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2023 HANSOL GROUP SUSTAINABILITY REPORT



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## About this Report

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Hansol Group began publishing its sustainability reports in 2020. Following the second report in 2022, we have adopted annual publication as a principle and now present the third Sustainability Report in 2023. With the publication of this 2023 Hansol Group Sustainability Report, (hereinafter, "the Report"), we share our sustainability activities and performance in the economic, social, and environmental areas. Our goal is to engage with stakeholders and integrate their feedback into our business management

#### **Reporting Period**

The Report covers the financial and non-financial outcomes of our key sustainability activities from Jan. 1 to Dec. 31, 2022, while certain data reflect activities conducted during the first half of 2023. In order to facilitate time series analyses, some quantitative data include statistics for the three years from Jan. 1, 2020 to Dec. 31, 2022.

#### Reporting Scope

The reporting scope includes the sustainability management activities of Hansol Group, comprising Hansol Holdings and ten affiliates, and the outcomes of their initiatives. Financial data solely represent the performance of Hansol Holdings on a consolidated basis, following the Korean International Financial Reporting Standards (K-IFRS).

#### **Reporting Principles and Standards**

The Report adheres to the Core standards of the Global Reporting Initiative (GRI) Standards, the international guidelines for sustainability management. Hansol Holdings also complies with ISO 26000, the management system guidelines for social responsibility.

#### Report Assurance

The Report has been verified by a professional sustainability report verification organization to ensure its reliability. The assurance statement can be found on p. 59 of this report.

#### Inquiries about the Report

For more detailed information on Hansol Group's sustainability management activities and outcomes included in the Report, please contact: Hansol Holdings Communication Team

Hansol Holdings Communication Team 100 Eulji-ro, Jung-gu, Seoul 04551, Republic of Korea

Tel 02-3287-6875 E-mail hansolholdings.communication@hansol.com www.hansol.com Web

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# CEO MESSAGE

#### Dear Respected Stakeholders,

On behalf of all Hansol Holdings employees, I would like to express my sincere gratitude to all of you for your unwavering support and interest in our company.



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In 2022, the business landscape experienced rapid changes, with sustainability attracting unprecedented interest.

Despite the challenging circumstances, Hansol Group remains committed to developing a sustainable business portfolio.

Our mission is to achieve sustainable growth by leveraging our competitive advantages and collaborating with stakeholders from all walks of life to maximize value.

To achieve this, we are committed to evolving our current business activities to maintain a competitive edge while exploring customer-centric strategies, new value, and innovative approaches for promising new ventures.

Each affiliate is actively constructing a sustainable business structure by developing a future-oriented business portfolio. This includes innovating existing business models, exploring new high-growth potential ventures, and undertaking challenging innovation tasks to boost competitiveness.

Furthermore, we are focused on instilling our organizational principles of immersion, transparency, respect, and speed in all our employees to foster a sustainable corporate culture that swiftly adapts to changes.

In 2023, we introduced the ESG index management system to all affiliates, strengthening our ESG management efforts. Through systematic and accurate ESG data management, each affiliate will derive and implement strategic tasks to improve the environment, society, and governance.

Our environment management system is founded on ISO 14001, an environmental management system certification. We also pursue safety and health management based on ISO 45001, an international standard for safety and health management certification, and the International Safety Rating System (ISRS). Additionally, we take the lead in respecting and safeguarding the human rights of all stakeholders, including employees. This is achieved by implementing company-wide human rights management and developing comprehensive guidelines.

In terms of our governance structure, we are conducting compliance management assessments of all affiliates and actively pursuing governance innovation through voluntary disclosure of corporate governance reports. Furthermore, our governance system encompasses non-financial risks, ensuring comprehensive risk management across all affiliates to enhance overall management sustainability. Lastly, we strengthen stakeholder communication through the implementation of mid- to long-term shareholder return policies and the operation of the Outside Director Nomination Committee.

We appreciate your continued support and interest in our sustainable growth.

Thank you.

**CEO of Hansol Holdings** 

Lee Jae-hee

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# HANSOL HOLDINGS AT A GLANCE

Hansol Holdings is committed to cultivating new corporate values in this era of transformation. As the holding company of the Hansol Group, we aim to strengthen competitiveness, create synergies, and establish new corporate roles to ensure the sustainable growth of our affiliates. To achieve sustainable management, we focus on enhancing Hansol's brand value, diversifying our business portfolio, and optimizing resource allocation. Embracing the importance of ESG practices, we lead by example, discovering new business opportunities and providing management consulting services to our affiliates. Hansol Holdings will pursue developing a business model that empowers Hansol Group with a unique competitive edge, fostering sustainable management and elevating corporate value.



Company Information

Date of Establishment

January 1965

25/F, Pine Avenue Building B, 100 Eulji-ro,

Jung-gu, Seoul, Republic of Korea

**Credit Rating** 

**Business Areas** Business consulting, investment and asset management, brand management, etc.

Financial Performance in 2022 (As of December 2022, based on separate

financial statements)

Total Assets

Headquarters

Sales

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#### ESG rating

A (NICE Investors Service) A (Korea Institute of Corporate Governance and Sustainability [KCGS]

**Operating Income** 





Hansol Technics

20.26%





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# **HISTORY**

Since its inception as a paper manufacturer in 1965, Hansol has flourished by engaging with consumers through a wide range of products and services in various sectors, such as distribution, chemicals, and logistics. Throughout the past 50 years, we have consistently pushed our boundaries and prepared ourselves for forthcoming challenges Today, we stand ready to extend our reach beyond Korea and establish ourselves as a global player, equipped with unmatched competitiveness and expertise. Our commitment to growth and adaptation remains unwavering, leveraging our experience and capabilities to meet evolving demands in the years to come.



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# 1990

- **1991** Separated from the Samsung Group and became independent
- Founded Hansol HomeDeco
- **1992** Founded Hansol Chemicals
  - Completed the construction of Hansol Paper Janghang Plant
- **1995** Founded the Hansol Cultural Establishment
  - Completed the construction of the Hansol Paper Daejeon Plant
  - Completed the construction of the Hansol HomeDeco lksan Plant
  - Founded Hansol Technics and Hansol PNS
- 1996 Completed the construction of the Hansol Technics Jincheon Plant
  - Hansol HomeDeco entered New Zealand's forestry
- market
- **1997** Hansol HomeDeco launched laminated flooring Chammaru



# 2000

- 2000 Hansol Logistics launched its global logistics platform business
  - Hansol Paper declared its vision to become the best paper manufacturer in Asia
- 2001 Hansol Logistics developed the world's first smart delivery system
- 2002 Cho Dong-gil appointed as the Chairperson of Hansol Group
- 2005 Vision declaration ceremony held in celebration of the 40th anniversary of Hansol Group
- 2007 Hansol Paper obtained the Forest Stewardship Council (FSC) certification
- 2008 Hansol PNS took over Hansol Inticube
- 2009 Hansol Paper ranked 4thlargest printing paper producer in Asia



- 2011 Acquired Hansol PaperTech
- 2012 Hansol Chemical launched an overseas branch office (Hansol Electronics) in
- China 2013 - Opened Museum SAN
- 2014 Hansol Chemical became the world's first to churn out
- QDs 2015 - Hansol Holdings launched - Introduced the HMS
- Hansol Technics entered the electronics manufacturing services (EMS) business
- 2016 Hansol Chemical acquired Tapex
- 2019 Hansol HomeDeco opened a branch in Vietnam

# 2020

- 2020 Hansol V-Frontiers launched
- 2021 Hansol Logistics acquired Eastern Logistics
  - Hansol PNS acquired Coever I&T
  - Hansol PNS acquired Zizle (currently Hansol BS)
- Hansol Inticube acquired Stickus Corporation
- 2022 Hansol Paper acquired Sungwoo Envi Tech
  - bonds
  - Hansol Technics acquired IONES
  - Hansol Logistics acquired Moonlogis
  - Hansol Home Deco launched Hansol MODU VHOM



- 2023 Hansol Paper won first place in the Most Admired Companies (paper category) for 20 consecutive years - Hansol Group designated as

- Hansol Paper issued ESG



a corporate group subject to public disclosure

# **GROUP BUSINESS PORTFOLIO**

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## Hansol

Paper

Date of Establishment Headquarters **Business Areas** 

nt	January 2015
	23 ~ 24/F, Pine Avenue Building B, 100 Eulji-ro, Jung-
	Paper: Manufacturing of printing paper, industrial paper
	thermal paper
	Environment: EPC (Engineering, Procurement, Const
	and Management)
	A (NICE Investors Service, unless specified otherwise

B+ (KCGS, unless specified otherwise)

Credit Rating Credit Rating

Since its establishment in 1965, Hansol Paper has emerged as the largest paper company in Korea, playing a crucial role in the cultural and industrial development of the nation through its diverse range of paper products. As the sole comprehensive paper manufacturer in Korea, operating four base factories in Janghang, Daejeon, Cheonan, and Shintanjin, respectively, Hansol Paper is dedicated to enhancing brand value through rigorous quality control, continuous research and development, and exceptional customer service. Recently, the company has been focusing on eco-friendly, high-value-added, and technology-intensive high-tech paper materials, propelling it toward becoming a global paper company with a strong presence in the USA and Europe. Moreover, the merger with Hansol EME has laid the groundwork for diversifying its business activities in the environmental domain, particularly in resource recycling.



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g-gu, Seoul, Republic of Korea aper, specialty paper, and

struction), O&M (Operation

se)

(Consolidated / Unit: KRW million)

2,457,952



Date of Establishment February 2000 Headquarters **Business Areas** 

Credit Rating

80 Daechi 7-gil, Daejeon-myeon, Damyang-gun, Jeollanam-do, Republic of Korea Manufacturing of corrugated cardboard sheets B1

Hansol PaperTech is a leading manufacturer of corrugated sheets, producing both outer and inner layers as well as the flute, and selling them domestically and internationally. Corrugated cardboard has exceptional buffering and shock-absorbent properties. As a result, it is extensively used in crafting boxes for industrial or agricultural products, electronic items, and general industrial packaging. Hansol PaperTech maintains stable materials supply and sales through sustainable partnerships with its subcontractors. Moving forward, the company remains dedicated to developing new technologies to produce green and high-quality products for stable business management.





# **134,802**

## Hansol

PNS

Date of Establishment February 1975 Headquarters **Business Areas** Credit Rating В Credit Rating

5/F, Ilheung Building, 213 Toegye-ro, Jung-gu, Seoul, Republic of Korea Paper distribution, IT service A3

Hansol PNS, Korea's largest paper distributor, not only distributes paper products but also offers IT services. Recently, the paper distribution division has enhanced its competitiveness by launching an online mall as part of its digital conversion project, securing a strong position in the future distribution industry. Additionally, the division is gearing up to venture into the platform industry through the establishment of a mobile system in the second phase. On the other hand, the IT service division is involved in designing corporate information systems, as well as developing hardware, application software, and customized solutions. One of its crucial divisions is the smart factory division, which plays a significant role in driving the digital transformation of the domestic small and medium business ecosystem and contributing to ESG integration.



Date of Establishment	December 1991
Headquarters	27/F, Jeonmun Geonseol Hoegwan, 15 Boramae 5-g
	Republic of Korea
<b>Business Areas</b>	Wood: Manufacturing and distribution of boards (MDF),
	Combined Heat and Power (CHP) Generation: Bioma
	and steam production)
	Afforestation: Investment in overseas afforestation but
	corporation in New Zealand
Credit Rating	BBB
ESG rating	В

Hansol HomeDeco specializes in supplying building materials, including MDFs and other eco-friendly materials for interior design. Hansol HomeDeco has developed a forest-product circulation system by leveraging its expertise in wood and forestry overseas, including lumber, furniture components, flooring, interior material distribution, and renewable energy. Additionally, the company has successfully completed the value chain in the timber business, generating new added value through the utilization of MDF and lumber by-products. In 2022, Hansol HomeDeco launched the direct interior platform VHOM as an online website and mobile app, establishing a customer-friendly sales network. To further expand and enhance the online total interior business capacity, the total interior business was physically separated, and Hansol MODU VHOM was established.



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HomeDeco

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(Unit: KRW million)

262.943

**314,246** 

gil, Dongjak-gu, Seoul,

), flooring, and interior products ass renewable energy (power

ousiness through an overseas

(Unit: KRW million) 253,213 263,250 **283,414** 



Date of Establishment June 1994 Headquarters **Business Areas** 

Credit Rating

22/F, Pine Avenue Building B, 100 Eulji-ro, Jung-gu, Seoul, Republic of Korea International logistics, container transport, truck transport, W&D, logistics consulting A3

Since its establishment in 1994, Hansol Logistics has been striving to become the best SCM solution provider, providing unmatched services in global logistics, encompassing air and sea freight forwarding, container transport, truck and rail freight transport, W&D, and logistics consulting. The company practices ESG management, ensuring safe workplaces, ethical management, and shareholder value, while offering differentiated global logistics services through its overseas network of 20 branches in seven countries in the Americas and Asia.



Date of Establishment August 1966 Headquarters **Business Areas** Credit Rating

B+

5/F, Pine Avenue Building B, 100 Eulji-ro, Jung-gu, Seoul, Republic of Korea Electric/electronic product power modules, wireless charging modules, solar power generation modules, LED material processing, and mobile phone components and EMS BBB+

ESG Rating

Hansol Technics is committed to delivering excellence through the highest quality standards, best-product development practices, and innovative cost competitiveness. Guided by a management philosophy that values human resources, technology, and a future-oriented approach, the company specializes in power module device (PMD) business, in the manufacturing of digital power, mobile phones, wireless charging modules, and automotive electronics. Simultaneously, it is actively engaged in the Energy Solution (ES) business, producing solar power modules and LED wafers. The company's relentless pursuit of continuous new business development has fueled its growth as a prominent electronic parts and energy solution company. As a key player in the national export core industry, the company is dedicated to systematizing ESG management within its operations and fostering the growth of SMEs to contribute to broader economic development.







## Hansol **Technics**

(Unit: KRW million)

1,015,372

(Unit: KRW million)

**1,647,392** 

## $\bigcirc \equiv \leftarrow \rightarrow$

80

## Hansol

IONES

Date of Establishment	March 1993 (formerly Dong-A Engineering)
Headquarters	2061 Anseong-daero, Gosam-myeon, Anseong-si, (
	Korea
<b>Business Areas</b>	Precision manufacturing and cleaning/coating service
	display manufacturing equipment parts
Credit Rating	BBB (E Credible)

Hansol IONES is a forward-thinking, innovative company offering ultra-precision special parts in the semiconductor and display industries. It provides a comprehensive one-stop service, encompassing design, processing, measurement, cleaning, coating, and analysis, fostering collaborative growth with customers through the best technology and quality competitiveness. With a proven track record of delivering precision parts and semiconductor consumable cleaning/coating services to top-tier semiconductor equipment companies and general semiconductor firms worldwide, Hansol IONES has established itself in the market with a distinct competitive edge. Fearlessly embracing challenges and changes, it is committed to continuous innovation, and aspires to become a global comprehensive parts company that focuses on new material development, nano-coating, and surface treatment technologies for the development of the industry.



Date of Establishment	December 2003
Headquarters	14/F, Nuri Dream Square Business Tower, 396 World
	Republic of Korea
<b>Business Areas</b>	Digital contact center, AI communication, communic
	solutions
Credit Rating	BB+(E Credible)

Hansol Inticube is a leading company in business communication solutions, specializing in the next-generation AI contact center. Utilizing extensive expertise in building various digital contact centers, it offers integrated solutions, encompassing construction of customer-centered contact center infrastructure, consulting, and maintenance. A notable achievement is the launch of ISAC-AI, an artificial intelligence (AI) communication platform that utilizes cutting-edge IT technologies such as AI, cloud, and big data — the core components of the 4th industrial revolution. With ISAC-AI, even small and medium-sized enterprises can easily adopt AI consulting services. The company is committed to contributing to digital innovation across the corporate ecosystem, fostering growth with clients.



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, Gyeonggi-do, Republic of

ices for semiconductor and

dcupbuk-ro, Mapo-gu, Seoul,

cation cloud, and mobile



#### Headquarters **Business Areas** Credit Rating

Date of Establishment March 1980 7~8/F, K-Tower, 513 Teheran-ro, Gangnam-gu, Seoul, Republic of Korea Precision chemicals, display materials, semiconductor materials, and secondary battery materials A+ (Korea Investors Service)

ESG Rating

В

Since its establishment in 1980, Hansol Chemical has emerged as a prominent high-tech fine chemicals company, renowned for its constant innovation and production of top-notch chemical products. The company boasts large-scale production facilities in Jeonju, Ulsan, and Xian, China, covering a wide spectrum of business areas, from fine chemicals to electronic materials. Hansol Chemical is committed to achieving sustainable growth by enhancing its competitiveness in semiconductors, advanced displays, and secondary battery materials. This objective is pursued by maximizing global capabilities through the implementation of ESG management strategies and the exploration of new business opportunities.



April 1994
#812 & 813, 8/F, Daehak 4-ro, Yeongtong-gu (Ace Gwanggyo Tower
Suwon, Gyeonggi-do, Republic of Korea
Functional adhesive tapes for electronic materials, plastic wraps for
packaging, consumer goods
A- (Korea Investors Service)
B+

Established in 1994, Tapex specializes in the manufacture of industrial adhesive tapes. The company has expanded its business areas to include the production of essential tapes for secondary batteries, display, and semiconductor manufacturing processes, as well as packaging wraps and green consumer products. Tapex's core competencies are in addressing global climate change and adapting to environmental policy changes. This strategic focus has earned the company a leading position in providing eco-friendly functional tapes for electric vehicles. Tapex has also laid the Establishment for sustainable management, contributing to the preservation of the global environment while achieving business growth.



Tapex



(Unit: KRW million)

885,471

r 1, lui-dong),

r food

(Unit: KRW million)

**182,261** 

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2023 HANSOL GROUP SUSTAINABILITY REPORT Hansol is dedicated to creating new values that contribute to a better future for its customers. Hansol Group has been actively involved in the development of green products and the expansion of the green product certification system. By prioritizing climate-related risk management, we aim to not only seize business opportunities but also gain an unparalleled competitive advantage in the market.

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# **SUSTAINABILITY KEY FIGURES 2022**

Hansol Group is committed to sustainability management, through which we intend to build customer trust, enhance corporate value, and foster sustainable growth. Our dedication to sustainability principles is evident in our continuous pursuit of new technologies and innovative solutions, which can be observed through our data reflecting major sustainability management performance.

International Environmental Management System ISO 14001 **Certification Obtained for** 

## 19 business sites

International Safety and Health Management System ISO 45001 **Certification Obtained for** 

12 business sites

**International Quality** Management System ISO 9001 **Certification Obtained for** 

Corporate value of 15 startups that participated in Hansol V Frontiers (As of December 2022)

# KRW 99.55 billion

Hansol Paper's annual carbon dioxide absorption

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Number of companies that signed business agreements with Hansol Paper to develop eco-friendly packaging materials

10

sales of Hansol Paper (as of 2022)

66%

# 7 affiliates

Percentage of green products sales among the total product Hansol HomeDeco partners that received the consulting support for establishing safety and health management system

companies

Number of employees of partner companies attending Hansol Technics' Win-Win **Cooperation Day** 

100

Number of grievances received during Tapex executiveemployee meetings

211

Recycled raw material usage rate for MDF production by Hansol HomeDeco

80%

Hansol Paper's Win-Win **Growth Fund for Partners** 

KRW 6 billion

Number of consecutive years that Hansol Paper received **EcoVadis Gold Medal** (Top 5% companies in ESG management)

3 years

**Donation from Hansol Technics** for installing solar modules at social welfare facilities (as of 2022)

## KRW 25.15 million

Percentage increase in Tapex's investment for safety and health facilities compared to 2021

52%

Number of affiliates that disclose Hansol Group **Corporate Governance Report** 

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# SUSTAINABILITY MANAGEMENT SYSTEM

Hansol Group has embraced the Hansol Management System (HMS) as a guiding vision to secure a distinctive competitive business advantage, and to foster sustainable growth. This system stands as core values shared and practiced by all executives and employees. In line with this vision, we have implemented environmental management, human rights management, ethical management, and safety and health management systems to embody sustainable practices throughout our operations. In 2022, while revising the HMS, we focused on advancing ethical management principles.

## Hansol Management System (HMS)

As a result, we integrated four new organizational principles: immersion, transparency, speed, and respect. This integration aims to instill a culture and management approach that places high value on mutual respect among all members of the organization.

#### Principles

#### Immersion: Focus and sense of unity for better results

At Hansol, we understand that achieving excellent results goes beyond mere effort; it demands full immersion. We strive for continuous growth both on organizational and individual levels by creating an environment where all our members can fully immerse themselves in their work, fostering a culture where both individuals and the organization continuously challenge themselves to reach new heights.

#### Transparency: Sharing of procedures and results

Transparency is a fundamental value that every member of Hansol must uphold. Through the practice of ethical business principles, responsible attitudes, and open communication, we fortify a transparent culture that benefits our customers, shareholders, employees, and local communities.

#### Speed: Agility based on simplicity and substantiality

Speed is powered by simplicity. It is driven by a keen focus on what truly matters in the present moment. The key lies in focusing on the essence and core of the matter. When communicating with our customers, we achieve impactful results by promptly identifying their needs and delivering the necessary services.

#### Respect: Hearts that Cherish One Another

Organizations that have cultivated a culture of respect honor the uniqueness and diversity of each individual by first embracing self-respect and then valuing one another. At Hansol, we are committed to providing fair opportunities for all our members to showcase their capabilities and realize their potential.



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## Environmental Management System (EMS)

Hansol Group ensures compliance with environmental laws at all business sites through an internationally standardized environmental management system (EMS). Each affiliate implements tailored environmental management, including afforestation and renewable energy businesses. Moreover, we prioritize continuous R&D on eco-friendly products for a safer environment and people.

#### **Environmental management**

Hansol Group has established an ESG indicator management system, centered on the group's holding company, Hansol Holdings, to efficiently and systematically manage ESG data across all affiliates. Environmental goals are planned by the Environmental Management Promotion Committee, involving major departments and the communication team. All affiliates communicate and implement these goals, fostering active information-sharing among working-level employees. Using our ESG indicator management system, we continuously monitor environmental data, such as management system certification, climate change responses, GHG emissions, energy- and water-consumption, and pollutant and waste management. This approach helps us assess targets and improve environmental management effectively.

#### Hansol Holdings' Environmental Policies

#### Efficient Resource-Use and Environmental Protection

We take the lead in environmental protection by preventing environmental pollution through efficient use of resources and energy and minimization of waste.

#### **EMS** Operation and Continuous Improvement

All our employees are aware of our environmental policy and participate in setting goals and taking action to consistently improve our environmental performance. We continuously upgrade our EMS through revisions for further enhancement.

#### Communication with Stakeholders and Compliance Obligations

We maintain active communication with stakeholders, regularly reviewing our environmental goals and directions. We inform stakeholders of the environmental requirements and management standards that align with their needs, thereby ensuring compliance.

#### Transparent Environmental Management Practices

We disclose our environmental policy and information on environmental management to encourage stakeholders to actively join the company's efforts. We also adhere to transparent environmental management practices.

Affiliates equipped with ISO 14001 certification, the international environmental management system

19 business sites

Hansol Paper, Hansol PaperTech, Hansol PNS, Hansol Technics, Hansol IONES, Hansol Logistics, Hansol HomeDeco, Hansol Chemical, Tapex (Refer to "Affiliates with Certifications" on p. 60.)

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## Human Rights in **Business**

Hansol Group has enacted a policy to protect and promote the human rights of all stakeholders, including executives and employees, in accordance with Article 25, Paragraph 2 of the National Human **Rights Commission Act. We have** also published the Human Rights Management Guidelines, which detail the necessary steps for implementation. Aligned with international human rights standards and regulations like the Universal Declaration of Human Rights, and the Declaration of Fundamental Principles and Rights at Work, we prioritize the dignity and value of every individual. We ensure a non-discriminatory working environment, strictly prohibit forced labor and child labor, and prioritize industrial safety and environmental rights.

#### Hansol Holdings' Human Rights Management Guidelines:

With the expanding impact of corporations on society and the environment, the responsibility to uphold human rights has become an important societal trend. In line with the UNGC's principle that states, "Businesses should support and respect the protection of internationally proclaimed human rights," Hansol Group proactively prevents labor rights violations.

In May 2022, Hansol Holdings introduced comprehensive human rights management guidelines, thoroughly educating staffs and disseminating it throughout the group. These guidelines encompass standards for human rights violations, response procedures, prevention programs, and representative cases of violations. They also provide a clear reporting mechanism for Hansol Holdings' employees and stakeholders who may encounter human rights violations.

#### Guidelines on Human Rights in Business:

#### Human Rights Statement

At Hansol, we are committed to upholding human dignity and value in all our business activities. Both our executives and employees embody this declaration as the guiding code of conduct for human rights management and the standard for making value judgments.

#### Human Rights Manager

- 1. Hansol shall appoint a human rights manager to systematically implement regulatory procedures and education to promote human rights in business.
- 2. The duties and responsibilities of the human rights manager include: - Overseeing the establishment and execution of human rights plans;
  - Managing human rights education initiatives;
  - Addressing remedies for any instances of human rights violations; and
  - Deliberating on other relevant matters related to human rights management, as necessary.

#### Human Rights Education

To promote awareness of human rights, regular human rights-related education shall be conducted at least once a year for all executives and employees at a time and in a manner that is deemed most appropriate.

#### Human Rights Activities and Support

Hansol is dedicated to advocating human rights protection and promoting their values. As part of this commitment, it may extend support to human rights-related organizations, entities, and stakeholders.

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## Compliance Management

The growing social demand for companies to follow the law and take responsibility for their management activities is becoming increasingly prominent. Compliance management is seen as the most basic requirement in ESG management for businesses. Recognizing its growing importance, Hansol evaluated compliance management at the group level in 2022, aiming to enhance systematization and address vulnerabilities within each affiliate.

#### **Compliance Management Assessment**

Since 2021, Hansol Group has been conducting compliance-management assessments. In 2022, the compliance-management status of Hansol Paper, Hansol Technics, Hansol HomeDeco, Hansol Logistics, Hansol PNS, and Hansol Inticube was diagnosed in five aspects: leadership, planning, execution support, internal audit, and follow-up response. The overall level of compliance management for the six companies averaged 3.8 points (out of 5 points), showing a 0.4-point increase from the previous year. The compliance management assessment helped spread awareness and commitment to compliance throughout the Hansol Group. Using the assessment results, the six companies will strengthen the group's compliance-management procedures, focusing on a compliance-management management system and enhancing field operations' execution power.

#### Average Compliance-Management Level within the Group



#### Strengthening the Compliance-Management Process

The six affiliates — Hansol Paper, Hansol Technics, Hansol HomeDeco, Hansol Logistics, Hansol PNS, and Hansol Inticube - have promptly selected compliancemanagement tasks, prioritizing areas that require immediate attention.

2021 2022

Planning

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#### Strengthening the Compliance-Management Process for All Affiliates

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Hansol Paper	Hansol Technics	Hansol HomeDeco
- Enhancing the purchasing process through the design and pilot opera- tion of subcontracting risk manage- ment.	<ul> <li>Proactive identifications of risks associated with violations of the Personal Information Protection Act and the Unfair Competition and Trade Secret Protection Act (UCPA) through the design and enhance- ment of personal and business in- formation management processes.</li> <li>Designing management processes for the initial identification of haz- ardous-chemical handling risks.</li> </ul>	- Implementing and ternal compliance enhance pre-ider
Hansol Logistics	Paper Distribution Division, Hasol PNS	IT Service Division Hansol Inticube
- Enhancing transparency and miti- gating subcontracting and fair trade risks through the augmentation of the transportation and subcontract- ing company selection process.	- Identifying risk factors and es- tablishing management plans to prevent safety accidents in new relocation centers.	- Implementing ind laws and regulation guide and enhance pre-identification capabilities throu

### 2023 HANSOL GROUP **SUSTAINABILITY** REPORT



## **Occupational Safety and Health**

Hansol Group's commitment to safety and health management is encapsulated in the phrase "no work needs to be done when one is injured." To address legal and regulatory risks and foster a safety culture as a reliable company, Hansol introduced the Hansol Safety Rating System (HSRS), which is the company's own safety and health work standards and evaluation system, optimizing the International Safety Rating System (ISRS) by aligning it with the company's unique business characteristics.

#### Introduced the Evaluation System for HSRS Safety and Health Management

In 2019, Hansol first implemented the ISRS to assess safety management and completed the verification of its effectiveness in 2020, followed by a second performance evaluation in 2021. Through this, we have improved the work system essential for fundamental safety management response and successfully nurtured safety management personnel. In 2022, we introduced the HSRS, an evaluation system tailored to Hansol's business characteristics.

#### **HSRS** Assessment Levels

Category	Level	C	
L5	Proactive (80 points or higher)	Field members voluntarily recognize the organization's strengths and weaknesses and make continuous improvements.	
L4	Preventive (60~80 points)	A system for core process control is in place and members are engaged and motivated under the leadership's encouragement.	
L3	Directive (50~60 points)	A system for major risk control has been introduced, and members participate in a passive manner under the leadership's guidance.	
L2	Reactive (40~50 points)	Key processes for loss prevention are not identified, and changes are only sought after an incident occurs.	
L1	Negligent (Below 40 points)	There is no recognition of the need for a safety system and members are not invested in improving safety.	

#### **HSRS Process Evaluation Areas**



#### **Business Sites that Utilize the HSRS Assessment**

Four business sites and Environmental Business Group of Hansol Paper, Hansol HomeDeco, Hansol PaperTech, Hansol Logistics, and Hansol Technics



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# HANSOL FOCUS **ISSUES**

# ISSUE **Development**

of Green **Products and Technologies** 

#### BACKGROUND

The global adoption of carbon tax and the activation of the carbon-trading market are driving efforts toward achieving carbon neutrality. In Korea, various entities, including the government, businesses, and the local communities, are working toward the goal of becoming carbon neutral by 2050. On the business front, the focus is on leveraging capabilities for product and technological innovation to transform climate change risks into opportunities.

#### **OUR APPROACH**

Hansol is actively developing green materials and resource recycling technology across its business areas to minimize environmental impact. By promoting environmental values and encouraging stakeholders to embrace carbon neutrality, the company is achieving sustainable growth in its corporate ecosystem.

#### MANAGEMENT BRIEFING

#### Oh Sang-won, Group Leader of Eco Packaging Team, Hansol Paper

With the strengthening of corporate ESG management, the demand for eco-friendly packaging is expected to rise. As consumers embrace green consumption and prioritize environmental values, the eco-friendly packaging sector holds promising potential. Hansol Paper aims to continually expand its range of sustainable products as alternatives to plastic, catering to the eco-friendly needs of both corporate customers and consumers. For instance, for the food and beverage industry, we are developing a diverse range of eco-friendly paper containers to replace plastic-based ones. Additionally, the eco-friendly and flexible packaging paper, Protego, is set to undergo horizontal expansion by exploring new applications based on existing product references.



#### **OUR PERFORMANCE**

#### **Development of Green Products**

#### Hansol Paper

Hansol Paper is actively embracing the eco-friendly trend by developing innovative application technologies to advance nano-cellulose manufacturing (product name: Duracle) as a cutting-edge eco-friendly material and expanding its usage. We offer eco-friendly packaging alternatives like Terravas, water-based barrier-coated paper containers, and Protego, an eco-friendly and flexible packaging paper, to reduce plastic usage in the market, supporting environmental sustainability and promoting eco-friendly applications in materials. Notably, Protego has earned prestigious recognition — receiving the Asia Star Awards 2020 from the Asian Packaging Federation; the Minister of Trade, Industry, and Energy Award at the Korea Packaging Competition; and the esteemed 2021 World Star Packaging Award by the World Packaging Organization (WPO).

#### Hansol HomeDeco

Our commitment to providing trustworthy products to consumers includes obtaining credible eco-friendly product certifications. We are exploring the development of low-carbon products and working on establishing our eco-friendly product standards. In December 2022, our flagship product, SB Maru Ultra Steel, received the Low Carbon Product Environmental Product Declaration Certificate from the Korea Environmental Industry and Technology Institute. Going forward, we will monitor low-carbon product management plans, sales, and GHG reduction data to further enhance our eco-friendly initiatives.

#### Hansol Technics

Hansol Technics develops and delivers highly reliable and competitive solar modules that meet KS certification and the carbon verification system. Our range of solar products includes media PV, high-output solar modules, and water-type solar modules, all certified under KS for the first time in Korea. Media PV combines solar modules and LED media, allowing them to generate solar power during the day and function as LED media at night with a maximum output of 470 watts (W). These modules can be easily installed on buildings and structures, making them ideal for use in zero-energy buildings. With twice the resolution of the previous model, these solar modules are ideal for landscape lighting and road noise barriers in confined spaces. With the adoption of these solar modules, we have taken a significant step toward achieving RE100 by generating energy from renewable sources.

## 2 MOU for Sustainable Packaging Development

#### Hansol Paper

Since 2020, Hansol Paper has signed MOUs with 10 leading domestic companies in various sectors including cosmetics, food, pharmaceuticals, confectionery, coffee franchises, health supplements, etc. to strengthen ESG management and promote sustainable packaging solutions. These companies are committed to adopting eco-friendly packaging to enhance their long-term corporate value and achieve sustainable management. They also possess strong research capabilities and experience in this area. Leveraging Hansol Paper's expertise in developing eco-friendly paper materials, the collaboration has resulted in the successful implementation of eco-friendly packaging with complex requirements. Through technological exchanges, both parties gained valuable know-how and technologies applicable to diverse industries like cosmetics, food, and confectionery, as well as various environmental conditions.



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**Safety and** Health Management

> SPEED LIMIT 20

#### BACKGROUND

The heightened social awareness of safety and health accidents has increased vigilance and interest in prevention. Since the implementation of the Serious Accidents Punishment Act on January 27, 2022, a crucial emphasis was placed on management personnel on prioritizing safety and health obligations. Therefore, industrial sites must allocate budgets, create manuals, and conduct inspections to address major industrial accidents and ensure worker health and safety.

#### **OUR APPROACH**

To establish a safety management system, Hansol Group introduced the International Sustainability Rating System (ISRS) in 2019. We have further strengthened our safety and health management by adopting the HSRS (Hansol Safety Rating System), customized to our business characteristics - based on effectiveness verification and performance measurement. With these initiatives, our aim is to reinforce and strengthen Hansol's safety culture.

#### MANAGEMENT BRIEFING

Hansol Technics Yeon Je-jin (Team Leader of Safety Support Team), Lee Chung-hwa (Manager in Safety Management Team)

Hansol Technics prioritizes safety and health activities that involve direct participation by supervisors and workers. First, we identify near-miss accidents and potential risks through worker input and conduct 5S activities to eliminate risk factors. Secondly, we engage in safety, health, and firefighting slogan contests. Lastly, we place A QR code at the workplace entrances and exits, allowing all personnel to easily submit safety and health concerns and suggestions. The CEO recognizes and rewards employees participating in these activities during the monthly EHS Day.

Moreover, Hansol Technics looks to industry leaders like Samsung Electronics for safety and health best practices. By benchmarking their inspection processes for 22 key areas, we selected 15 themes most relevant to our business and carry out regular intensive inspections. The insights gained from monitoring major EHS trends are integrated into our work processes to bolster safety measures. Additionally, the sharing of significant incidents by the Ministry of Labor helps raise safety awareness among our employees.

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#### **OUR PERFORMANCE**

Establishing a Safety Rating System

#### Hansol Holdings

**NO ACCIDENTS** 

To enhance safety and health evaluation efficiency and establish a field-oriented management system, Hansol Group embarked on its ISRS journey in 2019, validated its effectiveness in 2020, and completed the second performance measurement in 2021. Then in 2022, the Hansol Safety Rating System (HSRS) was developed, reflecting the unique business characteristics. The HSRS not only verified the field performance but also bolstered compliance with domestic laws and regulations. In 2022, the effectiveness of the HSRS was affirmed through evaluation by a certified safety and health professional institute, driving the establishment of an advanced IT-based integrated safety system to enhance field work efficiency. Currently, the HSRS is implemented across nine business sites, encompassing Hansol HomeDeco, Hansol PaperTech, Hansol Logistics, and Hansol Technics, alongside the four sites of Hansol Paper and the Environmental Business Headquarters. The ultimate goal is for all business sites to achieve and sustain Level 5 in the HSRS, thereby fortifying a robust safety and health practice system throughout the entire group.

#### Obtaining S-Grade in Process Safety **Management System**

#### Tapex

Process Safety Management (PSM) is a vital system implemented to avert severe industrial accidents resulting from hazardous substance leakage, fires, or explosions in workplaces and nearby areas. It applies to seven industries that deal with hazardous or dangerous facilities prescribed by Presidential Decree, and equipment and related process facilities that manufacture, handle, and store one or more of 51 hazardous substances in excess of the prescribed amount. In August 2022, Tapex achieved a significant milestone with the Yanggam Factory obtaining an S (Good) grade in the new evaluation. This reflects the company's dedication to strengthening the workplace safety management system and compliance with the Serious Accidents Punishment Act. The achievement further bolstered the company's credibility and standing in safety management, solidified safety and health standards, and established a periodic education and training system. Moreover, in 2022, Tapex expanded the safety campaign to include partners, specifically in-house subcontractors. A substantial investment of KRW 814 million was allocated to safety and health-related facilities, marking a 52% increase compared to the previous year's KRW 535 million.

#### Acquisition of Safety and Health Management Certification and SMT Activities

#### Hansol Paper

The Daejeon and Janghang plants of Hansol Paper hold the ISO 45001 and KOSHA-MS certifications. Additionally, the company implements the Safety Management Tour (SMT) and Care Observe Change (COC) activities across all business sites and partner companies across all business sites under the supervision of the CEO and CSO. Through SMT, the company helps boost employee motivation and participation, identifies issues through discussions, and establishes action plans with implementation strategies for tracking and management. The progress and effectiveness of plan execution, actions taken, and their appropriateness are continuously monitored and evaluated.





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**Customer-Satisfaction** and Product Responsibility

#### BACKGROUND

Customer-centered management entails identifying customer needs through their feedback and even providing solutions to unidentified problems. Businesses endeavors to capitalize on this approach to generate new possibilities. Thus, systematic data analysis and discovering insight are essential for gaining competitiveness in the global market.

#### **OUR APPROACH**

Hansol Group enhances its ability to understand voice of the customer (VOC) and true needs, crafting strategies to secure a unique competitive advantage and achieve remarkable outcomes. By doing so, we aim to deliver maximum value and foster mutual growth with our customers. To facilitate this customer analysis, we employ diverse diagnostic and measurement systems and systematize strategy implementation, process management, and performance creation at all stages.

#### **MANAGEMENT BRIEFING**

#### Kang Gil-jae, Senior Manager in Marketing Team at Hansol Paper

Since 1997, Hansol Paper has been conducting biannual Customer Satisfaction Index (CSI) surveys, gathering feedback on sales, quality, customer service, delivery, price, and brand image. In 2004, we expanded the surveys to include the export sector, transitioning it into an annual assessment. Furthermore, in 2010, we introduced the Net Promoter Score (NPS) in parallel with the CSI. As of 2020, we have embraced the digital age by shifting the domestic sector survey online, prioritizing customer convenience and responsiveness to changing trends. Through the survey, we gain clear insights into areas of customer dissatisfaction and non-recommendation, which enables us to craft tailored improvement plans that enhance product and service competitiveness in each sector. In 2022, the CSI increased across all fields and reached 76 points, a four-point increase from the previous year. We remain committed to elevating customer satisfaction through rigorous customer analysis and continuous improvement efforts.





#### **OUR PERFORMANCE**

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Hansol Group Hosts Innovation Olympics

#### Hansol Holdings

Hansol Holdings organizes the annual Innovation Olympics for all its affiliates. This event comprehensively assesses each affiliate's execution of various tasks over the year, recognizing and encouraging the achievements that have led to meaningful results. Since 2013, the Innovation Olympics has been a driving force behind Hansol's continuous growth, promoting a spirit of relentless innovation among its people. Originally initiated for major affiliates, it has expanded across the entire group in 2014. The latest event took place on December 16, 2022. At Hansol, innovation involves systematically executing key initiatives derived from portfolio and mid-term strategies and setting clear targets. Our aim is to institutionalize this systematic problem-solving method as a fundamental approach to our work culture and behavior. The innovation-promotion system acknowledges the challenges associated with these tasks, and supports and motivates task leaders to overcome obstacles effectively.

## 2 Achieving KRW 500 Billion in Global Sales

#### Hansol Logistics

Hansol Logistics is thriving globally, especially in the secondary battery industry in Asia. To ensure sustainable growth, the company is now strategically targeting the European market, capitalizing on its strengths in secondary battery operations. As a result, we achieved a major milestone by securing a long-term contract with company S, a new entrant in Europe, and obtaining a new facility transportation order from company H, a local secondary battery manufacturer. This success was recognized with the Gold Medal at the Innovation Olympics. In the Asian market, especially China, we are a leading secondary battery logistics specialist, serving major manufacturers and suppliers and establishing a strong presence in the global supply chain for electric vehicle production. To dominate the electric vehicle parts logistics market, including secondary batteries, we're expanding our global presence with new bases in Poland and the eastern United States, solidifying our position as a top global leader in EV supply chain services.

#### Hansol Group-KAIST New Technology Development Business Agreement

#### Hansol holdings

Hansol Group and KAIST join forces for customer-centric technology development in materials, parts, and equipment. The main focus of this collaboration is the establishment of the KAIST-Hansol Materials & Parts Innovation Research Center with an annual budget of KRW 500 million, effective until August 31, 2025. The joint research center will bring together key Hansol Group affiliates, including Hansol Paper, Hansol Technics, and Hansol IONES, alongside researchers from KAIST specializing in materials and AI. Drawing on Hansol's extensive manufacturing expertise since 1965 and KAIST's cutting-edge research in materials, electrical/electronic, and mechanical fields, the partnership aims to foster synergies and deliver impactful outcomes through collaborative research efforts.



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Supply-Chain Management

#### BACKGROUND

Pursuing short-term profit maximization by conglomerates and SMEs can weaken the establishment for SMEs' survival and threaten the corporate ecosystem. Additionally, with the EU Directive on Corporate Sustainability Due Diligence coming into effect in 2024, Korean companies reliant on exports will face supply-chain due diligence requirements. As a result, supply-chain management has become essential for ensuring sustainable global competitiveness.

#### **OUR APPROACH**

Hansol Group actively establishes and effectively manages a shared growth system with its suppliers. We prioritize fair and transparent evaluations to manage supplier risks and engage in various activities, including safety and health consulting and meetings, to educate suppliers and practice ESG management together.

#### MANAGEMENT BRIEFING

Park Yeong-soo, Senior Manager in Environmental Safety Team at Hansol HomeDeco At Hansol HomeDeco, the safety and health of partner business sites is of utmost importance. Since 2012, we have actively participated in the Mutual Growth Partnership, forging business agreements to establish robust safety and health systems with our partners. Our goal is to consistently strengthen this system through cultivating an organic and cooperative relationships, instigating a change in mindset among partners' representatives, and inspiring their employees while enhancing the overall work environment. In light of the expanded scope of the Serious Accidents Punishment Act, which becomes effective from January 2024 and applies to workplaces with five to 50 full-time workers, we have promptly notified our partners and taken the necessary steps to establish the required system in collaboration with them. We maintain regular communication through monthly consultative meetings with our partners' representatives and engage in meaningful discussions with their managers and supervisors on a quarterly basis. Looking ahead, our commitment extends to supporting safety campaigns and encouraging our partners to develop their own safety activities.



#### **OUR PERFORMANCE**

Partner Mutual Growth Program

#### **Hansol Paper**

Hansol Paper prioritizes mutual growth with partners by enhancing ESG management capabilities and overall competitiveness in the supply chain, alongside cost and quality competitiveness. As a win-win partner, we engage in various cooperation and support activities to foster mutual growth with our suppliers. These initiatives include leadership support in technology cooperation and education, the operation of a KRW 6 billion win-win fund, assistance with 6 Sigma and Hansol cyber education, safety management support, environmental initiatives, and improved communication through meetings with representatives and working-level staff.

#### Safety and Health Management System Consultation for Partners

#### Hansol HomeDeco

In April 2023, Hansol HomeDeco initiated a safety and health management consultation for its partners, with a strong focus on risk assessment. The consulting program, which is aligned with the guidelines of the Korea Occupational Safety and Health Agency, aims to help seven Hansol HomeDeco partners mitigate safety risks and prevent accidents. The comprehensive consulting process involves visiting partner business sites five times over four months in 2023. Key elements of the consultation include risk identification, risk elimination and control, management leadership, worker participation, emergency procedures, subcontracting, and company-wide safety and health evaluation and improvement. The goal is to create an effective safety and health management system and develop safety accident reduction plans. Through these efforts, Hansol HomeDeco is actively promoting a safety culture among its partners and striving to establish and foster a self-directed prevention system in workplaces.

## **R** Mutual Cooperation Day for Partners

#### **Hansol Technics**

Hansol Technics places great importance on fair trade principles and processes, ensuring harmonious coexistence with its partners. As part of its shared-growth program, the company provides comprehensive management-support programs, including education, quality consulting, technology protection, and benefit sharing. Employees also benefit from welfare programs and longterm employee support. To foster mutual growth, Hansol Technics hosts the annual Mutual Cooperation Day. During this event, 15 mutual growth programs are introduced, the latest management trends are shared, and education sessions on various topics, such as the Extended Producer Responsibility (EPR) for recycling and SME technology protection support, are conducted. Additionally, future purchase strategies by the business division are disclosed and individual purchase consultations are provided to partner companies. In November 2022, this event saw the participation of 100 executives and employees from partner companies, with 10 partners engaging in individual purchase consultations.



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**Ethics and** Compliance Management

#### BACKGROUND

In today's responsible era, meeting legal and ethical standards is vital. Severe management crises can arise from non-compliant actions, dealing fatal blows to subsequent corporate operations.

#### **OUR APPROACH**

At Hansol Group, ethics and compliance management are our top priorities. We prioritize transparency by disclosing our management principles to external stakeholders, including suppliers, customers, and investors. Since 2021, we have been conducting a companywide assessment of compliance status, identifying improvement tasks, to strengthen our ethics- and compliance-management.

#### **MANAGEMENT BRIEFING**

#### Kim Jeong-un, Team Leader of Compliance Team at Hansol Holdings

Hansol Holdings has implemented a Compliance Risk Management System to ensure that all departments and employees adhere to the required laws during their work. Regular self-assessments are conducted to prevent any violations, and the results are monitored and managed by the Board of Directors and executives. Since 2021, we have been conducting annual compliance assessments across Hansol Group's affiliates, identifying areas for improvement. Hansol Paper, Hansol Technics, Hansol PNS, Hansol Inticube, Hansol Logistics, and Hansol HomeDeco implement strategies to strengthen their compliance-management systems and reduce the risk of violations and fraudulent acts. Hansol Group takes proactive measures to reduce the risk of law violations, fraud, and irregularities, implementing specific strategies for each company. Moreover, the group prioritizes creating a healthy organizational culture to drive continuous growth and development.

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#### Conducting the Group's Compliance Assessment

#### Hansol Holdings

Hansol Holdings assesses compliance management in terms of leadership, planning, execution, support, internal audit, and improvement measures. To assess the level of each area in each affiliate, we conducted interviews from management to field personnel and analyzed relevant data. Based on the 2021 diagnosis results, we proceeded with tasks to strengthen the compliance-management system for each affiliate. After one year of implementation and comparing the results between 2021 and 2022, we found improvements in the planning, execution, and support areas. Hansol Holdings will implement ESG management by emphasizing practical task design, continuous management, and active communication for compliance across its companies' headquarters, business sites, and departments. This will expand awareness and consensus on compliance management throughout the group.

#### Establishing the ESG-Indicator Management **C** System

#### Hansol Holdings

Hansol Holdings officially launched the ESG-Indicator Management System to systematically and efficiently oversee non-financial performance across the company and its affiliates. The system incorporates around 300 indicators, allowing for preemptive responses to both domestic and international ESG disclosures. Detailed guidance is provided to ESG personnel, who facilitate accurate and systematic management of these indicators. The system emphasizes environmental data management, which was challenging for some affiliates. To address this, Hansol Holdings collaborated with the Korean Standards Association to establish precise measurement guidelines. Hansol's commitment extends to advancing the overall ESG management of the Hansol Group.

#### The Group's Risk-Management System Assessment

In 2022, Hansol Group conducted a comprehensive risk assessment of all affiliates to evaluate the status of financial and non-financial risk management. Financial risk assessments covered markets, customers, equity investments, project orders, exchange rates, interest rates, liquidity, taxes, and credit ratings. Non-financial risk evaluation included compliance areas (environment, safety, and compliance), operational areas (information security, personnel/ labor, and supply chain), and external communication areas (crisis response, brand value, and investor relations). To ensure sustainable management across all affiliates, regular risk inspections will be conducted every January, allowing for proactive risk mitigation and comprehensive oversight.





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Hansol swiftly embraced the evolving landscape, venturing into critical energy and semiconductor industries. Our focus on customer feedback has driven enhanced competitiveness. Our commitment to innovation shapes a brighter future.

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# CONSUMER

## Management for Customer Satisfaction

#### For the Sustainability

Hansol Group prioritizes sustainability management as the core of corporate operations, integrating it with product and service development. We focus on improving product- quality and identifying future growth opportunities, especially in core technologies for secondary batteries and semiconductors. Through mergers and acquisitions, we integrate ESG values into our business strategies. Notably, Tapex's flagship product, functional tape for secondary batteries, has witnessed increased sales and global reach due to the growing popularity of eco-friendly electric vehicles. As a response, we have expanded quality management system certifications and business areas. Moreover, Hansol Technics' acquisition of IONES, a specialist in semiconductor equipment parts manufacturing and cleaning/coating, further reinforces our commitment to growth and innovation.

Hansol Holdings hosts the annual Innovation Olympics for all affiliates, showcasing the "Hansol people's tireless spirit of challenge for innovation" to boost our group's differentiated competitiveness. Additionally, Hansol V Frontiers, a program by Hansol Holdings to nurture promising startups, has enabled 15 companies across three cycles to increase their corporate value by an average of six-fold. To enhance the marketing of competitive products, Hansol Paper, Hansol Technics, and Hansol HomeDeco actively engage in diverse energy and green expo events, forging closer connections with consumers.

Hansol Group takes the lead in the market by persistently innovating products with distinctive technology and reliable production capacity. Our focus on enhancing core competencies and seizing future business prospects drives us to restructure and engage in mergers and acquisitions to adapt to evolving business landscapes.







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## **1. Market Expansion and Diversification**

Introducing a

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#### Paper Distribution Division, Hasol PNS

Grooup (www.grooup.co.kr) is an online paper mall that has been developed with a strong focus on meeting customer needs and preferences. It offers a wide range of papers, including Hansol Paper. At Grooup, customer convenience is a top priority with features like the advanced search function for easy product search, real-time delivery updates through SNS notifications, and a cart reorder feature for streamlined repurchases. To cater to individual preferences, Grooup has partnered with a PG company to offer a variety of payment methods. Grooup regularly updates its platform based on customer feedback to enhance functionality and user experience.

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Securing New Growth Engines by Building a Global Network



#### Hansol Logistics

Hansol Logistics has built 19 logistics networks in seven countries, focusing on secondary batteries to strengthen its competitiveness in industries like electronics, chemicals, and automobile parts. The company's customer spectrum now includes both large global firms and medium-sized manufacturers, especially in the booming electric vehicle (EV) market. Hansol Logistics has become a dominant player in the Asian secondary battery logistics market, serving major manufacturers and vendors, especially in China, with over ten years of successful operation. Additionally, the company has strategically expanded into the thriving EV market by establishing new bases in Poland, the United States, and India to boost its EV parts logistics business, including secondary batteries. This successful approach led to Hansol Logistics achieving a record-breaking KRW 1 trillion in sales in 2022.

#### Hansol Logistics' Profit Trend through Diversification of Global Customers (Unit: KRW 100 million, consolidated basis)





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#### Vietnam Market Consulting and Strategy Development

#### Hansol HomeDeco

Hansol HomeDeco conducted a comprehensive market analysis in Vietnam, which is emerging as a rapidly growing market. The strategic consulting is aimed to expand performance possibilities for laminate flooring in the Vietnamese market, identify growth potential, and establish a strategic direction for overseas exports from the Hansol Vietnam base. The analysis revealed long-term growth potential in the Vietnamese market, particularly in high-end buildings, and highlighted opportunities for exports from Vietnam to the United States. This insight provided a clear direction for future business opportunities.

#### Analysis of the Vietnamese Flooring Material Market





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(Unit: KRW 100 million)

Venturing into Semiconductors and Advancing in LiDAR Sensor Investments

#### **Hansol Technics**

In January 2022, Hansol Technics strategically entered the semiconductor industry by acquiring IONES, a company specializing in semiconductor parts processing, cleaning, and coating. The acquisition amounted to KRW 127.5 billion, securing 34.47% of the shares to gain management control. This was intended to strengthen the profit structure and tap into the high-growth and high-value semiconductor industry. Additionally, in May 2022, the company invested in SOS LAB, a leading LiDAR sensor specialist with global competitiveness. This investment grants priority access to SOS LAB's mass-production and opens new possibilities for joint product development to internalize LiDAR technology and pursue ODM roles in the future.

#### Hansol Holdings

Hansol V Frontiers is an open innovation program operated by accelerator Blue Point Partners and Hansol Group since 2020. In September 2022, the 3rd cycle was successfully completed, and in 2023, the 4th cycle will be operated. Open innovation refers to the innovative strategy that allows businesses to outsource technology, ideas, and services to create value. As part of Hansol Holdings' corporate responsibility and ESG commitment, Hansol V Frontiers aims to foster a robust industrial ecosystem by supporting promising startups. The participating startups from the 1st to the 3rd cycles experienced remarkable growth, with their value increasing approximately six-fold as of December 2022, amounting to a total of KRW 99.55 billion. Notably, all five teams selected for the 3rd cycle successfully attracted follow-up investment.

Successful Implementation of PoC with Startups

#### **IT Service Division, Hansol PNS**

Hansol PNS's IT Service Division also embraces open innovation to enhance the value chain and cultivate a various collaboration ecosystem. In 2022, Hansol hosted a contest in collaboration with startup incubators like the Incheon Center for Creative Economy & Innovation and SeongNam Industry Promotion Agency. The result was the emergence of two successful startups in big data, AI, and MSA. The PoCs with these startups were successful and their solutions were validated through field testing. Building on these accomplishments, the division aims to further improve and expand its endeavors in 2023 by establishing cooperative relationships with venture capitalists (VCs) and accelerators (ACs) with various startup portfolios. Through open innovation, Hansol PNS seeks to share technology with external institutions and startups, fostering a customer-oriented approach and enhancing service competitiveness.

## 2. Customer Satisfaction and Marketing Excellence

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#### Quality-Management System Certification

#### Hansol Paper, Hansol HomeDeco, Hansol Technics, Hansol IONES, Hansol Logistics, Hansol Chemical, Tapex

Hansol Paper operates an integrated marketing system (Enterprise Resource Planning) that connects overseas marketing bases with production, distribution, and sales both domestically and internationally. We ensure quality throughout the entire product distribution process and have acquired ISO 9001 certification through strict quality-control, from production to delivery.

To remain responsive to customer needs and market dynamics, we consistently monitor and stay updated on international quality standards, ensuring our certification status. Additionally, we have established a standardized quality-control process for consistent quality across domestic and overseas products in accordance with the ISO 9001 certification. All certifications are subject to annual evaluation and renewed every three years.

Automotive Quality-Management System Certification

#### Tapex

Tapex's flagship product — functional tape for secondary batteries — has seen increased sales and global reach due to the growing popularity of eco-friendly electric vehicles. As a response, we have expanded quality management system certification for automotive, IATF 16949, to all business sites that produce the functional tape for secondary batteries. IATF 16949 is a globally recognized standard co-established by the International Automobile Task Force (IATF) and the International Organization for Standardization (ISO) to unify automotive quality-management systems across the supply chain, thereby ensuring standardized and authenticated quality practices. Certification validates the automotive company's robust quality management system for promotion of continual improvement in defect prevention and waste reduction. The Yanggam Plant of Tapex obtained this certification in September 2022, and the Hwaseong Plant acquired it in 2016.

#### **Quality-Certification Status of Major Affiliates**

Affiliates	Business Sites
Hansol Paper	Daejeon · Janghang · Shintanjin · Cheonan Plants
Hansol HomeDeco	Seoul Headquarters, Iksan Plant
Hansol Technics	Jincheon · Ochang Plants
Hansol IONES	Anseong Head Office, Baran Plant
Hansol Logistics	Headquarters
Hansol Chemical	Jeonju · Ulsan Plants
Тарех	Yanggam · Hwaseong · Uniwrap Plants

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Certification ISO 9001 ISO 9001 ISO 9001 ISO 9001, AS 9100 ISO 9001 ISO 9001 ISO 9001, IATF 16949 (Automotive quality management system, Yanggam and Hwaseong Plants)

Improving the Customer-Satisfaction Index

#### Hansol Paper and Hansol IONES

Hansol Paper conducts annual customer satisfaction surveys around August-September. The survey is divided by sector (printing paper, industrial paper, and special paper), to comply with the ISO 9001 requirements. The surveys help identify customer needs and facilitate immediate improvement activities. Despite price increases and reduced services in 2022, customer-satisfaction increased across all categories, reaching a score of 76, which was a four-point rise from the previous year. Hansol IONES excels in customer satisfaction through prompt and accurate responses. According to the AGS Score published by Applied Materials, a leading company in the global semiconductor equipment industry, the customer's satisfaction index related to delivery performance for Hansol IONES significantly improved from 43 points in 2022 to 69 points as of March 2023, representing a remarkable 60% increase compared to the previous year.

#### Hansol Paper Customer Satisfaction Survey System

#### Step 01

Quality evaluation by paper type INSPER M Rough, fancy paper, sublimation paper, Hansol thermal paper, Ensemble E-Class, Glassine, etc.

Step 02 Step 03 Specific criteria by item 1) White paper quality Step 04 2 Printability Interview ③ Workability Receive VOCs beyond ④ Finish evaluation surveys Reflection of results (5) Color characteristics 6 Suitability for labeling ⑦ Foreign matter

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Advancing Brand Image through Exhibition Engagements

#### Hansol Paper, Hansol Technics, and Hansol HomeDeco

Hansol Group actively participates in various expos and exhibitions to showcase high-quality new products, enhancing the brand value in both domestic and international markets.

Hansol Paper's exhibition engagements include prestigious events like the Chicago Label Expo in 2014, Brussels Label Expo in 2019, LUXE PACK Shanghai, and FESPA — drawing keen attention from designers and competitors. The participation helped solidify the company's position as a leading paper company. Additionally, Hansol Paper showcased its plastic-free, high-quality, green products to domestic customers at the Korea ESG Exhibition in November 2022.

Hansol HomeDeco participated in the 2023 Hotel Fair as an eco-friendly building materials and interior company, introducing a range of products with innovative construction methods that prioritize safety and sustainability. The "Web 3.0 hotel lounge & space trend" concept hall received high praise from hotel-related architecture and interior buyers. Additionally, it earned the Outstanding Space Award at the Seoul Living Design Fair, boosting its brand image externally. Hansol Technics participated as a platinum and official sponsor of the International Green Energy Expo from April 12 to 14, 2023. It showcased a range of solar products including media PV, high-output solar modules, and water-type solar modules, all certified under KS for the first time in Korea.



Hansol HomeDeco at the 2023 Hotel Fair

Establishing Green Packaging MOUs

#### Hansol Paper

Hansol Paper has signed MOUs with leading domestic companies in various sectors, including cosmetics, food, pharmaceuticals, confectionery, coffee franchises, and health functional foods for implementation of paper-based packaging materials. As it strengthens ESG management to build a sustainable future with its corporate customers, Hansol Paper is actively introducing eco-friendly paper packaging materials in various industries. This aims to encourage general consumers to practice environmental protection in their daily lives.

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## **3. Digital Transformation**

Smart Energy-Management System CoEMS

#### Hansol PNS

The Coever Energy-Management System (CoEMS) is Hansol PNS IT Service Division's smart energy management solution, focusing on efficient energy management and distribution to reduce GHG emissions and energy consumption in plants. This product facilitates customers in enhancing their ESG management through digitalization of the production process. Currently, it is utilized in Hansol HomeDeco's digital cluster business among affiliates and adopted by other manufacturers like Zian Wood and MS Chem Korea. The goal for 2023 is to advance ESG management in the manufacturing industry by expanding the smart factory business.

Accelerating AICC Business through MOU with Kore.ai, a Global AI Platform

#### Hansol Inticube

In March 2023, Hansol Inticube forged a strategic partnership with Kore.ai, a leading global interactive artificial intelligence platform. Kore.ai is renowned for providing conversational AI and digital UX technology to top Global 2,000 companies. Headquartered in Orlando, USA, Korea.ai was established in 2015 and has become the trusted provider of AI solutions to over a hundred Fortune 500 companies, including the top-four global banks. By utilizing Kore.ai's large language model (LLM) and generative AI technology, Hansol Inticube aims to enhance its conversational AI services, like ChatGPT, to significantly improve cost- and operational-efficiency, while eliminating manual work in creating conversation scenarios and learning natural language processing.



Ryu Chang-sung, CEO of Hansol Inticube, and Sreeni Unnamatla, Executive Vice President of APJ at Kore.ai

Becoming the Top Digital Trucking Freight Forwarder with Innovative IT Technology Application

#### Hansol Logistics

Logismile, a subsidiary of Hansol Logistics, has launched an app-based digital truck transportation system. Through the integration of digital trucking solutions with the company's nationwide direct dispatch service capabilities, it is enhancing its competitive edge in the trucking market. Having achieved successful digitization of the traditional truck transportation market through the Transportation Management System (TMS) and robotics technology, the company's focus has now shifted to integrating Al algorithms and other advanced solutions into the system.



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## Product Development Considering the **Environment and Climate Strategies**

#### For the Sustainability

Hansol Group's market development and business expansion strategy revolve around eco-friendly technology development. By focusing on R&D efforts in eco-friendly technologies and products, the company aims to secure new growth engines for the future and achieve sustainable growth. The development of eco-friendly products by Hansol Paper and Hansol HomeDeco are central to this strategy. Additionally, the utilization of new and renewable energy by Hansol Technics and Tapex is gaining attention. With generous investments in eco-friendly R&D, Hansol is committed to leading the way in responding to climate change and creating a greener business ecosystem.

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In response to the urgent climate crisis, both domestic and foreign companies are striving to achieve carbon neutrality by 2050. Hansol Group is also joining this global effort by actively reducing greenhouse gas emissions, transitioning to new and renewable energy sources, and innovating eco-friendly technologies and products.





## **1. Development of Eco-Friendly Technologies and Product Certifications**

Expanding the Eco-Friendly Material Market for Duracle Hansol Paper's "Duracle" brand offers an eco-friendly solution containing nanocellulose and microfibril cellulose. This versatile material finds applications not only in batteries and paints but also in cosmetics, urethane foam, rubber, and packaging. Collaborating with leading companies in various industries, we are actively developing application technologies for Duracle material. With its benefits for carbon neutrality and circular economy, the market demand for this material is expected to make a significant impact. Furthermore, our environmentally certified products have been well-received in the market, including "Protego," eco-friendly paper packaging; "Terravas," nature-friendly containers; and the "Whale-saving Wet tissue," made from natural pulp and plant-derived rayon fabric without generating microplastics.

#### Green-Certified Products by Hansol Paper

Certification	Production Location	Paper Type	Product Name
	Daejeon Plant	Industrial paper	Hi-Q AB Light, Hi-Q AB Premium, Hi-Q AB Plus, H Hi-Q ACB, Hi-Q SC, Hi-Q FAB, etc.
	Janghang Plant	Printing paper	Ensemble E Class, Cloud, colored wood free paper, new wood free paper for textbooks, fine coated paper, Hi-Q Duomatt, Hi-Q
		Thermal paper	Green, Green HS, Green AFH, CL, EL, SL, HB, HL, F
FSC	Shintanjin Plant	Printing paper	Campus paper (S, J), New Classic, New Wood Free Paper, New Plu Premium Textbook Paper, Hi-Q Matt Premium, Hi-Q Mystic, Hi-Q S Hi-Q Millenium Art, etc
		Thermal paper	Green HS, Green AFH, SL, EL, Slim, Green EL, Green HB,
	Cheonan Plant	Fancy paper	Fancy papers, green products, outsourced produ
		Thermal paper	Green, Pro, etc.
		Inkjet paper	Inkjet sublimation papers
UL ECV 2485	Cheonan Plant & Daejeon Plant		Protego S(EB Smart) 70g, Terravas Cup
GR Certification (Good Recycled)	Shintanjin Plant		Green Textbook Paper
Green Seal	Cheona	an Plant	INSPER Smooth Shopping (E) PCW30 · 90
	Janghang Plant		New Wood Free Blue, New Plus Blue, Hi-Duo Ma
Eco-label Certified Products	Cheonan Plant		INSPER Signature Eco, AHC Willow, INSPER Aloe, INSPER Magic O INSPER Eco
	Shintanjin Plant		Hi-Q Millennium Art, Premium Textbook Paper

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November 2022, Hansol Paper at the Korea ESG-ECO Expo (left), Hansol HomeDeco's eco-friendly SB flooring (right)

#### Green-Certified Products by Hansol HomeDeco

Certified Products	Certification	Product Description
E0 MDF 35	Eco-label	Constructed from selected wood waste recovered from constru (flexural strength of 35Mpa or more)
E0 MDF 30	Eco-label	Constructed from selected wood waste recovered from constru (flexural strength of 30Mpa or more)
SPB	Eco-label	Designed to replace particle boards with fiberboards, in line with increasing domestic imports of particle boards (flexural strength omore)
Laminated flooring	Eco-label, HB mark	7.5mm-thick, E0 grade non-glued flooring produced by bonding and reinforcing for durability
Ultra	Eco-label, HB mark, Low-carbon	7.5mm-thick, E0 grade flooring made by bonding HPL to ply
Story Wall	Eco-label, HB mark	9mm-thick, E0 grade flame retardant wall made by bonding LF
SB General (Edge/Stone)	Eco-label, HB mark, EPD	6mm-thick, SE0 grade flooring made by bonding PP to SB co resistant to water and moisture
SB HPL (Edge/Stone)	Eco-label, HB mark, EPD	6mm-thick, SE0 grade flooring made by bonding HPL to SB co resistant to water and moisture
SB Embo	Eco-Label	6mm-thick, SE0 grade flooring made by bonding HPL to SB co resistant to water and moisture (texturized)
Ultra HPL	Eco-label, HB mark, Low-carbon	7.5mm-thick, SE0 grade flooring made by bonding HPL to SB c resistant to water and moisture
Well Stone	HB mark	Non-combustible product with excellent dimensional stability resistance and processability through the bonding of LPL to inorg wool material
Prium	HB mark	10mm-thick SE0 grade hardwood flooring, crafted with UV co plywood

#### Hi-Q FSB,

ee paper, Hi Plus, premium Q Millenium Art, etc.

PF, Pro, etc.

Plus, Green Textbook Paper, Semi-kraft, Hi-Q Duomatt,

B, Green, CL, etc.

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#### Hansol Paper Eco-Friendly Product Sales

Sales of Eco-Friendly Products Total Sales (Separate)



#### Sales of eco-friendly products by each affiliate

Affiliates	Green-Certified Products (As of 2023)			2020	
Тарех	1 (Hanji oil absorbing pape_Eco-label)			2	
Hansol HomeDeco	3; MDF 30, 35, and flooring products (20 models)			830	
Hansol PaperTech	11; scratch paper and corrugated cardboard sheets including outer layers and flutes			814	
Hansol Technics	Cumulative total number of carbon-certified models: 188				
	Brea				
	Carbon level	Number of certifications (ea.)	CO2 emissions (kgCO2/kW)	1,296	
	Level 1	42	Under 630		
	Level 2	39	630~670		
	Level 3	24	670~730		
	Level 4	83	730 or above		

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(Unit: KRW 100 million)

2021	2022
2	2
793	842
1,014	1,237
1,426	2,304

#### Development of Low-Carbon Products

Introducing

Pack": Paper

Packaging

Made 100%

from Sugar

Expanding

straws and

supply of paper

reusable cups

Cane

"Sugar

#### Hansol Technics

Hansol Technics is dedicated to reducing greenhouse gas emissions through mid- to long-term plans. As of 2018, our GHG emissions amounted to 27,652 tCO2eq. With a goal of reducing emissions by 25% compared to 2018 levels by 2030, we are investing in high-efficiency energy facilities and equipment, introducing solar energy, and transforming our manufacturing processes to lower carbon emissions. Moreover, as part of our long-term vision, we are continuously researching and implementing measures to achieve carbon neutrality by 2050. We already have successfully developed low-carbon grade 1-3 products and have plans to continue providing green and sustainable solutions through ongoing product development and production.

#### Hansol PNS

Sugar Pack is a non-wood paper made 100% from sugar cane, thus ensuring no trees are cut down. The raw material, sugarcane, is one of the most cultivated crops worldwide, and the paper is made by recycling sugarcane by-products left over from the sugar manufacturing process. This eco-friendly product is free from harmful chemical treatment or artificial bleaching, making it a nature-friendly option for food packaging.

#### Tapex

Tapex's paper straws and reusable cups have gained significant popularity due to the government's regulations on plastic disposable products. With the plastic straw regulation in effect from November 2022, sales have risen by 22% in the same year. Additionally, the reusable cups, serving as an alternative to disposable ones, experienced a remarkable 120% sales increase, reaching KRW 800 million in 2022 compared to the previous year. These eco-friendly products have contributed to an estimated 145 tons of carbon reduction. Furthermore, to reinforce the company's commitment to sustainability, Tapex has joined the Habit Eco Alliance, collaborating with SK Telecom, SK Happiness Connect, Starbucks, and local governments in eco-friendly initiatives.

Implementing the lifecycle assessment of secondary battery tapes

#### Tapex

In a significant move toward environmental sustainability, Tapex has implemented Life Cycle Assessment (LCA) for its flagship products. LCA evaluates the environmental impact, particularly GHG emissions, throughout the entire lifecycle of a product. During the first half of 2022, a dedicated LCA Task Force team was established to assess the secondary battery tape used in battery production. Looking ahead, Tapex will expand the application of LCA to other products for global expansion.

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## 2. GHG Emissions Reduction and Energy Conservation

Upgrading to high energyefficiency facility

#### Hansol Chemical

Hansol Chemical's Jeonju Plant implements multi-faceted improvement efforts to curtail power and steam consumption, amid expanding business operations that cause escalating energy-usage each year. Our recent initiatives involve replacing conventional lights and refrigerators with high-efficiency LED lights and refrigeration machines to reduce power consumption (approx. 2,700 MW), and optimizing flare stack operations, while recovering steam in the process to reduce steam consumption (approx. 5,000 tons). As a result, we not only achieve significant energy-savings, but also reduce greenhouse gas emissions.

Investing in carbonemission reduction facilities

#### Hansol Technics

Hansol Technics is taking proactive steps to reduce GHG emissions, starting with the replacement of an aging 200HP air compressor at the Jincheon Plant. The old compressor was replaced with a new 100HP compressor to prevent energy-losses resulting from reduced plant-operation rates and excess capacity. This investment is expected to yield annual energy savings of KRW 10.5 million. At the Ochang plant, the boiler was upgraded to a high-efficiency, low-NOx boiler, and the discharge method was changed to an individual discharge approach, thereby ensuring stable boiler operation. We improved energy efficiency by resolving issues related to pipe corrosion, ignition problems, and boiler temperature management caused by condensation resulting from the temperature drop ( $140^{\circ}C \rightarrow 75^{\circ}C$ ).

New Zealand afforestation business and carbon-credit sales

#### Hansol HomeDeco

Since 1991, Hansol HomeDeco has been the pioneering Korean company in overseas afforestation, securing a stable source of wood resources. Since 1996, we have been involved in the afforestation business in New Zealand, annually absorbing 149,000 tCO<sub>2</sub> of carbon dioxide and generating profits through the carbon-credit business.

Increase use of recycled raw materials

World's No. 1 in use of recycled raw materials for MDF production

80,

Increase use of recycled raw materials to 100%

Reduce GHG emissions and energy consumption

Annual CO<sub>2</sub> reduction

000

```
Reduce power usage by 5% every year
```

Increase share of green products

30,

Share of green products in total sales Expand recycled products in MDF and flooring

Overseas afforestation area

10 000 

Annual CO<sup>2</sup> reduction of 149,000 tons

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Overseas afforestation business and securing carbon credits







MDF production



## **3. Pollutant and Waste Management**

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Reducing wastewater by 30,000 tons

Exceeding

wastewater

discharge

standards

#### Hansol Chemical

In 2022, despite business expansion, the Ulsan Plant of Hansol Chemical achieved a significant reduction in water usage and water pollutant emissions. The total discharged wastewater was 160,151 tons (440 tons/day), marking a 15% decrease from 2021's discharges of 189,823 tons (520 tons/day). This accomplishment was made possible by enhancing product-manufacturing process efficiency, and investing in facilities to increase wastewater reuse rate.

#### Hansol PaperTech

At Hansol PaperTech, we adhere to stringent wastewater-discharge requirements, which are set and managed internally to exceed the legal standards.

	Legal requirement	Internal standard
тос	25	20
COD	32	25
SS	30	22
PH	8.6	8
TN	30	23
ТР	4	3.5

Investing in environmental facilities

#### Hansol Paper

Hansol Paper strives to minimize resource-waste and pollutant discharges by increasing the waste-recycling rate and investing in facilities. The company aims to achieve zero marine waste discharge and promote eco-friendly resource circulation. Over the past three years, Hansol Paper has invested KRW 5.6 billion in 2020, KRW 6 billion in 2021, and KRW 1.5 billion in 2022, respectively, in environmental facilities - furthering its commitment to reducing air and water pollutants.

#### Hansol HomeDeco

Hansol HomeDeco invested in constructing heavy-metal reduction facilities for incinerator fly ash. Previously, the fly ash contained excessive levels of heavy metals, classifying it as designated waste and incurring high disposal costs. To address this, the company introduced heavy-metal elution inhibitor chemicals to the incinerator, converting the fly ash into general waste and facilitating recycling. This improved waste treatment processes, resulting in cost reductions.

#### Hansol PaperTech

Hansol PaperTech actively prepares and implements a waste recycling plan, specifically targeting the waste (sludge) generated during production, to transform it into valuable resources. Emphasizing the importance of waste treatment stability, the company invests in advanced facilities for this purpose. To ensure compliance with the Waste Control Act, all waste-related changes are promptly reported to local authorities and carefully managed. This performance, along with report certificates and third-party contracts, is registered in the Allbaro system for comprehensive management.

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#### **Hansol Technics**

Hansol Technics conducted effective dredging of sludge from collection and discharge tanks to ensure efficient wastewater treatment and maintain concentrations below legal limits. This proactive measure prevents the accumulation of wastewater sludge, which can lead to increased water-pollution levels and impact equipment like pumps and piping. As a result of the dredging process, significant reductions were achieved in wastewater contamination levels, including BOD (78%), TOC (19%), SS (52%), and T-P (85%).

#### Hansol PaperTech's Environmental Facility Investment in 2022-2023

Facility improvement	Investment amount
Replacement of water quality TMS (TOC)	62
Upper SDR replacement	82
Installation of spare turbo blower for aeration tanks and piping	91.5
Additional installation of advanced water-quality treatment (corresponding to TOC regulations)	618
Bag filter hopper replacement	140
Bag filter valve replacement	49
Spare aeration tank submersible pump replacement	31
Nano filter installation	563

#### Trend of Increasing Sludge Recycling Amount at Hansol PaperTech



# (Unit: KRW million)

#### (Unit: Tons)

## 4. Global Initiative & Environmental Management Certification

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Compliance with the TCFD recommendations and designation

as green company

#### Hansol Paper

The Task Force on Climate-related Financial Disclosures (TCFD) recommendations, established by the International Financial Stability Board (FSB), serves as standards for disclosing governance, risk management, and metrics and targets related to climate change response. Hansol Paper strengthens its climate-change response system and facilitates informed decision-making of key stakeholders by adhering to the TCFD recommendations and disclosing climate-related information. Moreover, Hansol Paper has earned the designation of a green company, approved by the Ministry of Environment and the Geumgang River Basin Environmental Office, reaffirming its commitment to eco-friendly management practices.

#### Hansol Paper's Governance for Climate Action



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Development and management of mediumterm energy plans and performance · Response to energyrelated issues Implementation of energy innovation activities · Evaluation of new energy technology implementation • Energy investment and performance management at each business site

#### Joining the **UN** Global Compact

#### Hansol HomeDeco

Hansol HomeDeco has joined the United Nations Global Compact (UNGC), thereby reaffirming its commitment to upholding global standards of ESG management and social responsibility. The UNGC is the world's largest voluntary corporate citizenship initiative, launched in New York, USA, in 2000, with the goal of promoting corporate social responsibility. With approximately 20,000 member companies from 162 countries worldwide, the UNGC emphasizes the importance of adhering to its ten principles in the areas of human rights, labor, environment, and anti-corruption. Participating companies are required to report on their progress toward achieving the Sustainable Development Goals (SDGs) through an annual Communication on Progress (COP). Hansol HomeDeco's membership of the UNGC signifies its dedication to being a responsible corporate citizen and upholding the principles of sustainability and social responsibility.

Newly certified business site for the ISO 14001 certification

#### Tapex

Tapex's Uniwrap Plant established a systematic environmental management system, and acquired the international environmental management system (ISO 14001) certification in 2022. This marks the complete certification of all three domestic business sites of Tapex.



Establishment of the Environmental Council and improvement plans

#### Hansol IONES

In 2023, Hansol IONES took a significant step forward by creating an Environmental Council, conducting meetings at both the Anseong headquarters and Baran campus. This council will be holding quarterly meetings to address internal and external environmental issues, evaluating risks, and setting specific goals. Hansol IONES is committed to prioritizing environmental management, and responding proactively to environmental challenges.

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#### For the Sustainability

Hansol Group is dedicated to upholding ESG values in collaboration with its employees, business partners, and local communities. In line with this commitment, we prepared and distributed human rights management operation guidelines across the organization to ensure proper training. We continuously strive to establish a safe and enjoyable workplace by bolstering our capabilities through educational support programs. Many of our major affiliates have already achieved ISO 45001 certification, a renowned international safety- and health-management system. To further strengthen safety measures, we have established the Hansol Safety Rating System in 2022, specifically designed in consideration of business characteristics. To achieve this goal, we provided consistent support through regular meetings, training, and consulting services, ensuring the safety and health of our employees in each affiliate and partner company. Hansol's labor-management council actively seeks input from both executives and employees, enabling constructive discussions and negotiations for determining compensation and annual salary increase rates. We are committed to fostering diversity within our workforce and promoting a culture of open communication, cultivating a pleasant work environment and attracting and retaining top talent.

## Sustainable Growth for All

Respect for and protection of human rights in business are becoming increasingly critical on a global scale. Companies that prioritize human rights and take into account the well-being of all stakeholders, including employees, suppliers, and local communities, are best positioned for sustainable growth. At Hansol, we uphold the UN's Universal Declaration of Human Rights and the United Nations Guiding Principles on Business and Human Rights (UNGP), actively promoting their principles.





## **1. Growth with Employees**

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Establishing the Group human rights management operation guidelines and operating counseling programs for employees

#### Hansol Holdings

Hansol Holdings has announced its commitment to human rights management, introducing the Human Rights Management Guidelines. These guidelines provide clear definitions of human rights and human rights management, identify various human rights violations, and establish procedures for addressing these concerns. The scope of application for the human rights management system includes the holding company, its affiliates, members, customers, and partners, among others, and is delivered through multiple communication channels, including Red Whistle (anonymous reporting channel), website, postal mail, email, and phone. Looking ahead to 2023, our plan is to expand human rights management to major affiliates and conduct annual training sessions. We are committed to fostering a culture of respect for human rights among all Hansol employees and upholding our Human Rights Management Declaration. In 2023, we are introducing a comprehensive counseling program to provide all our employees with access to professional counseling services through an external counseling center. This program aims to offer support for various personal challenges, including work-related stress, workplace conflicts, burnout syndrome, interpersonal conflicts, and human rights concerns.



Specific human rights violation relief procedures and prevention program included in the Human Rights Management Operation Guidelines

Employee growth support programs

Free agent (FA) system: The Flexible Assignment (FA) system, introduced in 2020, enables employees to apply for different job positions after a certain period. Eligible employees are given priority through regular job postings, promoting internal mobility and career growth opportunities. MBA support program: Each affiliate selects candidates internally to nurture them as executives every year. Top performers are awarded with full scholarships to complete MBA programs.

Mentoring program: Various mentoring programs aid new hires in adapting and growing within the organization. Hansol nurturing program: Our comprehensive training approach provides employees with essential education, encompassing online courses, free telemarketing, and outsourced programs, fostering their professional growth and development.

Respect leadership: We foster a corporate culture where employees respect one another and thrive under "respect leadership," a core value of the HMS, instilled in all Hansol leaders.

Absolute evaluation: Our performance management system prioritizes cooperation over internal competition, rewarding the achievement of shared goals and mutual growth.

Ground rules for teams: Hansol Group implements the "ground rules for teams" program, allowing teams to create a customized work environment that reflects their unique characteristics and culture.

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#### Hansol 한술물당스 임직원 대상 의부 전문 상당전터를 운영하여 심리적 안정감 및 정서 지원을 통하여 인권침해 발생 리스크를 사전에 예방하고 건강한 조직문화 형성 기반을 이런 상담 신청 및 문의 -- 상담 접수 --- 상담사 배정 --- 상담 진행 → 평가 및 사후 관리 → 위기 개입 및 관리 상당 프로그램 상담대상 | 한승그중 소속 일직원 및 배우자, 자내 포함 (연간 6회 이용가능 **[달문야 |** 인권링패, 직장 직무 스트레스, 직장 내 갈등, 경력개발, 심리우 빈-아웃중추군동 삶리 우울, 불안, 분노, 대인관계 값동, 감정노동 요상 후 스트레스, 강정노동동 가족 사춘기, 행동장애, 부부관계 ※ 법률, 제무의학, 금면, 절주, 자녀 학업상담 등의 항목은 제외 상담시간 1 월 ~ 토요일 0900~21:00 상담정소 | 상당센터 또는 원하는 장소 (상당사와 상호 현의 후 경정) 키카오채널에서 'EAP상당' 검색 후 친구 추가

#### Development of an online education curation system, LMS

#### Hansol Holdings

Hansol Group introduces its newly established Learning Management System (LMS), an online learning curation system connecting "Da Vinci," the Group's HR system, and an online education system, "H-Campus." The integrated learning curation platform includes a personal competency test to create Individual Development Plans (IDPs) and Career Development Plans (CDP). Utilizing AI technology, the LMS suggests relevant learning resources, such as contents, videos, and YouTube, based on the test results and keeps track of learning support and history. With this educational infrastructure, Hansol Group fosters a voluntary learning culture, actively supporting the self-development of every employee.

· Self-directed course search and individual learning plan creation by employees. Manual input of competency, goals, and curriculum by employees.

improvement.

and selection.

course.





#### New online learning curation system, LMS





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5.8

7.8

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Establishment of Hansol Safety Rating System for safety and health management

#### Hansol Holdings

Since the first ISRS evaluation in 2019, Hansol Group has developed its own safety and health work standards and evaluation system, tailored to the unique characteristics of its business. In 2022, we introduced the Hansol Safety Rating System (HSRS) after verifying the effectiveness and performance. The evaluation ratings range from level 1 to 5, and our affiliates in manufacturing businesses, Hansol Paper and Hansol HomeDeco, are working to attain and maintain HSRS Level 5, which is comparable to ISRS Level 7. This initiative aims to enhance our safety and health competitiveness, foster a safety culture within the organization, and extend it to our suppliers.

#### Hansol Paper's Janghang Plant received an L5 rating in the HSRS evaluation



Strengthening occupational safety and health education

#### Hansol PaperTech

Under the Serious Accidents Punishment Act, occupational safety and health education has been significantly reinforced. The annual safety and health education now requires evaluation of job-related competencies through KSA competency assessment for satisfactory completion. Safety and health managers must undergo regular training of at least six hours per quarter. Special safety and health education is mandatory for full-time employees, requiring 16 hours or more, and daily contract workers, requiring at least two hours. These measures aim to ensure safety at worksites engaged in operating one-ton or larger cranes, confined space operations, and workplaces with five or more pieces of material-handling equipment.

ISO 45001-certified business sites

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Management of human resources

Compliance

Competence

Rating \_5

Protecting employees' health through health checkups and safety and health policies

Introducing a telecommuting employment platform for persons with disability

#### Hansol PaperTech

When recruiting and assigning new workers to positions requiring special health examinations, Hansol PaperTech requires those employees to receive health checkups prior to starting work, informs them about any potential hazards in their workplace, and follows up with annual health checkups. Workplaces with hazardous conditions, such as excessive noise, dust, and potential exposure to radiation, sulfuric acid, and welding work, require special health examinations. Employees involved in processes like noise, dust, solvent handling, hazardous substance use, and night work, as specified in the Occupational Safety and Health Act, undergo specific health examinations tailored to the risks they encounter. To review adequacy of the policies, Hansol PaperTech regularly evaluates and updates its safety and health policies through active communication with members and stakeholders. Feedback is gathered through various channels, such as emails, official letters, meetings, and internal postings. The safety and health organization reports safety performance to the CEO semi-annually and actively works on improvement plans to address any pending issues.

#### Hansol Group

Hansol Group is proactively enhancing the employment of people with disabilities through a partnership with VDream, a specialized company in this field. Several major affiliates, including Hansol Logistics, Hansol PNS IT Service Division, Hansol Inticube, Hansol Chemical, Hansol Technics, and Tapex, have adopted and implemented the VDream platform. This initiative enables the employment of individuals with disabilities in support functions, encompassing responsibilities like document and data management and article processing. These employees receive equitable benefits, including education assistance, medical coverage, and regular health assessments, on par with their colleagues.

Tapex has taken a significant step toward diversity in employment by extensively utilizing the platform since 2022. In 20200, Tapex hired four additional individuals with disabilities, making the total number six. The company has carefully placed them in roles that offer telecommuting options, such as customer service, design, and general affairs, to ensure work convenience and accessibility.



Vdream allows individuals with disabilities to select the job field they want to apply for. (vdream.co.kr)

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Certified family-friendly businesses

#### Hansol Paper, Hansol Chemical, Tapex

Hansol Paper, Hansol Chemical, and Tapex have successfully applied for and obtained family-friendly management certification from the Ministry of Gender Equality and Family. Our certification was granted based on positive evaluations of our childbirth and childcare support systems, flexible working hours, early leave on Fridays, family-friendly programs, family-care leave, and overall family-friendly workplace culture.



Break room for pregnant employees and a remodeled female employee lounge at Tapex

Designated as a youth-friendly small giant

#### Hansol Coever

Hansol Coever, a subsidiary of Hansol PNS, was chosen as a youth-friendly small giant in 2023. Since 2016, the Ministry of Employment and Labor has been recognizing companies that offer excellent wages, compensation, work-life balance, and employment stability for young workers. As a result, Hansol Coever, acknowledged as a great workplace for young professionals, has been granted benefits such as recruitment support services, financial incentives, preferential treatment in tax audits, and additional points in screening for alternative military service companies.

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Strengthening intergenerational communication culture through meetings

#### Tapex

Tapex has been dedicated to fostering a harmonious corporate culture that embraces various generations as the number of employees rapidly increases in line with the company's recent growth. As part of this initiative, meetings have been conducted by position since 2022 to address and resolve employee grievances. These meetings are held regularly, at least once per year, with participants from the same level of position, under the supervision of each plant manager or head of the Managing Director. In 2022, a total of 264 individuals participated in the meetings, resulting in 211 complaints received, and the formulation of improvement plans.

#### Hansol Technics

Hansol Technics promotes effective communication with millennial and Generation Z (collectively known in Korea as MZ Generation) employees through various initiatives. The company provides monthly support for activity expenses and conducts video conferences with relevant departments to gather and share opinions on support, human resources, and general affairs. Additionally, the company operates a Junior Board and organizes meetings as intergenerational communication events between different positions. These meetings offer employees the chance to interact with the CEO in open and candid discussions, fostering better understanding and bridging generational gaps. Currently, there are six Junior Board members, with two representing each workplace.

#### Hansol IONES

In 2023, Hansol IONES organized company-wide meetings with the CEO, specifically by job category. The meeting aimed to prioritize the input and perspectives of working-level employees, excluding executives and managers, to ensure it was a platform for open communication and idea sharing. By fostering this culture of communication and engagement among different ranks and generations, Hansol IONES is committed to internalizing the social value of ESG principles.

Operating a flexible work system, "For Me"

#### Hansol PNS

Hansol PNS Paper Distribution Division operates the "For Me System" as part of its flexible work system, which can be described as "Friday for Me." Under the system, employees can enjoy a refreshing period with a three-day break after four days of work. In addition to the 16 days of annual paid holidays, an additional eight days are granted, providing a total of 24 days of rest. This allows employees to take every other Friday off. The second and fourth Fridays of each week are designated as default holidays, but they can be distributed and used at the discretion of teams and individuals.

Introducing an internal referral system

#### Tapex

At Tapex, we continuously strive to enhance corporate competitiveness by expanding recruitment channels. As part of these efforts, we introduced an internal referral system for our employees starting in 2022. When an employee referred through this system completes one year of service, the recommender receives incentives ranging from KRW 500,000 to KRW 2 million. Furthermore, in 2022, we resumed the open recruitment of college graduates, which had been suspended since the second half of 2013. This allowed us to hire 10 new talents across various fields.

## **2. Shared Growth with Partners**

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Shared-growth program

#### Hansol Technics

Hansol Technics has taken a significant step toward promoting fair trade and shared growth with its partners by elevating the Win-Win Cooperation Team to a department directly under the CEO's supervision. Recognizing that mutual growth with partners is of paramount importance, we are committed to dismantling elements of unfair trade practices that may have persisted in the past. To foster a collaborative environment, we actively support technology exchanges, provide consulting and education, and share welfare systems to address the specific needs of our partners. By doing so, we aim to boost the job satisfaction of our partners' employees. This has led to a marked improvement in the quality of partners and facilitated the recruitment of exceptional talent, which has now become a distinctive competitive advantage for Hansol.

#### Hansol Technics Shared-Growth Promotion System



\* Starting in 2023, the list of programs will expand to include language learning programs alongside the existing offerings.

Hosting Mutual Cooperation Day

#### **Hansol Technics**

Hansol Technics' annual Mutual Cooperation Day is a flagship initiative aimed at fostering mutually beneficial growth with partners. During this event, we present shared growth activities conducted throughout the year and action plans for the upcoming year. Moreover, we take the opportunity to share the latest management trends and upcoming regulatory changes. Last year's Mutual Cooperation Day featured detailed purchasing strategies for each division for 2023 and purchase consultations to ensure business stability for our valued partners.

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## Win-Win Cooperation Team Human Resources Management and Support

#### Supply-chain management of 180 partners

#### Hansol PaperTech

Hansol PaperTech's corrugated cardboard business is poised for significant expansion due to increasing demand, driven by environmental concerns, in the sectors of agricultural, marine packaging, and online shopping. Currently, Hansol PaperTech manages approximately 180 partners within its supply chain comprising outsourcing-type partners like Logismile for logistics; Jeongjin Development for labor contracts; supplier-type partners with 35 raw material manufacturers; two incineration fuel companies; seven waste- treatment companies; and 15 subsidiary material companies - as well as 120 network-type partners.

Development of Fair-Subcontracting Guidebook

#### Hansol Inticube

Hansol Inticube has published and shared the Fair Subcontracting Guidebook to ensure compliance with fair and transparent subcontracting regulations. This guidebook offers practical guidelines and business support for subcontracting transactions in accordance with the Fair Transactions in Subcontracting Act, covering key aspects like definitions, requirements, and obligations of main contractors. Additionally, it includes detailed Q&A sections to clarify complex matters for practitioners, such as transaction requirements and exceptions.





## **3. Communication and Engagement with Local Communities**

#### Museum SAN, a Space for Healing and Artistic

Expression



#### Hansol Cultural Foundation

Since its establishment in 2013, Museum SAN, operated by the Hansol Cultural Foundation, has become a prominent cultural and artistic space in Korea, offering a unique experience of healing through art amidst nature. With over 1.63 million visitors in the past decade and attracting more than 200,000 people annually, it has played a vital role in boosting the local economy. Museum SAN gained popularity with its minimalist architecture by Tadao Ando, featuring exposed concrete, and exhibition of James Turrell's art on an unprecedented scale in Asia. As the museum grew in prominence, it evolved into a more meaningful and cherished space. In 2023, Museum SAN celebrated its 10th anniversary with the exhibition "Tadao Ando-Youth," exploring Tadao Ando's architectural challenges and showcasing his remarkable world of architecture. This event reignited public interest in art and architectural culture.

#### Visitor Trends at Museum SAN: 2020-2023



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(Unit: Persons)



Donation of solar power modules to local communities and social contribution activities

#### **Hansol Technics**

Hansol Technics is actively fulfilling its social responsibility by providing support for solar products, particularly in rural areas. In 2017, Hansol Technics became the first private company to contribute to the Rural Community Win-Win Cooperation Fund. They actively provide solar panels to improve residents' lives through projects like KEPCO KPS's "Sharing Light Panel" initiative, scholarship support in Incheon City, and Iksan Community Pension's solar power generation project. Moreover, the annual Oriental medicine sharing event in Deoksan-eup, Jincheon-gun, continues to provide support to local communities.

#### Hansol Technics Local Community Support Details

(Unit: KRW 1,000) Support Amount Support Program Cash Non-cash donation donation Local farmer support (purchasing agricultural products: Shine Muscat) 2,500 131 Korea Electrical Safety Corporation - solar cell module donation 8,344 439 Donation of solar modules to the city of Iksan 11,757 618 15,549 **KEPCO KPS: solar cell module donation** 818 Assistance for the elderly living alone 1,000 Offering aid to children in unstable households 400 Oriental medicine sharing for residents in Deoksan-eup 20,000

ESG campaign for environmental preservation, beach cleaning, and waste electrical/ electronic product recovery

#### Tapex

Acknowledging the gravity of marine pollution and plastic waste in oceans, we organized beach cleaning initiatives aimed at preserving the environment and safeguarding biodiversity, with active employee involvement. Beach cleaning involves picking up sea flotsam and garbage, akin to "combing" the beach for debris. In collaboration with Hwaseong City, home to the Tapax factory, 62 executives and employees took part in three organized sessions at Gungpyeong Port, demonstrating our commitment to preserving the coastal environment. Furthermore, we collaborated with the Korea Electronics Recycling Cooperative (KERC) to conduct a resource-recycling awareness campaign, through which we collected and donated waste electrical and electronic products, including used mobile phones. Both Tapex and Hansol Chemical participated in this campaign, aiming to amplify the positive impact and raise awareness about ESG practices.

Community engagement through regular volunteering

#### Hansol Holdings

Every fourth Friday of the month, approximately 15 employees from Hansol Holdings visit the Eunpyeong Rehabilitation Center in Seoul's Eunpyeong-gu to engage in volunteer activities. These activities include repairing facilities, managing donation items, and visiting nearby cafes and hair salons with the center's residents. Hansol Holdings is committed to maintaining these volunteer initiatives to foster community connections, uphold corporate social responsibilities, and embody the spirit of corporate sharing.
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# GOVERNANCE

# Transparent Governance and **Shareholder-Friendly** Management

# For the Sustainability

Composed of various skilled directors, Hansol Group's Board of Directors plays a crucial role in transparent and independent decision-making, fostering efficient management through checks and balances. In line with the 2023 shareholder return policy, Hansol Holdings, Hansol Paper, Hansol Chemical, Hansol PNS, Hansol Technics, and Tapex distributed cash dividends. This was a significant milestone for Hansol Technics, achieving shareholder return for the first time in 12 years. Hansol actively addresses ESG information disclosure. While Hansol Paper is the only affiliate obligated to publish corporate governance reports, six other affiliates (Hansol Holdings, Hansol Technics, Hansol Chemical, Hansol Logistics, Hansol HomeDeco, and Hansol PNS) voluntarily disclose their ESG efforts. Furthermore, Hansol Holdings has established an ESG index management system for all affiliates, conducting comprehensive risk assessments and compliance management checks. A comprehensive strategy for financial and non-financial risk management was implemented to foster ESG practices across the group.

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A robust governance structure sets the foundation for practicing environmental and social values in ESG management. Therefore, a strong and transparent governance structure is key to the company's sustained growth and future preparedness. The BOD must prioritize independence, expertise, and diversity to ensure balanced decisions for all stakeholders, including customers, shareholders, and suppliers.







# **1. A Board of Directors with Independence and Expertise**

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Establishment of sound governance The Board of Directors of Hansol Holdings possesses the authority to manage and oversee major company matters in compliance with relevant laws and articles of incorporation. It comprises a total of seven directors, consisting of four inside directors and three outside directors. Together, they perform essential functions in management decision-making and supervision. To adhere to regulations, no outside director serves for more than six years. The CEO of Hansol Holdings serves as the chair of the Board, streamlining decision-making processes and enhancing overall corporate competitiveness. Commencing from August 2023, the Board will report the process of materiality evaluation to the CEO, further bolstering the company's responsible ESG management practices. Furthermore, to ensure the establishment and efficient operation of the internal accounting management system, the head of the finance team, who serves as the internal accounting manager, participates in the Board meetings as an inside director.

## **BOD** Composition

Category	Name	Gender	Term of office	Career
	Lee Jae-hui	Male	2015. 1. 2 ~ 2024. 3. 30	CEO of Hansol
	Jo Dong-gil	Male	1997. 2. 26 ~ 2024. 3. 30	Chair of Hanse
Inside Directors	Jeon Hun	Male	2019. 3. 26 ~ 2025. 3. 29	Chief of Financial RM
	Go Min-hyeok	Male	2020. 3. 30 ~ 2023. 3. 29	Chief of Human Res Ho
	Son II-tae	Male	2018. 3. 29 ~ 2024. 3. 30	Honorary Professo Un
Outside Directors	Lee Nam-wu	Male	2020. 3. 30 ~ 2023. 3. 29	Visiting Professor of Y School of Internation Career Deve
	Won Chang-yeon	Male	2023. 3. 29 ~ 2026. 3. 29	Lawyer at Do

Ensuring diversity and expertise of the BOD Hansol Holdings selects inside directors for their expertise, ensuring a varied skill-set on the Board. Outside directors follow relevant laws and guidelines set by the Korea Institute of Corporate Sustainability. The company avoids candidates who could compromise shareholder value or hinder independence, and instead recommends individuals who can contribute to growth, offer valuable management advice, and support compliance efforts.

BOD meetings held in 2022

**BOD** attendance

6 times in total

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## <sup>r</sup> highlights

- ol Holdings (present)
- sol Group (present)
- VI Team of Hansol Holdings
- esources Team of Hansol Ioldings
- or of Trade at Kyung Hee Iniversity
- Yonsei University Graduate onal Studies; Advisor at the velopment Center
- DongIn Law Group

# Board evaluation and remuneration system

Directors' remuneration budget is set at the general shareholders' meeting, but the actual operation is delegated to the Board of Directors. At the 2022 general shareholders' meeting, the approved remuneration budget was KRW 4 billion, and the total payment made to directors was KRW 2.46 billion.

				(011
Category	Number of persons	Remuneration total	Average remuneration per person	R
Registered directors (Excl. outside directors and audit committee members)	4	2,301	575	Fo d
Outside Directors (Excl. audit committee members)	-	-	-	
Audit committee members	3	162	54	Thre
Auditor	-	-	-	

Operation of Audit Committee and Outside Director Nomination Committee Hansol Holdings has set up and is currently operating the Audit Committee and Outside Director Nomination Committee within the Board of Directors. The Audit Committee comprises three outside directors, ensuring transparency and independence in the audit process while overseeing the BOD and management. The committees have supporting bodies in order to effectively fulfill their duties. An HR person is assigned to assist the Outside Director Nomination Committee and an audit team member assists the Audit Committee in fulfilling their respective duties.

# **BOD** and Committee Organizational Chart





ee outside directors

- -

# (as of May 2023)

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Establishing the Committee for Enhanced Management Integrity and Transparency

# Corporate Governance Report Disclosure

## Hansol IONES

Hansol IONES established the Committee for Enhanced Management Integrity and Transparency to ensure jeong-do ("right way") management and transparent governance. Comprising two or more external experts and one or more outside directors, the committee meets quarterly to review the adequacy of executives' corporate card details, monthly remuneration, and transaction history with stakeholders. By operating this committee, Hansol IONES aims to enhance management transparency and promote sustainable development.

Since 2022, listed companies with assets of KRW 1 trillion or more are required by law to disclose corporate governance reports to stock exchanges. Hansol Paper is the only company meeting this requirement in the Hansol Group. Nevertheless, six companies within the Group — namely, Hansol Holdings; Hansol Technics; Hansol Chemical; Hansol Logistics; Hansol HomeDeco; and Hansol PNS — which are not required to disclose, have proactively chosen to voluntarily publish corporate governance reports, bringing the total to seven companies adhering to the disclosure standard. This reflects Hansol's commitment to enhancing corporate transparency and preparing for upcoming changes, extending to listed companies with assets over KRW 500 billion starting in 2024. The voluntary disclosure efforts since 2018 have earned positive feedback in external ESG management evaluations for the Hansol Group.

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# 2. Ongoing Shareholder-Friendly Policy

Implementation of mid- to long-term shareholder return policy Hansol Holdings consistently discloses the details of its shareholder return policy, including cash dividends, on its website. In addition, information related to the shareholder return policy is provided in the IR materials issued quarterly and posted on the website, ensuring regular communication with shareholders. On May 13, 2022, the Board of Directors of Hansol Holdings resolved to maintain the existing shareholder return policy (2019-2021) until 2024 and made a fair disclosure of the information. Moving forward, the company aims to further improve the predictability of its dividend policy and enhance shareholder value.

## Three-Year Dividend Data: 2020-2022

Category	Unit	2020	2021	
Dividend per share-common shares	KRW	120	120	
Dividend rate per share-common shares	% KRW 100 million	3.3 50	3.4	
Total dividends				
Dividend payout ratio	%	7.1	23.3	

Returning to shareholders through end-ofyear dividends

#### Hansol Paper

In its business report released in March 2021, Hansol Paper revealed its plan to utilize approximately 25-35% of its consolidated net profit as part of its shareholder return policy. Regarding the consolidated cash dividend trend, it recorded 28.1% in 2020 and 104.3% in 2021. Furthermore, Hansol Paper disclosed its dividend settlement plan at the end of November, around when the fiscal year concludes. The company announced a year-end dividend plan of KRW 500 per share for the end of 2022, considering the expected annual performance for the year. Subsequently, during the general shareholders' meeting in March 2023, it confirmed a year-end dividend of KRW 500 and a mid-year dividend of KRW 200 per common stock.

2022
120
3.5
50
10.5

# 3. Enhanced Risk-Management System and Crisis-Response Capabilities

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Hansol Group's risk-response process

Hansol Group maintains a proactive approach to risk management, continuously monitoring and responding to potential risks. To ensure swift and effective responses, we have implemented a risk-response process, facilitating internal communication and information sharing. Additionally, we focus on identifying and managing risks that could significantly impact our business operations. We have also developed risk-recurrence prevention strategies for more effective responses t=o potential risks. As the Group's holding company, Hansol Holdings takes a comprehensive approach to risk management by conducting thorough assessments of risk across all affiliates. Through active collaboration, we address areas that require improvement.



- If high risk-level is determined: Promptly report to the CEO and the Board of Directors for immediate action - If low risk level is determined: Report to the respective organization in charge for lower-level response

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# Riskassessment process

# Hansol PaperTech

Hansol PaperTech prioritizes safety and a pleasant work environment by effectively managing major hazardous risk factors and minimizing the likelihood of accidents. This responsibility extends to key managers, including the CEO, CSO, and plant manager, along with the safety team leader, safety manager, and team leader (management supervisor). All employees are actively involved in risk assessments and contribute to establishing effective risk-reduction measures.

Category	Responsible body	Frequency	Major tasks
Identification and review of risk areas	Each team	Annual	Identification of risk factors that may aff and health, and identification of critic
Implementation of risk assessment	Each team	Initial: Introduction of equipment Regular: Annual Irregular: Ongoing	Conduct risk assessment based on ide factors
Review of risk assessment results	Safety team	Annual	Confirmation of the adequacy of risk as results
Risk monitoring	Each team	Ongoing	Developing and executing improvemen critical risk-related tasks and risk factor level 8 or above
Evaluation and improvement	Each team	Initial: Introduction of equipment Regular: Annual Irregular: Ongoing	Sharing of risk-assessment results with a

# Share risk information and report promptly Share risk information

and report, adhering to the principles of "promptness, accuracy, and transparency."

Determine the level of response

Consider risk severity, probability of occurrence, and potential impact to determine the appropriate level of response and reporting



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Group's riskreporting system

Hansol Holdings, as a holding company, effectively responds to changes in the internal and external business environment by establishing a risk-management council, which includes the CEO and executives. Through this structure, we conduct periodic risk inspections and respond rapidly to risks.

# **Reporting structure**



# Management process

01	02	03
Integrated Risk-Management Implementation	Reporting material issues to the BOD by the RM Council	Risk-manag areas
<ul> <li>Periodic evaluation of risk management status (Risk Monthly)</li> <li>Annual updates such as addition, improvement, and deletion of the risk classification system</li> <li>Joint inspection with affiliates on risks that may occur in case of investments and orders exceeding a certain size or with high risks</li> </ul>		•Targets: A subsidiarie • Areas: All risks, inclu external c finance, c operation

\* (Affiliates) Monitoring changes in the internal and external business environment and regular/ongoing risk assessments

2023 HANSOL GROUP SUSTAINABILITY REPORT Team leaders at Hansol Holdings (HMES Team/Finance Team/HR Team/Communication Team)

RM team (part) of affiliate

#### agement targets and

: All affiliates (including aries) All areas with potential acluding business, al communication, , compliance, and on

# Group's Risk-Classification System

C	ategory	Level 1	Level 2	Level 3	
				Political/legal	
				Economic	
		Market/customer	Trends (PESTEL)	Social	
			()	Technological	
				Environmental	
			Business model	Business model verification	
		Investment in shares	Business model	Scalability and vision	
	Business		System	Laws and regulations	
				Project structure	
Financial				Complaints	
risks		Orders	Project	Exclusion clauses in contracts	
				Construction and delivery period	
				Quality/performance assurance	
		Property rights	Intellectual property infringements	Political/legal Economic Social Technological Environmental Business model verification Scalability and vision Scalability and vision Laws and regulations Project structure Complaints Exclusion clauses in contracts	
			Exchange rates	-	
		Market	Interest rates	-	
	Financial	Liquidity	Financing	-	
	Financial	Liquidity	Profit and loss	-	
		Тах	Тах	-	
		Credit	Credit Rating	-	
			Environment	Climate change, carbon emissions	
		Environment/safety	Safety	Safety accidents	
	Compliance			Laws	
	Compliance		Anti-corruption	-	
		Compliance	Disclosure	-	
			Unethical conducts	-	
Non-		Security	-	-	
financial risks		HR, labor	-	-	
	Operation	Supply chain	-	-	
		Quality/certifications	-	-	
		Bonds management	-	-	
		Crisis response	Brand	Reputational risk or damage	
	External communication	Brand	Undermining the value of brand equity	Misuse of CI	
		Market/shareholders	IR	-	

# $\widehat{\ }\equiv \leftarrow \rightarrow$

# INTRODUCTION

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Consumer

Management for Customer

Satisfaction

Environment

Product development considering

the environment and climate strategies

Social

Sustainable growth for all

Governance

Transparent governance and shareholder-friendly management

# APPENDIX

Riskmanagement system review and improvement plans

# Implementation of compliance assessment

In 2022, Hansol Group conducted a comprehensive risk survey across all affiliates using the Group Risk Classification System to identify areas needing improvement. The Hansol Holdings' HMES team and the Financial RM team, in collaboration with affiliates, will be reviewing investment and order receipts that could pose risks or require discussion. In March 2023, the progress of improvement measures for incomplete items was monitored and reported on. To enhance management sustainability and prevent risk occurrence, annual inspections will be conducted in January each year to update the risk items that need attention.

Since 2021, Hansol Group has been assessing the compliance-management status of each affiliate. The evaluation covers five key areas: compliance leadership; planning; execution and support; internal audit; and improvement. Based on interviews with executives and employees, along with data analysis, specific action tasks are derived for each affiliate. The Group aims to make compliance management the foundation of sustainability, increase awareness of it among employees, reduce legal and regulatory risks, and enhance overall compliance management.

# Enhancing compliance management: Key tasks for affiliates

Hansol Paper	Hansol Technics	Hansol Home D
<ul> <li>Raise risk awareness of field workers and encourage them to actively lead improvement activities (direct management, partners, and all subsidiaries)</li> <li>Establish a subsidiary compliance system and stabilize operation</li> </ul>	<ul> <li>Establish and operate compliance management system for overseas corporations and subsidiaries</li> <li>Enhance the environmental risk management system</li> <li>Reinforce on-site safety and environmental accident-prevention capabilities</li> </ul>	• Reinforce risk r fair trade, subc control, etc.
Hansol Logistics	Paper Distribution Division, Hansol PNS	Hansol PNS IT S Hansol Inticube
<ul> <li>Reinforce compliance system and self-audit for subsidiaries</li> <li>Improve accident-prevention management for transportation companies and partners</li> </ul>	• Reinforce education and communication to strengthen organizational participation in compliance management	Strengthen org participation in management t and communic Establish a suk system and sta

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### Deco

< management for ocontracting, internal

F Service Division / De

rganizational in compliance t through education nication ubsidiary compliance stabilize operation Establishing the ESG Indicator Management System Hansol Group has established the ESG Indicator Management System to implement more systematic and efficient sustainability management. Since January 2023, all affiliates have been utilizing the system. Accurate measurement guidelines for environmental data, essential for risk management in the industry, were established in collaboration with the Korean Standards Association. The company's integrated ESG data management aims to position Hansol as a leading force in sustainable management practices.

## **ESG Indicator Management System Details**

Main menu	Submenu	Summary	
ESG indicator	Indicator pool search	Out of 1,000 evaluation items from global disclosure guidelines and SASB) and domestic and overseas ESG evaluation agencie	
management	Indicator classification and management	DJSI, MSCI), indicators are selected and managed based on imusability, representativeness, clarity, and urgency.	
	Indicator selection by industry group		
ESG indicator selection	Affiliate industry classification	<ul> <li>Utilize 2 ESG inspection processes</li> <li>Review and assess about 60 common indicators for all affili</li> <li>Use industry-specific indicators according to operating busic</li> </ul>	
	Affiliate ESG-indicator management	each affiliate	
	Measurement plan establishment	• Provide a comprehensive overview of indicators for all affiliates	
ESG inspection	Indicator inspection	monitoring. • Implement continuous data management by defining data-ma	
	Approval of measurement results	cycles and assigning responsible personnel.	
	Three-Year data		
ESG data	Indicator performance by company	Compare and manage ESG data entered by each company for years for each indicator	
	Notifications	· Share notifications and facilitate information-sharing among E	
Bulletin board	Q&A	level staff	





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# MATERIALITY TEST

Hansol Group selects key issues by analyzing the interests of stakeholders, at home and abroad, and their impact on business. The materiality tests are conducted by comprehensively considering international sustainability-management standards, such as GRI Standards, UN SDGs, and ISO26000; social issues exposed to the media; and sustainable management trends in the same industry. In 2023, we identified and disclosed 10 key issues, along with our management approach and achievements in this report.

#### Materiality-Test Process

To establish the core reporting content of the sustainability report and prioritize sustainability-management issues, we conducted a materiality test following the Global Reporting Initiative (GRI) guidelines. The test consisted of the following four steps:

#### Step 1.

Create a pool of basic issues

- · Analyze press releases, data, and global trends from January 2022 to March 2023.
- Examine the issues of 15 domestic and international competitors.
- Align with international stan-
- dards, such as ISO 26000, GRI, ESRS general requirements,
- and ESG evaluation standards
- like K-ESG and MSCI.
- · Identify 28 sustainability issues.

Channels of communication with stakeholders

step 2.
laterialist test

- · Ensure alignment with international standards for the issue pool and validate stakeholder interests.
- · Identify key issues through stakeholder surveys.
- · Evaluate the materiality of key issues.
- · Select 10 material issues.

# Step 3. Key issue management

- · Identify risks and opportunities related to the material issues. · Manage activities and performance associated with these issues, including the responsible organizations. · Set strategic tasks to prepare
- for future external evaluations.

- Report.

#### Stakeholders Channels of communication Issues of interest · Labor-management council · Communication board Investor presentation · Employee portal Employees · Communication with management · Employee training · In-house broadcasting Workshop management-labor relations · Employee-satisfaction survey Meetings Surveys Partner · Mutual growth workshops · Mutual growth day sustainable business management companies · Mutual growth council · Disclosure, business performance presentation · General meetings of shareholders Shareholders · Marketing brochures · Business reports disclosure, and governance reform · Sustainability Report and investors · Investor meetings · Business portfolio improvement · Calls for outside director candidates · Corporate governance reports Government • Ministry of Environment · Ministry of Economy and Finance · FSC, ISO and local Participation in policy research · Collaborative program governments · Website · Blog · Facebook Customers YouTube Brochures Marketing videos communication, brand value Customer satisfaction surveys Customer events · Exhibitions and fairs Local CSR activities · Communication with local communities near business sites community / NGO · Sustainability Reports economy

# Step 4.

Monitoring and reporting

· Analyze the findings and prepare the Sustainability

· Share the report with major affiliate organizations and gather feedback.

· Disclose the report online

and offline, and share it with shareholders.



· Mutual growth, win-win business management,

· Transparent business activities, transparent

· Job creation; tax compliance, and legal compliance for the fulfillment of corporate responsibility and contribution to the nation's sustainable development; compliance with regulations; response to climate change; response to and engagement in pubic policy; workplace safety compliance

· Quality- and service-improvement, customer

· Reduction of waste water and waste, pollutant management in worksites, job creation and maintenance, CSR activities, development of the local

# Materiality-Test Results



#### Reports on key issues as a result of the materiality tests

Category	Key	issues	GRI Content Index	Report details	Page no.
Governance	1	Ethical management and anti-corruption	GRI 3-3, GRI 205-2	Ethics and compliance management	p.11~12, 18, 41~42
Environmental	2	Management of air pollutants in the manufacturing process	GRI 3-3, GRI 305-8	Environmental pollutants and waste management	p.23, 29
Social	3	Creation of a safe work environment	GRI 3-3, GRI 403	Safety and health management	p.13, 15, 33
Economy	4	Enhancing product responsibility and customer satisfaction	GRI 3-3, GRI 416	Management for customer satisfaction	p.16, 23
Social	5	Promotion of work-life balance	GRI 3-3, GRI 401-3		p.11, 33~34
Social	6	Supporting employee capacity-building	GRI 3-3, GRI 404	Growth with employees	p.32
Environmental	7	Minimizing raw material consumption and promoting recycling	GRI 3-3, GRI 306-4	GHG-emissions reduction and energy conservation	p.11, 28, 30
Environmental	8	Safe waste, wastewater, and chemical discharge management	GRI 3-3, GRI 303-2	Environmental pollutants and waste management	p.11, 29
Social	9	Fostering an agile organizational culture	-	Growth with employees	p.33~34
Social	10	In-house human rights policy and education	-	Human rights in business	p.32

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# Hansol Holdings

Economy Category 2020 2021 2022 Unit 26,323 29,323 34,361 Sales Selling, general, and administrative expenses 15,360 16,019 18,082 10,963 13,304 16,279 Operating income 412 964 1,470 Financial income KRW Income 367 406 1,036 statement Financial expenses million 10,194 2,233 248 Other income 30 63 2,769 Other expenses Net income before the deduction 21,171 16,031 14,190 of corporate tax expenses 56,289 64,779 73,919 Current assets Assets Non-current assets 381,185 386,883 382,738 Current liabilities KRW 9,160 9,394 10,299 Balance sheet Liabilities Non-current million 1,279 7,373 6,566 liabilities 427,035 434,896 439,792 Capital

**DATA CENTER** 

(Based on the separate financial statements)

#### Social

Category			Unit	2020	2021	2022
	r of employees	3	Persons	47	50	46
		Total		11	10	8
	Executives	Female	-	0	0	0
Current		Male	-	11	10	8
employees	_	Total	-	35	39	36
(by	Permanent	Female	Persons	6	9	10
employment type)		Male Total	-	<u> </u>	30	26
	Non-	Female	-		0	2
	permanent	Male	-	1	1	1
Outsourced	workers	IVIDIC	Persons		0	0
Current	Full-time			44	47	44
(by work schedule)	Part-time		Persons -	3	3	2
Current	Domestic			45	47	44
employees (by location)	Overseas		Persons -	2	3	0
	No. of male e	mployees	Persons	41	41	35
	Ratio of male	employees	%	64	66	65
	No. of female employees		Persons	6	9	11
	Ratio of female employees		%	13	18	24
	No. of male executives		Persons	11	10	8
	Ratio of male executives		%	23	20	17
	No. of female executives		Persons	0	0	0
	Ratio of female executives		%	0	0	0
	No. of female managers (manager level or higher)		Persons	1	1	3
	Ratio of female managers (manager level or higher)		%	2	2	6.5
	<u> </u>	No. of employees with disabilities	Persons	0	0	0
Employee diversity		Ratio of employees with disabilities	%	0	0	C
		No. of senior employ- ees (Over 55 years old, excluding executives)	Persons	0	0	5
		Ratio of senior employees	%	0	0	11
	Hiring of the socially dis-	No. of foreign employ- ees	Persons	2	3	2
	advantaged	Ratio of foreign employees	%	4	6	4
		No. of employees with high school degree	Persons	1	1	2
		Ratio of employees with high school degree	%	2	2	4
		No. of veterans	Persons	0	0	C
		Ratio of veterans	%	0	0	0

Category			Unit
		Persons in the age group (Under 30 years of age)	Persons
		Percentage (Under 30 years old)	%
Employee diversity	Employee composi-	Persons in the age group (30 ~ 50 years of age)	Persons
liversity	tion	Percentage (30 ~ 50 years of age)	%
		Persons in the age group (Above 50 years of age)	Persons
		Percentage (Above 50 years of age)	%
	Male		
	female		
New hires		Under 30	Persons
	By age	30 ~ 50	
		Above 50	
		Average male salary	KRW
		Average female salary	million
		Ratio of base salaries	%
		of female to male	
		Average male execu- tive salary	KRW
		Average female execu- tive salary	million
		Ratio of base salary of female executive to male executive	%
	Base salary and remu- neration by gender	Average male perma- nent employee salary	KRW
Employee compensa-		Average female perma- nent employee salary	million
ion		Ratio of base salary of female permanent employee to male permanent employee	%
		Average male non-per- manent employee salary	KRW
		Average female non-permanent employee salary	million
		Ratio of base salary of female non-perma- nent employee to male non-permanent employee	%
	Average year	s of service	Years
lob	Total number of	of employee turnovers	Persons
security	Voluntary turr	nover	%
	Non-voluntar	y turnover	/0
	No. of benefic education	ciaries of training/	Persons
	Total budget training/educ		KRW million
Falent de- velopment	Training expe	enses per employee	KRW 1,000
	Total no. of ho	ours of training	
	Average train employee	ing hours per	Hours
	No. of industr occurred	rial accidents	Ea.
ndustrial	Industrial acc		%
accidents	No. of deaths		Persons
	No. of injuries		
		ork-hour loss	Hours
ointrode	No. of violations of fair trade laws		Ea.
air trade	Fines impose	KRW million	

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2020	2021	2022
0	0	1
0	0	2
35	36	35
74	72	76
12	14	10
26	28	22
9		6
2		2
0	0	1
10	13	7
135	1	0 196.1
135	139	
55	75	67.6
40	53	34
-	-	446.43
-		0
-	-	0
-	-	117.21
-	-	71.88
-	-	61
-		82.54
-	-	24.7
-	-	30
9.5	9	9.7
-	-	13
-	-	69.2
-	-	30.8
47	50	46
29	17	19.9
627	358	433
2,947	1,794	1,098
54	49	23.87
0	0	0
	0	0
0		0
	0	0
0	0	0
0 0 0 0		
0 0 0	0	0

Category			Unit	2020	2021	2022
Informa- tion-securi- ty breaches	Customer-data leakage, theft, and loss		Ea.	0	0	(
Workplace discrimina- tion	No. of complaints filed in relation to workplace discrimination		Ea.	0	0	(
Incidents of non-com-	No. of violations	ons that resulted in		0	0	(
pliance with regulations	No. of warnin compliance	gs from non-	Ea.	0	0	(
and internal codes	No. of violatic	ons of internal codes		0	0	
Work losses	No. of work-lo companies	oss cases in partner	Ea.	-	-	
	Employees	Total		-	-	
	who have taken pa-	Male	_	-	-	
	rental leave	Female		-	-	
	No. of employees	Total	Persons	-	-	
	who have returned to work after	Male		-	-	(
	parental leave	Female	_	-	-	
Parental leave	Return rate of employees who have taken parental leave		%	-	-	10
	No. of em- ployees who have worked over 12 months after returning from paren- tal leave	Total	Persons	-	-	(
		Male		-	-	
		Female		-	-	
	Ratio of employees who have worked over 12 months after returning from parental leave		%		-	
	Duration of he Hours	uman rights training	Hours	43	50	4
Human rights	Duration of e	ducation for workplace bullying	Total -	43(1)	49(1)	46(*
policies and		ducation for sexual	hours	43(1)	49(1)	46(*
procedures	harassment prevention Other education (Human rights education for people with disabilities, etc.)		(Per em- – ployee)	43(1)	49(1)	46(*
	Investment	Cash donations	KRW	20	10	1
	in CSR (incl donation)	Non-cash donations	million	0	0	
CSR	Total voluntee	er hours		-	480	56
	Average volunteer hours per employee		Hours	-	9.6	1:
	Direct benefic support prog		Persons	-	250	40

Governance	nance
------------	-------

Category		Unit	2020	
	No. of Board meetings	Times	9	
	No. of agendas	Ea.	22	
5	Preliminary deliberation	%	100	
Board of Directors	Decisions on revised agenda	Ea.	0	
Directors	Reported agenda	Ea.	10	
	BOD attendance rate	%	98.4	
	Non-executive attendance rate	70	100	
	Male	Persons	7	
	Female	Feisolis	0	
	Ratio of female directors in the BOD	%	0	
Board diversity	Under 30 years		-	
diversity	30 ~ 50 years	Persons	-	
	Above 50 years	Persons	-	
	No. of outside directors		-	
	Ratio of outside directors	%	-	
	No. of Board members who received ethics training	Persons	7	
	Ratio of Board members who received ethics training	%	100	
	Total no. of employees who received ethics training	Persons	47	
Anti-cor- ruption	Ratio of employees who received ethics training	%	100	
policies and procedures	Total no. of Board members who have signed the ethics pledge	Persons	7	
	Ratio of Board members who have signed the ethics pledge	%	100	
	Total no. of employees who have signed the ethics pledge	Persons	45	
	Ratio of employees who have signed the ethics pledge	%	96	
Anti-cor- ruption violations	No. of anti-corruption violations	Ea. (persons)	0	

\* Newly disclosed indicators for 2022: Age-based classification of Board members used by Hansol Holdings is uniformly applied across all affiliates.

\*Industrial-accident rate: (number of injured workers / number of workers subject to industrial accidents) × 100, applies to all affiliates

\* Base salary ratio: Calculated based on average remuneration, applies to all affiliates \*Parental leave: Data for 2020 and 2021 were not collected; new disclosures in 2022

2021	2022
7	6
15	13
100	100
0	0
8	8
100	100
100	100
7	7
0	0
0	0
-	0
-	0
-	7
-	3
-	43
7	7
100	100
50	46
100	100
7	7
100	100
47	46
94	100
0	0

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# Hansol Paper

## Economy

Category			Unit	2020	2021	2022
	Sales			1,509,871	1,834,224	2,457,953
	Gross profit			300,684	361,179	572,466
	Selling, general, and administrative expenses			206,123	300,451	442,241
	Operating i	ncome	KDI	94,561	60,728	130,226
Income statement	Financial in	come	KRW million	10,165	4,090	12,561
Statement	Financial ex	kpenses	THINOT	26,282	28,022	45,852
	Other incor	ne		13,530	16,429	48,250
	Other expe	nses		19,784	24,479	49,357
		before the deduction e tax expenses		72,189	28,746	95,828
	Assets	Current assets		567,002	663,678	1,007,797
		Non-current assets		1,173,433	1,224,155	1,202,219
		Current liabilities		618,262	727,426	1,082,342
	Liabilities	Non-current liabilities		487,310	481,074	385,130
Balance sheet		Shareholders' equity in the parent company	KRW million	634,821	679,292	742,419
	Capital	Shareholders' equity in the non-controlling company		41	41	125
	Total R&D expenses for the current period		KRW million	5,870	6,321	8,769
R&D	R&D expen	ses/sales	%	0.52	0.48	0.36
	No. of R&D	personnel	Persons	33	49	55

(Based on the consolidated financial statements)

#### Environment

Category			Unit	2020	2021	202
Consumption of raw materials		Raw materials consumed	Tons	1,165,645	1,222,487	1,211,50
Consumption of materials that contain recycled materials		Amount of recycled materials (reused raw materials) consumed	Tons	579,830	587,022	562,30
		Ratio of recycled materials (reused raw materials) consumed	%	49.7	48.0	46.
		Total energy consumed		15,753	16,488	16,96
Energy con- sumption	Total energy consumed	Scope 1 energy consumption	TJ	2,358	2,347	2,17
		Scope 2 energy consumption		13,395	14,141	14,79
		Total amount of water consumed		23,735,541	26,733,756	30,530,83
	Total	Amount of water consumed		6,076,727	7,276,014	6,181,35
Water con- sumption (amount,	amount of water consumed	Amount of underground water consumed	Tons	280,915	199,624	253,94
based on domestic		Surface water		9,098,761	9,923,582	10,866,77
data)		Recycled water		11,585,858	9,334,536	13,228,76
	Water reuse	Amount of water reused		8,279,138	9,346,482	9,780,69
		Ratio of water reused	%	35	35	3
GHG emis-	Emissions	Direct emissions (Scope 1)	tCO₂eq	341,087	296,456	303,07
sions		Indirect emissions (Scope 2)		587,461	626,738	725,89
		SOx		2.3	0.8	1
Air pollut-	Emissions	NOx	Tons	89.9	73.7	8,98
ants		HCI		5.4	5.4	52
		PM		8.4		18
Water	Amount	BOD		9	8	2
pollutants	discharged	COD	ppm		31	7
	 Total	SS Total amount of waste		13 250,523	11 235,754	9 346,28
	amount of waste	Waste discharged at business sites	-	235,648	220,428	323,01
Waste	(amount treated in	Designated waste	Tons	2,332	2,172	5,31
Haste	Korea)	Domestic waste		12,543	13,154	17,94
	Waste	Recycled amount		134,457	122,424	134,55
	recycling	Waste recycling ratio	%	37.3	40.0	40.

Category		Unit
Violations of environmental laws and regulations	Amount of fines	KRW million
Environmental expenses and investments	Environmental investments	KRW million
	Sales of green products and services	KRW million
Sales of green products	Total sales	
	Ratio of sales related to green products	%

\* Total energy consumed in 2021: Discrepancies in statistics due to the difference between the report publication date and data collection period.
\* Amount of water pollutants discharged: Units extracted from Hansol Paper's Sustainability Report
\* Emissions increased due to the incorporation into the Environmental Business Headquarters in 2022.

#### Social

Category			Unit	
Total number	r of employee	S	Persor	
		Total		
Current	Executives	Female		
		Male		
		Total		
employees	Permanent	Female	Persor	
(by employ- ment type)		Male		
ment type)		Total		
	Non-	Female		
	permanent	Male		
Outsourced	workers		Persor	
Current	Full-time			
employees (by work schedule)	Part-time		Persor	
Current	Domestic			
employees (by location)	Overseas		Persor	
	No. of male e	employees	Persor	
	Ratio of male		%	
	No. of female		Persor	
			%	
	Ratio of female employees		Persor	
	Ratio of male executives			
		%		
	No. of female executives		Persor	
	Ratio of female executives		%	
	No. of male managers (manager-level or higher)		Persor	
	Ratio of male managers (manager-level or higher)		%	
	No. of female managers (manager-level or higher)		Persor	
	Percentage of female managers (manager-level or higher)		%	
Employee diversity		No. of employees with disabilities	Persor	
alversity	Hiring of the socially dis-	Ratio of employees with disabilities	%	
	advantaged	No. of veterans	Persor	
		Ratio of veterans	%	
		Persons in the age	70	
		group (Under 30 years of age)	Persor	
		Percentage (Under 30 years of age)	%	
	Employee composi-	Persons in the age group (30 ~ 50 years of age)	Persor	
	tion Percentage (30 ~ 50 years of age)		%	
		Persons in the age group (Above 50 years of age)	Persor	
		Percentage (Above 50 years of age)	%	
	Male	so years or age		
	female			
New hires		Under 30 years	Persor	
	By age	30 ~ 50 years	- -	
	Dyage	our ou years		

	2022
2	0
6,000	1,488
-	146,470
-	207,801
-	70.5

2020	2021	2022
1,186	1,202	1,657
27	24	24
	0	0
27	24	24
1,168	1,186	1,575
101	99	129
1,067	1,077	1,464
18	16	64
6	4	14
12	12	50
0	0	0
1,168	1,186	1,575
0	0	0
1,178	1,192	1,639
8	10	18
1,078	1,089	1,514
90.4	90.6	91.4
107	113	143
9.6	9.4	8.6
27	24	24
2.2	1.9	1.7
	0	0
	0	0
180	197	288
15.1	16.3	17.3
3	5	8
0.3	0.4	0.4
30	34	43
2.5	2.8	2.9
21	25	24
1.8	2.1	1.5
162	176	254
14	15	15
763	702	917
64	58	55
251	324	486
21	27	29
73	114	211
15	14	26
51	89	124
32	43	75
4	2	0
	<u>_</u>	5

Category			Unit	2020	2021	202
		Average male		75	73	9
		salary Average female	KRW million		40	
		salary Ratio of base		49	49	6
		salary of female to male	%	65	67	7
		Average male executive salary	KRW	-	-	33
		Average female executive salary	million	-	-	
		Ratio of base salary of female executive to male executive	%	-	-	
Employee	Base salary	Average male per- manent employee salary	KRW	-	-	6
compensa- tion	and remu- neration by gender	Average female permanent em- ployee salary	million	-	-	4
		Ratio of base sal- ary of female per- manent employee to male permanent employee	%		-	7
		Average male non-permanent employee salary	KRW	-	-	4
		Average female non-permanent employee salary	million	-	-	2
		Ratio of base salary of female non-permanent employee to male non-permanent employee	%	-	-	6
	Average year		Years	17.6	17.5	15.
Job security	Total number	of employee turnover	Persons	74	111	18
	Voluntary tur		%	3.4	6.0	8.
	No. of benefi education	ciaries of training/	Persons	1,186	1,202	1,65
Talent de-		for employee ation	KRW million	542	986	1,22
velopment	Training expenses per employee		KRW 1,000	476	820	74
	Average train employee	ing hours per	Hours	61	53	5
	No. of indust occurred	rial accidents	Ea.	7	5	
Industrial	Industrial acc	cident rate	%	0.82	0.57	0.2
accidents	No. of deaths		Persons	0	0	
	No. of injurie			7	5	
	Duration of w	vork-hour loss Total no. of partner	Hours	878	2,096	9,33
Mutual	Suppliers	companies	Ea.	1,001	1,027	1,22
growth		Total purchase from partners	KRW million	173,727	193,016	246,20
Fair trade	No. of violation	ons of fair trade laws	Ea. KRW	0	0	
	Fines impose	ed	million	0	0	
Information- security breaches	Customer-da and losses	ata leakages, theft,	Ea.	0	0	
Workplace discrimina- tion	No. of compl to workplace	aints filed in relation discrimination	Ea.	0	0	
Incidents of non-com-	No. of violations	ons that resulted in		1	0	
pliance with regulations	No. of warnin compliance	igs due to non-	Ea.	0	1	
and internal codes	No. of violation	ons of internal codes		0	0	
Work losses	No. of work-l companies	oss cases in partner	Ea.	-	-	
	Employees	Total		·	2	
	who have	Male		0	1	
	taken pa- rental leave	Female		1	1	
Parental	No. of	Total	Deres	1	6	
leave	employees who have returned to	Male	Persons		1	
	work after			· ·		
	parental	Female		1	5	

Category			Unit	2020	
Parental	Return rate of have taken pa	f employees who arental leave	%	100	
	No. of em- ployees who have worked	Total		10	
	over 12 months after	Male	Persons	2	
	returning from paren- tal leave	Female			
	Ratio of employees who have worked over 12 months after returning from parental leave		%	100	
	Human rights training (per person)		Hours	3.08	
Human	Duration of education for preven- tion of workplace bullying		Total	1,185(1)	1,:
rights policies and procedures	Duration of education for sexual harassment prevention		hours (Per em-	1,185(1)	1,:
procedures	Other education for disabilities, et	· · ·	ployee)	1,185(1)	1,:
	Investment in CSR (incl. donation)	Cash donation	KRW million	307	
CSR	Total voluntee	er hours	Hours,	3,000	
	No. of particip	oants	Persons	906	
	Direct benefic support progr		Persons	491	

1. Judicial agency sanctions in 2020: KRW 17 million 2. Tax authorities sanctions in 2021: KRW 3,814 million

Category		Unit	2020
	No. of Board meetings	Times	13
Board of Directors	Preliminary deliberation		100
Directors	BOD attendance rate	%	97.80
	Male		7
	Female	Persons	0
	Ratio of female directors in the BOD	%	0
Board	Under 30 years		-
diversity	30 ~ 50 years	Deveene	-
	Above 50 years	Persons	-
	No. of outside directors		3
	Ratio of outside directors	%	11
	Total no. of business sites		6
Anti-	No. of business sites that conducted anti-corruption risk assessment	Ea.	6
corruption	Ratio of business sites that conducted anti-corruption risk assessment	%	100
	No. of Board members who received ethics training	Persons	7
	Ratio of Board members who received ethics training	%	100
	Total no. of employees who received ethics training	Persons	1,185
Anti-cor- ruption	Ratio of employees who received ethics training	%	100
policies and procedures	Total no. of Board members who have signed the ethics pledge	Persons	7
	Ratio of Board members who have signed the ethics pledge	%	100
	Total no. of employees who have signed the ethics pledge	Persons	-
	Ratio of employees who have signed the ethics pledge	%	-
Anti-cor- ruption violations	No. of anti-corruption violations	Ea. (persons)	0

2021	2022
100	80
6	4
1	0
5	4
100	100
5.82	3.33
202(1)	1,788
202(1)	1,732
202(1)	1,620
336	328
115	230
40	57
360	700

2021	2022
8	11
100	100
100	100
8	8
0	0
0	0
-	0
-	0
-	8
3	5
12.5	20.8
6	6
6	6
100	100
8	8
100	100
1,202	1,661
100	100
8	8
100	100
1,139	1,657
94.7	98.9
0	0

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# Hansol PaperTech

#### Economy

Category			Unit	2020	2021	2022
	Sales			100,216	134,802	130,363
	Gross profit			11,406	15,954	16,222
	Selling, general, and administrative expenses			9,005	9,840	10,814
	Operating ir	icome		2,401	6,113	5,408
Income statement	Financial ind	come	KRW million	221	127	194
Statement	Financial expenses		7 9	777	359	336
	Other income			98	322	1,011
	Other expenses			968	854	526
	Net income before the deduction of corporate tax expenses			975	5,350	5,751
	Assets	Current assets		22,734	27,362	29,294
	Assels	Non-current assets	KRW -	48,116	48,115	49,235
Balance		Current liabilities		24,582	25,948	22,512
sheet	Liabilities	Non-current liabilities	million	3,417	2,170	1,726
	Capital			43,461	47,358	54,290

(Based on the separate financial statements)

#### Environment Category Unit 2020 2021 2022 Consumption of raw Raw materials Tons 303,368 333,932 292,719 materials consumed Amount of recycled materials (reused Tons 300,017 332,722 270,925 Consumption of materials raw materials) that contain recycled consumed materials Ratio of recycled materials (reused % 98.9 99.6 92.6 raw materials) consumed Total energy 1,168 1,235 1,449 consumed Energy Total energy Scope 1 energy TJ consump-tion 380 450 352 Scope 2 energy 788 785 1,097 consumption Total amount of 2,218,918 1,969,116 1,433,016 water consumed Amount of water Total 6,503 5,475 9,227 consumed Water con- amount sumption of water Amount of underground water Tons consumed 512,483 230,372 1,152,055 (amount, consumed based on Amount of stream domestic 1,352,722 1,458,720 271,734 water consumed data) Amount of water 347,210 274,549 38,449 reused Water reuse Ratio of water % 15.6 13.9 2.7 reused Direct emissions 68,949 38,275 75,061 GHG emis- Emissions (Scope 1) Indirect emissions tCO2eq sions 75,695 37,554 35,059 (Scope 2) 4.07 3.9 SOx 2.16 NOx 38.89 39.32 26.77 Air pollut-Emissions ——— kg PM ants 1.75 2.25 1.56 PFC 0 0 245,736 BOD 3.7 15.4 1.8 TOC pollutants Emissions 20.2 5 5.2 \_\_\_\_\_ ppm SS 4.1 8 5.5 ΤN 4.5 Total amount of Total 21,749 18,902 11,665 waste amount Waste discharged of waste 19,563 16,772 9,935 (amount at business sites Tons 2,186 2,130 1,730 treated in Designated waste Waste Korea) Domestic waste 0 0 0 6,289 3,100 3,147 Recycled amount Waste recycling Waste recycling % 28.9 16.4 26.9 rate ratio Amount of Environ- Environ-mental Environ-environmental investments KRW expenses mental investments million 647 543 932 and invest- investments Environmental 4,470 4,756 6,248 ments expenses

Category			Unit
	r of employees	3	Persons
		Total	
	Executives	Female	
		Male	
Current		Total	
employees (by employ-	Permanent	Female	Persons
ment type)		Male	
	Non-	Total	
	permanent	Female	
		Male	
Outsourced v	workers		Persons
Current employees	Full-time		
by work	Part-time	Persons	
schedule)			
Current em- ployees (by	Domestic		Persons
ocation)	Overseas		1 61 50115
	No. of male e	mployees	Persons
	Ratio of male		%
	No. of female		Persons
		le employees	%
	No. of male e		Persons
	Ratio of male		%
	No. of female		Persons
	Ratio of fema		%
	No. of male m		
	(manager-lev		Persons
	Ratio of male	%	
	(manager leve No. of female		
	(manager leve	Persons	
	Ratio of fema		%
	(manager leve		
		No. of employees with disabilities	Persons
		Ratio of employees	
		with disabilities	%
		No. of senior	
		employees (55 years or older,	Persons
		excl. executives)	
		Ratio of senior	%
Employee diversity	Hiring of the	employees	
arronony	socially dis-	No. of foreign employees	Persons
	advantaged	Ratio of foreign	
		employees	%
		No. of employees	
		with high school degree	Persons
		Ratio of employees	
		with high school	%
		degree	
		No. of veterans	Persons
		Ratio of veterans	%
		Persons in the age group (Under 30	Persons
		years of age)	
		Percentage (Under	%
		30 years of age)	
	Employee	Persons in the age group (30 ~ 50	Persons
	composi-	years of age)	
	tion	Percentage (30 ~	%
		50 years of age) Persons in the age	
		group (Above 50	Persons
		years of age)	
		Percentage (Above	%
	Male	50 years of age)	
	female		
New hires		Under 30 years	Persons
	Byage	30 ~ 50 years	1 0100115
	By age	Above 50 years	
		Above 50 years Average male	
	D	salary	KRW
Employee	Base salary and remu-	Average female	million
compensa- tion	neration by	salary	
lion	gender	Ratio of base salaries of female	%
		to male	

Social

2020	2021	2022
131	142	143
4	5	4
0	0	0
4	5	4
120	124	124
4	4	4
116	120	120
4	11	13
0	0	0
4	11	13
3	2	2
131	142	143
0	0	0
131	142	143
0	0	0
124	136	137
94	95	97
7	6	4
6	5	3
4	5	4
100	100	100
0	0	0
0	0	0
-	-	26
_	_	18
1	1	1
1	1	1
3	3	3
2	2	2
16	25	30
12	18	21
0	0	0
0	0	0
58	69	62
44	49	44
0	0	0
0	0	0
-	-	19
-	-	13
-	-	75
-		53
-		47
-		33
8	11	15
0	0	0
5	5	3
3		
		8
0	2	4
54	55	70
44	47	56
81	85	79

Category			Unit	2020	2021	2022
		Average male executive salary	KRW	-	-	363
		Average female	million			(
		executive salary				
		Ratio of base salary of female executive to male executive	%	-	-	1
		Average male per- manent employee salary	KRW	-	-	7
		Average female permanent em- ployee salary	million	-	-	5
Employee compensa- tion	Base salary and remu- neration by gender	Ratio of base sal- ary of female per- manent employee to male permanent employee	%	-	-	7
		Average male non-permanent employee salary	KRW	-	-	52
		Average female non-permanent employee salary	million	-	-	
		Ratio of base salary of female non-permanent employee to male non-permanent employee	%	-	-	
	Average year		Years	11	11.5	
Job	Total number	of employee turnovers	Persons	-	-	1
security	Voluntary tur		% -		-	7
		ry turnovers ciaries of training/	Persons		- 143	2
		for employee	KRW	195	203	9
Talent de-	training/education					
velopment	Training expenses per employee		1,000	1,500	1,420	63
	Total no. of hours of training Average training hours per employee		Hours	66	- 66	9,30
		rial accidents	Ea.	4	1	(
Industrial	Industrial acc	cident rate	%	3	0.7	
accidents	No. of deaths	3	Persons -	0	1	
	No. of injurie			4	0	
	Duration of v	vork-hour loss Total no. of partner companies	Hours Ea.	<u>960</u> 1	0	18
Mutual growth	Suppliers	Total value of purchases from partners	KRW million	937	740	80,26
	No. of violati	ons of fair trade laws	Ea.	0	0	
Fair trade	Fines impose	ed	KRW million	0	0	
Informa- tion-securi- ty breaches	Customer da and losses	ta leakages, theft,	Ea.	0	0	
Workplace discrimina- tion		aints filed in relation discrimination	Ea.	0	0	
Incidents of non-com-	sanctions	ons that resulted in	_	0	0	
pliance with regulations and internal	No. of warnir compliance	ngs from non-	Ea.	0	0	
codes	No. of violation	ons of internal codes		0	0	
Work losses	No. of work-l companies	oss cases in partner	Ea.	-	-	(
	Employees	Total		0	0	;
	who have taken pa-	Male	-	0	0	
	rental leave	Female	-	0	0	:
Parental	No. of employees	Total	Persons	0	0	
leave	who have returned to work after	Male	-	0	0	
	parental leave	Female		0	0	
	Return rate o	of employees who	%		_	6

Category			Unit	2020	2021	2022
	No. of em- ployees who have worked	Total		0	0	2
Parental	over 12 months after	Male	Persons	0	0	1
leave	returning from paren- tal leave	Female		0	0	1
worked ov		oyees who have 12 months after n parental leave	%	-	-	67
	Duration of education for prevention of workplace bullying			0	0	0
Human rights policies and	Duration of education for sexual harassment prevention		Total hours (Per em-	262(1)	284(1)	286(2)
procedures	Other education (Human rights education for persons with disabilities, etc.)		ployee)	262(1)	284(1)	286(2)
	Investment	Cash donation	KRW	14	12	23
		Non-cash donation	million	0	1	33
CSR	Total voluntee	er hours		0	301	1,716
	Average volunteer hours per employee		Hours	0	2	12
	Direct benefic support prog		Persons	140	140	-

\* Mutual growth: Due to the changes in disclosure indicator standards, the total purchases in this report are from all suppliers and partners in 2022.

#### Governance

Category		Unit	2020
	No. of Board meetings	Times	-
	No. of agendas	Ea.	-
	Preliminary deliberation	%	-
Board of Directors	Decisions on revised agenda		-
Directors	Reported agenda	Ea	-
	BOD attendance rate		-
	Non-executive attendance rate	% -	-
	Male		-
	Female	Persons -	-
	Ratio of female directors in the BOD	%	-
Board	Under 30 years		-
diversity	30 ~ 50 years	Deveene	-
	Above 50 years	Persons -	-
	No. of outside directors		-
	Ratio of outside directors	%	-
	Total no. of business sites		-
Anti- corruption in business sites	No. of business sites that conducted anti-corruption risk assessments	Ea.	-
	Ratio of business sites that conducted anti-corruption risk assessments	%	-
	No. of Board members who received ethics training	Persons	-
	Ratio of Board members who received ethics training	%	-
A	Total no. of employees who received ethics training	Persons	131
Anti-cor- ruption policies	Ratio of employees who received ethics training	%	100
and proce- dures	Total no. of Board members who have signed the ethics pledge	Persons	-
uuroo	Ratio of Board members who have signed the ethics pledge	%	-
	Total no. of employees who have signed the ethics pledge	Persons	106
	Ratio of employees who have signed the ethics pledge	%	80
Anti-cor- ruption violations	No. of anti-corruption violations	Ea. (per- sons)	0

\* Ratio of employees who have signed the ethics pledge in 2022: The region's water scarcity posed challenges to normal production operations, leading to a decline in the ratio of employees who signed the ethical pledge.

2021	2022
-	7
-	16
-	100
-	0
-	6
-	95
-	57
-	5
-	0
-	0
-	0
-	0
-	5
-	1
-	20
-	1
-	1
-	100
-	5
-	100
142	143
100	100
-	5
-	100
131	107
92	78
0	0

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# Hansol PNS\_Paper Distribution Division

# Economy\_Hansol PNS, comprehensive

Category			Unit	2020	2021	2022
	Sales			244,823	262,943	314,246
	Gross profit			20,436	24,039	28,474
	Selling, general, and administrative expenses			16,545	19,487	25,787
	Operating in	ncome		3,891	4,551	2,686
Income	Financial in	come	KRW	448	860	453
statement	Financial ex	penses	million	322	298	1,005
	Other incon	ne		536	367	1,400
	Other expenses			28	131	601
	Affiliates' profits and losses			0	83	-63
	Net income before the deduction of corporate tax expenses			4,523	5,432	2,870
	Acceto	Current assets		89,360	73,580	98,702
	Assets	Non-current assets		17,766	36,130	36,241
		Current liabilities		60,301	53,430	78,697
	Liabilities	Non-current liabilities		3,168	6,236	5,145
Balance sheet		Shareholders' equity in the parent company	KRW million	43,656	46,577	47,355
	Capital	Shareholders' equity in the non-controlling company		0	3,466	3,746

(Based on the consolidated financial statements)

#### Environment

Category			Unit	2020	2021	2022
Consumptio materials	n of raw	Raw materials consumed	Tons	240,900	229,400	225,100
En avera		Total energy consumed	TJ	7.3	6.6	6.8
Energy consump- tion	Total energy consumed	Scope 1 energy consumption		1.9	1.8	1.8
		Scope 2 energy consumption		5.3	4.7	5.0
GHG emis-	Emissions	Direct emissions (Scope 1)	tCO2eq	126	123	162
sions	ETTISSIOTIS	Indirect emissions (Scope 2)	ico2eq	255	225	239
	Total amount	Total amount of waste	Tons	1,202	1,220	1,490
	of waste (amount	Waste discharged at business sites		1,202	1,220	1,490
Waste	treated in	Designated waste		-	-	0
	Korea)	Domestic waste	-	-	0	
	Waste Recycled amount		1,188	1,220	1,489	
	recycling rate	Waste recycling ratio	%	99	100	100
Environ- mental expenses	montal Invesiments		KRW million	3	4.5	3.7
and invest- ments	investments	Environmental expenses	minon	-	5	
		Sales of green products and services	KRW million	-	-	298
Sales of gree	en products	Total sales		-	-	260,802
		Ratio of sales related to green products	%	-	-	0.11

-		
50	cial	
	udi	

Category			Unit	2020	2021	2022
Total numbe	r of employee	S	Persons	79	86	95
		Total		1	2	5
	Executives	Female		0	0	0
		Male		1	2	5
Current	Permanent	Total		76	85	88
employees		Female	Persons	16	20	20
(by employ- ment type)		Male		60	65	68
	Non-	Total		2	1	2
		Female		1	0	1
	permanent	Male		1	1	1
Outsourced	workers		Persons	0	0	0

Category			Unit
Current employees	Full-time		D
(by work schedule)	Part-time	Persons	
Current employees	Domestic	Persons	
(by job location)	Overseas		
	No. of male e	Persons	
	Ratio of male		%
	No. of female	employees ale employees	Persons %
	No. of male e		Persons
	Ratio of male		%
	No. of female	executives	Persons
	Ratio of fema	ale executives	%
	No. of male n level or highe	nanagers (manager er)	Persons
	Ratio of male (manager leve	el or higher)	%
	No. of female (manager leve	el or higher)	Persons
	Ratio of fema (manager leve	el or higher)	%
		No. of employees with disabilities	Persons
		Ratio of employees with disabilities No. of senior	%
Employee diversity	Hiring of the socially dis- advantaged	employees (55 years or older, excl. executives)	Persons
		Ratio of senior employees	%
		No. of foreign employees	Persons
		Ratio of foreign employees	%
		No. of employees with high school degrees	Persons
		Ratio of employees with high school degrees	%
		No. of veterans	Persons
		Ratio of veterans	%
		Persons in the age group (Under 30 years of age)	Persons
		Percentage (Under 30 years of age)	%
	Employee composi-	Persons in the age group (30 ~ 50 years of age)	Persons
	tion	Percentage (30 ~ 50 years of age)	%
		Persons in the age group (Above 50 years of age)	Persons
		Percentage (Above 50 years of age)	%
	Male female		
New hires		Under 30 years	Persons
	By age	30 ~ 50 years	
		Above 50 years	
		Average male	
		salary Average female salary	KRW million
		Ratio of base salary of female to	%
Employee	Base salary and remu-	male	
compensa- tion	neration by	Average male executive salary	KRW
	gender	Average female	million
		executive salary	
		Ratio of base salary of female executive to male executive	%

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2020	2021	2022
79	86	95
0	0	0
79	86	95
0	0	0
62	68	74
78	77	78
17	20	21
22	23	22
1	2	5 5
0	2	0
0	0	0
-	-	28
-		29
0	0	2
0	0	2
1	1	1
1	1	1
2	1	8
3	1	8
0	0	0
0	0	0
21	24	31
16	16	18
0	0	0
0	0	0
-	-	17
-	-	18
-	-	60
-	-	63
-	-	18
-	-	19
6	19	12
4	3	2
3	7	7
7	15	7
0	0	0
48	65	73
32	46	44
66	70	60
-	-	190
-		0
-	-	100

Category			Unit	2020	2021	202
		Average male permanent		-	-	6
		employee salary	KRW _			
Employee	Base salary and remu-	Average female permanent employee salary	mmon	-	-	2
compensa- iion	neration by gender	Ratio of base salary of female permanent employees to male permanent employees	%		-	-
	Average year		Years	8.1	7.2	
Job		of employee turnovers	Persons	3	5	
security	Voluntary turi					1
	Non-voluntar		% -			
		ciaries of training/	Persons	79	86	!
	Total budget training/educ		KRW million	42	35	
Talent de- /elopment		nses per employee	KRW 1,000	532	407	4
	Total no. of h	ours of training		-	-	1,23
		ing hours per	Hours	11	11	,
	No. of industr occurred	ial accidents	Ea.	0	1	
Industrial	Industrial acc	ident rate	%	0	1.2	
accidents	No. of deaths		Persons -	0	0	
	No. of injuries	3		0	1	
	Duration of w	ork-hour losses	Hours	0	9	
Vlutual	Suppliers	Total no. of partner companies	Ea		-	
growth		Total purchases from partners	KRW million		-	
Fair trade	No. of violatio	ons of fair trade laws	Incidents	0	0	
nforma-	Fines impose	d	KRW million	0	0	
tion-securi- ty breaches	Customer-da and losses	ta leakages, theft,	Ea.	0	0	
Workplace discrimina- tion		aints filed in relation discrimination	Ea.	0	0	
Incidents of non-com-	No. of violations	ons that resulted in		0	0	
pliance with regulations	No. of warnin compliance	gs for non-	Ea	0	0	
and internal codes	No. of violatio	ons of internal codes		0	0	
Work loss	No. of work-lo companies	oss cases in partner	Ea.	-	-	
	Employees	Total		2	3	
	who have taken paren-	Male		0	0	
	tal leave	Female		2	3	
	No. of employees	Total	Persons	0	1	
	who have returned to work after	Male		0	0	
	parental leave	Female		0	1	
Parental leave	Return rate of have taken pa	f employees who arental leave	%	0	53	;
	No. of em- ployees who	Total		0	0	
	have worked over 12 months after	Male	Persons	0	0	
	returning from paren- tal leave	Female	-	0	0	
	Ratio of empl	oyees who have 12 months after	%	0	0	ļ

Category			Unit	2020
Human rights policies and procedures	Duration of e rights	ducation for human	Hours	237
	No. of employ human rights	yees who completed training	Persons	79
	Ratio of empl completed hu	loyees who uman rights training	%	100
		prevention of workplace bullying		79(1)
proceduree	Duration of e	ducation for sexual prevention	Total hours (Per em-	79(1)
	education for	Other education (Human rights education for persons with disabilities, etc.)		79(1)
CSR	Investment Cash donation in CSR (incl. donation) Non-cash donation		KRW	
			million	-

#### Governance

Category		Unit	2020
DOD	No. of Board meetings	Times	-
BOD operation*	No. of agendas	Ea.	-
operation	BOD attendance rate	%	-
	Male	Persons	-
	Female	Feisons	-
	Ratio of female directors in the BOD	%	-
Board diversity*	Under 30 years		-
	30 ~ 50 years	Persons	-
	Above 50 years	Feisons	-
	No. of outside directors		-
	Ratio of outside directors	%	-
	Total no. of business sites		-
Anti- corruption	No. of business sites that conducted anti-corruption risk assessment	Ea.	-
contribution	Ratio of business sites that conducted anti-corruption risk assessment	%	-
	No. of Board members who received ethics training*	Persons	-
	Ratio of Board members who received ethics training*	%	-
	Total no. of employees who received ethics training	Persons	79
Anti-cor- ruption	Ratio of employees who received ethics training	%	100
policies and procedures	Total no. of Board members who have signed the ethics pledge*	Persons	-
	Ratio of Board members who have signed the ethics pledge*	%	-
	Total no. of employees who have signed the ethics pledge	Persons	79
	Ratio of employees who have signed the ethics pledge	%	100
Anti-cor- ruption violations	No. of anti-corruption violations	Ea. (per- sons)	0

\* Total number for Hansol PNS

2021	2022
252	348
84	89
100	100
86(1)	89
86(1)	89
86(1)	89
	133
-	-

2021	2022
-	13
-	24
-	95
-	6
-	0
-	0
-	-
-	2
-	4
-	2
-	29
-	4
-	0
-	0
-	7
-	100
86	95
100	100
-	7
-	100
86	95
100	100
0	0

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# Hansol PNS\_IT Service Division

# INTRODUCTION

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2023 HANSOL GROUP SUSTAINABILITY REPORT

# Social

Category			Unit	2020	2021	2022	Category			Unit	
Total numbe	r of employees	3	Persons	134	146	176			Average male		
		Total	_	1	2	1			salary	KRW millior	
	Executives	Female Male	-	0	0	0			Average female salary		
Current		Total	-	133	143	175			Ratio of base		
employees	Permanent	Female	Persons	37	39	47			salary of female to male	%	
by employ-	1 onnahont	Male		96	104	128			Average male		
nent type)		Total	-	1	1	0			executive salary	KRW	
	Non-	Female	-	1	1	0			Average female	millio	
permanent Male		-	0	0	0			executive salary			
Outsourced workers		Persons	0	0	0			Ratio of base salary of female			
Current	Full-time			134	146	176			executive to male	%	
employees by work	Part-time		Persons -		0	0			executive Average male		
Schedule) Current em-	Domestic			132	144	173			permanent		
oloyees (by			Persons -				Employee	Base salary and remu-	employee salary Average female	KRW millio	
ocation)	Overseas			2	2	3	compensa-	neration by	permanent		
	No. of male e	mployees	Persons	97	106	129	tion	gender	employee salary		
	Ratio of male	employees	%	72	73	73			Ratio of base		
	No. of female	employees	Persons	38	40	47			salary of female permanent		
	Ratio of fema		%	28	27	27			employee to	%	
	No. of male e		Persons	1	2	1			male permanent		
	Ratio of male		%	1	1	1			employee Average male		
	No. of female		Persons	0	0	0			non-permanent		
	Ratio of fema		%	0	0	0			employee salary	KRW	
	level or highe	,	Persons		-	41			Average female non-permanent	million	
	Ratio of male level or highe	managers (manager r)	%		-	23			employee salary Ratio of base		
	No. of female (manager leve		Persons	16	16	5			salary of female non-permanent	%	
	Ratio of fema (manager leve	0	%	12	11	3			employee to male non-permanent		
	_(managoriova	No. of employees	Persons	0	0	0		Average year	employee rs of service	Years	
		with disabilities Ratio of employees					Job		of employee turnover	Perso	
		with disabilities	%	0	0	0	security	Voluntary tur			
		No. of senior						Non-voluntai	ry turnover	%	
		employees (55	Persons	1	1	2			ciaries of training/	Poroc	
		years or older, excl. executives)						education		Perso	
		Ratio of senior	%	 1	1	1		Total budget training/educ		KRW million	
Employee diversity	Living of the	employees					Talent de-			KRW	
aiversity	Hiring of the socially dis-	No. of foreign employees	Persons	1	1	0	velopment		enses per employee	1,000	
	advantaged	Ratio of foreign employees	%	1	1	0		Total no. of hours of training Average training hours per		Hours	
		No. of employees	Porcono	2	2	2		employee No of indust	rial accidents	Ea.	
		with high school degrees	Persons	3	2	3					
		Ratio of employees					Industrial	Industrial acc		%	
		with high school	%	3	2	2	accidents	No. of deaths		Perso	
		degrees						No. of injuries		Harri	
		No. of veterans	Persons	0	0	0		Duration of w	vork-hour loss	Hour	
		Ratio of veterans	%	0	0	0	Mutual		Total no. of partner companies	Ea.	
		Persons in the age group (Under 30	Persons	-	-	30	growth	Suppliers	Total purchase from partners	KRW millio	
		years of age)						No. of violatio	ons of fair trade laws	Ea.	
		Percentage (Under 30 years of age)	%	-	-	17	Fair trade			KRW	
Employee		Persons in the age				124		Fines impose	ed	millio	
Employee composi- tion	group (30 ~ 50 years of age)	Persons			124	Information security	Customer da and losses	ta leakages, theft,	Ea.		
	tion	Percentage (30 ~ 50 years of age)	%	-	-	70	Workplace No. of com		aints filed in relation		
		Persons in the age group (Above 50	Persons	-	-	22	discrimina- tion	to workplace	discrimination	Ea.	
		years of age) Percentage (Above				10	Incidents of non-com-	No. of violations	ons that resulted in		
		50 years of age)	%	-	-	13	pliance with	No. of warnin	ngs for non-	Ea.	
	Male			11	26	42	regulations and internal	compliance			
	female			3	10	17	codes	No. of violation	ons of internal codes		
New hires		Under 30 years	Persons	4	6	12		No. of work-l	oss cases in partner	Ea.	
	By age	30 ~ 50 years	_	10	14	43	Work loss	companies		La.	
,	Above 50 years	-	0	0	4						

616062464748757877100616161790000015.37614725-001331431711481281700	2020	2021	2022
757877160100616179000015.37614725100015.376144725-1000000133143171148128170716776994000 <td< td=""><td>61</td><td>60</td><td>62</td></td<>	61	60	62
Image: constraint of the sector of the sec	46	47	48
0-100-1000015.37-015.37-0115.37-0115.37-0115.37-0115.37-0115.37-0115.37-0115.37-0115.37-0115.37-0115.37-0115.37-0115.37-0115.37-0115.37-0115.37-12.90115.314311712.9000000000000000000000000000000000000 <td>75</td> <td>78</td> <td>77</td>	75	78	77
-       -       100         -       -       61         -       -       48         -       -       79         -       -       0         -       -       0         -       -       0         -       -       0         15.3       7       6         14       7       25         -       -       100         -       -       0         1133       143       171         148       128       170         716       776       994         -       -       7,592         82       44       43.1         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0 <t< td=""><td>-</td><td>-</td><td>16</td></t<>	-	-	16
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-       -       48         -       -       79         -       -       0         -       -       0         -       -       0         -       -       0         15.3       7       6         14       7       25         -       -       100         -       -       0         133       143       171         148       128       170         716       776       994         -       -       7,592         82       44       43.1         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0<	-	-	100
-       -       79         -       -       0         -       -       0         -       -       0         15.3       7       6         14       7       25         -       -       100         -       -       0         1133       143       171         148       128       170         716       776       994         -       -       7,592         82       44       43.1         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0<	-	-	61
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-         -         0           15.3         7         6           14         7         25           -         100         100           -         -         100           -         -         0           133         143         171           148         128         170           716         776         994           -         -         7,592           82         44         43.1           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0	-	-	79
-         -         0           15.3         7         6           14         7         25           -         -         100           -         -         0           133         143         171           148         128         170           716         776         994           -         -         7,592           82         44         43.1           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0	-	-	0
15.3         7         6           14         7         25           -         -         100           -         -         0           133         143         171           148         128         170           716         776         994           -         -         7,592           82         44         43.1           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0	-	-	0
14         7         25           -         -         100           -         -         0           133         143         171           148         128         170           716         776         994           -         -         7,592           82         44         43.1           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         <	-	-	0
14         7         25           -         -         100           -         -         0           133         143         171           148         128         170           716         776         994           -         -         7,592           82         44         43.1           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         <	15.3	7	6
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133       143       171         148       128       170         716       776       994         -       -       7,592         82       44       43.1         0       0       0	-	-	
148         128         170           716         776         994           -         -         7,592           82         44         43.1           0         0         0           0         0	-		
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82         44         43.1           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           46         35         97           5,200         4,427         12,900           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0	716	776	
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46         35         97           5,200         4,427         12,900           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0			
5,200     4,427     12,900       0     0     0       0     0     0       0     0     0       0     0     0       0     0     0       0     0     0       0     0     0       0     0     0       0     0     0       0     0     0       0     0     0       0     0     0	0	0	0
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	0	0	0
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	-	-	0

Category			Unit	2020	2021	2022
	Employees	Total		1	1	3
	who have taken pa-	Male		0	0	1
	rental leave	Female		1	1	2
	No. of employees	Total	Persons	2	0	0
	who have returned to work after	Male		0	0	0
	parental leave	Female		2	0	0
Parental leave	Return rate of have taken pa	f employees who arental leave	%	100	0	0
	No. of em- ployees who have worked	Total		2	0	0
	over 12 months after	Male	Persons	0	0	0
	returning from paren- tal leave	Female		2	0	0
	worked over	oyees who have 12 months after n parental leave	%	100	0	0
	Duration of education for human rights		Hours	402	429	507
		No. of employees who completed human rights training		134	143	169
Human rights	Ratio of empl completed hu	oyees who uman rights training	%	100	100	96
policies and procedures	Duration of e prevention of	ducation for workplace bullying	Tatal	134(1)	145(1)	169(1)
	Duration of each harassment p	ducation for sexual prevention	Total hours (Per em-	134(1)	145(1)	169(1)
		her education (Human rights ucation for people with abilities, etc.)		134(1)	145(1)	169(1)
CSR	Investment in CSR (incl. donation)	Cash donation Non-cash donations	KRW million	8.8	6.2	-

#### Governance

Category		Unit	2020	2021	2022
	No. of Board meetings	Times	-	-	13
BOD operation*	No. of agendas	Ea.	-	-	24
operation	BOD attendance rate	%	-	-	95
	Male	Deveene	-	-	6
	Female	Persons	-	-	(
	Ratio of female directors in the BOD	%	-	-	(
Board diversity*	Under 30 years		-	-	
uiversity	30 ~ 50 years	Daraana	-	-	1
	Above 50 years	Persons	-	-	4
	No. of outside directors		-	-	:
	Ratio of outside directors	%	-	-	28.5
Anti-	Total no. of business sites		-	-	
	No. of business sites that conducted anti-corruption risk assessments	Ea.	-	-	
corruption	Ratio of business sites that conducted anti-corruption risk assessments	%	-	-	10
	No. of Board members that received ethics training*	Persons	-	-	,
	Ratio of Board members who received ethics training*	%	-	-	10
	Total no. of employees who received ethics training	Persons	134	145	17
Anti-cor- ruption	Ratio of employees who received ethics training	%	100	100	10
policies and procedures	Total no. of Board members who have signed the ethics pledge*	Persons	-	-	
	Ratio of Board members who have signed the ethics pledge*	%	-	-	10
	Total no. of employees who have signed the ethics pledge	Persons	134	145	17
	Ratio of employees who have signed the ethics pledge	%	100	100	10
Anti-cor- ruption violations	No. of anti-corruption violations	Ea. (per- sons)	0	0	(

\* Total number for Hansol PNS

# SUSTAINABILITY ESSENTIALS

# HANSOL SUSTAINABILITY ACTION

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# Hansol HomeDeco

### Economy

Category			Unit	2020	2021	2022
	Sales			253,213	263,249	283,414
	Gross profit	:		35,776	46,174	48,665
	Selling, gen administrati	eral, and ve expenses		33,037	37,555	45,950
	Operating ir	ncome		2,739	8,619	2,714
Income statement	Financial ind	come	KRW million	2,100	3,470	1,240
Statement	Financial ex	penses	millon	4,105	2,994	4,883
	Other incom	ne		3,572	1,518	3,787
	Other expenses			3,655	2,706	9,016
		before the deduction tax expenses		650	7,905	(6,157)
		Current assets		78,680	98,188	108,300
	Assets	Non-current assets		216,309	216,472	211,195
		Current liabilities		76,068	101,751	118,712
Balance	Liabilities	Non-current liabilities	KRW	64,380	53,062	47,361
sheet		Shareholders' equity in the parent company	million	154,542	159,847	153,347
	Capital	Shareholders' equity in the non-controlling company		0	0	74
	Total R&D e current peri	xpenses for the od	KRW million	160	482	160
R&D	R&D expense	ses/sales	%	0.06	0.18	0.06
	No. of R&D	personnel	Persons	0	0	0

(Based on the consolidated financial statements)

#### Environment

Category			Unit	2020	2021	2022
Consumptio materials	n of raw	Raw materials consumed	Tons	177,118	185,605	160,310
Consumption of materials that contain recycled materials		Amount of recycled materials (reused raw materials) consumed	Tons	84,723	96,985	87,323
		Ratio of recycled materials (reused raw materials) consumed	%	48	52	54
Enormy		Total energy consumed		2,862	2,974	1,98
Energy consump- tion	Total energy consumed	Scope 1 energy consumption	TJ		-	96
		Scope 2 energy consumption		-	-	1,02
	Total	Total amount of water consumed		610,228	592,392	617,04
Water con- sumption	n- amount of water consumed	Amount of water consumed	Tons	359,632	346,584	409,89
(amount, based on domestic		Amount of underground water consumed		250,596	245,808	207,15
data)	Water reuse	Amount of water reused		63,714	60,462	13,47
		Ratio of water reused	%	10.4	10.2	2.
GHG	Emissions	Direct emissions (Scope 1)	tCO2eq	13,621	12,905	9,31
emissions		Indirect emissions (Scope 2)		48,180	48,865	46,08
		SOx		587	586	75
Air	Emissions	NOx	kg	80,846	72,073	72,75
pollutants		HAP		2,863	1,896	2,64
		PM		21,786	12,378	33,32
Water		BOD		11	14	
pollutants	Emissions	COD	ppm	49	38	2
		SS		7	6	
	Total amount of waste	Total amount of waste		28,414	31,863	28,81
	(amount treated in	Waste discharged at business sites	Tons	25,983	29,291	28,25
Waste	Korea)	Designated waste		2,430	2,570	56
	Waste	Recycled amount		20,770	25,299	21,79
	recycling rate	Waste recycling ratio	%	73	79	7

Category		Unit
Violation of environmental laws and regulations	Amount of fines	KRW million
Environ- mental Environ- expenses mental	Amount of environmental investments	KRW million
and invest- investments ments	Environmental expenses	THINOT
	Sales of green products and services	KRW million
Sales of green products	Total sales	
	Ratio of sales related to green products	%

\* Energy consumption: Because GHG emissions and steam are measured in units of energy, it is impossible to distinguish between Scope 1 and Scope 2.

Social

Category			Unit
	r of employees	3	Persons
		Total	
	Executives	Female	
		Male	
Current		Total	
employees (by employ-	Permanent	Female	Persons
ment type)		Male	
51 /	Main	Total	
	Non- permanent	Female	
	ponnanoni	Male	
Outsourced	workers		Persons
Current employees	Full-time		Persons
(by work schedule)	Part-time		1 61 50 113
Current em- ployees (by	Domestic		Persons
location)	Overseas		
	No. of male e	mployees	Persons
	Ratio of male	%	
	No. of female	Persons	
	Ratio of fema	%	
	No. of male e	Persons	
	Ratio of male	%	
	No. of female	Persons	
	Ratio of fema	%	
	No. of male n level or highe	Persons	
	Ratio of male level or highe	%	
	No. of female (manager lev	Persons	
	Ratio of fema (manager leve	%	
		No. of employees with disabilities	Persons
Employee diversity		Ratio of employees with disabilities	%
		No. of senior	
		employees (55 years or older, excl. executives)	Persons
		Ratio of senior employees	%
	Hiring of the socially dis-	No. of foreign employees	Persons
	advantaged	Ratio of foreign employees	%
		No. of employees with high school degree	Persons
		Ratio of employees with high school degree	%
		No. of veterans	Persons
		Ratio of veterans	%

# 2023 HANSOL GROUP SUSTAINABILITY REPORT

2020	2021	2022
0	3	5
2.5	48.1	1,866
1,755	2,132	1,887
-	-	84,155
-	-	283,414
-	-	29.7

2021 20	21 2022	202	2020
			267
13	13 7	-	13
0	0 0		0
13			13
			242
31			20
19			222
19			12 7
5		·	5
0			0
		30	267
0	0 0		0
301	298	30	263
4	4 5		4
260	60 267	26	240
85			89
45	45 36		27
15	15 12		11
13	13 7		13
4	4 2		5
0			0
0	0 0		0
-	- 46		-
-	- 15		-
3	3 1		2
4	4 0.3		2
6	6 6		6
2	2 2		2
7	7 13		9
2	2 4		3
0	0 0		0
0	0 0.0		0
109	09 122	10	103
36	36 40		39
2	2 1		1
0.7	0.7 0.3	0	0.4

Category			Unit	2020	2021	202
		Persons in the age group (Under 30 years of age)	Persons	-	-	7
	Employee composi-	Percentage (Under 30 years of age)	%	-	-	2
Employee diversity		Persons in the age group (30 ~ 50 years of age)	Persons	-	-	15
uiversity	tion	Percentage (30 ~ 50 years of age)	%	-	-	5
		Persons in the age group (Above 50 years of age)	Persons	-	-	5
		Percentage (Above 50 years of age)	%	-	-	1
	Male			21	37	3
	female		-	10	21	
New hires		Under 30 years	Persons	21	28	
	By age	30 ~ 50 years	-	10	30	
		Above 50 years		0	0	
		Average male salary	KRW	6	33	2
		Average female salary	million	25	25	3
		Ratio of base salary of female to male	%	59	66.8	7
		Average male executive salary Average male	-	36	37	19
	Base salary and remu- neration by gender	permanent employee salary	KRW million	59	67	2
Employee		Average female permanent employee salary		36	37	3
Employee compensa- tion		Ratio of base salary of female permanent employee to male permanent employee	%	-	-	٤
		Average male non-permanent employee salary	KRW _	-	-	2
		Average female non-permanent employee salary	million	-	-	2
		Ratio of base salary of female non-permanent employee to male non-permanent employee	%	-	-	8
	Average year		Years	9.5	8	10
Job		of employee turnover	Persons		-	40
security	Voluntary tur		% -		-	10
	Non-voluntary turnover No. of beneficiaries of training/ education		Persons		305	29
Talant da	Total budget training/educ	for employee ation	KRW million	250	210	29
Talent de- velopment	Training expe	enses per employee	KRW 1,000	936	688	10
	Total no. of h	ours of training	1,000		_	6,21
	Total no. of hours of training           Average training hours per           employee		Hours	29	22	2
		rial accidents	Ea.	0	2	
Industrial	Industrial-ac		%	0	0.65	0.9
accidents	No. of deaths		Persons -	0	0	
	No. of injuries	ork-hour loss	Hours	0	224	3,40
Mutual		Total no. of partner companies	Ea.	4	5	0,-0
growth	Suppliers			6,244	6,606	7,49
	No. of violation	ons of fair trade laws	Ea.	0	0	
Fair trade	Fines impose	ed	KRW million	0	0	
Informa- tion-securi- ty breaches Customer-data leakages, theft, and losses		Ea.	0	0		

Category			Unit	2020
Workplace discrimina- tion		aints filed in relation discrimination	Ea.	0
Incidents of non-com-	No. of violations	ns that resulted in		0
pliance to regulations and internal	No. of warning compliance	gs from non-	Ea.	0
codes	No. of violatio	ns of internal codes		0
Work loss	No. of work-lo companies	oss cases in partner	Ea.	-
	Employees who have	Total		3
	taken	Male		0
	parental leave	Female		2
	No. of employees who have returned to work after parental leave	Total	Persons	1
		Male		0
		Female		1
Parental leave	Return rate of have taken pa	employees who arental leave	%	0
	No. of em- ployees who have worked over 12 months after returning from paren- tal leave	Total	Persons	0
		Male		0
		Female		0
	Ratio of employees who have worked over 12 months after returning from parental leave		%	0
				267(1)
ployees who       Total         have worked       over 12         months after       Male         returning       Female         tal leave       Ratio of employees who have         Ratio of employees who have       worked over 12 months after         returning from parental leave       Duration of education for         Human       Duration of education for sexu         narassment prevention       harassment prevention		Total hours	267(1)	
	Other education (Human rights education for people with		(per em- ployee) 267(1)	267(1)
CSR	Investment in CSR (incl. donation)	Cash donation	KRW million	-

Category		Unit	2020
	No. of Board meetings	Times	-
	No. of agendas	Ea.	-
	Preliminary deliberation	%	-
Board of Directors	Decisions on revised agenda	Ea	-
Directors	Reported agenda	Ed.	-
	BOD attendance rate	%	-
	Non-executive attendance rate	70 -	-
	Male	Persons	-
	Female	Persons	-
	Ratio of female directors in the BOD	%	-
Board	Under 30 years		-
diversity	30 ~ 50 years	Persons -	-
	Above 50 years	Persons	-
	No. of outside directors	-	-
	Ratio of outside directors	%	-
	No. of Board members who received ethics training	Persons	-
	Ratio of Board members who received ethics training	%	-
	Total no. of employees who received ethics training	Persons	267
Anti-cor- ruption	Ratio of employees who received ethics training	%	100
policies and procedures	Total no. of Board members who have signed the ethics pledge	Persons	-
	Ratio of Board members who have signed the ethics pledge	%	-
	Total no. of employees who have signed the ethics pledge	Persons	267
	Ratio of employees who have signed the ethics pledge	%	100
Anti-cor- ruption violations	No. of anti-corruption violations	Ea. (persons)	0

2021	2022
0	0
0	0
0	0
0	0
-	0
4	2
1	0
3	2
2	1
1	1
1	0
66	25
1	1
0	1
1	0
100	50
305(1)	303(1)
305(1)	303(1)
305(1)	303(1)
-	33

2021	2022
-	23
-	32
-	100
-	0
-	9
-	100
-	100
-	7
-	0
-	0
_	0
-	0
-	7
-	2
-	29
-	7
-	100
305	303
100	100
-	7
-	100
305	303
100	100
0	0

# SUSTAINABILITY ESSENTIALS

# HANSOL SUSTAINABILITY ACTION

# APPENDIX

Materiality Test
Data Center
GRI Content Index
UN Sustainable Development Goals
Independent Assurance Statement
Affiliates with Certifications
Awards
Local Business Sites
Association Memberships

# Hansol Logistics

### Economy

Category			Unit	2020	2021	2022
	Sales			509,613	747,044	1,015,371
	Gross profit	Gross profit		42,351	64,134	78,680
		Selling, general, and administrative expenses		29,274	33,830	42,330
	Operating ir	ncome		13,076	30,304	36,349
Income	Financial ind	come	KRW	1,354	8,148	3,047
statement	Financial ex	penses	million	3,060	2,959	8,403
01010110	Other incom	ne		3,615	4,996	17,568
	Other expenses			4,075	7,501	18,317
	Net income before the deduction of corporate tax expenses			11,895	33,509	30,450
	Gains or losses using equity method			984	520	204
	Assets	Current assets		120,770	178,348	178,162
		Non-current assets		75,201	88,279	96,334
		Current liabilities		111,820	166,532	156,801
	Liabilities	Non-current liabilities		29,501	21,506	15,189
Balance sheet		Shareholders' equity in the parent company	KRW million	54,649	78,525	102,344
	Capital	al Shareholders' equity in the non-controlling company		0	63	162

(Based on the consolidated financial statements)

#### Social

Category			Unit	2020	2021	2022
Total numbe	r of employee	s	Persons	359	382	323
		Total		6	5	4
Total number of employeesPersons359382Total number of employeesTotal65ExecutivesFemale00Male65(by employ- ment type)PermanentFemalePersonsNon- permanentTotal2322Non- permanentFemalePersons330Non- permanentTotal2322Non- permanentFemale1415Male970Outsourced workersPersons33Current employees (by work schedule)Full-timePersons359382Part-timeDomesticPersons000Current employees (by workDomesticPersons347369	Executives	Female		0	0	0
	4					
Current		Total		330	355	292
	Permanent	Female	Persons	54	64	79
ment type)						213
	Non-	Total		23	22	31
		Female		14	15	20
				9	7	11
Outsourced	workers		Persons	3	3	3
Current employees	Full-time			359	382	323
Current employees by work schedule) Current em- bloyees (by	Part-time		Persons	0	0	0
ployees (by location) Ov			— Persons -	347	369	308
				12	13	15
	No. of male	employees	Persons	276	291	224
	Ratio of male	employees	%	81	79	69
	No. of female	e employees	Persons	54	64	99
	Ratio of fema	ale employees	%	19	21	31
	No. of male	executives	Persons	6	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	4
(by work schedule) Current em- ployees (by	Ratio of male	e executives	%	2	1	1
	No. of female	e executives	Persons	0	0	0
	Ratio of fema	ale executives		0	0	0
		0	Persons	-	-	104
Total number of Current employees (by employ- ment type) Dutsourced w Current employees (by work schedule) Current em- oloyees (by ocation)	0		%	-	-	35
	0		Persons	15	14	15
	otal number of employees         current         mployees         by employ-         nent type)         Non-         permanent         Dutsourced workers         current         mployees         py work         chedule)         current employees         corrent         putsourced workers         current         powerk         chedule)         current employees         loyees (by         coration)         No. of male em         Ratio of male em         No. of female em		%	4	4	5

Employee inversity         No. of employees with disabilities with disabilities with disabilities with disabilities with disabilities with disabilities ware or older, encloyees (55 years or older, years or older, years or older, years or older, years or older, years or older, encloyees (55 years or older, years or older, years or older, years or older, encloyees (55 years or older, years or older, years or older, years or older, encloyees (55 years or older, years or older, encloyees (55 years or older, years or older, years or older, encloyees (55 years or older, encloyee (55 years or older, encloyees (55 years or older, encloyee (55 years or older, encloyees (55 years (56 years), encloyees (55 years), encloyee (5	Cotogory			l Init	2020	2021	2000
Employee ion         Mail         Fersons         S         S           Encloyee ion         No. of serior employee (So So S	Galegory		No. of employees				2022
with disabilities         **         1         1         0.0           No. of serior employees (55) years or older, employees (67) advantage         Persons         17         19         11           Ratio of serior employees advantage         Ratio of serior employees         Persons         0         0         0           Batio of foreign employees advantage         No. of employees with high school degree         Persons         93         800         44           Employee diversity         No. of employees with high school degree         Persons         0			with disabilities	Persons	5	5	1
employees         persons         17         19         11           Ratio of senior employees advantages         Ratio of foreign employees with high school degree         Persons         0         <			with disabilities	%	1	1	0.3
Batic of senior employees         96         5         5         4           Hing of the advantages advantages advantages advantages advantages advantages intersity         No. of foreign employees with high school degree         Persons         0         0         0         0           Employee diversity         Persons in the age group (Inder 30 years of age)         Persons         0         0         0         0           Employee diversity         Persons in the age group (Inder 30 years of age)         Persons         -         199           Persons in the age group (Inder 30 years of age)         Persons         -         199           Persons in the age group (Inder 30 years of age)         Persons         -         199           Persons in the age group (Inder 30 years of age)         Persons         -         199           Persons in the age group (Inder 30 years of age)         Persons         -         199           Persons in the age group (Above 50 years         Persons         -         10         0           Persons in the age group (Above 50 years         Persons         -         10         0           Persons in the age group (Above 50 years         Persons         -         0         0         0           Persons in the age group (Above 50 years         Persons         - <td rowspan="2">Employee diversity</td> <td></td> <td>employees (55 years or older,</td> <td>Persons</td> <td>17</td> <td>19</td> <td>11</td>	Employee diversity		employees (55 years or older,	Persons	17	19	11
Socially dis- advantaged advantaged inversity         Socially dis- repropession (inversity)         Oersons (inversity)         Oersons (inversity) <thoersons (inversity)         Oersons (inversity</thoersons 			Ratio of senior	%	5	5	4
Employee inversity         Practic of employees with high school degree         96         0         0         0           Ratio of employees with high school degree         Persons         93         80         44           Ratio of vetrans         Persons         0         0         2           Ratio of vetrans         Persons         0         0         2           Persons in the age group (Under 30 years of age)         Persons         -         2           Persons in the age group (Under 30 years of age)         Persons         -         2           Persons in the age group (Under 30 years of age)         %         -         -         3           Persons in the age group (Abors 50         Persons         -         25         388         3         1         0           Male         Terrange (Abors 50 years of age)         Persons         16         22         0         0         1         26         0         1         0         0         0         1         1         0 <t< td=""><td></td><td>socially dis-</td><td>0</td><td>Persons</td><td>0</td><td>0</td><td>0</td></t<>		socially dis-	0	Persons	0	0	0
Male         Persons         93         80         44           diversity         Ratio of employees (degree)         %         26         21         1           No. of vetrans         Persons         0         0         2           Ratio of vetrans         %         0         0         2           Persons in the age group (Under 30) years of age)         %         -         2         3           Persons in the age group (Above 50) years of age)         %         -         -         3           Persons in the age group (Above 50) years of age)         %         -         -         3           Persons in the age group (Above 50) years of age)         %         -         -         3           Persons in the age group (Above 50) years of age)         %         -         -         3           Persons in the age group (Above 50) years of age)         %         -         -         3           Persons in the age group (Above 50) years         %         -         -         3           Male         Under 30 years         Persons         -         3         1         0           Average male salary of female         Average male salary of female         -          0         -         <	Image: Second	auvantaged	employees	%	0	0	0
Employee diversity         Ratio of employee with high school Agerse         %         26         21         14           No. of veterans Persons in the age group (Under 30 years of age)         Persons         0         0         2           Persons in the age group (Under 30 years of age)         Persons         -         265           Persons in the age group (Under 30 years of age)         Persons         -         265           Persons in the age group (Above 50 years of age)         Persons         -         265           Persons in the age group (Above 50 years of age)         Persons         -         -           Persons in the age group (Above 50 years of age)         Persons         -         -         665           Persons in the age group (Above 50 years of age)         Persons         -         -         666           New hires         Male         23         -         -         666           Male         -         7         12         Co         -         667           New hires         Male         -         7         11         26         225         38         32           Average male salary         -         -         -         11         26         225         38         31         160			with high school	Persons	93	80	40
Ratio of veterans Persons in the age group (Under 30 years of age)         Persons         -         -         66           Persons in the age composi- tion         Persons in the age persons of age)         %         -         -         22           Persons in the age composi- tion         Persons in the age group (Above 50) years of age)         %         -         -         22           New hires         Male female         Persons in the age group (Above 50) years of age)         %         -         -         33           New hires         Male female         Under 30 years 30 - 50 years         Persons         -         25         38         33         14           New hires         Male female         Under 30 years 30 - 50 years         Persons         18         23         14           Above 50 years         31         10         00 </td <td>14</td>		14					
Employee composi- tion         Persons in the age group (Under 30 years of age)         Persons         -         -         661           Percentage (Under years of age)         %         -         -         223           Percentage (30- years of age)         %         -         -         661           Percentage (30- years of age)         Persons         -         -         661           Percentage (Above source (30- years of age)         %         -         -         661           Persons         -         7         12         66         661           Male         Under 30 years         Persons         7         11         26         225           Male         Under 30 years         Persons         11         26         225         38         33         1         0         661           Male         Marcage female salary         Marcage female salary         Marcage female salary         Marcage female executive salary         Mithithithithithi			No. of veterans	Persons	0	0	2
Employee tion         Employee Percentage (Under 30 years of age) Percentage (Under 30 years of age) Percentage (20 - 50 years of age) Percentage (30 - 50 years of age) Percentage (30 - 50 years of age) Percentage (Above 50 years of age)         Percentage (20 - 50 years of age) Percentage (Above 50 years of age)         96         -         -         66           New hires         Male         96         -         -         66           Male         11         25         38         33           female         0.016r 30 years         Persons         11         26         22           New hires         Under 30 years         Persons         18         23         14           Above 50 years         13         10         0         0         15           New hires         Under 30 years         Persons         18         23         14           Above 50 years         3         10         0         0         15           Above 50 years         3         10         0         0         15           Above 50 years         3         10         0         0         0         15           Ratio of base salary of female executive salary         KRW         -         -         0         0           Average male employee salary<			Ratio of veterans	%	0	0	1
30 years of age) persons in the age group (30 - 50 years of age)         70         -         -         2         2           Very (30 - 50 years of age)         96         -         -         193           Persons tion         Persons in the age group (Above 50 years of age)         96         -         -         660           Persons years of age)         Persons Persons in the age group (Above 50 years of age)         Persons         -         33           New hires         Male         Under 30 years Above 50 years         Persons         11         26         22           New hires         Male         Under 30 years Above 50 years         Persons         18         23         14           New hires         Male         Under 30 years         Persons         18         23         14           New hires         Male         Under 30 years         Persons         18         23         14           New age         Male         Maverage female salary         Persons         11         26         22           New age         Above 50 years         3         1         00         0         0           Average female sconpers         Ratio of base salary of female permanent employee salary         KRW         -         - <td rowspan="2">-</td> <td></td> <td>group (Under 30</td> <td>Persons</td> <td>-</td> <td>-</td> <td>67</td>	-		group (Under 30	Persons	-	-	67
Employee composi- tion         group (30 - 50 years of age)         Persons         -         118           Percentage (30 - 50 years of age)         Persons in the age group (Above 50 years of age)         96         -         -         34           New hires         Male         Image         Percentage (Above 50 years of age)         Persons         18         23         14           New hires         Under 30 years         Persons         11         26         28         3         14         0           New hires         Under 30 years         Persons         11         26         28         3         14         0           New hires         Under 30 years         Persons         11         26         28         3         14         0         28         3         14         0         28         3         14         0         3         16         0         3         16         0         3         16         15         3         16         3         3         16         3         3         16         3 <t< td=""><td></td><td>30 years of age)</td><td>%</td><td>-</td><td>-</td><td>23</td></t<>			30 years of age)	%	-	-	23
tion         Percentage (30 - 50 years of age)         %         -         66           Persons in the age group (Above 50 years of age)         Persons in the age group (Above 50 years of age)         Persons         -         33           Male         25         38         33         31         24           Main         27         712         66           Main         23         71         26         25           Main         23         71         26         25         38         33         31         26         22           New hires         Male         Under 30 years         Persons         71         26         27           New hires         Main         Under 30 years         Persons         71         26         27           New hires         Main         Under 30 years         Persons         71         26         27           Average male exacutive salary         KRW         T         71         26         27           Ratio of base salary of female to male         %         -         72         26           Base salary on remu- comployee to male permanent employee salary         KRW         T         73         26           Average female non			group (30 ~ 50	Persons	-	-	195
Image: second			Percentage (30 ~ 50 years of age)	%	-	-	66
S0 years of age)         70         -         -         -         1           Male         Inder 30 years         7         12         66         22         38         33         14         26         22         28         31         12         66         22         26         38         33         14         26         22         22         38         33         14         26         22         22         38         33         1         00         30         50 years         33         1         00         30         40         26         22         28         38         33         1         00         30         50 years         33         1         00         30         40         26         22         28         38         31         40         30         40         40         30         40         40         30         40         40         30         40         40         30         40         40         40         30         40         40         40         40         40         40         40         40         40         40         40         40         40         40         40         40			group (Above 50 years of age)	Persons	-	-	34
Image: Second				%		-	11
New hires         Under 30 years         Persons         18         23         14           By age         30 - 50 years         31         26         22           Above 50 years         3         1         26         22           Above 50 years         3         1         26         22           Average male salary         3         1         26         25           Average female salary         Average female salary         3         1         26           Ratio of base salary of female to male         %         -         53         53           Average male executive salary         Merage male executive salary         64         -         77           Ratio of base salary of female executive to male executive aslary         %         -         66           Average female permanent employee to male non-permanent employee to male non-permanent employee to male non-permanent employee salary of female permanent employee salary of female non-permanent employee salary of female permane							33
By age     30 - 50 years     11     26     22       Above 50 years     3     1     00       Average male salary     Average female salary     3     1     00       Average female salary     Average female salary     %     -     -       Ratio of base salary of female to male     %     -     11.52       Average female executive salary     KRW     -     11.52       Average female executive salary     KRW     -     -       Average female executive to anale executive to male executive to male employee salary     -     -       Average female male permanent employee salary     %     -     -     22       Average male non-permanent employee salary     %     -     -     22       Average female non-permanent employee salary     -     -     33       Average male non-permanent employee salary     -     -     -       Average male non-permanent employee salary     -     -     -     -       Average years of service     Years     8.6     8.6     -       <	New hires	female		5			6
Employee ion     Base salary executive salary and remu- neration by gender     Base salary executive salary and remu- neration by gender     Average male salary of female to salary of female executive salary Ratio of base salary of female executive salary Average female executive salary Ratio of base salary of female executive salary Average female executive salary Ratio of base salary of female employee salary Ratio of base salary of female permanent employee salary Ratio of base salary of female non-permanent employee salary Ratio of base salary of service Years Ratio Sase salary Sase Sase Sase Sase Sase Sase Sase Sase		Durr		Persons			14
Employee compensation       Base salary       Average female salary       KRW       -       -       66         Ratio of base salary       Ratio of base salary of female to male       %       -       -       77         Ratio of base salary of female to male       %       -       -       77         Average male executive salary       Average female executive salary       KRW       -       -       11.153         Average female executive salary       Average female executive to male executive to male executive to male permanent employee salary       %       -       -       00         Base salary of female to mentation by gender       Average female permanent employee salary       %       -       -       00         Ratio of base salary of female permanent employee salary       Marcage female permanent employee salary       %       -       -       00         Average female permanent employee to male permanent employee salary       Marcage female non-permanent employee salary       -       -       22         Average female non-permanent employee salary       -       -       33       -       33         Average female non-permanent employee to male non-peremanent employee to male non-permanent employee to male non-perma		ву аде					
Employee compensa- tion     Base salary and remu- neration by gender     Salary Nerrage female executive salary Average female executive salary Average female executive salary Average female executive salary Average female executive to male executive to male permanent employee salary Ratio of base salary of female executive Average male permanent employee salary Ratio of base salary of female permanent employee to male permanent employee salary Ratio of base salary of female permanent employee salary Ratio of base salary of female permanent employee to male permanent employee to male non-permanent employee to male non-permanent employee to male persons 28 31 33     33					3	1	
Employee ion     Base salary     Fatio of base salary of female to male     %     -     -     77       Average male executive salary     KRW     -     -     11.152       Average female executive salary     Merage female executive salary     %     -     -     00       Ratio of base salary of female executive salary     %     -     -     00       Ratio of base salary of female executive to male executive to male executive to male permanent employee salary     %     -     -     63       Ratio of base salary of female permanent employee salary     KRW     -     -     63       Average male permanent employee salary     KRW     -     -     63       Average female permanent employee salary     %     -     -     64       Average male permanent employee salary     %     -     -     63       Average male permanent employee salary     %     -     -     63       Average male permanent employee salary     %     -     -     63       Average female non-permanent employee salary     -     -     -     63       Average female non-permanent employee salary     -     -     -     -       Average years of service     Years     8.6     8.6     -       Job security     Average years of			salary			-	69 52
Employee compensation       Base salary of male executive salary of female executive to male permanent employee salary of female permanent employee salary factor of base salary of female permanent employee salary factor of base salary of female permanent employee salary factor of base salary of female permanent employee salary factor of base salary of female permanent employee salary factor of base salary of female permanent employee salary factor of base salary of female permanent employee salary factor of base salary of female permanent employee salary factor of base salary of female permanent employee salary factor of base salary of female permanent employee salary factor of base salary of female permanent employee salary factor of base salary of female non-permanent employee to male no			salary Ratio of base			-	
Employee compensation       Base salary       Average female executive salary       %       -       -       0         Base salary compensation       Base salary       Average female executive to male permanent employee salary       %       -       -       0         Average female permanent employee salary of female permanent employee to male permanent employee salary       KRW       -       -       -       440         Average male permanent employee salary       Maverage female permanent employee to male permanent employee salary       %       -       -       -       440         Average male non-permanent employee salary       %       -       -       -       440         Average female non-permanent employee salary       %       -			male	%	-	-	77
Employee compensa- tion       Base salary       Ratio of base salary of female executive to male executive       %       -       -       60         Base salary and remu- neration by gender       Average female permanent employee salary       %       -       -       60         Ratio of base salary of female permanent employee salary       KRW       -       -       60         Average female permanent employee to male permanent employee to male permanent employee salary       %       -       -       60         KRW       -       -       60       -       -       60         Average female permanent employee to male permanent employee salary       -       -       -       60         Average male non-permanent employee salary       %       -       -       -       22         Average female permanent employee salary       %       -       -       -       -       -         Matio of base salary of female non-permanent employee salary       %       - <td></td> <td>executive salary</td> <td></td> <td>-</td> <td>-</td> <td>1,153</td>			executive salary		-	-	1,153
Employee compensation       Base salary of female executive to male executive to male permanent employee salary and remuneration by gender       %       -       -       63         Employee compensation       and remuneration by gender       Average female permanent employee salary       KRW       million       -       -       64         Permanent employee salary gender       Average female permanent employee salary       KRW       -       -       -       44         Permanent employee salary       Ratio of base salary of female permanent employee to male permanent employee salary       %       -       -       -       22         Average female non-permanent employee salary       KRW       -       -       -       22         Average female non-permanent employee salary       KRW       -       -       -       22         Average female non-permanent employee salary       KRW       -			executive salary			-	0
Employee compensa- tionBase salary and remu- neration by genderpermanent employee salary63Average female permanent employee salaryAverage female permanent employee salaryKRW million44Average female permanent employee salary44Average female permanent employee to male permanent employee%44Average male non-permanent employee salary%22Average female non-permanent employee salary%22Average female non-permanent employee salaryMillion22Average female non-permanent employee salary%31Average female non-permanent employee to male non-permanent employee%32Job securityAverage years of service Voluntary turnoverYears8.68.67%JobTotal number of employee turnover Voluntary turnover%100%JobTotal number of employee Voluntary turnover%Job <t< td=""><td></td><td></td><td>salary of female executive to male executive</td><td>%</td><td>-</td><td>-</td><td>0</td></t<>			salary of female executive to male executive	%	-	-	0
American compensa- tionand remu- neration by genderAverage female permanent employee salarymillionRatio of base salary of female permanent employee to male permanent employee46Average male non-permanent employee salary%46Average male non-permanent employee salary%46Average male non-permanent employee salary%22Average female non-permanent employee salaryNew and the permanent employee salary22Average female non-permanent employee salary%23Ratio of base salary of female non-permanent employee%33Average years of service voluntary turnoverYears8.68.673Voluntary turnover%100%100	T-may 1-1	Base salarv	permanent		-	-	63
Ratio of base salary of female permanent employee to male permanent employee to male permanent employee salary%-73Average male non-permanent employee salary Ratio of base salary of female non-permanent employee salary Ratio of base salary of female non-permanent employee salary%73Average female non-permanent employee salary Ratio of base salary of female non-permanent employee22Average female non-permanent employee salary%33Batio of base salary of female non-permanent employee%136Non-permanent employee%136Average years of serviceYears8.68.674Job securityTotal number of employee turnover%100%100	compensa-	and remu- neration by	permanent	million	-	-	46
non-permanent       -       -       22         employee salary       KRW       million       31         Average female       non-permanent       -       -       31         employee salary       Ratio of base       salary of female       -       -       31         Ratio of base       salary of female       non-permanent       -       -       138         employee       Mon-permanent       %       -       -       138         on-permanent       employee       %       -       -       138         on-permanent       employee       Years       8.6       8.6       7         Job       Total number of employee turnover       Persons       28       31       33         Voluntary turnover       %       -       -       100			salary of female permanent employee to male permanent	%	-	-	73
non-permanent employee salary31Ratio of base salary of female non-permanent employee to male non-permanent employee%133JobAverage years of service Total number of employee turnoverYears8.68.673JobTotal number of employee turnover Voluntary turnover%100			non-permanent employee salary		-	-	22
salary of female non-permanent employee to male non-permanent employee%-139Mathematical securityAverage years of serviceYears8.68.670Job securityTotal number of employee turnover Voluntary turnoverPersons283133%100			non-permanent employee salary		-	-	31
JobTotal number of employee turnoverPersons283133SecurityVoluntary turnover%100			salary of female non-permanent employee to male non-permanent employee	%	-	-	139
Voluntary turnover % 100							7
· · · · · · · · · · · · · · · · · · ·				Persons	28		195         66         34         11         33         6         14         25         0         69         53         77         1,153         0         63         46         73         22         31         139
Non-voluntary turnover	security			%		-	
		Non-voluntar	y turnover		-	-	U

# 2023 HANSOL GROUP SUSTAINABILITY REPORT

Category			Unit	2020	2021	202
	No. of benefic education	ciaries of training/	Persons	337	358	29
Talent de-	Total budget training/educ		KRW million	90	200	17
velopment	Training expe	nses per employee	KRW 1,000	268	558	60
	Average train employee	ing hours per	Hours	49	75	
	No. of industr occurred	ial accidents	Ea.	0	0	
Industrial	Industrial-acc	ident rate	%	0	0	
	No. of deaths		Doroono	0	0	
	No. of injuries	5	Persons	0	0	
	Duration of w	ork-hour loss	Hours	0	0	
Mutual growth	Suppliere	Total no. of partner companies	Ea.	942	997	79
	Suppliers	Total purchase from partners	KRW	278,950	431,781	605,02
	SME support	Total purchases from SME	million	0	0	
	No. of violatic	ns of fair trade laws	Incidents	0	0	
Fair trade	rade Fines imposed		KRW million	0	0	
tion-securi-	Customer dat and losses	a leakages, theft,	Ea.	0	0	
discrimina-			Ea.	0	0	
	No. of violatic sanctions	ns that resulted in		0	0	
pliance with regulations and internal codes	No. of warnin compliance	gs for non-	Ea.	0	0	
	No. of violations of internal codes			0	0	
	No. of work loss cases in partner companies		Ea.	-	-	
	Employees	who have		1	7	4
	taken pa-	Male		0	3	
	rental leave	Female		1	3       558       60         3       558       60         3       75       3         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         1       2       4         0       0       2         1       2       3         1       2       3         1       2       4         0       0       2         1       2       3         1       2       3	
	employees	Total	Persons	1	2	00       11         100       11         100       11         100       11         100       11         100       11         11       6005,02         00       11         00       11         00       11         00       11         00       11         00       11         00       11         00       11         00       11         00       11         00       11         00       11         00       11         00       11         11       6005,02         00       11         11       6005,02         11       100         11       100         11       100         11       100         12       11         13       11         14       11         1558       11         11       11         11       11         11       11         12       11         13
velopment       Training expenses per employee       KRW 1,000         Average training hours per employee       Hours         Average training hours per employee       Hours         No. of industrial accidents occurred       Ea.         Industrial accidents       Industrial-accident rate       %         No. of deaths       Persons         No. of injuries       Persons         Duration of work-hour loss       Hours         Mutual growth       Total no. of partner companies       Ea.         SME       Total purchases from partners       KRW million         Fair trade       No. of violations of fair trade laws       Incidents         Fines imposed       KRW million       Incidents         Informa- tion-securi- ty breaches       No. of violations that resulted in sanctions       Ea.         Workplace discrimina- tion       No. of violations that resulted in sanctions       Ea.         No. of violations of internal codes       No. of violations of internal codes       Ea.         Work loss       No. of work loss cases in partner companies       Ea.         Work loss       No. of work loss cases in partner companies       Ea.         No. of work loss cases in partner companies       Ea.         Work loss       No. of work loss cases in partner companies	0	0				
	Training expenses per employee       1,000       268       558         Average training hours per employee       Hours       49       75         No. of industrial accidents occurred       Ea.       0       0         Industrial-accident rate       %       0       0         No. of deaths       Persons       0       0         No. of injuries       Persons       0       0         Suppliers       Total no. of partner companies       Final purchases from partners       RRW       278,950       431,781         SME       Total purchases from partners       RRW       278,950       431,781       0       0         No. of violations of fair trade laws       Incidents       0       0       0       0         SME       Total purchases from SME       Ea.       0       0       0       0         Fines imposed       KRW       million       0       0       0       0       0         Image: and losses       Ea.       0	(				
			%	17	25	8
Industrial accidents Mutual growth Fair trade Informa- tion-securi- ty breaches Workplace discrimina- tion Incidents of non-com- pliance with regulations and internal codes Work loss Work loss	No. of em-			1	0	2
	over 12	Male	Persons		0	
	returning			·		
	tal leave					
	worked over returning from	l2 months after n parental leave	%	14	0	
	rights		Hours	1,348	1,432	1,1
pliance with regulations and internal codesNo. of warnings for non- complianceEa.Work lossNo. of violations of internal codesEa.Work lossNo. of work loss cases in partner companiesEa.Work lossNo. of work loss cases in partner companiesEa.Work lossNo. of work loss cases in partner companiesEa.Work lossTotal MaleMaleEmployees who have rental leaveFemaleNo. of employees who have returned to work after parental leaveFemaleParental leaveReturn rate of employees who have taken parental leave%No. of em- ployees who returning from paren- from paren- from paren- returning from parental leave%Ratio of employees who completed human rights rightsMo. of employees who completed human rights trainingHouNo. of employees who completed human rights training policies and proceduresRatio of employees who completed human rights trainingPerDuration of education for prevention of workplace bullying Duration of education for sexual harassment preventionTotal hou			Persons	337	358	2
	%	93	93	(		
policies and			Total	0	0	
			hours	674(2)	716(2)	558
		people with		674(2)	716(2)	558       6         75

### Governance

Category		Unit	2020
	No. of Board meetings	Times	-
	No. of agendas		-
Board of Directors	Reported agenda	Ea.	-
Directors	BOD attendance rate		-
	Non-executive attendance rate	%	
	Male		-
	Female	Persons	-
	Ratio of female directors in the BOD	%	-
	Under 30 years		-
aiversity	30 ~ 50 years	Persons	-
	Above 50 years	Persons	-
Board       Male         Female       Ratio of female         BOD       Under 30 year         30 ~ 50 years       Above 50 years         Above 50 years       No. of outside         Ratio of outside       Ratio of outside         Ratio of Board received ethic       Ratio of Board received ethic         Total no. of employed ethics training       Total no. of employed ethics training         policies and       Total no. of Board received ethics	No. of outside directors		-
No. of outside dire Ratio of outside d No. of Board men received ethics tra Ratio of Board me	Ratio of outside directors	%	
	No. of Board members who received ethics training	Persons	-
	Ratio of Board members who received ethics training	%	-
	Total no. of employees who received ethics training	Persons	362
	Ratio of employees who received ethics training	%	100
P. C. C. C. C. C. C.	Total no. of Board members who have signed the ethics pledge	Persons	-
	Ratio of Board members who have signed the ethics pledge	%	-
	Total no. of employees who have signed the ethics pledge	Persons	362
	Ratio of employees who have signed the ethics pledge	%	100
Anti-cor- ruption violations	No. of anti-corruption violations	Ea. (persons)	0

\* Total no. of employees who have signed the ethics pledge in 2022: Inconsistencies in the number of employees who signed the ethics pledge can be attributed to changes in staffing due to new hires and resignations.

2021	2022
-	23
-	41
-	0
-	94
-	87
-	7
-	0
	0
	0
-	0
-	0
-	7
-	2
-	29
-	7
-	100
385	363
100	100
-	7
-	100
385	363
100	100
0	0

# SUSTAINABILITY ESSENTIALS

# HANSOL SUSTAINABILITY ACTION

# APPENDIX

Materiality Test
Data Center
GRI Content Index
UN Sustainable Development Goals
Independent Assurance Statement
Affiliates with Certifications
Awards
Local Business Sites
Association Memberships

2023 HANSOL GROUP SUSTAINABILITY REPORT

# Hansol Technics

#### Economy

Category			Unit			2022
Sales         1,194,892         1,490,620         1,647,33           Gross profit         Selling, general, and administrative expenses         118,526         107,707         127,93           Operating income         Financial income         KRW         32,460         (4,255)         55,10           Financial expenses         Other income         118,526         107,707         127,93           Other income         Financial expenses         29,996         28,594         72,83           Other income         0,571         2,810         2,66           Other income         1,571         2,810         2,66           Other expenses         7,649         979         9,44           Net income before the deduction of corporate tax expenses         25,357         (6,570)         36,34           Liabilities         Non-current liabilities         280,264         320,674         562,50           Capital         Shareholders' equity in the parent company         78,022         177,123         207,18           Capital         Shareholders' equity in the non-controlling company         298         284         133,73           R&D         Expenses for the current period         KRW         19,721         18,199         22,27           R&D	Sales			1,194,892	1,490,620	1,647,391
	Gross profit			150,987	103,451	183,094
	127,989					
	55,104					
	Financial income			28,970	24,449	60,831
statement	Financial ex	penses	THINOT	29,996	28,594	72,822
	Other incom	าย		1,571	2,810	2,683
	Other expenses			7,649	979	9,448
				25,357	(6,570)	36,348
Selling, general, and administrative expenses         118,526         107,707           Operating income statement         Operating income         32,460         (4,255)           Financial income         32,460         (4,255)           Financial expenses         29,996         28,594           Other income         1,571         2,810           Other expenses         7,649         979           Net income before the deduction of corporate tax expenses         25,357         (6,570)           Non-current assets         311,128         467,995           Non-current liabilities         280,264         320,674           Liabilities         Non-current liabilities         280,264         320,674           Capital         Shareholders' equity in the non-controlling company         78,022         177,123           R&D         Total R&D expenses for the current period         KRW million         298         284           R&D expenses/sales         %         1.65         1.22	Assets	Current assets		311,128	467,995	509,415
		Non-current assets		280,264	320,674	562,506
		Current liabilities		234,267	333,270	424,708
	207,186					
		equity in the parent		278,804	277,992	306,289
AssetsCurrent assets311,128AssetsCurrent assetsLiabilitiesCurrent liabilitiesLiabilitiesNon-currentBalanceShareholders'equity in the parentCompanyCapitalShareholders'Shareholders'equity in the parentcompanyShareholders'equity in the parent278,804277,992280280284	133,736					
				19,721	18,199	22,275
R&D	R&D expense	ses/sales	%	1.65	1.22	1.35
	No. of R&D	personnel	Persons	131	138	153

(Based on the consolidated financial statements)

#### Environment

Category			Unit	2020	2021	2022
Consumptio materials	n of raw	Raw materials consumed	Tons	22	75	30.3
_		Total energy consumed		236	241	225.02
Energy consump- tion	Total energy consumed	Scope 1 energy consumption	TJ	15.4	14.3	13.97
		Scope 2 energy consumption		220.1	226.5	211.05
Water con-	Tatal	Total amount of water consumed		65,372	65,977	52,081
sumption (amount, based on	Total amount of water	Amount of water consumed	Tons	33,602	32,048	29,855
domestic data)	consumed	Amount of underground water consumed		25,711	26,864	22,226
GHG emis-	Emissions	Direct emissions (Scope 1)	tCO:eq	775	726	709.19
sions	ETTISSIOTIS	Indirect emissions (Scope 2)	Tons	10,691	10,867	10,099.7
A .		SOx	kg	0	0	0
Air pollutants	Emissions	NOx	kg	158	149	230
polititanto		PM		202	217	240
	Emissions	BOD		8	14	14.1
Water pollutants	Emissions	consumedresponseDirect emissions (Scope 1)1CO2eq775Indirect emissions (Scope 2)10,691Indirect emissions (Scope 2)10,691EmissionsNOxkgPM202PM202EmissionsCODppmBOD8SS8Total amount of waste8Total amount of waste972Amount at business sites treated in Korea)Domestic wasteDomestic waste24	12	20.8		
polititanto		SS		8	7	6.9
	Total			972	779	1,154
	of waste (amount	0	Tons	778	660	917
Waste	treated in	Designated waste		9	17	31
	Korea)	Domestic waste		24	29	31
	Waste	Recycled amount		802	689	979
	recycling rate	Waste recycling ratio	%	83	88	85
Environ- mental expenses	Environ- mental	Amount of environmental investments	KRW million	33	19	65
and invest- ments	investments	Environmental expenses	THINOT	290	312	299
	expenses 250 Sales of green products and KRW - services million		-	230,438		
Sales of gree	en products	Total sales		-	-	1,647,391
		Ratio of sales related to green products	%	-	-	14

Category			Unit
Total number	r of employees		Persons
		Total	
	Executives	Female	
<u> </u>		Male	
Current		Total	
employees (by employ-	Permanent	Female	Persons
ment type)		Male	
		Total	
	Non- permanent	Female	
	permanent	Male	
Outsourced v	workers		Persons
Current	Full-time		
employees (by work	Part-time		Persons
schedule) Current em-	Domestic		
ployees (by			Persons
location)	Overseas		
	No. of male e	mployees	Persons
	Ratio of male	employees	%
	No. of female	employees	Persons
	Ratio of fema	le employees	%
	No. of male e		Persons
	Ratio of male		%
	No. of female		Persons
		le executives	%
	No. of male n level or highe	Persons	
	Ratio of male level or highe	managers (manager er)	%
	No. of female (manager leve	0	Persons
	Ratio of fema (manager leve		%
		No. of employees with disabilities	Persons
		Ratio of employees with disabilities	%
		No. of senior employees (55 years or older, excl. executives)	Persons
Employee		Ratio of senior employees	%
diversity	Hiring of the socially dis-	No. of foreign	Persons
	advantaged	employees Ratio of foreign employees	%
		No. of employees with high school	Persons
		degree Ratio of employees	
		with high school degree	%
		No. of veterans	Persons
		Ratio of veterans	%
		Persons in the age group (Under 30 years of age)	Persons
		Percentage (Under 30 years of age)	%
	Employee composi-	Persons in the age group (30 ~ 50 years of age)	Persons
	tion	Percentage (30 ~ 50 years of age)	%
		Persons in the age group (Above 50 years of age)	Persons
		Percentage (Above 50 years of age)	%
	Male		
	female		
New hires		Under 30 years	Persons
	By age	30 ~ 50 years	
	-)		

Social

2022	2021	2020
635	656	662
11	11	11
0	0	0
11	11	11
589	620	628
120	123	141
469	497	487
35	36	34
12	9	8
23	27	26
0	0	0
635	656	662
0	0	2
608	656	662
27	0	0
503	524	513
79	80	77
132	132	149
21		23
11	11	11
1.7	1.6	1.6
0	0	0
0	0	0
227	-	-
35.1	-	-
6	6	5
4	3	2
5	3	4
1	1	1
33	25	27
5	4	4
0	0	0
0	0	0
172	175	192
27	27	29
2	2	2
0.3	0.3	0.3
71		
11		
482	-	-
75	-	-
93	-	-
14	-	-
85	49	70
	9	10
15		
15 45	25	43
	25 31	43 34

Category			Unit	2020	2021	2022
		Average male salary	KRW	65	60	50
		Average female salary	million	50	43	60       51         43       44         71       84         71       84         -       314         -       314         -       607         -       44         -       24         -       24         -       28,124         607       611         271       28,124         62       44         1       0         0       0         0       0         336       81,293         0       0         0       0         0       0         0       0         0       0         0       0         0       0         0       0         0       0         0       0         0       0         0       0         0       0         0       0         0       0         0       0         0       0         0       0         0       0         0
Compen- sation of Employee	Ratio of base salary of female to male		%	76	71	80
		Average male executive salary		-		316
		Average male permanent employee salary	KRW million	-	-	5
		Average female permanent employee salary			-	0 $56$ 3 $45$ 1 $80$ - $316$ - $47$ - $47$ - $47$ - $47$ - $47$ - $47$ - $47$ - $42$ - $41$ - $29$ - $70$ 7 $615$ 1 $294$ 2 $478$ 28,126 $28,126$ 2 $466$ 1 $00$ 0 $0$ 0 $0$ 0 $0$ 0 $0$ 0 $0$ 0 $0$ 0 $0$ 0 $0$ 0 $0$ 0 $0$ 0 $0$ 0 $0$ 0 $0$ 0 $0$ 0 $0$ <td< td=""></td<>
Compen- sation of Employee	compensa-s tion p e	Ratio of base salary of female permanent employee to male permanent employee	%	-	-	82
		Average male non-permanent employee salary	KRW	-	-	4
		Average female non-permanent employee salary	million	-	-	2
		Ratio of base salary of female non-permanent employee to male non-permanent employee	ary			
		iciaries of training/	Persons	662	607	61
	Total budget for employee training/education			270	271	294
	Training expenses per employee			436	442	478
velopment	Total no. of hours of training					28,120
-	Average training hours per employee		Hours	65	62	40
	Ratio of wages to training expenses		%	1	1	
	No. of industrial accidents occurred		Ea.	1	0	
Industrial	Industrial accident rate		%	0	0	(
Employee       tion       Starty of refinite permanent employee to male permanent employee       %       -       -         Average maile non-permanent employee salary       KRW       -       -       -         Average femanent employee salary       KRW       -       -       -         Ratio of base salary of female non-permanent employee salary       %       -       -         Ratio of base salary of female non-permanent employee to male non-permanent employee       %6       -       -         Talent de- velopment       Total budget for employee training/education       KRW       270       271         Tatent de- velopment       Training expenses per employee training velocation       KRW       436       442         Total no. of hours of training expenses       %6       1       1         Average training hours per employee       Hours       65       62         Ratio of wages to training expenses       %6       1       1         No. of industrial accident rate       %6       0       0         No. of industrial accident rate       %6       0       0         No. of violations of fair trade laws growth       Suppliers       Total purchases from partners       Ea.       429       394         Mutual growth       No. of violations of fai	0	(				
	Duration of v		Hours	960	0	-       41         -       29         -       70         607       615         271       294         442       478         28,126       46         1       28,126         62       46         1       0         0       0         0       0         0       0         1       0         0       0         394       6661,770         336       81,299         0       0         0       0         0       0         0       0         0       0         0       0         0       0         0       0         0       0         0       0
	Suppliers	companies	Ea.	429	394	64
	SME	from partners				
	support			54,038	134,336	81,29
	No. of violati	ons of fair trade laws		0	0	(
Fair trade	Fines impos	ed		0	0	(
security		ata leakage, theft,	Ea.	0	0	(
discrimina-			Ea.	0	0	(
Incidents of		ons that resulted in		0	0	(
pliance to regulations	No. of warnin compliance	ngs from non-	Ea.	0	0	(
and internal codes	No. of violati	ons of internal codes		0	0	
Work loss	No. of work l companies	oss cases in partner	Ea.	-	-	(

Category			Unit	2020	
	Employees	Total		14	
	who have taken pa-	Male		4	
	rental leave	Female		10	
	No. of employees	Total	Persons	6	
Parental eave	who have returned to work after	Male		1	
	parental leave	Female		5	
	Return rate of have taken pa	employees who arental leave	%	43	
	No. of em- ployees who have worked	Total		6	
	over 12 months after	Male	Persons	1	
	returning from paren- tal leave	Female		5	
	worked over	oyees who have 12 months after 1 parental leave	%	100	
1	Duration of economic prevention of	ducation for workplace bullying	Tatal	-	
Human ights policies and	Duration of each harassment p	ducation for sexual prevention	Total hours (per em-	662(1)	(
procedures	Other education (Human rights education for people with disabilities, etc.)		ployee)	662(1)	(
CSR	Investment	Cash donation	KRW ·	0.4	
	in CSR (incl. donation)	Non-cash donation	million	32.5	
	Direct benefic support prog		Persons	262	

Category		Unit	2020
	No. of Board meetings	Times	-
Category Board of Directors Board diversity Anti- corruption Anti-cor- ruption policies and procedures	No. of agendas	Ea.	-
	Preliminary deliberation	%	-
	Decisions on revised agenda		-
	Reported agenda	Ea.	-
	BOD attendance rate	0/	-
	Non-executive attendance rate	%	-
	Male	Persons	-
Board of Directors Board diversity Anti- corruption	Female	Persons	-
	Ratio of female directors in the BOD	%	-
	Under 30 years		-
uiversity	30 ~ 50 years	Dereene	-
	Above 50 years	Persons	-
	No. of outside directors		-
	Ratio of outside directors	%	-
	Total no. of business sites		-
	No. of business sites that conducted anti-corruption risk assessment	Ea.	-
Directors Board diversity Anti- corruption Anti-cor- ruption policies and	Ratio of business sites that conducted anti-corruption risk assessment	%	-
	No. of Board members who received ethics training	Persons	-
Board of Directors Board diversity Anti- corruption	Ratio of Board members who received ethics training	%	-
	Total no. of employees who received ethics training	Persons	663
	Ratio of employees who received ethics training	%	100
	Total no. of Board members who have signed the ethics pledge	Persons	
	Ratio of Board members who have signed the ethics pledge	%	-
	Total no. of employees who have signed the ethics pledge	Persons	663
Anti- corruption Anti-cor- ruption policies and	Ratio of employees who have signed the ethics pledge	%	100

2021	2022
16	13
5	5
11	8
12	6
5	5
7	1
75	46
12	5
5	4
7	1
100	100
25(1)	681(1)
607(1)	710(1)
607(1)	670(1)
0.4	2
73.5	38
814	36

2021	2022
-	7
	23
_	100
	0
	11
_	86.3
_	100
-	7
-	0
-	0
-	0
-	1
-	6
-	2
-	29
-	7
-	0
-	0
-	7
-	100
657	646
100	100
-	7
-	100
657	646
100	100

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# Hansol IONES

# Economy

Category			Unit	2020	2021	2022
	Sales			-	-	163,912
	Gross profi	Gross profit		-	-	57,959
		Selling, general, and administrative expenses		-	-	21,886
	Operating i	ncome		-	-	36,072
Income statement	Financial in	come	KRW - million -	-	-	1,809
Statement	Financial ex	penses	minori	-	-	(1,022)
	Other incor	ne		-	-	668
	Other expe	nses		-	-	(3,741)
	Net income before the deduction of corporate tax expenses			-	-	36,741
	Assets	Current assets		-	-	99,779
	Assets	Non-current assets		-	-	127,588
		Current liabilities	-	-	-	70,826
	Liabilities	Non-current liabilities		-	-	5,725
Balance sheet		Shareholders' equity in the parent company	KRW million	-	-	150,815
	Capital	apital Shareholders' equity in the non-controlling company		-	-	0
		Total R&D expenses for the current period		-	-	109
R&D	R&D expen	ses/sales	%	-	-	0.61
	No. of R&D	personnel	Persons	-	-	13

(Based on the consolidated financial statements)

#### Environment

Category			Unit	2020	2021	2022
Consumptio materials	n of raw	Raw materials consumed	Tons	-	-	1,640
Consumption of materials that contain recycled		Amount of recycled materials (reused raw materials) consumed	Tons	-	-	166
materials		Ratio of recycled materials (reused raw materials) consumed	%	-	-	10
		Total amount of water consumed		-	123,1	123,103
	Total	Amount of water consumed		-	-	123,103
Water con- sumption (amount,	amount of water consumed	Amount of underground water consumed	Tons		-	C
based on domestic data)		Amount of seawater consumed		-	-	C
	Water reuse	Amount of water reused		-	-	C
		Ratio of water reused	%	-	-	C
GHG emis-	Emissions	Direct emissions (Scope 1)	tCO2eq	-	-	159
sions	ETHISSIONS	Indirect emissions (Scope 2)		-	-	10,741
		SOx		-	-	0.09
Air pollutants	Emissions	NOx	kg	-	-	6.98
poliutants		PM		-	-	15.99
	Total amount	Total amount of waste	Tons	-	-	561
Waste	of waste (amount	Waste discharged at business sites		-	-	421
	treated in	Designated waste	10115	-	-	140
	Korea)	Domestic waste		-	-	0
	Waste	Recycled amount		-	-	445
	recycling	Waste recycling ratio	%	-	-	79

Category			Unit
lotal number	of employees		Persons
		Total	
	Executives	Female Male	
Current		Total	
employees	Permanent	Female	Persons
by employ- nent type)		Male	1 0100110
nonic typo)		Total	
	Non- permanent	Female	
	pormanone	Male	
Dutsourced v	vorkers		Persons
Current	Full-time		
employees by work	Dout time o		Persons
schedule)	Part-time		
Current em- ployees (by	Domestic		Persons
ocation)	Overseas		
	No. of male e	Persons	
	Ratio of male	employees	%
	No. of female	employees	Persons
		le employees	%
	No. of male e		Persons
	Ratio of male		<u>%</u>
	No. of female		Persons
		lle executives	%
	level or highe	nanagers (manager r)	Persons
	Ratio of male	%	
	level or highe No. of female		
	(manager leve	Persons	
	Ratio of fema	%	
	(manager leve	No. of employees	
		with disabilities	Persons
		Ratio of employees	%
		with disabilities No. of senior	
		employees (55	Deveene
		years or older,	Persons
		excl. executives) Ratio of senior	
Employee		employees	%
diversity	Hiring of the socially dis-	No. of foreign	Persons
	advantaged	employees Ratio of foreign	
		employees	%
		No. of employees	Doroono
		with high school degrees	Persons
		Ratio of employees	
		with high school degrees	%
		No. of veterans	Persons
		Ratio of veterans	%
		Persons in the age	
		group (Under 30 years of age)	Persons
		Percentage (Under	%
		30 years of age)	<i>%</i>
	Employee	Persons in the age group (30 ~ 50	Persons
	Employee composi-	years of age)	1 0130113
	tion	Percentage (30 ~	%
		50 years of age) Persons in the age	
		group (Above 50	Persons
		years of age)	
		Percentage (Above 50 years of age)	%
	Male		
	female		
New hires		Under 30 years	Persons
	By age	30 ~ 50 years	
		Above 50 years	

Social

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2020	2021	2022
	-	588
		7
		0
		7
		567
		87
		480
_	-	14
		2
		12
-		
-		588
_	_	
-	-	588
_	_	_
		499
		85
		87
-		15
-		10
-		2
-		0
-		0
_	_	27
-	-	5
-	-	0
-		0
_	_	11
-	-	2
-	-	11
-	-	2
-	-	11
-	-	2
-	-	233
	_	40
		+0
-	-	0
-		0
-	-	182
_	-	31
_	_	380
		64
		04
-	-	24
-	-	4
-	-	149
-		35
		78
		99
		7
-		/

Category			Unit	2020	2021	202
		Average male salary	KRW	-	-	4
		Average female salary	million	-	-	3
		Ratio of base salary of female to male	%	-	-	7
		Average male executive salary	KRW	-	-	12
		Average female executive salary	million	-	-	
		Ratio of base salary of female executive to male executive	%		-	
		Average male permanent		-	-	2
Employee compensa- tion	Base salary and remu- neration by	Average female permanent employee salary	KRW million	-	-	3
	gender	Ratio of base salary of female permanent employee to male permanent employee	%	-	-	
		Average male non-permanent employee salary	KRW	-	-	
		Average female non-permanent employee salary	million	-	-	
		Ratio of base salary of female non-permanent employee to male non-permanent employee	%	-	-	٤
	Average year		Years			3
Job		of employee turnover	Persons	-		
security	Voluntary turnover		%	-	-	ę
	Non-voluntary turnover		/0	-		
	Total budget for employee training/education		KRW million	-	-	3
Talent de- velopment	Training expenses per employee		KRW 1,000	-	-	6
velopment	Total no. of h	Total no. of hours of training				3,02
	Average train employee	ning hours per	Hours	-	-	5.
	No. of indust	rial accidents	Agendas			
Industrial	Industrial acc		%			0.
accidents	No. of deaths		Persons			
	No. of injuries	vork-hour loss	Hours			88
		Total no. of partner companies	Ea.	-	-	
Mutual growth	Suppliers	Total purchase from partners	KRW	-	-	49,00
	SME support	Total purchases from SME	million	-	-	41,86
E a la tracata	No. of violation	ons of fair trade laws	Ea.	-		
Fair trade	Fines impose	ed	KRW million	-	-	
Informa- tion-securi- ty breaches	Customer-da and losses	ata leakages, theft,	Ea.	-	-	
Workplace discrimina- tion		lo. of complaints filed related to orkplace discrimination		-	-	
Incidents of non-com-	No. of violations that resulted in sanctions					
pliance to regulations	No. of warnings for non- compliance		Ea.	-	-	
and internal		61 J J J			_	
and internal codes		ons of internal codes				

Category			Unit	2020
	Employees	Total		-
	who have	Male		-
	taken pa- rental leave	Female		
	No. of employees who have returned to work after	Total	Persons	-
		Male		-
	parental leave	Female		
Parental eave	Return rate of have taken pa	f employees who arental leave	%	-
	No. of em- ployees who have worked	Total		-
	over 12 months after returning	Male	Persons	-
	from paren- tal leave	Female		
	worked over	oyees who have 12 months after n parental leave	%	-
1	Duration of education for prevention of workplace bullying		Total hours (per em- ployee)	-
Human rights policies and	Duration of education for sexual harassment prevention			-
procedures	Other education (Human rights education for people with disabilities, etc.)			-
		Cash donations		-
CSR	Investment in CSR (incl. donation)	Non-cash donations	KRW million	
	uonation)	Business expenses		-
Governan	се			
Category			Unit	2020
	No. of Board	-	Times	
	No. of agenda		Ea.	
Board of	Preliminary d		%	
Directors		revised agenda	Ea.	
	Reported age BOD attenda			
			%	
1	Non-executive attendance rate	o attendance rate		

Board of Directors	Preliminary deliberation	%	-
	Decisions on revised agenda		-
Directors	Reported agenda	Ea.	-
	BOD attendance rate		-
	Non-executive attendance rate	%	-
	Male	Deveeve	-
	Female	Persons	-
_	Ratio of female directors in the BOD	%	-
Board diversity	Under 30 years		-
diversity	30 ~ 50 years	Dereene	-
	Above 50 years	Persons	-
	No. of outside directors		-
	Ratio of outside directors	%	-
	Total no. of business sites		-
Anti- corruption	No. of business sites that conducted anti-corruption risk assessments	Ea.	-
contraption	Ratio of business sites that conducted anti-corruption risk assessments	%	-
	No. of Board members who received ethics training	Persons	-
	Ratio of Board members who received ethics training	%	-
	Total no. of employees who received ethics training	Persons	-
Anti-cor- ruption	Ratio of employees who received ethics training	%	-
policies and procedures	Total no. of Board members who have signed the ethics pledge	Persons	-
	Ratio of Board members who have signed the ethics pledge	%	-
	Total no. of employees who have signed the ethics pledge	Persons	-
	Ratio of employees who have signed the ethics pledge	%	-
Anti-cor- ruption violations	No. of anti-corruption violations	Ea. (Persons)	-

violations

2021	2022
-	6
-	0
-	6
-	3
-	0
-	3
-	50
-	1
-	0
-	1
-	17
-	1
-	1
-	1
-	15
-	0
-	0

2021	2022
-	11
-	23
-	100
-	0
-	13
-	99
-	97
-	8
-	0
-	0
_	
_	2
_	6
_	3
	38
	4
-	0
-	0
-	8
-	100
-	588
-	100
-	8
-	100
-	588
-	100
-	1

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# SUSTAINABILITY ESSENTIALS

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# Hansol Inticube

## Economy

Category			Unit	2020	2021	2022
	Sales			52,588	59,462	59,146
	Gross profit	Gross profit		5,979	11,767	12,319
	Selling, general, and administrative expenses			11,499	12,011	16,292
	Operating ir	ncome		(5,520)	(243)	(3,972)
Income	Financial ind	come	KRW	181	203	244
statement	Financial ex	penses	million	151	110	131
	Other incom	าย		348	132	413
	Other exper	ises		792	86	2,806
	Affiliates' pr	ofits and losses		8,655	0	0
	Net income before the deduction of corporate tax expenses			2,721	(105)	(6,253)
	Assats	Current assets		34,199	32,455	25,186
	Assets	Non-current assets		7,587	16,339	14,630
		Current liabilities		13,433	18,248	14,138
	Liabilities	Non-current liabilities		2,124	1,760	2,413
Balance sheet		Shareholders' equity in the parent company	KRW million	26,229	26,376	21,932
Capital		Shareholders' equity in the non-controlling company		-	2,409	1,333
	R&D Total R&D expenses for the current period R&D expenses/sales		KRW million	1,765	1,818	1,426
R&D			%	3	3	3
	No. of R&D	personnel	Persons	7	5	0

(Based on the consolidated financial statements)

#### Social

Category			Unit	2020	2021	2022
Total number of employees			Persons	227	224	253
Executives	Total		3	3	6	
	Female		0	0	0	
		Male	_	3	3	6
Current		Total		219	212	247
employees (by employ-	Permanent	Female	Persons	54	53	67
ment type)		Male	-	165	159	180
	Non-	Total	-	5	9	0
	permanent	Female	-	2	2	0
	. <u> </u>	Male		3	7	0
Outsourced	workers		Persons	2	0	0
Current employees	Full-time		Persons <sup>-</sup>	227	224	253
(by work schedule)	Part-time			0	0	0
Current em- ployees (by	Domestic		Persons -	227	224	253
location) Overseas	Overseas			0	0	0
	No. of male employees		Persons	171	169	186
	Ratio of male	employees	%	75	75	74
	No. of female	e employees	Persons	56	55	67
	Ratio of fema	ale employees	%	25	25	26
	No. of male e	executives	Persons	3	3	6
	Ratio of male	executives	%	1	1	2
Employee	No. of female	e executives	Persons	0	0	0
diversity	Ratio of fema	ale executives	%	0	0	0
, , , , , , , , , , , , , , , , , , ,	No. of male managers (manager level or higher)		Persons	-	-	128
	Ratio of male level or highe	e managers (manager er)	%	-	-	51
	No. of female (manager lev		Persons	20	18	23
	Ratio of fema (manager lev	ale managers rel or higher)	%	9	8	9

Category			Unit	
		No. of employees	Persons	
		with disabilities Ratio of employees	%	
		with disabilities	%	
		No. of senior employees (55	Deve	
		years or older,	Persons	
		excl. executives) Ratio of senior	0/	
	Hiring of the	employees	%	
	socially dis-	No. of foreign employees	Persons	
	advantaged	Ratio of foreign	%	
		employees No. of employees		
		with high school	Persons	
		degree Ratio of employees	%	
Employee		with high school degree		
diversity		No. of veterans	Persons	
		Ratio of veterans	%	
		Persons in the age group (Under 30	Persons	
		years of age)		
		Percentage (Under 30 years of age)	%	
		Persons in the age		
	Employee	group (30 ~ 50 years of age)	Persons	
	composi- tion	Percentage (30 ~	%	
		50 years of age) Persons in the age		
		group (Above 50 years of age)	Persons	
		Percentage		
		(Above 50 years of age)	%	
New hires	Male	<u> </u>		
	female		Persons	
	By age	Under 30 years 30 ~ 50 years		
		Above 50 years		
		Average male		
		salary Average female	KRW million	
		salary		
		Ratio of base salary of female to	%	
		male		
		Average male executive salary	KRW	
		Average female	million	
		0	million	
		executive salary Ratio of base		
		executive salary	%	
		executive salary Ratio of base salary of female executive to male executive		
		executive salary Ratio of base salary of female executive to male		
Employee	Base salary	executive salary Ratio of base salary of female executive to male executive Average male permanent employee salary	% KRW	
compensa-	Base salary and remu- neration by	executive salary Ratio of base salary of female executive to male executive Average male permanent employee salary Average female permanent	%	
Employee compensa- tion	and remu-	executive salary Ratio of base salary of female executive to male executive Average male permanent employee salary Average female permanent employee salary	% KRW	
compensa-	and remu- neration by	executive salary Ratio of base salary of female executive to male executive Average male permanent employee salary Average female permanent employee salary Ratio of base salary of female	% KRW	
compensa-	and remu- neration by	executive salary Ratio of base salary of female executive to male executive Average male permanent employee salary Average female permanent employee salary Ratio of base	% KRW	
compensa-	and remu- neration by	executive salary Ratio of base salary of female executive to male executive Average male permanent employee salary Average female permanent employee salary Ratio of base salary of female permanent employee to male permanent	% KRW million	
compensa-	and remu- neration by	executive salary Ratio of base salary of female executive to male executive Average male permanent employee salary Average female permanent employee salary Ratio of base salary of female permanent employee to male permanent employee Average male	% KRW million	
compensa-	and remu- neration by	executive salary Ratio of base salary of female executive to male executive Average male permanent employee salary Average female permanent employee salary Ratio of base salary of female permanent employee to male permanent employee Average male non-permanent	% KRW million %	
compensa-	and remu- neration by	executive salary Ratio of base salary of female executive to male executive Average male permanent employee salary Average female permanent employee salary Ratio of base salary of female permanent employee to male permanent employee Average male non-permanent employee salary Average female	% KRW million	
compensa-	and remu- neration by	executive salary Ratio of base salary of female executive to male executive Average male permanent employee salary Average female permanent employee salary Ratio of base salary of female permanent employee to male permanent employee Average male non-permanent employee salary	% KRW million %	
compensa-	and remu- neration by	executive salary Ratio of base salary of female executive to male executive Average male permanent employee salary Average female permanent employee salary Ratio of base salary of female permanent employee to male permanent employee Average male non-permanent employee salary Average female non-permanent employee salary Ratio of base	% KRW million %	
	and remu- neration by	executive salary Ratio of base salary of female executive to male executive Average male permanent employee salary Average female permanent employee salary Ratio of base salary of female permanent employee to male permanent employee Average male non-permanent employee salary Average female non-permanent employee salary Ratio of base salary of female non-permanent employee salary	% KRW million % KRW million	
compensa-	and remu- neration by	executive salary Ratio of base salary of female executive to male executive Average male permanent employee salary Average female permanent employee salary Ratio of base salary of female permanent employee to male permanent employee Average male non-permanent employee salary Average female non-permanent employee salary Ratio of base salary of female	% KRW million %	

2023 HANSOL GROUP SUSTAINABILITY REPORT

2020	2021	2022
3	2	2
1	1	1
2	2	4
1	1	2
0	0	0
0	0	0
4	5	9
2	2	4
2	2	2
1	1	1
-	-	53
-	-	21
-	-	166
-	-	66
-	-	34
-	-	13
14	31	53
5	9	21
13 6	<u> </u>	24 45
0	0	5
48	48	58
40	41	42
83	85	74
-	-	110
-		0
-	-	0
-	-	56
-		42
-	-	76
-	-	0
_		0
-	-	0

Category			Unit	2020	2021	202
	Average yea		Years	7.5	8	7.
Job		of employee turnover	Persons		-	4
security	Voluntary tur Non-volunta		%		-	8
		iciaries of training/	Persons	222	220	25
	Total budget training/edu	for employee cation	KRW million	252	170	23
Talent de- velopment	Training exp	enses per employee	KRW 1,000	1,135	775	96
	Total no. of h	ours of training		13,947	7,213	7,16
	Average train employee	ning hours per	Hours	26	28	2
	No. of indust	rial accidents	Ea.	0	0	
Industrial	Industrial ac	cident rate	%	0	0	
accidents	No. of death	S	Persons	0	0	
	No. of injurie			0	0	
	Duration of v	vork-hour loss	Hours	0	0	
	Suppliers	Total no. of partner companies	Ea.	226	200	20
Mutual growth	ouppliers	Total purchases from partners	KRW	23,005	29,684	30,43
	SME support	Total purchases from SME	million	18,499	20,613	20,15
		ons of fair trade laws	Ea.	0	0	
Fair trade	Fines impos	ed	KRW million	0	0	
Information security breaches	Customer data leakages, theft, and losses		Ea.	0	0	
Workplace discrimina- tion	No. of complaints filed regarding workplace discrimination		Ea.	0	0	
Incidents of non-com-	f No. of violations that resulted in sanctions			0	0	
pliance to regulations No. of warnin compliance		ngs for non-	Ea.	0	0	
and internal codes	No. of violations of internal codes			0	0	
Work loss	No. of work-loss cases in partner companies		Ea.	-	-	
	Employees	Total		4	1	
	who have taken pa-	Male		1	0	
	rental leave	Female		3	1	
	No. of employees	Total	Persons	4	1	
	who have returned to	Male		1	0	
	work after parental	Female		3	1	
Parental		of employees who	%	100	100	
leave	No. of em-	arental leave		4		
	ployees who have worked	Total				
	over 12 months after	Male	Persons	1	0	
	returning from paren- tal leave	Female		3	1	
	Ratio of employees who have worked over 12 months after returning from parental leave		%	100	100	7
	Duration of h Hours	uman rights training	Hours	1,135	1,100	77
	No. of emplo human rights	yees who completed s training	Persons	227	220	25
Human	Ratio of emp		%	100.00	98.20	10
rights policies and	Duration of e	education for f workplace bullying		227(1)	224(1)	257(
procedures	Duration of e	education for sexual	Total hours	340(1.5)	336(1.5)	257(
	harassment prevention Other education (Human rights education for people with disabilities, etc.)		(per em- ployee)	340(1.5)	336(1.5)	257(

	_			0000
Category			Unit	2020
in ( do CSR	Investment in CSR (incl. donation)	Cash donation	KRW million	8.1
		Non-cash donations		1.5
		Business expenses		0
	Total volunteer hours		Hours	0
	Average volu employee	verage volunteer hours per nployee		0

Category		Unit	2020
	No. of Board meetings	Times	-
Board of	No. of agendas		-
Directors	Reported agenda	Ea	-
	BOD attendance rate	%	-
	Male	Persons -	-
	Female	reisons -	-
	Ratio of female directors in the BOD	%	-
Board	Under 30 years		-
diversity	30 ~ 50 years	Deveene	-
	Above 50 years	Persons -	-
	No. of outside directors	-	-
	Ratio of outside directors	%	-
	Total no. of business sites		-
Anti- corruption	No. of business sites that conducted anti-corruption risk assessment	Ea.	-
	Ratio of business sites that conducted anti-corruption risk assessment	%	-
	No. of Board members who received ethics training	Persons	-
	Ratio of Board members who received ethics training	%	-
	Total no. of employees who received ethics training	Persons	227
Anti- corruption	Ratio of employees who received ethics training	%	100
policies and procedures	Total no. of Board members who have signed the ethics pledge	Persons	-
	Ratio of Board members who have signed the ethics pledge	%	-
	Total no. of employees who have signed the ethics pledge	Persons	227
	Ratio of employees who have signed the ethics pledge	%	100
Anti- corruption violations	No. of anti-corruption violations	Ea. (Persons)	0

2021	2022
7.3	7.7
3.2	0
0	0
0	0
0	0

2021	2022
-	10
	20
_	12
_	100
_	7
-	0
-	0
_	0
_	2
_	5
-	3
-	43
-	1
-	1
-	100
-	7
-	100
224	253
100	100
-	7
-	100
224	253
100	100
0	0

# SUSTAINABILITY ESSENTIALS

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# 2023 HANSOL GROUP SUSTAINABILITY REPORT

# Hansol Chemical

#### Economy

Category	ategory			2020	2021	2022
	Gross profit			619,277	768,688	885,470
	Selling, gen administrati	eral, and ve expenses		213,876	267,971	265,682
	Operating ir	icome		61,942	70,287	79,691
	Financial ind	come		151,933	197,684	185,990
	Financial ex	penses	KRW	4,033	4,204	9,227
Income statement	Other incom	ie	million	10,044	6,176	7,518
otatomont	Other exper	ISES	THINOT	6,915	6,631	9,009
	Affiliates' pr	ofit and loss		4,719	6,999	10,742
		Net income before the deduction of corporate tax expenses		12,693	13,356	8,271
	Net income before the deduction of corporate tax Expenses			160,812	208,702	194,237
	Assets	Current assets		307,726	411,301	386,120
		Non-current assets		691,474	785,873	867,190
		Current liabilities		171,630	199,711	153,669
	Liabilities	Non-current liabilities		205,299	229,593	247,144
Balance sheet		Shareholders' equity in the parent company	KRW million	553,201	689,239	763,481
	Capital Shareholders' equity in the non-controlling company			69,069	78,630	89,014
	Total R&D e current peri	xpenses for the od	KRW million	13,004	13,640	18,955
R&D	R&D expense	ses/sales	%	2	2	3
	No. of R&D	personnel	Persons	107	120	127

(Based on the consolidated financial statements)

#### Environment

Category			Unit	2020	2021	2022
Consumptio materials	n of raw	Raw materials consumed	Tons	150,967	151,701	147,16 <sup>-</sup>
Consumption of materials that contain recycled materials		Amount of recycled materials (reused raw mate- rials) consumed	Tons	0	0	(
		Ratio of recycled materials (reused raw materials) consumed	%	0.0	0.0	(
		Total energy consumed		2,628	3,119	3,39
Energy	Total energy consumed	Scope 1 energy consumption	TJ	320	502	55
consump- tion		Scope 2 energy consumption		2,308	2,617	2,83
	Energy intens	sity	GJ/KRW billion	4,243.7	4,057.6	3,834.
		Total amount of water consumed		2,148,690	2,214,557	2,557,06
	on of water ht, consumed on	Amount of water consumed	Tons	28,933	40,407	46,26
Water con- sumption (amount, based on		Amount of underground water consumed		0	0	
domestic data)		Amount of seawa- ter consumed		0	0	
		Amount of water reused		0	0	
		Ratio of water reused	%	0	0	
GHG emis-	Emissions	Direct emissions (Scope 1)	tCO2eq	70,687	84,466	87,06
sions		Indirect emissions (Scope 2)		66,989	77,153	82,26
		SOx		96	5,960	1,11
Air pollutants	Emissions	NOx	kg	46	16,316	19,49
poliutants		PM		441	983	67
		BOD		9.9	14.1	14.
Water	Enclosion -	COD	ppm	31.3	28.5	33.
pollutants	Emissions	SS		15.3	23.2	12.
		TN		18.4	8.1	7.
	Total	Total amount of waste		6,439	8,526	10,20
	amount of waste	Waste discharged at business sites		3,552	4,327	4,81
Waste	(amount treated in	Designated waste	Tons	2,887	4,199	5,38
110010	Korea)	Domestic waste		0	0	
	Waste	Recycled amount		4,537	6,299	7,90
	recycling rate	Waste recycling ratio	%	70	74	7

Category			Unit
Hazardous (	shomical)	No. of chemical spills	Cases
Hazardous (chemical) substance spills		Amount of chemicals spilled	Tons
Environ- mental expenses	Environ- mental	Amount of environmental investments	Ea.
and invest- ments	investments	Environmental expenses	

\* Consumption of materials that contain recycled materials: Error in the previous disclosure; Hansol Chemical did not use recycled raw materials
 \* SOx emissions: Decrease in emission due to differences in measurement methods

#### Social

Category			Unit	
Total numbe	r of employees	6	Person	
		Total		
	Executives	Female		
		Male		
Current		Total		
employees (by employ-	Permanent	Female	Person	
ment type)		Male		
	Nen	Total		
	Non- permanent	Female		
	permanent	Male		
Outsourced	workers		Person	
Current	Full-time			
employees (by work			Person	
schedule)	Part-time			
Current em-	Domestic			
ployees (by			Person	
location)	Overseas			
	No. of male e	mployees	Person	
	Ratio of male	employees	%	
	No. of female	employees	Person	
	Ratio of fema	le employees	%	
	No. of male e	xecutives	Person	
	Ratio of male	executives	%	
	No. of female	executives	Person	
	Ratio of fema	le executives	%	
	No. of male n			
	level or highe	Person		
	Ratio of male	%		
	level or highe	70		
	No. of female	Person		
	(manager lev			
	Ratio of fema (manager lev		%	
	(managor iov	No. of employees		
		with disabilities	Person	
		Ratio of employees	%	
		with disabilities	70	
		No. of senior		
		employees (55 years or older, excl.	Persor	
		executives)		
		Ratio of senior	0/	
Employee		employees	%	
diversity	Hiring of the	No. of foreign	Person	
	socially dis- advantaged	employees	- 01301	
	aaranagou	Ratio of foreign	%	
		employees		
		No. of employees with high school	Persor	
		degree		
		Ratio of employees		
		with high school	%	
		degree		
		No. of veterans	Persor	
		Ratio of veterans	%	
		Persons in the age	-	
		group (Under 30 years of age)	Persor	
		Percentage (Under		
		30 years of age)	%	
		Persons in the age		
	Employee	group (30 ~ 50	Persor	
	composi-	years of age)		
	tion	Percentage (30 ~	%	
		50 years of age)		
		Persons in the age group (Above 50	Person	
		years of age)	Perso	
		Percentage (Above	0/	
		50 years of age)	%	

2020	2021	2022
0	3	0
0	5.1	0
5,129	3,069	4,232
1,981	2,717	2,922

0000	0001	0000
2020	2021	2022
563	632	658
13	14	16
1	1	1
12	13	15
508	520	548
65	76	80
443		468
42	98	94
0	0	2
42	98	92
0	0	0
563	632	658
0	0	0
560	629	653
3	3	5
497	555	575
88	87	87
66		83
12	12	13
12	13	15
2	2	2
1	1	1
0.2	0.2	0.2
-		116
	12	16
11	12	12
5	4	5
1	1	1
		· ·
24	13	23
4	2	4
0	0	0
0	0	0
146	135	153
26	21	23
4	4	4
1	1	1
-	-	220
-	-	34
-	-	360
-	-	55
-	-	72
-	-	11

Category			Unit	2020	2021	202
	Male			54	123	7
	female			11	15	2
New hires	Under 30 years		Persons	49	116	7
	By age	30 ~ 50 years		13	20	2
		Above 50 years		3	2	
		Average male		90	88	10
		salary	KRW			
		Average female salary	million	60	64	10
		Ratio of base				
		salary of female to	%	66	72	10
		male				
		Average male		-	-	91
		executive salary	KRW million			
		Average female executive salary	minon	-	-	2,94
		Ratio of base				
		salary of female	%	-	-	32
		executive to male executive	,,,			01
		Average male				
		permanent		-	-	10
	Base salary	employee salary	KRW			
Employee compensa-	and remu-	Average female	million			
tion	neration by	permanent		-	-	6
	gender	employee salary Ratio of base				
		salary of female				
		permanent	%	-	-	6
		employee to male permanent	70			
		employee				
		Average male				
		non-permanent		-	-	5
		employee salary	KRW million			
		Average female non-permanent		_	_	
		employee salary				
	Ratio of base					
		salary of female	%			
		non-permanent employee to male		-	-	
		non-permanent				
		employee				
	Average year	rs of service	Years	7	6	7.
Job	Total number	of employee turnover	Persons		-	6
security	Voluntary turnover		%		-	9
	Non-voluntary turnover				-	
	No. of beneficiaries of training/		Persons	485	553	65
	education		KRW			
Talent de-	Total budget for employee training/education		million	868	859	32
velopment			KRW		500	
	Training expenses per employee		1,000	451	522	50
	0	ning hours per	Hours	17	19	7
	employee					
		ial accidents occurred	Ea.		2	
Industrial	Industrial acc		%		0	
accidents	No. of deaths		Persons		0	
	No. of injurie				2	
	Duration of w	/ork-hour loss	Hours		0	
		Total no. of partner companies	Ea.	147	148	20
Mutual	Suppliers	Total purchase				
growth		from partners	KRW	105,929	144,366	262,60
	SME	Total purchases	million	20.615	12.070	56 50
	support	from SME		32,615	43,876	56,50
	No. of violation	ons of fair trade laws	Ea.	0	0	
Fair trade	Fines impose	ed	KRW	0	0	
Information			million			
Information security		ta leakage, theft,	Ea.	0	0	
breaches	and loss					
Workplace	No of compl	aints filed in relation				
discrimina-		discrimination	Ea.	0	0	
tion		ons that resulted in				
Incidents of non-com-	No. of violations	ons that resulted in		0	0	
pliance to		igs from non-	Ea.			
regulations	compliance	<u> </u>	Ed.	0	0	
and internal	No. of violations of internal codes			0	0	
codes Work loss		oss cases in partner	 Ea.			

Category			Unit	2020
	Employees	Total		1
	who have taken pa-	Male		1
	rental leave	Female		0
	No. of employees	Total	Persons	1
	who have returned to	Male		1
	work after parental leave	Female		0
Parental leave	Return rate of e taken parental	employees who have leave	%	100
	No. of employ- ees who have	Total		1
	worked over 12 months after returning	Male	Persons	1
	from parental leave	Female		0
	worked over 1	oyees who have I2 months after n parental leave	%	100
	Duration of edu	cation for human rights	Hours	1
	No. of employ human rights	rees who completed training	Persons	496
Human	Ratio of emplo	oyees who Iman rights training	%	88
rights policies and	Duration of economic prevention of	ducation for workplace bullying	Total	388(1)
procedures	Duration of education for sexual harassment prevention		hours (per em-	451(1)
	Other education (Human rights education for people with disabilities, etc.)		ployee)	461(1)
	Investment	Cash donation		296
	in CSR (incl.	Non-cash donation	KRW million	0
	donation)	Business expenses		0
CSR	Total voluntee	er hours		480
	Average volunteer hours per employee		Hours	0.9
	Direct benefic support progr		Persons	500

Category		Unit	2020
	No. of Board meetings	Times	-
	No. of agendas	Ea.	-
Board of	Preliminary deliberation	%	-
Directors	Decisions on revised agenda	Fa	-
	Reported agenda	Ea	-
	BOD attendance rate	%	-
	Male	Persons -	-
	Female	Persons -	-
	Ratio of female directors in the BOD	%	-
Board	Under 30 years		-
diversity	30 ~ 50 years	- Persons -	-
	Above 50 years	Persons -	-
	No. of outside directors	-	-
	Ratio of outside directors	%	-
	Total no. of business sites		-
Anti-	No. of business sites that conducted anti-corruption risk assessment	Ea.	-
corruption	Ratio of business sites that conducted anti-corruption risk assessment	%	-
	No. of Board members that received ethics training	Persons	-
	Ratio of Board members that received ethics training	%	-
	Total no. of employees that received ethics training	Persons	563
Anti-cor- ruption	Ratio of employees that received ethics training	%	100
policies and procedures	Total no. of Board members who have signed the ethics pledge	Persons	-
	Ratio of Board members who have signed the ethics pledge	%	-
	Total no. of employees who have signed the ethics pledge	Persons	522
	Ratio of employees who have signed the ethics pledge	%	93
Anti-cor- ruption violations	No. of anti-corruption violations	Ea. (Persons)	C

2021	2022
2	8
0	4
2	4
1	7
0	4
1	3
50	88
0	4
0	3
0	1
0	50
1	1
617	625
98	100
132(1)	625(1)
609(1)	625(1)
630(1)	625(1)
212	214
0	1
0	0
420	513
0.7	0.84
500	700

2021       2022         -       8         -       14         -       0         -       0         -       0         -       0         -       0         -       0         -       100         -       0         -       100         -       2         -       16.7         -       0         -       2         -       4         -       3         -       0         -       0         -       0         -       0         -       0         -       0         -       0         -       0         -       100         632       652         100       100         -       6         -       100         593       614         94       93         0       0		
-     14       -     0       -     0       -     100       -     5       -     16.7       -     0       -     2       -     4       -     0       -     2       -     4       -     0       -     20       -     4       -     0       -     100       632     652       100     100       593     614       94     93	2021	
-         0           -         0           -         100           -         5           -         1           -         16.7           -         0           -         2           -         4           -         3           -         50           -         4           -         0           -         0           -         0           -         0           -         0           -         0           -         0           -         0           -         0           -         0           -         0           -         0           -         0           -         0           -         0           -         100           632         652           100         100           -         6           -         100           593         614           94         93	-	
-     0       -     3       -     100       -     5       -     1       -     0       -     2       -     4       -     50       -     4       -     0       -     100       632     652       100     100       -     6       -     100       593     614       94     93	-	14
-       3         -       100         -       5         -       16.7         -       0         -       2         -       4         -       50         -       4         -       50         -       4         -       0         -       0         -       0         -       0         -       0         -       0         -       0         -       0         -       0         -       0         -       0         -       0         -       0         -       0         -       0         -       100         632       652         100       100         -       6         -       100         593       614         94       93	-	0
-       100         -       5         -       16.7         -       0         -       2         -       4         -       50         -       4         -       50         -       4         -       0         -       0         -       0         -       0         -       0         -       0         -       0         -       0         -       0         -       6         -       100         632       652         100       100         -       6         -       100         593       614         94       93	-	
-       5         -       16.7         -       0         -       2         -       4         -       50         -       4         -       50         -       4         -       0         -       0         -       0         -       0         -       0         -       0         -       0         -       0         -       0         -       6         -       100         632       652         100       100         -       6         -       100         593       614         94       93	-	3
- 1 - 16.7 - 0 - 2 - 4 - 3 - 50 - 4 - 0 - 4 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0	-	100
- 16.7 0 - 2 - 4 - 3 - 50 - 4 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0	-	5
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- 50 - 4 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0	-	4
- 4 - 0 - 0 - 0 - 6 - 100 632 652 100 100 - 6 - 100 593 614 94 93	-	3
- 0 - 0 - 0 632 632 652 100 100 - 6 - 100 593 614 94 93	-	50
- 0 - 0 - 100 632 652 100 100 - 6 - 100 593 614 94 93	-	4
- 0 - 0 - 100 632 652 100 100 - 6 - 100 593 614 94 93		
<ul> <li>-</li> <li>-</li></ul>	-	0
- 100 632 652 100 100 - 6 100 593 614 94 93	-	0
632     652       100     100       -     6       -     100       593     614       94     93	-	6
100         100           -         6           -         100           593         614           94         93	-	100
- 6 - 100 593 614 94 93	632	652
- 100 593 614 94 93	100	100
593         614           94         93	-	6
94 93	-	100
	593	614
0 0	94	93
	0	0

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# 2023 HANSOL GROUP SUSTAINABILITY REPORT

# Tapex

#### Economy

Category			Unit	2020	2021	2022
	Sales			118,772	154,922	182,261
	Gross profit			27,655	36,543	42,585
	Selling, gene administrati	eral, and ve expenses		13,813	15,289	17,133
	Operating in	ncome		13,842	21,254	25,451
Income	Financial inc	come	KRW	290	864	1,660
statement	Financial ex	penses	million	1,407	449	382
	Gains or loss	es using equity method		0	0	(3,321)
	Other incom	ne		5,675	2,708	3,527
	Other expenses			1,685	900	3,236
	Net income before the deduction of corporate tax expenses		_	16,715	23,477	23,699
	A = = = + =	Current assets		66,120	74,930	84,233
	Assets	Non-current assets		96,485	105,883	51,900
	Liabilities	Current liabilities		38,868	25,968	24,861
Balance		Non-current liabilities	KRW	9,321	23,536	19,971
sheet		Shareholders' equity in the parent company		114,416	131,309	147,966
	Capital Shareholders' eq- uity in the non-con- trolling company			0	0	0
	Total R&D expenses for the		KRW million	3,050	3,956	3,973
R&D	current period R&D expenses/sales		%	2.59	2.60	2.21
	No. of R&D		Persons	31	29	32

(Based on the consolidated financial statements)

#### Environment

Category			Unit	2020	2021	2022
Consumption of raw materials Consumption of materials that contain recycled		Raw materials consumed	Tons	11,975	13,010	12,757
		Amount of recycled materials (reused raw materials) consumed	Tons	2,191	2,490	2,260
materials		Ratio of recycled materials (reused raw materials) consumed	%	18	19	18
		Total energy consumed		223	264	273
Energy consump-	Total energy consumed	Scope 1 energy consumption	TJ	-		76
tion		Scope 2 energy consumption		-		198
	Energy intens	sity	GJ/KRW billion	-	-	1,516
	Total amount	of water consumed		2,022,800	2,057,568	2,156,459
		Amount of water consumed		220,255	221,847	218,792
	Yanggam plant	Amount of underground water consumed		0	0	(
		Amount of seawa- ter consumed		0	0	(
Water con-	on Hwaseong nt, plant on	Amount of water consumed		785,800	786,994	921,30
sumption (amount, based on		Amount of un- derground water consumed	Tons	0	0	(
domestic data)		Amount of seawa- ter consumed		0	0	(
uala)		Amount of water consumed		1,016,745	1,048,727	1,016,366
	Uniwrap plant	Amount of un- derground water consumed		0	0	(
		Amount of seawa- ter consumed		0	0	(
	Water reuse	Amount of water reused		2,003,076	2,034,712	2,140,452
		Ratio of water reused	%	99	99	- 99
	Emissions	Direct emissions (Scope 1)		3,396	4,285	4,131
GHG		Indirect emissions (Scope 2)	tCO2eq	7,643	8,800	9,452
emissions	Greenhouse ga	s emissions (Scope 1+2)		11,039	13,085	13,583
	GHG emission intensity		tCO2eq/ KRW billion	-	-	76
		SOx		58	351	604
		NOx		8,672	9,958	11,665
Air		POP		-	-	(
pollutants	Emissions	VOC	kg			
p shatanto		HAP		14,807	20,659	24,778
		PM		13,894	13,979	13,864
		PFC				(
Water		BOD		1.7	1.8	1.3
pollutants	Emissions	COD	ppm	0	8.6	12.6
		SS		2.4	0.8	1.2

Category			Unit			
		Total amount of waste (amount treated in Korea)				
	General	General waste discharged at business sites				
	waste	Landfill				
		RecyclingDesignated wastedischargedIncinerationLandfill				
		0	Tons			
Waste	Designated waste	Incineration				
	waste	Landfill				
		Recycling				
	Domestic waste	Domestic waste discharged				
		Incineration				
	Landfill					
		Recycling				
	Waste	Recycled amount				
	recycling rate	Waste recycling ratio	%			
Environ- mental ex-	Environ- mental	Amount of environ- mental investments	KRW			
penses and investments	investments	Environmental expenses	million			
Solos of groe	n producto	Sales of green prod- ucts and services	KRW million			
Sales of green products		Ratio of sales related to green products	%			

\* Newly disclosed indicators in 2022: Energy intensity, GHG emission intensity
 \* No significant spills of hazardous (chemical) substances or violation of environmental laws and regulations in the past three years (zero cases)

Social

ategory			Unit
otal number	of employees	3	Persons
		Total	
	Executives	Female	
		Male	
urrent		Total	
mployees by employ-	Permanent	Female	Persons
nent type)		Male	
ionicitypo)	Non-	Total	
	permanent	Female	
		Male	
utsourced v	workers		Persons
urrent mployees	Full-time		Persons
oy work chedule)	Part-time		
Current em- loyees (by	Domestic		Persons
ocation)	Overseas		
	No. of male e	mployees	Persons
	Ratio of male	employees	%
	No. of female	employees	Persons
	Ratio of fema	le employees	%
	No. of male e	xecutives	Persons
	Ratio of male	%	
	No. of female	Persons	
	Ratio of fema	%	
	No. of male m level or highe	Persons	
	Ratio of male level or highe	%	
	No. of 18 mar level or highe	Persons	
	Ratio of fema (manager leve	%	
mployee		No. of employees with disabilities	Persons
iversity		Ratio of employees with disabilities	%
		No. of senior employ- ees (55 years or older, excl. executives)	Persons
	1 Balance of the s	Ratio of senior employees	%
	Hiring of the socially dis-	No. of foreign employees	Persons
	advantaged	Ratio of foreign employees	%
		No. of employees with high school degree	Persons
		Ratio of employees with high school degree	%
		No. of veterans	Persons
		Ratio of veterans	%

2020	2021	2022
1,239	1,423	1,317
833	909	816
0	0	0
33	14	0
800	895	816
382	488	467
1	30	56
0	0	0
381	458	411
24	25	34
0	0	0
0	0	0
24	25	34
1,205	1,379	1,261
97	97	96
91	1,378	731
68	223	59
-	-	154
-	-	0.09
	thu	

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269         363           30         31           239         332           1         2           1         1           0         1           0         29           277         394           0         7           274         398           3         3	390 32 358 4 4 0 30 421 11 427
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239         332           1         2           1         1           0         1           0         29           277         394           0         7           274         398           3         3	358 4 0 30 421 11 427
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0         1           0         29           277         394           0         7           274         398           3         3	0 30 421 11 427
0         29           277         394           0         7           274         398           3         3	30 421 11 427
277         394           0         7           274         398           3         3	421 11 427
0         7           274         398           3         3	11 427
274         398           3         3	427
3 3	_
	5
	0
245 345	371
	85.9
32 56	61
	14.1
6 6	7
	1.62
	1
0.36 0.25	0.23
	75
	17.4
7 10	11
2.5 2.5	2.6
2 3	7
0.7 0.8	1.6
3 8	6
1.1 2.0	1.4
3 3	3
1.1 0.8	0.7
88 156	165
31.8 38.9	38.2
2 2	2
0.7 0.5	0.5

Category		Porsona in the en	Unit	2020	2021	202
		Persons in the age group (Under 30 years of age)	Persons	-	-	6
		Percentage (Under 30 years of age)	%	-	-	14.
Employee	Employee composi-	Persons in the age group (30 ~ 50 years of age)	Persons	-	-	31
diversity	tion	Percentage (30 ~ 50 years of age)	%	-	-	72.
		Persons in the age group (Above 50 years of age)	Persons		-	5
		Percentage (Above	%		-	12.
	Male	50 years of age)		111	177	10
	female			7	4	
New hires	Duana	Under 30 years	Persons	55	59	3
	By age	30 ~ 50 years Above 50 years		61 - 2	<u> </u>	8
		Average male			55	6
		salary Average female	KRW million			
		salary		44	45	4
		Ratio of base salary of female to male	%	83	81	7
		Average male execu-				273.3
		tive salary	KRW million			213.3
		Average female executive salary Ratio of base salary			-	244.7
		of female executive to male executive	%	-	-	89.
	and remu-	Average male permanent employee salary	KRW	-	-	65.0
Employee compensa-		Average female	million			
tion		permanent employee salary		-	-	59.5
		Ratio of base salary				
		of female permanent employees to male	%	-	-	91.
		permanent employees				
		Average male non-permanent	KRW million	_	_	
		employee salary				
		Average female non-permanent				2.4
		employee salary		-	-	2.4
		Ratio of base salary of female non-perma-				
		nent employees to	%	-	-	
		male non-permanent employees				
	Average year		Years	5.8	4.9	5.
Job	Total number of employee turnover		Persons	-	-	8
security	Voluntary tur		%			95. 4.
	Non-voluntai	ries of training/education	Persons		401	4.
	Total budget	for employee	KRW	123	185	22
Talent de-	training/educ		Million KRW			
velopment	Training expe	enses per employee	1,000	445	462	56
		ours of training	Hours	3,687	4,082	3,81
	Average trainii	ng hours per employee No. of industrial		13	10	
		accidents occurred	Ea.	2	2	
	Employees	Industrial accident rate No. of deaths	%	0.7	0.5	0.
	Employees	No. of injuries	Persons	2	2	
Industrial		Duration of work- hour loss	Hours	1,104	1,008	12
accidents		No. of industrial	Ea.	-	-	
		accidents occurred Industrial accident rate	%			
	Subcon- tractors	No. of deaths	Persons	-	-	
		No. of injuries Duration of work-		-	-	
		hour loss Total no. of partner	Hours	-	-	
Mutual	Suppliers	<u>companies</u> Total purchase	Ea.	102	71 100	10
growth	0145	from partners	KRW	49,792	71,199	76,31
	SME support	Total purchases from SME	million	31,239	47,211	57,26
			Ea.	-	-	
	No. of violations of fair trade laws Fines imposed		KRW million	-	-	
Fair trade						
Fair trade Information security breaches	·	ta leakage, theft,	Ea.	0	0	

Category			Unit	2020
Incidents of non-com-	No. of violations that resulted in sanctions			0
pliance to regulations	No. of warnin compliance	gs from non-	Ea.	0
and internal codes	No. of violatic	ons of internal codes		0
Work loss	No. of work lo companies	oss cases in partner	Ea.	-
	Employees	Total		6
	who have taken pa-	Male		3
	rental leave	Female		3
	No. of em- ployees who	Total	Persons	1
	have returned	Male	_	0
	to work after parental leave	Female		1
Parental leave	Return rate of e taken parental	employees who have leave	%	100
	No. of employ- ees who have worked over 12 months after	Total		6
		Male	Persons	1
	returning from parental leave	Female		5
	Ratio of employees who have worked over 12 months after returning from parental leave		%	100
	Duration of educ	cation for human rights	Hours	-
	No. of employ human rights	vees who completed training	Persons	-
Human rights	Ratio of empl completed hu	oyees who ıman rights training	%	-
policies and procedures	Duration of edu of workplace b	ication for prevention ullying	Total	236(2)
procedures	Duration of each harassment p	ducation for sexual prevention	hours (per em-	236(1)
		(Human rights educa- vith disabilities, etc.)	ployee)	236(2)
	Investment	Cash donation		0
	in CSR (incl. donation)	Non-cash donation	KRW million	3
CSR	uonationj	Business expenses		-
	Total voluntee		Hours -	18
		er hours per employee		0.06
	Direct benefic support prog		Persons	65

Category		Unit	2020
	No. of Board meetings	Times	-
	No. of agendas	Ea.	-
Desired	Preliminary deliberation	%	-
Board of Directors	Decisions on revised agenda	Ea	-
Directors	Reported agenda	Ed.	-
	BOD attendance rate	% -	-
	Non-executive attendance rate	70	-
	Male	Persons -	-
	Female	Feisons -	-
	Ratio of female directors in the BOD	%	-
Board	Under 30 years		-
diversity	30 ~ 50 years	- Persons	-
	Above 50 years	Persons -	-
	No. of outside directors	-	-
	Ratio of outside directors	%	-
	Total no. of business sites		-
Anti-	No. of business sites that conducted	Ea.	
corruption	anti-corruption risk assessment		-
conuption	Ratio of business sites that conducted	%	
	anti-corruption risk assessment	70	-
	No. of Board members who	Persons	_
	received ethics training		
	Ratio of Board members who	%	_
	received ethics training		
	Total no. of employees who	Persons	274
	received ethics training		
Anti-cor-	Ratio of employees who received	%	98.9
ruption	ethics training		
policies and procedures	Total no. of Board members who have signed the ethics pledge	Persons	-
procedures	Ratio of Board members who		
	have signed the ethics pledge	%	-
	Total no. of employees who have		
	signed the ethics pledge	Persons	244
	Ratio of employees who have		
	signed the ethics pledge	%	88.09
Anti-cor-			
ruption No. of anti-corruption violations		Ea.	0
violations		(Persons)	

2021	2022
0	0
0	0
0	0
-	0
1	9
0	4
1	5
6	5
4	2
2	3
86	50
6	8
2	5
4	3
86	72
1	1
369	399
92.0	92.4
369(2)	798(2)
369(1)	399(1)
369(2)	798(2)
0	18
10	10
-	2
18	300
0.04	0.69
86	179

2021	2022
-	8
-	13
-	100.0
-	0
-	7
-	93.8
-	91.7
-	5
-	1
-	16.7
-	0
-	1
-	5
-	3
-	50.0
-	4
	0
-	0
-	3
-	50
369	399
92	92.4
-	0
-	0
311	353
77.56	81.7
0	0

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# **GRI CONTENT INDEX**

standards from January 1, 2022 to December 31, 2022. GRI 1: Foundation 2021 applied

## UNIVERSAL STANDARDS

#### **General Disclosures 2021**

Index		Description	ISO 26000		
	2-1	Organizational details			
The	2-2	Entities included in the organization's sustainability reporting			
organization and its reporting	2-3	Reporting period, frequency and contact point			
practices	2-4	Restatements of information	6.3.10/6.4.1~		
	2-5	External assurance	6.4.5/6.8.5		
	2-6	Activities, value chain and other business relationships			
Activities and workers	2-7	Employees			
	2-8	Workers who are not employees			
	2-9	Governance structure and composition			
	2-10	Nomination and selection of the highest governance body	6.2/7.4.3/7.7.5		
	2-11	Chair of the highest governance body	0.2/1.4.0/1.1.0		
	2-12	Role of the highest governance body in overseeing the management of impacts			
	2-13	Delegation of responsibility for managing impacts			
	2-14	Role of the highest governance body in sustainability reporting	6.2/7.4.3/7.7.5		
Governance	2-15	Conflicts of interest			
	2-16	Communication of critical concerns			
	2-17	Collective knowledge of the highest governance body			
	2-18	Evaluation of the performance of the highest governance body			
	2-19	Remuneration policies			
	2-20	Process to determine remuneration			
	2-21	Annual total compensation ratio			

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# Hansol Holdings reported in accordance with GRI

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4
2, 4~8
2
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The company has not delegated responsibility for managing impact.

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There is no process to prevent conflicts of interest Insufficient data (No information) Annual education schedule starting 2023 Insufficient data (No information) Confidential; not to be disclosed Insufficient data (No information) Confidential; not to be

disclosed

Index		Description	ISO 26000	Page n
	2-22	Statement on sustainable development strategy	4.7/6.2/7.4.2	3
	2-23	Policy commitments		10.10
	2-24	Embedding policy commitments		12~13, :
Strategy, policies and practices	2-25	Processes to remediate negative impacts		Insufficien (No inform
	2-26	Mechanisms for seeking advice and raising concerns	6.6.3	32
	2-27	Compliance with laws and regulations		45~56
	2-28	Membership associations	7.8	61
	2-29	Approach to stakeholder engagement	5.3	44
	2-30	Collective bargaining agreements		Insufficien (No inform

#### Material Topics 2021

Index		Description	ISO 26000	Page
	3-1	Process to determine material topics	50/200 204	
Material topics	3-2	List of material topics	- 5.2/7.3.2~7.3.4	44
	3-3	Management of material topics	7.5.3/7.6.2	

#### Topic Specific Standards Economic Performance

Index		Description	ISO 26000	Page
Economic	201-1	Direct economic value generated and distributed	6.8.1~	4~8, 4
performance	conomic erformance201-1Direct economic value generated and distributed201-2Financial implications and other risks and opportunities due to climate charindirect conomic inpacts203-1Infrastructure investments and services supported203-2Significant indirect economic impactsand anti-corruption3-3Management of material topics	6.8.3/6.8.7/6.8.9	26~2	
Indirect	Economic performance201-1Direct economic value generated and distributed201-2Financial implications and other risks and opportunities dueIndirect economic mpacts203-1Infrastructure investments and services supported203-2Significant indirect economic impacts3-3Management of material topics	Infrastructure investments and services supported	6.3.9/6.6.6/ 6.6.7/6.7.8/	36
impacts		Significant indirect economic impacts	- 6.8.1~ - 6.8.2/6.8.5/ 6.8.7/6.8.9	14~;
Anti comuntion	3-3	Management of material topics		44
Anti-corruption	205-2	Communication and training about anti-corruption policies and procedures	6.6.1~6.6.3	45~

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#### **Topic Specific Standards Environmental Performance**

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Description Index ISO 26000 Management of material topics 3-3 Energy 302-1 Energy consumption within the organization 6.5.4 302-5 Reductions in energy requirements of products and services Management of water discharge-related impacts 303-2 Water and 6.5.4 effluents Water withdrawal 303-3 Management of material topics 3-3 Direct (Scope 1) GHG emissions 305-1 Water discharge 305-2 Direct (Scope 2) GHG emissions 6.5.5 Nox, Sox, and other significant air emissions 305-7 Management of material topics 3-3 306-2 Management of material impacts related to waste Waste 306-3 Waste by type and disposal method 6.5.6 306-4 Waste recycling

#### **Topic Specific Standards Social Performance**

Index		Description	ISO 26000
	3-3	Management of material topics	
Employment	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	6.4.4/6.8.7
	401-3	Parental leave	6.4.4
	3-3	Management of material topics	
	403-1	Occupational health and safety management system	
Occupational health and safety	403-4	Worker participation, consultation, and communication on occupational health and safety	
Sulety	403-5	Worker training on occupational health and safety	6.4.6/6.8.8
	403-9	Work-related injuries	
	3-3	Management of material topics	
Training and education	404-2	Programs for upgrading employee skills and transition assistance programs	0.4.7/0.6.5
	404-3	Percentage of employees receiving regular performance and career development reviews	6.4.7/6.8.5
	3-3	Management of material topics	
Diversity and equal	405-1	Diversity of governance bodies and employees	6.2.3/6.3.7/
opportunity	405-2	Ratio of basic salary and remuneration of women to men	6.3.10/ 6.4.3/6.4.4
Local communities	413-1	Operations with local community engagement, impact assessments, and development programs	6.3.9/6.5.1~ 6.5.3/6.8
Supplier social assessment	414-2	Negative social impacts in the supply chain and actions taken	
Customer	3-3	Management of material topics	
health and safety	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	
Marketing and labeling	417-1	Requirements for product and service information and labeling	6.7.3

# 2023 HANSOL GROUP **SUSTAINABILITY** REPORT

# **UN SUSTAINABLE DEVELOPMENT GOALS**

The UN Sustainable Development Goals, (hereinafter referred to as SDGs), which replace the Millennium Development Goals (MDGs), are the common goals the United Nations and the international community aim to achieve from 2016 to 2030. The SDGs consist of 17 goals and 169 specific tasks for the sustainable development of all nations around the world, such as reduction of poverty and inequality and responses to climate change, as well as economic growth and job creation. Hansol Group's key issues for sustainable management align with the UN SDGs. This commitment is transparently shared in the Sustainability Report to ensure responsible task execution.

Key issues	UN SDGs	Activities
Ethical management and anti- corruption	3 Montesing 	<ul> <li>All affiliates conducted compliance management assessment.</li> <li>All affiliates reviewed risk management system.</li> <li>All affiliates established the ESG Indicator Management System.</li> </ul>
2 Management of air pollutants in the manufacturing process	12 REPORTER LAPPENDEN COO	<ul> <li>Hansol Chemical upgraded facilities for energy efficiency.</li> <li>Hansol Technics cut GHG emissions through facility upgrades.</li> </ul>
3 Creation of a safe work environment	4 Bauman Dial 5 Bauman Paraman Dial 1 Bauman Paraman Dial 1 Bauman Paraman Dial 1 Bauman Paraman Dial 1 Bauman Paraman	<ul> <li>All affiliates established the Hansol Safety Rating System (HSRS) to manage health and safety.</li> <li>ISO 45001 certification obtained by Hansol Paper, Hansol Logistics, Hansol PaperTech, Hansol Chemical, Hansol Technics, and Tapex.</li> </ul>
Enhancing product-responsibility and customer satisfaction	7 UTRANSFERRATE CONSTRAINTS	<ul> <li>Hansol Holdings hosted Group Innovation Olympics.</li> <li>Hansol Group and KAIST established a joint research center in the field of materials, parts, and equipment.</li> <li>7 affiliates of Hansol Group obtained ISO 9001 for quality management.</li> </ul>
5 Promotion of work-life balance	13 AMAR	<ul> <li>Hansol Paper, Hansol Chemical, and Tapex certified as family-friend companies.</li> <li>A telecommuting employment platform introduced for persons with disability.</li> </ul>
6 Supporting employee capacity building	4 Bourn Distantin	<ul> <li>All affiliates developed an online education curation system utilizing competency diagnosis.</li> <li>Tapex introduced an internal referral system.</li> </ul>
Minimizing raw material consumption and promoting recycling	6 minutes     7 ensembles       Image: State of the state of	<ul> <li>Hansol Paper and Hansol HomeDeco increased share of green products.</li> <li>Hansol HomeDeco increased use of recycled raw materials.</li> </ul>
8 Safe waste, wastewater, and chemical discharge management	14 ART MARKER 15 ART OF A	<ul> <li>Hansol Chemical reduced waste water discharge by 30,000 tons.</li> <li>Hansol Paper, Hansol HomeDeco, Hansol PaperTech, and Hansol Technics invested in environmental facilities.</li> </ul>
9 Fostering an agile organizational culture	6 REFARERER T	<ul> <li>Hansol Technics, Tapex, and Hansol IONES hosted meetings to enhance intergenerational communication.</li> <li>Hansol PNS operates flexible working system.</li> </ul>
10 In-house human rights policy and education		<ul> <li>Hansol Holdings established Group Human Rights Management Policy.</li> <li>Operation of Group Employee Mental Health Promotion Program.</li> </ul>

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# INDEPENDENT ASSURANCE STATEMENT

#### To: Executives and Stakeholders of Hansol Holdings

#### Introduction

Korean Standards Association (KSA, hereinafter, the "Assurer") was commissioned by Hansol Holdings to conduct an independent assurance of the 2023 Hansol Group Sustainability Report hereinafter (the "Report"). The Assurer reviewed the validity of the data contained in the report prepared by Hansol Holdings and presented an independent assurance opinion. The data and presentation in the Report are solely the responsibility of Hansol Holdings.

#### Independence

The Assurer, as an independent assurance agency, is solely dedicated to providing third-party assurance on the Report, with no vested interests or affiliations in Hansol Holdings' business activities that could compromise their independence or financial gains.

#### Assurance Standards and Level

In accordance with the assurance standard of AA1000AS v3, the Assurer verified compliance with the principles of comprehensiveness, materiality, responsiveness, and impact. The evaluation has determined a "moderate" level of reliability for the information presented in the Report. Furthermore, compliance with the GRI Standards 2021 was verified, covering both the universal standards and topic-specific standards.

#### Assurance-Type and Scope

The Assurer conducted a Type 1 assurance, confirming adherence to the four principles of AA1000AP (AccountAbility Principles) 2018. The scope of assurance covered the period from January 1, 2022, to December 31, 2022, with a particular focus on Hansol Group's sustainability-management policies, objectives, initiatives, standards, and accomplishments, including those of Hansol Holdings and its affiliates during the reporting period. Verification encompassed environmental and social data as well as broader financial data related to economic performance. However, verification of stakeholder engagement was limited to a review of the materiality test process.

#### Methodology

To collect the information, data and evidence for assurance, the Assurer performed the following activities;

- Examination of stakeholder-engagement and materiality test process of Hansol Holdings by sustainability management experts;
- Assessment of the media-research results that pertained to Hansol Holdings' sustainability management and the overall balance of reporting;
- Verification of the consistency in financial performance data, undertaken by a certified public accountant, including a review of the financial statement and disclosed data;
- Review of conformity with the environmental information disclosure data by the Greenhouse Gas Assurer; and
- Review of other pertinent performance documents and data.

#### Conclusion and Opinion

The Assurer examined the initial draft of the Report and offered insights, leading to subsequent revisions that incorporated these suggestions. No major errors or improper statements were identified within the Report's contents. The Assurer's assessment of the 2023 Hansol Group Sustainability Report can be summarized as follows.

2023 **HANSOL GROUP SUSTAINABILITY** REPORT

#### Inclusivity

#### Has Hansol Holdings actively involved stakeholders in shaping its strategic response to sustainability?

It is confirmed that Hansol Holdings acknowledges the significance of engaging with stakeholders in advancing sustainable practices and is actively working to establish a participatory framework. The company has specifically identified employees, partners, shareholders/investors, government/local authorities, customers, and local communities/NGOs as essential stakeholder groups and maintains dedicated communication channels for each group to gather a wide range of perspectives and valuable input.

#### Materiality

Has Hansol Holdings provided crucial information in the report to empower stakeholders' informed decision-making? Our assessment indicates that Hansol Holdings has diligently included all pertinent information for stakeholders. Moreover, we verified that a comprehensive materiality test was conducted, encompassing the key issues identified through an exhaustive analysis of both the internal and external factors affecting Hansol Holdings, and these findings were reported.

#### Responsiveness

Has Hansol Holdings adequately responded to the needs and concerns of stakeholders? Our review did not uncover any indications of misreported or inadequate response activities by Hansol Holdings.

#### Impact

Has Hansol Holdings effectively monitored its influence on stakeholders?

Our assessment confirmed that Hansol Holdings is diligently monitoring and comprehending the impact of its business operations on stakeholders. Furthermore, we verified that this information has been accurately incorporated into the Report.

#### **GRI Standards Disclosure Review**

The Assurer confirms that the Report adheres to the GRI Standards. The sections pertaining to both Universal Standards and Topic Standards indicators are presented based on data supplied by Hansol Holdings. Our review of the data substantiates the accuracy of these representations.

> Chair of Korean Standards Association, Kang Myeong-Soo





The Korean Standards Association is a special corporation established according to the Industrial Standardization Act in 1962. It is a knowledge service institution that supplies and spreads industrial standardization, quality management, sustainable management, and KS and ISO certifications, etc. It contributes to the sustainable development of Korean society as an ISO 26000 Korean agency, GRI designated education institution, AA1000 assurance institution, Korea Sustainability Index (KSI), UN CDM operation organization, and institution of greenhouse gas and energy management system assurance.

June 2023

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# **AFFILIATES WITH** CERTIFICATIONS

ompany			Certification			Affiliates	Awards	Awarded by
ame	Environment	Quality	Safety and health	Family-friendly certification	Other	Hansol Paper	The most respected company in Korea: ranked top in the paper sector for 20	Korea Management As
ansol aper	ISO 14001 Green Business (Janghang Plant)	ISO 9001 (Daejeon, Janghang, Shintanjin, Cheonan Plants)	ISO 45001 (Daejeon, Janghang Plants)	Family- friendly business	Gold-certified in the Ecovadis sustainability evaluation	Hansol HomeDeco	Best Space Award	Consulting (KM
ansol aperTech	ISO 14001 (Headquarters)		ISO 45001 (Headquarters)			Hansol Logistics	2022 AEO Sharing Contest: Recognition Award (Lee Jin-seok)	Korea Customs S
							Certificate of Commendation from Seoul Regional Customs (Lee Jin-seok)	Seoul Regional Cu
nsol PNS	ISO 14001 (Paper distribution division)				ISMS (information security management, IT service) (Subsidiary) Hansol Coever Youth- friendly small giant		2022 DX Sector Environmental Safety Innovation Contest Partner Day: Excellence Award	Samsung Electro
nsol meDeco	ISO 14001 (Headquarters, Iksan	ISO 9001	KOSHA-MS			Hansol Technics	2021 Agricultural and Fishing Villages Collaborative Cooperation Fund: Honorary Award	Ministry of Trade, Industry
	Plant)	(Iksan Plant)			AEO certification		Certificate of Commendation (No. 125758, Choi Jong-ik)	Ministry of Agriculture, Fo Affairs
sol stics	ISO 14001 (Headquarters)	ISO 9001 (Headquarters)	ISO 45001 (Headquarters)		(Excellent company for export/ import safety management) Outstanding logistics provider	Hansol IONES	The Anseong City Entrepreneur Awards: Harmonious Labor-Management Award (Corporate)	Anseong Chamber of C
					General logistics service, international freight forwarding, and trucking)		Selected as the top three company in materials, parts and equipment in 2022 Beacon Company	Ministry of Trade, Industry
sol inics	ISO 14001 (Jincheon, Ochang Plants)	ISO 9001 (Jincheon, Ochang Plants) IATF 16949 (Automobile quality management system)	ISO 45001 (Jincheon, Ochang Plants)				Tower of 300 Million Dollar Export 2022 Outstanding Innovation Partners: Grand Prize	Samsung Electro
sol	ISO 14001 (Headquarters, Baran	ISO 9001 (Headquarters, Baran Plant)	ISO 45001 (Headquarters) KOSHA-MS		ISO 22301 (Business continuity management system) ISO 27001	Hansol Chemical	Fire Safety Management Practical Ability Contest: Grand Prize (Joo Hyungang)	-
	Plant)	AS 9100	(Headquarters, Baran Plant)		(Information security management system)		Commendation on Firefighting Day (Joo Hyungang)	Jeollabuk-do
sol nical	ISO 14001 (Jeonju, Ulsan Plants) Green business	ISO 9001 (Jeonju, Ulsan Plants) IATF 16949	ISO 45001 (Jeonju, Ulsan Plants)	Family- friendly business	Materials and parts specialist (Ministry of Trade, Industry and Energy)		Industrial Complex Disaster Monitoring: Certificate of Commendation (Kim Seong-jin)	
		ISO 9001			Matorials/parts/aquipment		Excellence Award in Materials, Parts, and Equipment Manufacturing: Minister's Award	Ministry of Trade, Industry
	ISO 14001 (Yanggam, Hwaseong, Uniwrap Plants)	(Yanggam, Hwaseong, Uniwrap Plants) IATF 16949 (Yanggam, Hwaseong Plants)	ISO 45001 (Yanggam, Hwaseong Plants)	Family- friendly business	Materials/parts/equipment specialist (Korea Evaluation Institute of Industrial Technology)	Тарех	Tower of 50 Million Dollar Export	Korea International Trade

#### (\*As of June 2022)

# AWARDS

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# LOCAL BUSINESS SITES

Company name	Business site	Address	Company name	Business site	Address
-lansol -loldings	Headquarters	25/F, Pine Avenue Building B, 100 Eulji-ro, Jung-gu, Seoul, Republic of Korea		Headquarters	5/F, Pine Aver Seoul, Repub
Headquarters Janghang Plant Daejeon Plant Cheonan Plant Sintanjin Plant Environmental Business	23 ~ 24/F, Pine Avenue Building B, 100 Eulji-ro, Jung- gu, Seoul, Republic of Korea		Jincheon Plant	55 Hansam-r Chungcheon	
	Janghang Plant	149 Jangsan-ro, Janghang-eup, Seocheon-gun, Chungcheongnam-do, Republic of Korea	Hansol Technics	Ochang Plant	140 Gwahaks gu, Cheongju Korea
	Daejeon Plant	Daejeon Plant 50 Sinilseo-ro 68 beon-gil, Daedeok- gu, Daejeon, Republic of Korea		Suwon Research	#801, Building
	Cheonan Plant	4186 Sejong-ro, Gwangdeok-myeon, Dongnam-gu, Cheonan-si, Chungcheongnam-do, Republic of Korea		Center	Suwon-si, Gy 2061 Anseon
		60 Sinilseo-ro 126 beon-gil, Daedeok-gu, Daejeon, Republic of Korea		Headquarters	Gyeonggi-do
	Business	3/F, Ubiquitous Building, 68 Pangyo-ro 255 beon-gil (616 Sampyeong-dong), Bundang-gu, Seongnam,	Hansol IONES	Balan Campus	71-29, Balang Hwaseong-si
lansol	Headquarters	Gyeonggi-do, Republic of Korea 80 Daechi 7-gil, Daejeon-myeon, Damyang-gun,		Dongtan R&D Center	7, Dongtansa Republic of K
PaperTech	Headquarters	Jeollanam-do, Republic of Korea	Hansol Inticube	Headquarters	13/F and 14/F Worldcupbuk
	(Paper Distribution Division)	5/F, Ilheung Building, 213 Toegye-ro, Jung-gu, Seoul, Republic of Korea	Hansol Chemical	Headquarters	7~8/F, K Towe Republic of K
	Headquarters (IT Service Division)	13/F and 14/F, Nuritkum Square Business Tower, 396 Worldcupbuk-ro, Mapo-gu, Seoul, Republic of Korea		Jeonju Plant	873 Gwahang Jeollabuk-do
lansol PNS	Chungmuro	120-1 Family Building, Pildong 2-ga, Jung-gu, Seoul,	Ghernical	Ulsan Plant	116 Napdo-ro
	Center Paju Converting Center	Republic of Korea 108 Jikji-gil, Paju-si, Gyeonggi-do, Republic of Korea		Iksan Plant	1101, Oryong do, Republic #812-813, 8th
	Paju Integration Center	96 Jikji-gil, Paju-si, Gyeonggi-do, Republic of Korea		Headquarters	gu (lui-dong, Gheonggi-do
	Headquarters	27/F, Jeonmun Geonseol Hoegwan, 15 Boramae 5-gil,		Yanggam Plant	62-16 Chorok Hwaseong-si
lansol lomeDeco	nsol TI Business	Dongjak-gu, Seoul, Republic of Korea 15/F, Jaram Building, 78 Mapo-daero, Mapo-gu, Seoul, Republic of Korea	Тарех	Hwaseong Plant	95-4 Goju-ri, do, Republic
Iksan Plant		54 Seogam-ro 17-gil, Iksan-si, Jeollabuk-do, Republic of Korea		Uniwrap Plant	108 Mannyeo Gyeonggi-do
	Headquarters	22/F, Pine Avenue Building B, 100 Eulji-ro, Jung-gu, Seoul, Republic of Korea		Gunsan Plant	San 38-3, San Osikdo-dong
	Icheon Center	#202, 288 Cheongganggachang-ro, Majang-myeon, Icheon-si, Gyeonggi-do, Republic of Korea			completed in
	Gunsan CY Center	Gunsan Station, 197 Naeheung 2-gil (Naeheung- dong), Gunsan-si, Jeollabuk-do, Republic of Korea			
	Gunsan Branch	Pier 5, Gunsan Port, 194 Seohae-ro (Soryong-dong), Gunsan-si, Jeollabuk-do, Republic of Korea			
	Damyang Center	Hansol PaperTech, 80 Daechi 7-gil, Daejeon-myeon, Damyang-gun, Jeollanam-do, Republic of Korea			
-	Daejeon Center	Hansol Paper Daejeon Plant, 50 Sinilseo-ro 68 beon- gil (Sinil-dong), Daedeok-gu, Daejoen, Republic of Korea			
	Busan Center	11/F, Jungang Building, 89 Haegwan-ro (Daechang- dong 1-ga), Jung-gu, Busan, Republic of Korea			
	Busan New Port Center	#202 Jian Square, 6 Hwajeonsandan 4-ro 30beon-gil, Gangseo-gu, Busan, Republic of Korea			
Hansol Logistics	Samsung C&T Fashion Business Team	M1 Floor, Kendall Square Bucheon Logistics Park, 80 Sinheung-ro 511beon-gil, Bucheon, Gyeonggi-do, Republic of Korea			
	Metropolitan Area Business Team	M2 Floor, Kendall Square Bucheon Logistics Park, 80 Sinheung-ro 511beon-gil, Bucheon, Gyeonggi-do, Republic of Korea			
	Shintanjin CY Center	Shintanjin CY, 24-3 Pyeongchon-dong, Daedeok-gu, Daejeon, Republic of Korea			
	Sintanjin Center	Hansol Paper Shintanjin Plant, 60 Sinilseo-ro 126beon-gil (Sinil-dong), Daedeok-gu, Daejeon, Republic of Korea			
	Opo Center	Hansol REF, 34-16 Jangji 9-gil (Jangji-dong), Gwangju, Gyeonggi-do, Republic of Korea			
	Suwon Center	4/F, Hansol REF, 55 Omokcheon-ro 132beon-gil (Gosaek-dong), Gwonseon-gu, Suwon, Republic of Korea			
	Iksan Center	Hansol HomeDeco Iksan Plant, 54 Seogam-ro 17-gil, Iksan, Jeollabuk-do, Republic of Korea			
	Janghang Center	Hansol Paper Janghang Plant, 149 Jangsan-ro, Janghang-eup, Seocheon-gun, Chungcheongnam- do, Republic of Korea			
	Cheonan Center	Hansol Paper Cheonan Plant, 4186 Sejong-ro, Gwangdeok-myeon, Cheonan-si, Chungcheongnam- do, Republic of Korea			

# **MEMBERSHIP OF ASSOCIATIONS**

### enue Building B, 100 Eulji-ro, Jung-gu,

ublic of Korea -ro, Deoksan-myeon, Jincheon-gun, ngbuk-do, Republic of Korea ksaneop 1-ro, Oksan-myeon, Heungdeokiu-si, Chungcheongbuk-do, Republic of

ng C, Digital Empire Building, 16, daero 1556beon-gil, Yeongtong-gu, yeonggi-do, Republic of Korea

ng-daero, Gosam-myeon, Anseong-si, , Republic of Korea

ngongdan-ro 4-gil, Hyangnam-eup, i, Gyeonggi-do, Republic of Korea andan 7-gil, Hwaseong-si, Gyeonggi-do,

F, Nuritkum Square Business Tower, 396 k-ro, Mapo-gu, Seoul, Republic of Korea ver, 513, Teheran-ro, Gangnam-gu, Seoul,

ng-no, Bongdong-eup, Wanju-gun, do, Republic of Korea

ro, Nam-gu, Ulsan, Republic of Korea

g-ri, Samgi-myeon, Iksan-si, Jeollabukof Korea th Floor, 17 Daehak4-ro, Yeongtong-

I, Ace Gwanggyo Tower 1-cha), Suwon, lo, Republic of Korea ok-ro 532beon-gil, Yanggam-myeon, si, Gyeonggi-do, Republic of Korea

, Paltan-myeon, Hwaseong-si, Gyeonggiof Korea

eon-ro, Hyangnam-eup, Hwaseong-si, do, Republic of Korea aemangeum National Industrial Complex,

, Gunsan-si, Jeollabuk-do (to be October 2023)

#### Hansol Holdings

Korea Listed Companies Association

Korea Investor Relations Service The Korea Employers Federation

#### Hansol Paper

Korean Federation of Design Industry

Associations Korean Standards Association

Korea Personnel Improvement

Association

Korea International Trade Association

Korea Electric Engineers Association

The Institute of Internal Auditors Seoul Chamber of Commerce and

Industry Daedeok Association

Korea Fire Safety Institute

Korea Chemicals Management Association

Korea Industrial Technology Association

Korea Industrial Safety Association

Korea Listed Companies

The Korea Employers Federation

Daejeon Chungnam Environmental Preservation Association

Korea Paper Association

Korea Energy Engineers Association

Fair Competition Federation Daejeon Sejong Chungnam Environmental Engineers Association Korea Society of Packing Science &

Technology

Korea Exchange

Korea Investor Relations Service Korea Resources Circulation Industry

Promotion Association (GR Association)

Korean Standards Association

Korea Package Design Association Korea Chamber of Commerce and Industry (Associate Member)

Federation of Korean Industries Construction Association of Korea

International Contractors Association of

Korea Korea Construction Engineers Association

Korea Engineering and Consulting Association

Korea Electrical Contractors Association

Korea Fire Facility Association

Korea Electric Engineers Association

Korea Fire Safety Institute

Korea Specialty Contractors Association The Seongnam Chamber of Commerce and Industry

#### lansol PaperTech

Korea Paper Industry Cooperative Korea Fire Safety Institute Gwangju Jeonnam Jeju Area PSM Council Korea International Trade Association

#### ansol PNS

Korea Software Industry Association

Korea International Trade Association Korean Information & Communication Contractors Association

Korea Listed Companies Association

#### Hansol HomeDeco

Korea Industrial Safety Association

Korean Industrial Health Association

Korean Standards Association

Korea Electric Engineers Association

Jeonbuk Environmental Managers

Jeonbuk Branch of Korea Safety Association

Hansol Honam Council

Council

Hansol Safety and Health Council

Korea Specialty Contractors Association Seoul Metropolitan City Council

Korea Wood Panel Association Korea Exchange Seoul Office

Iksan Business Environment Council

Iksan Regional Safety and Health Council

Korea Energy Engineers Association

Jeonbuk Environmental Preservation

Association Korea Waste Recycling Association

Jeonbuk Regional Chemical Plant

Council Hazardous Goods Fire Safety Council

Korea Exchange

Korea International Trade Association

Korea Listed Companies Association

Korea Franchise Association

Korea Fire Safety Association

Hansol Group Seoul Council

The Korean Society of Wood Science

and Technology

Korea Proptech Forum

#### Hansol Logistics

Korea Trucking Association Korea Freight Forwarders Association

Korea Railroad Logistics Association

Korea Customs Logistics Association Korea International Logistics Association

Korea International Trade Association

International Air Transport Association

(IATA)

Korea Port Logistics Association AEO Promotion Association

Korea Chamber of Commerce and Industry

Korea Listed Companies Association

Korean Industrial Health Association

Korea Industrial Safety Association

Environmental Preservation Association

Korea Photovoltaic Industry Association

Environmental Preservation Association

Anseong Managers Association

Korea World Class Enterprise

Anseong Chamber of Commerce

KOSDAQ Listed Companies Association

Korea International Trade Association

Chungbuk Environmental Engineers

Chungbuk Sejong Environmental

Korea Personnel Improvement

Hansol Technics

Korea Fire Safety Institute

Korean Nurses Association

Preservation Association

Association

Association

lansol IONES

Fire Safety Institute

Association

lansol Inticube

Industry

Contractors Association

Information & Communication

Korea Software Financial Cooperative

Korea International Trade Association

KOSDAQ Listed Companies Association

Korea Artificial intelligence Association Seoul Chamber of Commerce and

Jeonju Wanju Industria Council

Jeonbuk Business Env

#### Tapex

Industry

Korea

Llangel Chamical
Hansol Chemical
Korea Chamber of Commerce and Industry
Korea International Trade Association
International Semiconductor Equipment and Materials Association
Korea Industrial Safety Association
Korea Fire Safety Association
Ulsan Environmental Engineers Association
Korea Energy Engineers Association
Jeonbuk Environmental Engineers Association
Wanju Environmental Engineers Association
Jeonbuk Chemical Plant Council
Jeonju Wanju Industrial Complex Fire Council
Jeonju Industrial Complex Safety and Health Managers Council
Jeonbuk Green Business Council
Jeonbuk Business Environment Council
Тарех
Korea Listed Companies Association
Hwaseong Chamber of Commerce and

Korea International Trade Association

Korea Vinyl Environmental Council

Korea Industrial Technology Association

Korea Adhesive Industry Association

The Society of Adhesion and Interface.

Korea Fire Safety Association

Korea Industrial Safety Association

Korea Electric Engineers Association

Korea Energy Engineers Association



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# Hansol

2023 Hansol Group Sustainability Report

2023 HANSOL GROUP SUSTAINABILITY REPORT

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#### Soy ink printing

We used soy ink for the printing of this report, which contains a significant portion of vegetable oil derived from soybeans. Due to the high concentration of vegetable oil, soy ink is highly biodegradable and low in volatile organic compounds (VOCs).



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