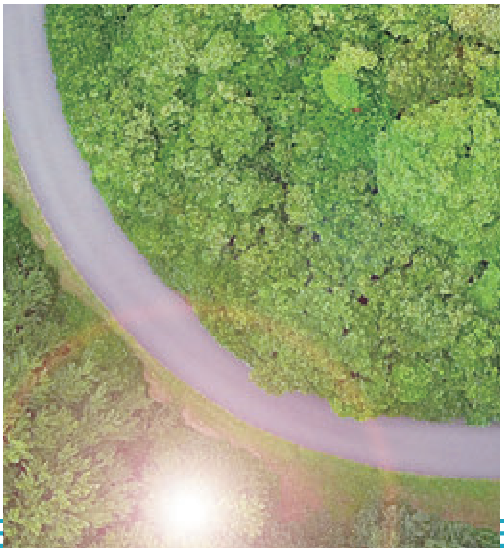
GAMASOT

Integrated Report 2022



DONG-A SOCIO GROUP

COVER STORY

The "GAMASOT spirit" that has been with Dong-A Socio Group since its beginning in 1932 has presented a direction for Dong-A Socio Group's responsible management for the last 90 years. The warmheartedness of caring for people, serving all home visitors with a bowl of warm cauldron-cooked rice, has been a guide to Dong-A's unique "Jeong-Do management". We will stay true to our unchanging commitment to growing in an economically, socially, and environmentally right way as we are heading towards a 100-year company and when we will develop into a global healthcare player as well.

The cover of Dong-A Socio Group's Integrated Report 2022 sought to communicate that the cauldron's warmth presents a direction for social responsibility management, opens the path to green growth, and serves as a driver of the sustainable impact that Dong-A creates as a global company. It also reflects the united efforts made by all Dong-A employees, who are gathering their capabilities and sincerity so that the GAMASOT spirit that has been with Dong-A throughout its 90-year history can lead to the "New Flow" of the new era and "New Shift" of new change.

← Contents

Greetings to all the valued stakeholders of Dong-A Socio Group,

Jae-Hun Jung

CEO & President, Dong-A Socio Holdings

I am delighted to unveil our new slogan, "New Flow, New Shift," on the 90th anniversary of the Group's establishment. This slogan encapsulates our commitment to shaping Dong-A's illustrious 100-year history in collaboration with all of our esteemed stakeholders.
Now, I would like to share our resolutions and plans as we embark on a journey towards a future that surpasses the accomplishments and experiences of our past and present.

New Flow – Fostering Happy Employee Engagement

At Dong-A Socio Group, we recognize the significance of individual employees and the organizations they form. We believe in fostering a virtuous cycle of "happy engagement," wherein heightened employee satisfaction leads to exceptional customer service, an enhanced corporate reputation, and outstanding financial performance. Achieving this goal necessitates the establishment of employee welfare initiatives, motivational performance strategies, a corporate culture that fosters mutual respect, and a sustainable and secure work environment. Aligned with this vision, I and the CEOs of our Group affiliates made a solemn pledge during our human rights management declaration ceremony at the end of last year. We vowed to adhere unwaveringly to international standards and guidelines concerning human rights and labor practices, demonstrating our steadfast commitment to a zero-tolerance policy towards human rights violations and discrimination. Our efforts include promoting employee growth and happiness by evaluating the organizational culture of Group affiliates, implementing a learning system based on a capability model, and introducing family-friendly programs to achieve a harmonious work-life balance. Furthermore, we have undertaken the important task of creating a GHG inventory for all Group affiliates and have completed third-party verification to instill environmentally-conscious practices and safety and health management across all facets of our business, from production to consumption. With this information, we are developing a mid-to-long-term strategy to reduce GHG emissions and reinforce safety and health evaluations for our Group affiliates, striving to create safer workplaces and significantly reduce the occurrence of accidents.

New Shift – Prosperity for All Stakeholders

Our ultimate objective is to realize the "New Shift" through the success of the "New Flow," leading to the prosperity and advancement of all stakeholders. To achieve this, we believe in harnessing the power of two critical components: the "Solid Core" and "Disruptive Innovation." The "Solid Core" represents the ethical standards that underpin our management philosophy, ensuring that we remain steadfast in our commitment to integrity and responsibility. Simultaneously, "Disruptive Innovation" thrives within a corporate culture that embraces challenges and failures as natural steps in the pursuit of progress. We welcome novel and diverse perspectives, grounded in continuous learning and deep expertise, fostering an environment conducive to transformative growth. The story of our founder, Joong-Hee Kang, who made a bold decision to halt production of "Saeng-myeong su" in 1967, in response to concerns over the product's main ingredient, stands as a testament to the harmony of our "Solid Core" and "Disruptive Innovation" ingrained within our DNA.

"New Flow, New Shift" encompasses both financial and non-financial performance aspects. Every decision we make is guided by the principle that it must align with the Group's mission: "Continuous challenge to pursue health and happiness for humanity." Our focus is on long-term sustainability and setting an example for others.

As we look forward to the next 100 years, Dong-A Socio Group aspires to surmount challenges and emerge as a pioneering force that creates enduring value for the generations to come, in partnership with each and every one of our stakeholders. We gratefully seek your unwavering support as we embark on this exciting journey.

Thank you.

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http://en.donga.co.kr/Main.da

This report is available in PDF format which can be downloaded at Dong-A Socio Holdings website.

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Thank you.

Dear all,
I extend my heartfelt gratitude to all the stakeholders who have shown immense interest and support for Dong-A Socio Group as we stride towards our centennial milestone.

A company's history holds genuine value when it evolves in tandem with society. With your invaluable support as members of our society, Dong-A Socio Group is committed to facing and surmounting social challenges with unwavering passion.

In pursuit of sustainable growth, companies must create both tangible and intangible value, driven by a long-term vision. To this end, Dong-A Socio Group will consistently contemplate important matters and embrace new challenges that contribute to the well-being of humanity, staying true to our company philosophy and motto, which form the bedrock of our management principles.

In the dynamic landscape of today's business world, marked by various innovations, including AI-based services, predicting a company's future growth has become increasingly complex, and the rise and fall of enterprises may occur at an unprecedented pace. In response, Dong-A Socio Group will harness the potential of new technologies within this rapidly changing environment, seamlessly integrating them into our business models. This approach will empower us to cultivate sustainable competitiveness in the market, ensuring continuous growth.

Ultimately, the driving force behind a company's sustainability lies in its people. Dong-A Socio Group is dedicated to taking the lead in endeavors that promote public health and well-being. I urge you to recognize that your unwavering interest, as stakeholders, provides substantial strength to both Dong-A Socio Group and its employees. I assure you that our Group will serve as a model in creating a healthier society.

Thank you for your unwavering support.

Shin-Ho Kang
Honorary Chairman, Dong-A Socio Group
姜信浩

Key Milestones of Social Responsibility Management

1932

Began practicing social justice based on "Jeong-Do" the founding spirit of Joong-Hee Kang, the founder of Dong-A Socio Group

1967

Stopped production of "Saeng-myeong su" in response to controversy over harmfulness of the main ingredient of our main product, practicing the Jeong-Do management principle

1970

Strengthened responsibility toward shareholder rights and interests by registering as the 44th listed company on the Korea Exchange

1975

Second President Shin-Ho Kang was inaugurated and announced the company philosophy that emphasizes "fulfillment of corporate social responsibility"

2002

Realized the management philosophy, "new drug development is our social contribution for humankind" through the launch of "Stillen", the first original drug developed in-house by Dong-A and a gastritis treatment

2018

Declared "Jeong-Do management" to uphold the founding principles of integrity, sincerity, and consideration, building a foundation for sustainable management

2019

Launched Dong-A Socio Group's "Human Respect Committee" to more rapidly, accurately respond to employees' human rights-related issues

2020

Launched the "Dong-A Socio Group Social responsibility Council", consisting of the CEOs of 13 Group affiliates as well as Dong-A Socio Holdings, to expedite the realization of social responsibility management based on ISO 26000

Published the integrated report, "GAMASOT", for the first time

Joined the UNGC to take part in sustainable development and the realization of corporate social responsibility

2022

Participated in the 2022 BIS Summit anti-corruption pledge to contribute to the establishment of a fair society of integrity and to enhance corporate competitiveness based on social responsibility management

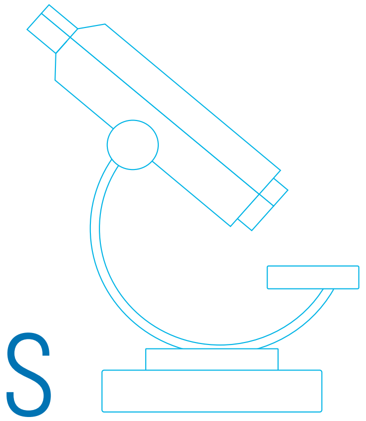
Built a GHG inventory for all Group affiliates and completed a voluntary third-party verification of GHG emissions

Declared human rights management of all Group affiliates in accordance with the Jeong-Do management philosophy and international standards on corporate social responsibility

New flow,
new shift.

Guided by the "GAMASOT" spirit, Dong-A Socio Group has been striving to grow in a right way for the past 90 years since its establishment in 1932. The founding principle of Dong-A has been inherited to "Jeong-Do management", which now leads the new flow in a new era.

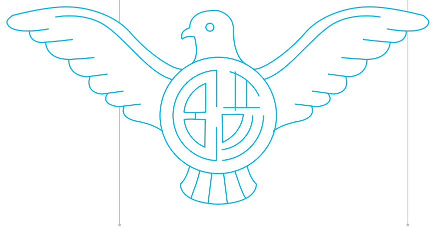
GUIDING PRINCIPLE



90 years

of "integrity" that shows a virtuous way of life, "sincerity" that embraces responsibility, and "consideration" that encourages sharing in daily life

MILESTONES



1932

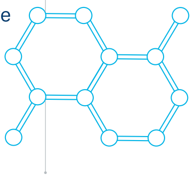
Joong-Hee Kang's Wholesaler, a pharmaceutical and hygiene material wholesaler, began operations in Joonghak-dong, Jongno-gu, Seoul, Korea

1949

Changed name to Dong-A Pharmaceutical Corporation

1963

Began to produce the comprehensive tonic "Bacchus D"



1967

Ranked first in sales among domestic pharmaceutical companies

1970

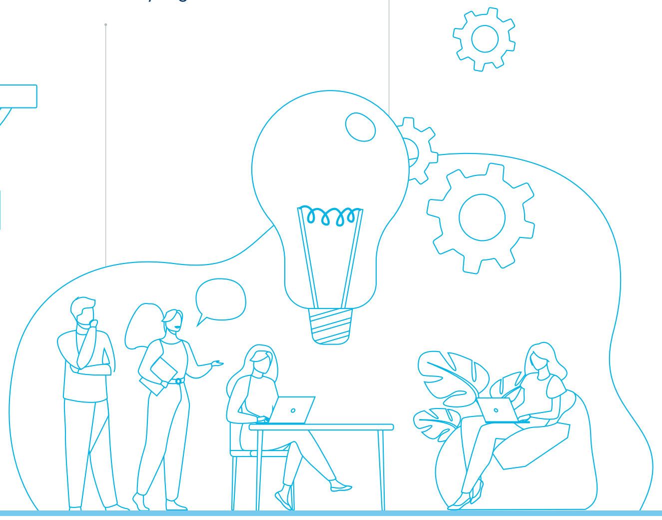
Initial Public Offering (IPO)

1977

Established a research center

1980

Constructed the Korea's first GMP(Good Manufacturing Practice)-compliant plant in Anyang



1981

Exported Bacchus D to the US for the first time

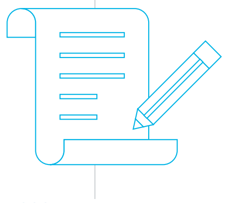
1985

Designated as the industry's first KGMP(Korea Good Manufacturing Practice)-certified company

1987

Development of AIDS diagnostic reagents in Korea

Exports exceeded USD 10 million

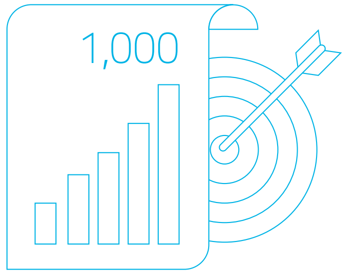


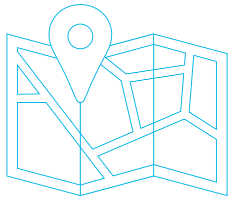
1990

Established Dong-A America (US subsidiary)

1995

Bacchus sales exceeded KRW 100 billion





1998

Launched Dong-A Pharmaceutical's Tour Korea for College Students

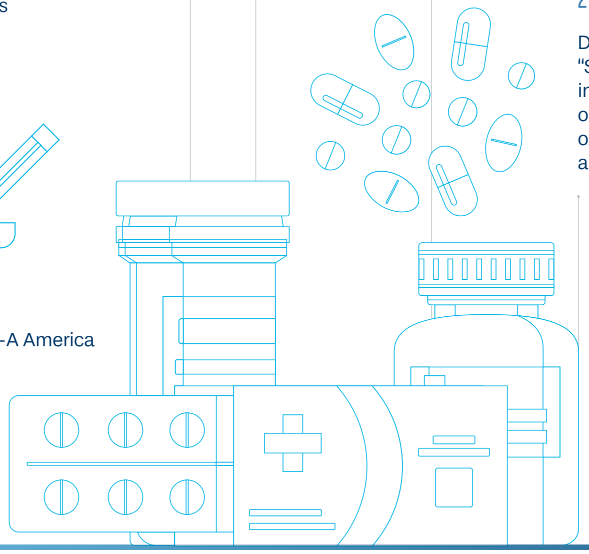
2000

Cheonan Plant received KGMP approval and completed construction

2002

Launched "Stillen", the first original drug developed in-house and a botanical treatment for gastritis

Became the first in the pharmaceutical industry to record sales of more than KRW 500 billion



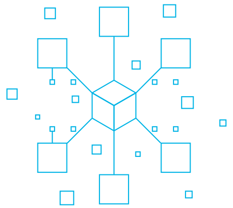
2005

Launched "Zydena", the second in-house developed original drug and erectile dysfunction treatment

2011

Launched "Motilitone", the third in-house developed original drug and dyspepsia treatment

Became the first in the pharmaceutical industry to exceed KRW 900 billion in sales



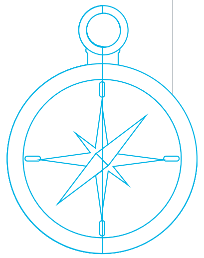
2013

Changed to a holding company structure leading to a demerger into three companies –Dong-A Socio Holdings, Dong-A Pharmaceutical, and Dong-A ST

Established the first dementia research center in Korea

2015

Dong-A ST launched "Sivextro", the fourth in-house developed original drug and oxazolidinone class antibiotic



2016

Dong-A ST launched "Suganon", the fifth in-house developed original drug and diabetes treatment

2020

Dong-A Socio Holdings published the Group's integrated report, "GAMASOT"

Dong-A Socio Holdings joined the UNGC

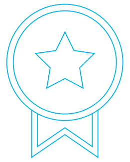
2021

Dong-A Socio Holdings was chosen by the Korea Exchange as "2021 Outstanding Corporation of Disclosure of Corporate Governance Report"

2022

90th anniversary of Dong-A Socio Group's founding

NEW FLOW NEW SHIFT

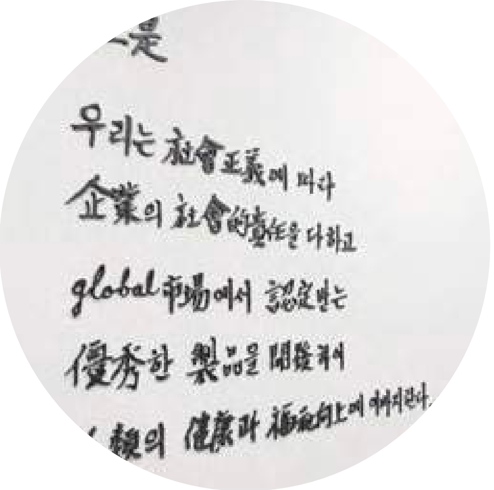


2022

Dong-A Socio Holdings earned the "Prime Minister's Commendation as an Outstanding Family-friendly Company"

As Dong-A Socio Group embarks on a new voyage towards a new decade, in celebration of the 90th anniversary of the Group's founding in 2022, we are preparing three sails.

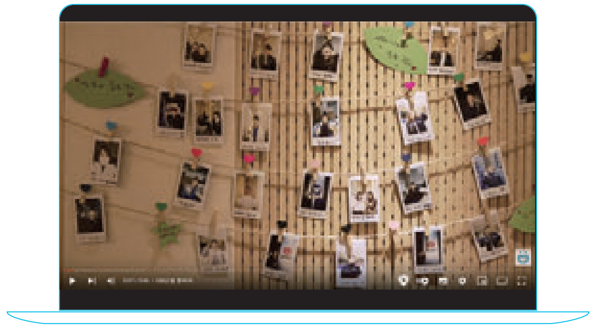
The first sail is "developing growth engines" by strengthening existing businesses and expanding the value chain according to business portfolio adjustments. Second, we will strive to "secure growth drivers" by developing real estate with great geographical conditions within the Group and having Group affiliates that are gaining market attention go public. For the third sail, which is "strengthening business competitiveness," we will focus on strengthening R&D and investment governance, innovating work processes by adopting robotic process automation (RPA), strengthening performance-based compensation, nurturing key talent, and establishing a foundation for social responsibility management. After hoisting the sails and setting clear goals and direction for future sustainable growth, all Group affiliates will gather their strengths to powerfully move forward and will encounter, more anew, a new future where the health and happiness of humanity is realized.



next 10 years

to stay ahead of next 100 years

FUTURE DIRECTIONS



"I am a Butterfly" – sung by all Group affiliate employees in celebration of the 90th anniversary

> Dong-A ST has been making substantial efforts in R&D and achieved meaningful results, such as the largest number of in-house developed original drugs in Korea.
>
> However, we recognized the need to change to a new direction in accordance with the new flow and chose key therapeutic areas. Based on close cooperation among the Research Center, Development Department, and Marketing Department, we will establish and execute strategies. In addition, we will create distinctive value by building a new R&D pipeline through aggressive open innovation and new business development.

Jae-Hong Park
Chief Scientific Officer, Dong-A ST

New Drug

Dong-A ST chose oncology, inflammatory disease, neurodegenerative diseases, endocrine system, digestive system, and musculoskeletal system as key therapeutic areas and is expediting R&D. DA-1241 is being developed as a treatment for type 2 diabetes and Non-alcoholic Steatohepatitis (NASH). During the phase 1b clinical trial in the US, its outstanding blood glucose level-lowering effects were confirmed. We signed a license-out agreement with NeuroBo Pharmaceuticals in September 2022 and are preparing for a phase II global clinical trial. DA-1726, which is an obesity treatment, was confirmed to have weight-reducing effects as well as non-alcoholic fatty liver disease treatment effects in a pre-clinical study. Dong-A ST made a poster presentation on DA-1726's non-clinical results at the American Diabetes Association in June 2022. We signed a license-out agreement with NeuroBo Pharmaceuticals in September 2022 and are preparing for a phase I global clinical trial.

DA-1229 (Suganon) is undergoing a phase II clinical trial in Korea as a calcific aortic valve disease indication through REDNVIA. Preparations are being made for phase II and III clinical trials in the US. We are also working on the development of nerve disorder treatments, such as dementia. DA-8010 is a best-in-class drug, and its efficacy and safety were confirmed by the results of a phase II clinical trial in Korea targeting overactive bladder patients. A phase III clinical trial in Korea is actively in progress. In addition, for successful new drug development, we are expanding open innovation with pharmaceutical companies, ventures, government-funded agencies, and academies, and implementing innovative platform technologies, including PROTAC[1] and ADC[2].

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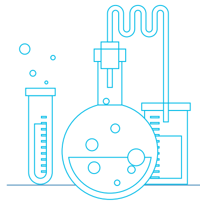
[1] PROTAC (Proteolysis Targeting Chimera): Technology for selective degradation of disease-causing proteins

[2] ADC (Antibody Drug Conjugate): Substance that has chemically combined a drug and monoclonal antibody

DA-1241	• GPR119 agonist for type 2 diabetes • It stimulates the G Protein-coupled Receptor 119 (GPR119) that exists in intestinal and pancreatic cell membranes to lower blood glucose levels, protect pancreatic beta cells, and improve lipid metabolism.
DA-1726	• An oxyntomodulin analogue for the treatment of obesity • Acts on both glucagon-like peptide-1 (GLP-1) and glucagon receptors to suppress appetite, promote insulin secretion, and increase peripheral basal metabolism, leading to weight loss.
DA-1229	• A Dipeptidyl Peptidase-4 (DDP-4) inhibitor class treatment for type 2 diabetes • It inhibits DPP 4, which is a serine protease of GLP-1 and prolongs GLP-1 action to promote insulin secretion and inhibit glucagon secretion to lower blood glucose levels.
DA-8010	• Muscarinic M3 receptor antagonist for the treatment of overactive bladder • Compared to other antimuscarinics, it offers excellent bladder contraction suppression effects and outstanding bladder selectivity to improve side-effects (thirst, constipation) and efficacy.



DMB-3115
- Biosimilar of Stelara®, which suppresses inflammatory cell activation
- Development status: Completed the phase III global clinical trial. Planning to apply for item approval in the US and Europe in the first half of 2023

DA-3880
- Biosimilar of Nesp®, an anemia treatment
- Sales status: Exporting the finished product to Japan. Planning on clinical development/ approval/sales in Latin America through a license-out agreement with Polifarma, a Turkish pharmaceutical company.

STP0404 (Pirmitegravir)
- HIV-1 treatment
- Development status: Completed the phase I clinical trial and received phase 2a clinical trial approval. Planning to recruit participants and perform the clinical trial in the second quarter of 2023

STP1002 (Basroparib)
- Anti-cancer drug
- Development status: Phase I clinical trial is in progress. Planning to complete the phase I clinical trial in the first half of 2023 and establish a strategy on the next-phase clinical trial

Bio

Dong-A ST is expediting its advancement into the global biosimilar market based on excellent R&D capabilities in new drug development. In case of DMB-3115, a biosimilar of Stelara® and an inflammatory disease treatment under development in partnership with Meiji Seika Pharma, we completed a phase III global clinical trial that took place in a total of nine countries, beginning with the U.S. in March 2021 and eight other countries, including Poland and Estonia, through November 2022. The global clinical trial has enabled us to prove therapeutic equivalence compared to the original and confirmed safety, based on which we are preparing item approval application to the US Food and Drug Administration (FDA) and European Medicines Agency (EMA). In the meanwhile, Dong-A ST and Meiji Seika Pharma signed a global licensing-out agreement for DMB-3115 with Intas, a multinational pharmaceutical company, in July 2021 and transferred approval and sales rights in global regions, excluding Korea, Japan, and some Asian countries, to Intas. Accordingly, Intas will take charge of global commercialization of DMB-3115.

Sales of biosimilar DA-3880 of Nesp®, an anemia treatment, began in Japan in 2019. This was followed by the signing of a license-out agreement with Polifarma, a Turkish pharmaceutical company, in November 2022, signaling new market entry. In addition, we signed a licensing-in agreement on an immunotherapy candidate of the bi-specific antibody modality in December with Kanaph Therapeutics, a bio venture that conducts innovative new drug R&D, and are performing joint research. We plan to expand R&D and investment through diverse joint research and licensing-out.

STP0404 (Pirmitegravir), an HIV-1 treatment drug that ST Pharm is developing, completed the phase I clinical trial in July 2022, thus securing outstanding safety and tolerability. Based on the results, we made a phase 2a clinical trial IND application to the US FDA in August 2022 and received approval from the US FDA in September. Accordingly, ST Pharm plans to conduct a phase 2a clinical trial on adults who are infected with HIV-1 and did not receive a prescription to evaluate STP0404's antiviral activity, safety, tolerability, and pharmacokinetics.

The anti-cancer drug STP1002 (Basroparib) is undergoing a dose escalation clinical trial at three clinical sites in the US to confirm safety and tolerability on advanced solid tumor patients. We performed a non-clinical trial on the possibility of co-administration with an anti-cancer drug of a different mode of action and secured excellent results. Based on safety secured from the phase I clinical trial and the non-clinical trial results regarding co-administration, we will establish a strategy on the next-phase clinical trial in 2023 and perform the phase II clinical trial.

Health Care

Dong-A Pharmaceutical is enhancing competitiveness and expediting growth momentum by implementing a distinctive strategy by brand. For the flagship brand Bacchus, we plan to increase the scope of growth by launching new products and increasing the number of stores where Bacchus decafe is sold based on the performance growth of Bacchus D. We seek to improve the brand power of flagship over-the-counter (OTC) brands, which are Panpyrin, Benachio, and Myvlar, while working on form differentiation and item diversification of skin ointment brands Noscarna, Mela Toning, and Acnon, and establishing a foundation for global market entry.

In addition, we plan to launch the ":DAP mall", an online mall for pharmacists, in 2023 and thus build an online sales/marketing system. In case of Orthomol in the consumer healthcare sector, we plan to expand the line-up to develop it into a mid- to long-term mega brand. In addition, focused investments will be made in MiNiMAX and GUM GUARD as next-generation strategic brands. Furthermore, we will establish a foundation for growth by expanding our business areas to include medical devices and beauty instruments that have applied electroceutical technologies over the mid- to long-term future, while also improving production efficiency by making investments to replace old production facilities, adopt IT systems, and improve GMP facilities.

> We will solidify Dong-A Pharmaceutical's reputation as a consumer-centered healthcare-specializing company by securing business competitiveness, strengthening new businesses and developing new growth engines, and innovating processes.
>
> We will grow into the No. 1 player in the OTC sector by recruiting professional research personnel and increasing R&D investments, and look into new growth opportunities in the H&B sector by developing large health functional food brands, strengthening functional daily necessity brands, and increasing overseas exports of derma cosmetics.

Sang-Hwan Baek
CEO & President,
Dong-A Pharmaceutical

SPECIAL FEATURE

CEOs Talk Concert **":D Talks!"**

Attended by all employees of 13 Group affiliates, the 90th anniversary ceremony of Dong-A Socio Group was held to look back on the Group's history and prepare for a new future as a 100-year company. In particular, each Group affiliate's CEO shared information on the respective company's major pending matters and a clear direction of the company's vision and strategy at the CEOs Talk Concert ":D Talks!", which allowed participants to reaffirm Dong-A Socio Group's unique and distinctive growth potential. In addition, the event added greater significance by also serving as an arena for true bi-directional communication where CEOs provided frank answers to employee questions and shared their thoughts about the future.

Now, *New,* Next.

Dong–A Socio Group prepares for a new flow and new change. Leveraging our unique social responsibility management and turning the global trend of ESG into new growth opportunities, we open the door to a sustainable tomorrow for generations to come, going beyond today.

ALWAYS RESPECT HUMAN RIGHT

With its mission, "Continuous challenge to pursue health and happiness for humanity", Dong–A Socio Group strives to fulfill its responsibilities toward people at all times in all areas of business. Guided by our people–centered management philosophy, we will establish a human rights management system based on international standards, and thus realize the value of respect for human rights by reflecting our unique methodologies and practical index.

Declaring Human Rights Management

Consisting of the CEOs of 13 Group affiliates of Dong–A Socio Group as well as Dong–A Socio Holdings, the Dong–A Socio Group Social responsibility Council (DSC) held a human rights management declaration ceremony on December 16, 2022 to have the human rights management system take root. Dong–A Socio Group established a human rights management framework that places importance on human dignity and values in accordance with its Jeong–Do management philosophy and international standards on corporate social responsibility, and is having it take root in overall management systems. DSC seeks to facilitate employees' happy engagement by thoroughly examining human rights–friendly management activities, and will implement the entire process of human rights management with a responsible attitude so that the human rights of all stakeholders can be respected.

Establishment of a Human Rights Violation Remedy System

Dong–A Socio Group respects the human rights of all employees and takes systematic, quick responses in the event of human rights violations. In 2022, we confirmed whether the most recent human rights/labor–related laws and regulations were applied to each Group affiliate's company rules, while also examining the appointment of Grievance Handling Officer, setup of Grievance Counseling Centers, and establishment of grievance handling procedures. In case of companies that already have relevant systems in place, we informed employees of respective details. We also established a remedy process for people who were negatively impacted in relation to human rights and informed all employees of how to receive appropriate relief through the Human Rights Violation Remedy Committee. Established at each Group affiliate, Committee determines relief of a victim in the event of a human rights violation and recommends relief measures to the CEO. It applies the zero–tolerance principle and implements the relief process based on objective facts.

"Consultation on Human Rights Violation and Remedy" in the Our Value – Humanity Section

Participating in the UNGC "Ring the Bell" Initiative

On March 16, 2022, Dong–A Socio Holdings participated in the "1st Ring the Bell for Gender Equality" ceremony that was jointly organized by UN Global Compact Network Korea and Korea Exchange and made known its determination to take part in the realization of the values of gender equality and diversity. Organized by the UN and Sustainable Stock Exchanges (SSE) initiative, the Ring the Bell initiative is a global awareness campaign aimed at promoting gender diversity and inclusion and encouraging detailed action for gender equality and women's empowerment.

Ring the Bell
for Gender Equality

MORE & BETTER LABOUR PRACTICES

Employees' happiness is a value that a company needs to consider with priority for sustainable growth and a driver that will enable new growth. Dong-A Socio Group set a clear goal of being a company where employees are happy, and is giving shape to its happiness management philosophy by establishing systematic systems for building a happy, healthy organizational culture and encouraging their active execution.

Family-friendly Management

Dong-A Socio Holdings presents a direction so that family-friendly management that guarantees balance between work and personal life can take root at all Group affiliates and promotes a sense of belonging in the organization and stability among employees by discovering and sharing outstanding cases of Group affiliates and supporting the adoption of successful cases. In addition, we expanded the scope of welfare system beneficiaries to include employee families in addition to employees to establish an environment where employees demonstrate full engagement in their organization and duties and help employees share positive experiences with their family. Thanks to these efforts, Dong-A Socio Holdings first received family-friendly company certification in 2017 and then received re-certification for two times in a row. In addition, it was chosen as an outstanding family-friendly company in 2022 and received a prime minister citation.

"Work-Life Balance" in the Our Value – Humanity Section

Diagnosis of Organizational Culture

"If you can't measure it, you can't manage it. If you can't manage it, you can't improve it." This famous quote of Peter Drucker, who is dubbed the guru of management, also applies to building a happy organizational culture. To establish an organizational culture where employees are happy, Dong-A Socio Group is diagnosing its organizational culture by structuralizing happiness management items and designing measurable organizational diagnosis items. In 2022, we conducted an organizational culture diagnosis on all Group affiliate employees, consisting of 69 questions in seven diagnosis areas (employee happiness, organizational happiness, strategy, leadership, organizational structure, work management, people management). We make continuous efforts to improve our organizational culture throughout the year according to assessment results by Group affiliate. By analyzing the outcomes and using them for Group affiliate evaluations, we are establishing a systematic organizational culture assessment framework at the Group level.

"Change Management of Organizational Culture" in the Our Value – Humanity Section

Creating a Flexible Work Environment

In July 2021, Dong-A Socio Group adopted a flexible dress code as part of efforts to establish a flexible work environment. Accordingly, all Group affiliate employees can each decide on what to wear to work according to the time/place/occasion (TPO) without any special rules. In 2022, which marked the second year of adopting the flexible dress code that removes unnecessary rules and procedures while raising work efficiency, we created the "vlogs by job group" to fully establish the system and to improve the imbalance among Group affiliates and used it as an employee communication channel for sharing information on various cases of the flexible dress code. It was also shown at job fairs as a PR video on Dong-A Socio Group's jobs and corporate culture, and was well received by many.

Welfare System of Dong-A Socio Holdings

Education/daily life stability

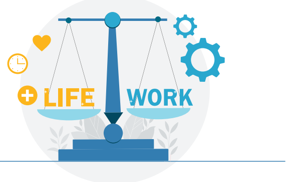
Child tuition support, self-development support, housing purchase and rent support, funeral service support, operation of the Employee Welfare Fund (loan support), payment of congratulatory funds for marriage/childbirth, etc., support for family relocation costs for a transfer

Leisure

Operation of corporate condominiums and resorts, operation of clubs, operation of the selective welfare system, operation of cafeterias/in-house cafes/rooftop gardens

Health

Comprehensive health check-up for employees aged 45 or more, medical expense support for an employee's hospitalization/discharge, purchase of a group insurance policy for employees and spouses, operation of sick leave



Work-life balance

Reward and sabbatical leave for long service, flexible work system, flexible dress code, Family Day, childcare leave and family care leave, retirement support office

Building a Labor-Management Culture of Win-Win and Cooperation

The GAMASOT spirit of cherishing others and being warmhearted to others is materializing into Dong-A Socio Group's labor-management culture of win-win and cooperation over a long period of time. The Group affiliates formed a labor union and labor-management council in consideration of the respective company's circumstances and characteristics as part of efforts to raise the level of understanding between labor and management and to expand the scope of communication and cooperation. As a result of putting into action this strong determination to build a labor-management culture of win-win and cooperation, major Group affiliates, including Dong-A ST and Dong-A Pharmaceutical, are maintaining their tradition as a zero-dispute business site and building an organizational culture of trust and harmony.

"Labor-Management Culture of Win-win" in the Our Value – Humanity Section

> I hope the flexible dress code effectively settles down across all Group affiliates so that employees can comfortably concentrate on their work.
>
> It would be great for leaders to set an example and put the flexible dress code into practice according to the situation. Then the employees under the leaders will feel comfortable about taking part in this good campaign in a more flexible atmosphere!

Jeong-Hun Cha
Associate Manager,
ETC Business Division of Dong-A ST

Innovating the Organizational Culture for Communication and Consideration

Each Group affiliate that makes up Dong-A Socio Group is implementing a detailed and practical corporate culture project to build a stronger, healthier organizational culture based on the core values shared by all Dong-A employees – pursue innovation, lead change, trust others, thrive together. In 2022, Dong-A ST paid close attention to the opinions of young employees through an organizational culture diagnosis, leading to its recognition of the importance of correct understanding and communication among generations. It formed a taskforce team and established a Junior Board, consisting of junior-level employees, in January 2023 and held the first meeting in February. The Junior Board will carry out activities aimed at coming up with creative ideas, developing management skills of key future talent, and boosting employees' work engagement by facilitating communication among generations.

Yongma Logis began to conduct the "YongmaYongma Campaign" in October 2022 to raise employee awareness of workplace harassment and to fully establish a corporate culture that values respect and consideration. It made a poster with the slogan, "Develop courage to take action, approach others with your heart, forgive and understand others, and listen attentively to others, sitting face to face". By doing so, it promoted employee understanding and encouraged participation, while providing education on a communication culture as a way to build a corporate culture where employees acknowledge and respect differences.

> I hope to see Dong-A Socio Group's corporate culture develop into diverse forms that respect employee freedom,
>
> just like the flexible dress code that allows employees to freely choose their clothes as long as the clothes are appropriate for TPO!

Yu-Rim Lee
Manager,
OTC Business Unit of
Dong-A Pharmaceutical

A

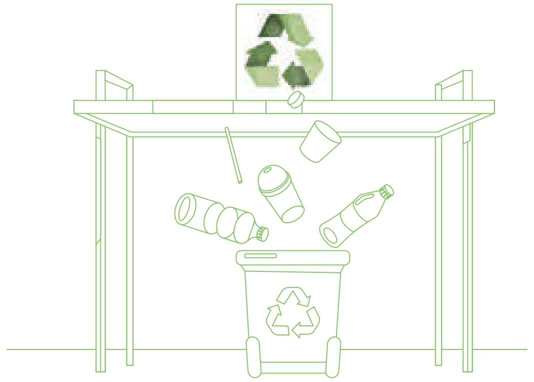
ACT GREEN

Through the 2022 NDC[1] Synthesis Report, the United Nations Framework Convention on Climate Change (UNFCCC) emphasized that countries across the globe must more strictly keep the climate pledge. At this time when everyone must take action to resolve the climate crisis, Dong-A Socio Group is keeping pace with the global flow that demands more active climate action by implementing campaigns at the Group level and also gathering capabilities of the Group affiliates.

Dong-A Socio Holdings

EarthBack - delivering value beyond recycling

On April 5, 2022, we unveiled "EarthBack," the first 100% recycling station set up by Dong-A Socio Holdings in collaboration with the Korea Federation for Environmental Movements. The name was chosen through a naming contest that was held by the Korea Federation for Environmental Movements and means, "turning the Earth's environment back to clean." Fitting for its name, the space is where social value is created, going beyond a simple location for separate waste collection. EarthBack was executed as part of the "Earth Recovery Resource Circulation Campaign" that Dong-A Socio Holdings has been conducting since 2021, and ultimately aims at building a sustainable environment by publicizing the importance of recycling and encouraging action in daily life. Residents can receive points that can be used like cash at the Jongno Branch of the Eco Cooperative in accordance with the amount of wastes that were separately discarded at EarthBack, and use an app to check recycling routes of wastes and the resulting reduction in carbon emissions. We expect this to encourage correct separation of wastes for discard among residents and contribute to the spread of a resource circulation mindset. On April 5, when the first EarthBack was opened, we also held an event where we gave out succulent plant pots in celebration of Arbor Day and gained a positive response.



Dong-A Socio Group

CSR Seminar - where a new encounter to social value takes place

Dong-A Socio Group holds the CSR Seminar every year for employees in charge of CSR at all Group affiliates, and shares information on major ESG management trends and cases and comes up with ideas for ESG value creation.
Held for the third time, the CSR Seminar in 2022 was attended by 43 CSR managers and working-level employees from Group affiliates. Discussions were held on diverse subjects, including supply chain management, the human rights management system, and organizational culture.
The participants shared their opinions from the ESG value perspective and on ways to practice social responsibility management that can be applied to each company's fields and business areas. The seminar began with sharing of information on past activities by the Corporate Culture Innovation Team, HR Strategy Department, Jeong-Do Management Team, and CSR Team, and included a lecture on social value measurement/evaluation by CEO Hyeon-Myeong Do of Impact Square, an ESG business consulting company. This was followed by practical training on measuring social value and applying a relevant framework based on other companies' cases and a time to come up with and improve ideas on social value that can be discovered by the Group affiliate the participant is affiliated with. This enabled participants to experience the new value of social value.

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[1] Nationally Determined Contributions: National GHG reduction goal that a participating nation determines itself according to the Paris Agreement

Dong-A Otsuka

Blue Label Campaign – eco wave continued for 10 years

In 2022, Dong-A Otsuka celebrated the 10th anniversary of the "Blue Label Campaign" –the first of its kind in the Korean beverage industry adopted in 2013. The Blue Label is a separation guideline or cut line that enables easy removal of labels from PET bottles. By steadily conducting the Blue Label Campaign every year for the last 10 years, Dong-A Otsuka has been publicizing the right way to separately discard PET bottles for resource circulation. In 2022, Dong-A Otsuka collaborated with eco-friendly brands "F5Lab" and "CUECLYP" to produce eco-friendly upcycled goods and gave them away to consumers, achieving participation by around 200 thousand people. Dong-A Otsuka plans to actively use eco-friendly products for promotions in 2023 as well. At a sampling event held in February 2023 for warm POCARI SWEAT made of powder, it gave out an eco-friendly tote bag to consumers who took part in a survey.

204,948 +

No. of participants in the 2022 Blue Label Campaign

> The POCARI SWEAT Blue Label Campaign was able to celebrate its 10th anniversary thanks to the participation of many consumers.
>
> I believe the 10th anniversary was made all the more meaningful by communicating the value and significance of resource circulation to participants through upcycled goods that were produced with a sense of appreciation. As we begin a new decade, we are exploring ways to reduce plastics during PET production or use waste plastics that are collected from our plants.

Jun-Chul Lee

Brand Manager of POCARI SWEAT, Dong-A Otsuka

ST Pharm

Use of Recycled Solvents – the fundamentals of a sustainable company

ST Pharm is striving to minimize the use of organic solvents for API process development and production for eco-friendly business operation. It is also reducing waste purification costs by reusing 70-80% of waste ethanol used for processes and production, and also reducing use of natural resources, including coal and corn. ST Pharm will continue to increase use of recycled solvents and develop eco-friendly source technology as part of its efforts to reduce negative impact on the environment caused by API R&D and production.

Dong-A ST

The Environmental Camp for Youth – green wind blowing for almost 20 years

Dong-A ST has been operating "The Environmental Camp for Youth" since 2004 to help youths become aware of the preciousness of the environment and life as well as practice their love of the environment. This camp enables youths to learn how precious the environment is, develop a mindset of restoring life, and experience environmental protection activities, and has been held online since 2020 due to COVID-19. The 17th Class of The Environmental Camp for Youth held in 2022 was attended by 80 middle school students from across the nation during which they explored ways for wise co-existence to protect biodiversity.

Dong-A ST is also building "Forests of Peace" to care for the environment and life. Hoping to build an ecosystem where Nature and humankind can achieve harmonious symbiosis and for peace on the Korean Peninsula, Dong-A ST began planting trees in the Peace Gate Square in the demilitarized zone in Cheorwon County, Gangwon Province and is currently planting trees in a region where South Korea borders North Korea that was damaged due to conflicts on the Korean Peninsula. In 2022, Dong-A ST planted 3,000 trees near Jaein Falls in Yeoncheon County, Gyeonggi Province that was designated as a UNESCO Global Geopark in the hopes that the "Forest of Peace" becomes a symbol of love/cooperation/eco-friendliness.

Dong-A Pharmaceutical

SAVE 2 SAVE – protect to protect!

Dong-A Pharmaceutical's "SAVE 2 SAVE" campaign protects children's oral health and endangered animals. In February 2021, Dong-A Pharmaceutical began publicizing the importance of protecting endangered animals by including nine endangered animal characters, including the Asian black bear and the Eurasian eagle-owl, in the container design of Garglin-For-Kids. We signed the SAVE 2 SAVE campaign MOU with Seoul Grand Park and the National Nature Trust on protecting endangered animals in March, and donated a portion of Garglin-For-Kids proceeds to the National Nature Trust in October. In 2022, we expanded the scope to an in-house campaign. On the World Environment Day on June 11, employees and their families carried out volunteering activities, painting murals at the zoo at Seoul Grand Park.

Sponsorship for IVU – protecting the health of both the earth and volunteers

Dong-A Pharmaceutical is providing Bacchus and Bacchus Jelly for the marine environment-protecting volunteer activities of IVU, an island village volunteering alliance, to root for IVU's efforts. As a non-profit organization established in 2018, IVU carries out volunteer activities on isolated island regions and contributes to protecting the environment by collecting ocean wastes amounting to 250-300 kg a month through plogging[1] activities. By regularly providing Bacchus, which is Dong-A Pharmaceutical's flagship product, for IVU's kindhearted activities, Dong-A Pharmaceutical seeks to add strength to IVU's efforts. Dong-A Pharmaceutical also plans to deliver Bacchus to island village residents according to the weight of collected wastes.

[1] Picking up litter while jogging

S

SUSTAINABILITY FAIR

Dong-A Socio Group seeks to grow in an economically, socially, and environmentally right way, and hopes that corporate growth leads to society's sustainable development. To this end, we take part in global initiatives for anti-corruption and corporate social responsibility, while also expanding the scope of Jeong-Do management to the global stage.

Global Initiatives to build a fair, transparent business environment

Dong-A Socio Group takes active part in global alliances aimed at creating a fair and transparent corporate environment. On behalf of the Group, Dong-A Socio Holdings joined the UN Global Compact (UNGC) and is cooperating with various stakeholders, including companies, NGOs, and governments in Korea and abroad, and also publishes "GAMASOT", the Group's integrated report, every year based on the UNGC's 10 Principles.

Dong-A Socio Holdings is strengthening cooperation with companies and public organizations in Korea to contribute creating an anti-corruption business environment. To this end, we participate in the Business Integrity Society (BIS) Summit initiative, a project that was launched by UN Global Compact Network Korea and Korea Sustainability Investing Forum (KoSIF) with the goal of improving laws and systems, strengthening companies' compliance/ethical management capabilities, and building an anti-corruption corporate culture. We attended the BIS Impact Forum in 2022 as a panel member and provided an outline of Dong-A Socio Group's Jeong-Do management and shared information on the five-year anti-bribery management system (ABMS) implementation plan and execution activities as well as supply chain management measures.

"Compliance Management System" in the Our Value – Integrity Section

Global Alliance for humankind's health and happiness and sustainable development

Dong-A Socio Holdings joined the UNGC in September 2020 and made known its commitment to support UNGC's 10 Principles in the areas of human rights, labor, environment, and anti-corruption, and is practicing social responsibility management based on ISO 26000, which is an international standard on corporate social responsibility, to this end. In detail, we hold the Social responsibility Council (DSC), which consists of the CEOs of Group affiliates, twice a year and discuss implementation measures for the Group's overall social responsibility management and sustainable management. In addition, the Group's integrated report, "GAMASOT," is published to communicate the outcomes of social responsibility management to stakeholders. We also stand by the UN's Sustainable Development Goals (SDGs) and support the development goals, thereby contributing to shaping a sustainable future for all.

O

OPEN COMMUNICATION

The starting point and goal of the sustainable growth that Dong-A Socio Group pursues is customers. As such, Dong-A Socio Group pays close attention to customer opinions, provides products and services that add value to customers' lives, and handles customer information with care, thereby thriving together with customers.

Expanding Customer Communication

Dong-A Socio Group communicates with customers and pays close attention to voice of customer (VOC) by using diverse on/offline channels. Dong-A ST collects VOC through four channels, which are homepage, telephone, Medical Representative (MR), and regular mail, and shares the collected VOC on a company-wide level through its complaint management system. In 2022, Dong-A ST improved the complaint management system for smooth customer communication and more efficient use of VOC. It sends informational texts according to the VOC situation, resulting in a higher level of understanding among elderly consumers who find it difficult to understand details with oral explanations alone. In addition, it developed a VOC statistics analysis tool and is using collected information to improve products and services.

Dong-A Pharmaceutical also runs various VOC collection channels, including homepage and telephone. It set up a consumer bulletin board on its official online store, "Dmall", and FATION brand website, and collects the various opinions of customers. It categorizes the collected VOC into different types for management and systematically and quickly handles VOC according to its VOC operation process.

"Consumer-Centered Management" in the Our Value – Responsibility Section

Strictly Protecting Customer Information

Dong-A Socio Group legitimately collects and safely manages customer information that is needed to run its business. Dong-A Socio Holdings established and operates personal information protection guidelines in relation to collecting and handling personal information and continues to revise the guidelines in accordance with changes in compliance regulations and the internal work environment. In December 2022, we newly earned personal information protection management system ISO 27701 certification.

Dong-A Pharmaceutical strictly protects customers' personal information based on management criteria pursuant to the Personal Information Protection Act. Personal information is collected according to type and is automatically deleted based on the destruction criteria per type. Yongma Logis is also focused on information protection activities and information security management system improvements to promote information confidentiality, integrity, and availability according to the Personal Information Protection Act. Dong-A Otsuka, which runs an online mall, is encrypting data using the two methods of DES and RSA for strict protection and management of personal information.

"Information Security Management System" in the Our Value – Integrity Section

Providing Consumer-Centered Products and Services

Dong-A Socio Group is making utmost efforts to provide good products and services with a sense of responsibility based on the understanding that adding value to customers' lives is the right path to realizing its mission – Continuous challenge to pursue health and happiness for humanity.

Due to the characteristics of ethical drugs, it is difficult for Dong-A ST to reflect consumer opinions in the product development process. However, Dong-A ST conducts strict safety testing even after market release of products and actively responds to inconveniences that are found as a result of the tests and VOC collection as well as making improvements. In 2022, Dong-A ST established product package improvement guidelines to prevent errors in filling prescriptions that are caused by similar packaging, and began applying the guidelines to mass-produced products. In addition, it reflected consumer opinions that were received as a consumer complaint and improved the packaging of Leucostim Injection so that each unit can be easily separated.

Dong-A Pharmaceutical is making company-wide efforts to develop products that consider customer needs. To ensure that consumers can check the tablet and capsule size of health functional food, the company accurately indicates the size on the case exterior to help consumers safely and conveniently consume the food. In case of health functional food for children, it is expanding the application of eco-friendly packaging, considering that the products are for the healthy lives of the future generation. In 2022, we took improvement measures for consumer claims on a total of six products.

Yongma Logis built a "fixed-temperature shipping system" in 2021 and additionally adopted temperature management history management to provide customers with optimal-quality pharmaceuticals. In 2022, it provided a rental service that used bio containers and temperature-recording device, thereby strengthening the fixed-temperature shipping system so that all processes are connected, ranging from logistics facilities to transport vehicles, transport containers, and temperature management history management services.

Dong-A Otsuka holds regular customer satisfaction (CS) meetings and delivers customer opinions to the production department to address issues, while sharing information on improvements that were made with customers and striving to provide safe, convenient products. DONGCHEONSU collected/analyzed materials on claims related to mineral water during its storage process in 2022 and is striving to reduce the number of claims.

"Enhancement of Customer Satisfaction" in the Our Value – Responsibility Section

TOGETHER WITH COMMUNITY

Dong-A Socio Group has adopted "thrive together," one of its core values, as a corporate social responsibility (CSR) creed, and explores ways to thrive together with stakeholders, including local communities. Based on the principle, "new drug development is our social contribution for humankind", we deliver the value of thriving together by bringing together capabilities, wisdom, and minds so that a greater number of people can enjoy healthy, happy lives together with Dong-A.

> I am extremely glad that ST Pharm's innovative technologies can help patients in poverty who do not have access to treatment through our cooperation with DNDi.
>
> I especially think it is extremely meaningful to deliver hope to children and will make diverse efforts and engage in cooperation for future treatment development.

Jun-Young Choi
Head of R&D Center,
ST Pharm

ST Pharm x DNDi

Global Cooperation to eradicate neglected disease

Millions of people die from a lack of treatment all across the globe, but there is still not enough interest in diseases in poor, vulnerable regions. There are many cases where pharmaceutical companies avoid developing treatments for neglected diseases because of low marketability. To resolve this issue, the World Health Organization, five international research institutes, and Médecins Sans Frontières (Doctors Without Borders) established the Drugs for Neglected Diseases initiative (DNDi).

ST Pharm took part in global cooperation for neglected disease eradication by signing an agreement on commercialization process optimization for a visceral leishmaniasis (VL) candidate with DNDi in 2022. VL is a parasite infection disease, a risk that around 600 million people around the world are exposed to. There are 200 thousand to 400 thousand patients a year. Since high manufacturing costs of a new drug candidate are a considerable burden on treating patients in low-income countries, there is a need for process technology optimization before commercialization. ST Pharm is striving to raise production efficiency of the candidate that is undergoing a phase I global clinical trial through this agreement-based research and also conduct research on an alternative process that applies innovative technologies, such as CFT[1] and SMB[2], to enable affordable, safe production.

[1] CFT: Continuous flow production technology

[2] SMB: Simulation moving bed separation process

Dong-A ST x KoNECT

New Cooperation to license in overseas new drugs

In October 2022, Dong-A ST signed an MOU for Korean licensing-in of global non-licensed-in drugs with the Korea National Enterprise for Clinical Trials (KoNECT), and promised to share relevant drug information and continue mutual cooperation for Korean licensing-in of new drugs that were developed and released overseas. KoNECT is a foundation under the Ministry of Health and Welfare that was established in 2014 and aims at building a foundation for clinical trials in Korea and to raise clinical trial efficiency of the domestic pharmaceutical industry. It investigated ways for Korean licensing-in of global new drugs based on advice from an expert group to raise new drug accessibility of citizens, shared the results with Dong-A ST, and plans to cooperate with Dong-A ST for Korean licensing-in of 244 new drugs. This MOU is a new way of cooperation between a public organization and private company to license in overseas new drugs, and is anticipated to provide practical help to patients suffering from rare disease and intractable disease and their families, while enabling Dong-A ST to discover new business opportunities.

Dong-A Pharmaceutical x BST

Win-Win Cooperation for all, including local farms and the natural environment

In September 2022, Dong-A Pharmaceutical signed an MOU on natural ingredient development for cosmetics with BST as part of efforts to practice ESG management and to promote the eco-friendly, sustainable materials industry. Established in 2000, BST is the first venture company in the cosmetics field of the Ministry of Health and Welfare and develops raw materials and products using natural materials. Based on the MOU, Dong-A Pharmaceutical plans to cooperate with BST to develop a cosmetics ingredient with anti-aging effects by using unripe mandarins from Jeju. Dong-A Pharmaceutical anticipates to replace an imported cosmetics ingredient with a domestically-produced native plant ingredient.
This is also assessed as a leading example of cooperation that is beneficial to the company, local farms, and natural environment as it explored ways to use farm products that are discarded by farms and to achieve win-win with an SME.

Dong-A Otsuka x MOIS x Korean Red Cross

Continued Cooperation to efficiently overcome heat waves

In 2022, when the entire nation suffered from scorching heat, Dong-A Otsuka carried out a campaign to overcome heat waves together with the Ministry of the Interior and Safety (MOIS) and Korean Red Cross. Damages from heat-related illnesses are steadily growing due to climate change, but there is a lack of social awareness of how serious the issue is. Dong-A Otsuka has therefore established a private-government cooperation system and is engaging in close cooperation to contribute to enhanced citizen health by arousing citizens' attention to heat waves and informing citizens of the need to stay hydrated to prevent heat-related illnesses and necessary actions in case of a heat wave. In 2020, Dong-A Otsuka became the first private company in Korea to sign an MOU with the MOIS and Korean Red Cross to quickly carry out relief activities against summer heat waves and other disasters. It steadily engaged in cooperation and contributes to national efforts to solve social issues.

Financial Highlights

TOTAL ASSETS
(Unit: KRW billion)

1,731.5

TOTAL LIABILITIES
(Unit: KRW billion)

998.7

SALES
(Unit: KRW billion)

1,014.9

OPERATING PROFIT
(Unit: KRW billion)

37.9

R&D EXPENSE
(Unit: KRW billion)

6.4

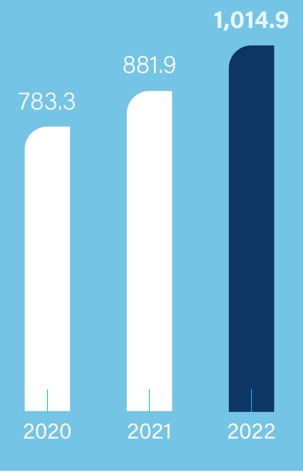
• Based on consolidated financial statements

TOTAL ASSETS
(Unit: KRW billion)

2.4%

Consolidated total assets of the Group increased by 2.4% year-on-year

SALES
(Unit: KRW billion)



1 KRW trillion

Consolidated sales the Group exceeded KRW 1 trillion

R&D EXPENSE
(Unit: KRW million)

2022 Sales

1,014,860.9

0.6 %

Invested 0.6% of sales in R&D

R&D Expense in 2022

6,423.4

• Including Dong-A Socio Holdings, Dong-A ST, Dong-A Pharmaceutical, ST Pharm, STgen Bio, Dong-A CHAMMED, Dong-A Otsuka, Yongma Logis, Soo Seok, Korea Sinto, DONGCHEONSU, ABEN E&C, DA Information

Non-financial Highlights

Employment

Percentage of full-time employees as of 2022 year-end stood at 95.7%

5,653	5,407	8.6
persons	persons	years
No. of employees	**No. of full-time employees**	**Average length of service**

Employee Diversity

Percentage of female employees at Dong-A Socio Holding, Dong-A ST, Dong-A Pharmaceutical, ST Pharm, STgen Bio, and DA Information exceeds 20%

1,111	19.7	26.2
persons	%	%
No. of female employees	**Percentage of female employees**	**Percentage of female employees taking childcare leave**

Workplace Safety & Health

There was zero fatal accident due to industrial accidents over the past three years

18.1	28.3	30
hours	hours	cases
Safety training hours per person	**Job training hours per person**	**No. of industrial accidents**

Social Contributions

Percentage of local talent of DONGCHEONSU is 61.3%, also contributing to the balanced development of local community

3,617	9.6	67.5
KRW million	%	%
CSR expenditures of Dong-A Socio Group	**CSR expenditures to operating profit**	**Percentage of local talent** (STgen Bio)

Environmental Management

Maintained upwards trends by recording 55.6%, 57.1%, and 70.5% in 2020, 2021, and 2022, respectively

156,740	1,886,439	70.5
tCO_2eq	Tons	%
GHG emissions	**Water consumption**	**Recycling rate of waste**

External Evaluation[1)]

Went up by one grade from BBB rating in 2021

A	A	GOLD
Rating	Rating	AWARD
MSCI ESG Ratings	**KCGS ESG Evaluation**	**LACP Spotlight Awards**

- Including Dong-A Socio Holdings, Dong-A ST, Dong-A Pharmaceutical, ST Pharm, STgen Bio, Dong-A CHAMMED, Dong-A Otsuka, Yongma Logis, Soo Seok, Korea Sinto, DONGCHEONSU, ABEN E&C, DA Information

[1)] Based on Dong-A Socio Holdings

GROUP OVERVIEW

01

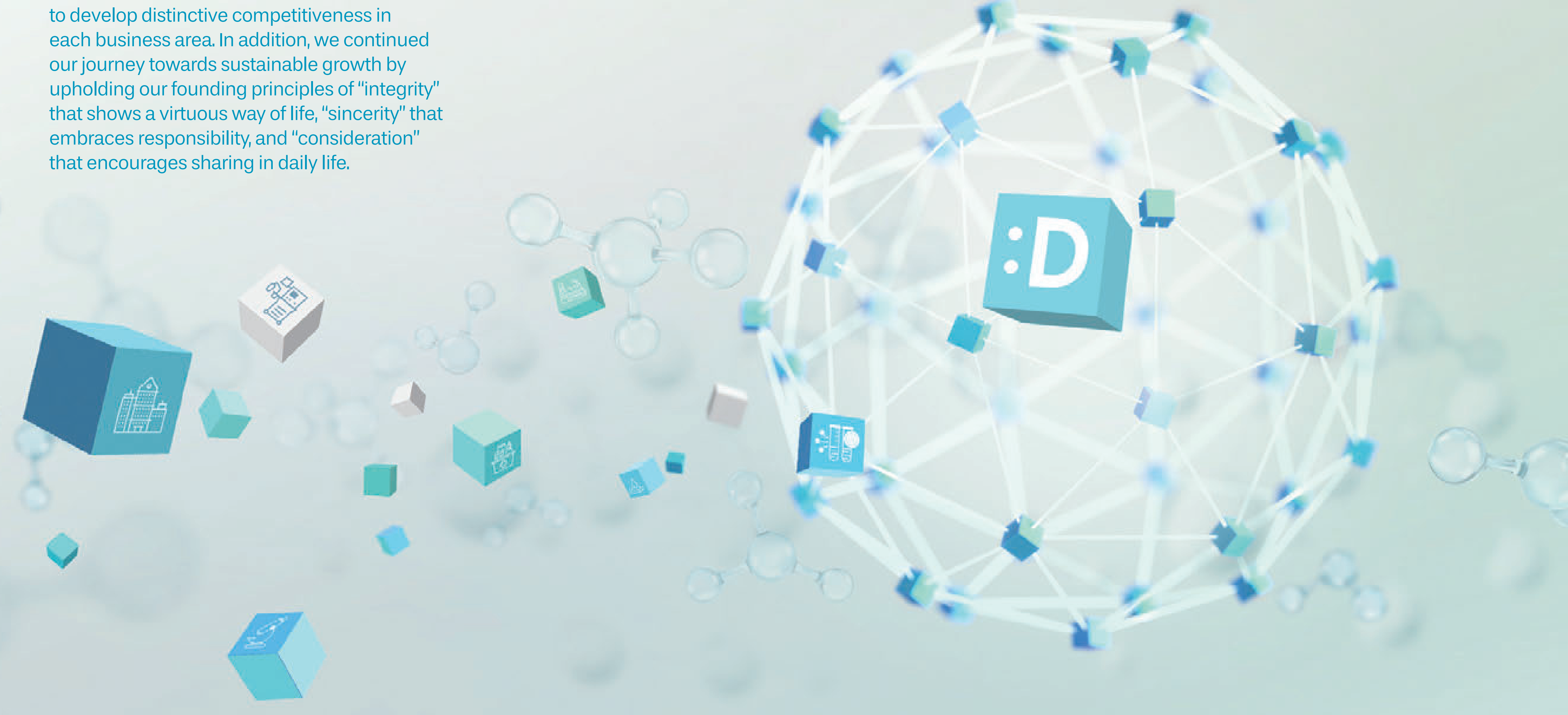
Dong-A Socio Group

Group Affiliates

Dong-A So

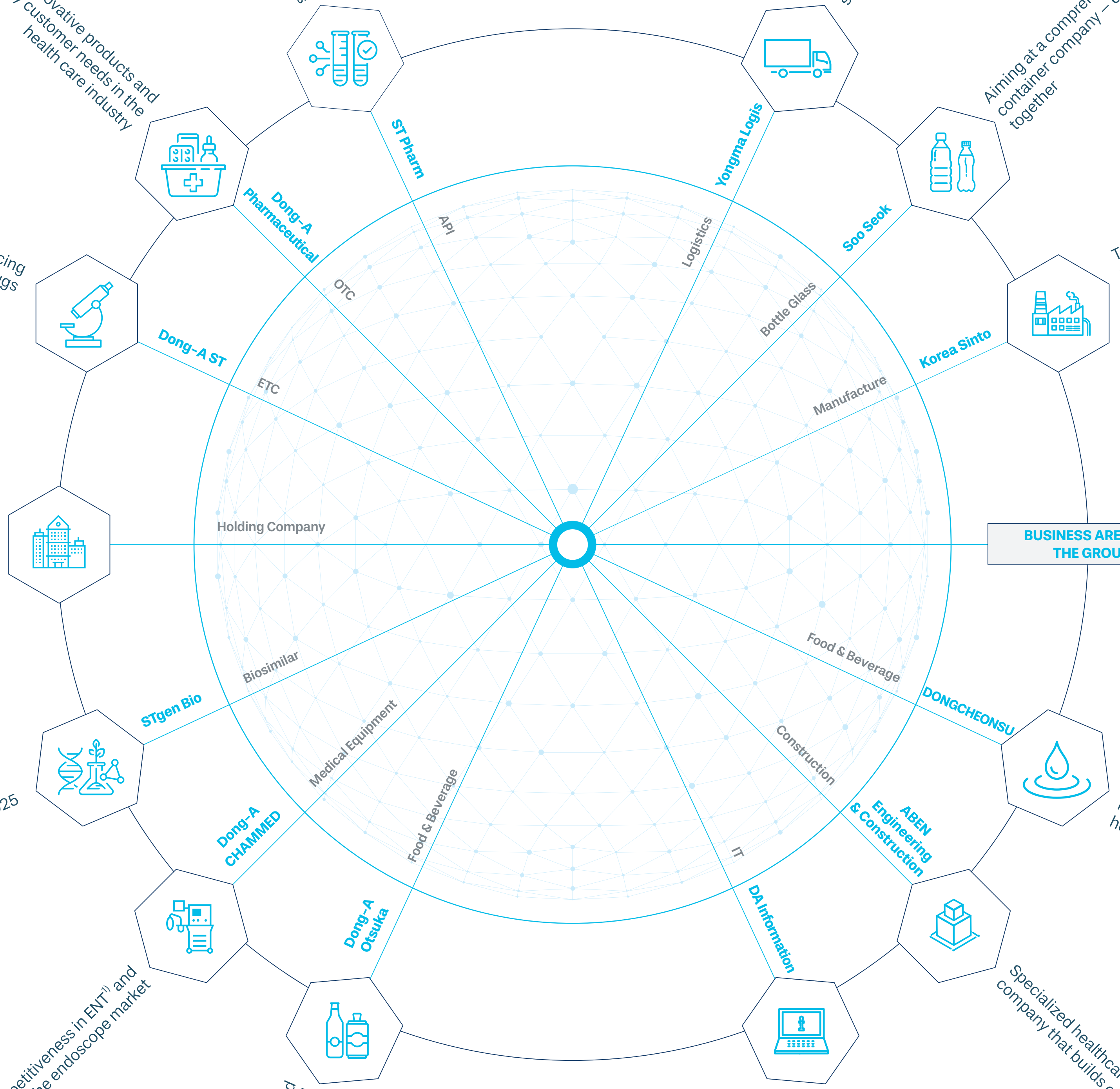
Guided by the direction towards sustainable value creation, set by Dong-A Socio Holdings as "Group Value Creator", 30 affiliates of Dong-A Socio Group in Korea and overseas do their businesses in such areas as pharmaceuticals, medical equipment, food & beverage, logistics, among others.

In 2022, celebrating the 90th anniversary of our founding, under the new slogan of "New Flow, New Shift", we made concentrated efforts to develop distinctive competitiveness in each business area. In addition, we continued our journey towards sustainable growth by upholding our founding principles of "integrity" that shows a virtuous way of life, "sincerity" that embraces responsibility, and "consideration" that encourages sharing in daily life.



GROUP VALUE CREATOR

DONG-A SOCIO HOLDINGS VISION SLOGAN → Dong-A Socio Holdings



Dong-A Socio Holdings
Holding Company

Dong-A ST
ETC
A leading pharmaceutical company advancing through the development of new global drugs

Dong-A Pharmaceutical
OTC
Development of innovative products and services that satisfy customer needs in the health care industry

ST Pharm
API
The innovative company saving lives

Yongma Logis
Logistics
A global SCM[2] leader in H&B[3] through specialized logistics services

Soo Seok
Bottle Glass
Aiming at a comprehensive packaging container company – eco-friendly, smiling together

Korea Sinto
Manufacture
Total engineering company building trust with pride in products and technology

DONGCHEONSU
Food & Beverage
Develop into the No. 3 company in the mineral water industry by expanding categories based on healthy water

ABEN Engineering & Construction
Construction
Specialized healthcare construction company that builds customer success

DA Information
IT
Customer value creation through IT services

Dong-A Otsuka
Food & Beverage
Company that takes the lead in functional beverages and foods based on distinctive products

Dong-A CHAMMED
Medical Equipment
Develop 1st tier competitiveness in ENT[1] and successfully enter the endoscope market

STgen Bio
Biosimilar
Develop into a global biopharma by 2025

BUSINESS AREA AND VISION OF THE GROUP AFFILIATES → **DONG-A SOCIO GROUP VISION SYSTEM**

GROUP VISION

To Be a Global Healthcare Player by Establishing Distinctive Competencies in Each Business Area

Continuous Challenge to Pursue Health and Happiness for Humanity

GROUP MISSION

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[1] ENT: Ear, Nose and Throat

[2] SCM: Supply Chain Management

[3] H&B: Health and Beauty

Group Affiliates

Based on the mission, "Continuous challenge to pursue health and happiness for humanity", Dong-A Socio Group operates business in diverse fields, including pharmaceuticals, medical devices, food & beverage, and logistics. To develop into a global pharmaceutical/bio company, Dong-A Socio Group is continually identifying new growth drivers through biopharmaceutical and innovative new drug development, while pursuing phased business expansion by moving beyond the previous focus on therapeutics to include medical services and digital healthcare. As of the end of 2022, Dong-A Socio Group consists of 30 affiliates in Korea and abroad (16 in Korea and 14 in seven overseas countries), including 8 subsidiaries of Dong-A Socio Holdings[1], with the holding company, Dong-A Socio Holdings, at the center. Their regions of operations include such diverse global markets us the U.S., Hong Kong, and China.

Dong-A Socio Group Network

● Head Office ● Research Center, Manufacturing Plant, Sub Business Site

Dong-A Socio Holdings
64 Cheonho-daero 13-gil,
Dongdaemun-gu, Seoul

Dong-A ST
64 Cheonho-daero 13-gil,
Dongdaemun-gu, Seoul

- Cheonan Campus
- Daegu Campus
- Songdo Campus

Dong-A Pharmaceutical
64 Cheonho-daero 13-gil,
Dongdaemun-gu, Seoul

- Icheon Plant
- Cheonan Plant
- Dalseong Plant
- Dangjin Plant

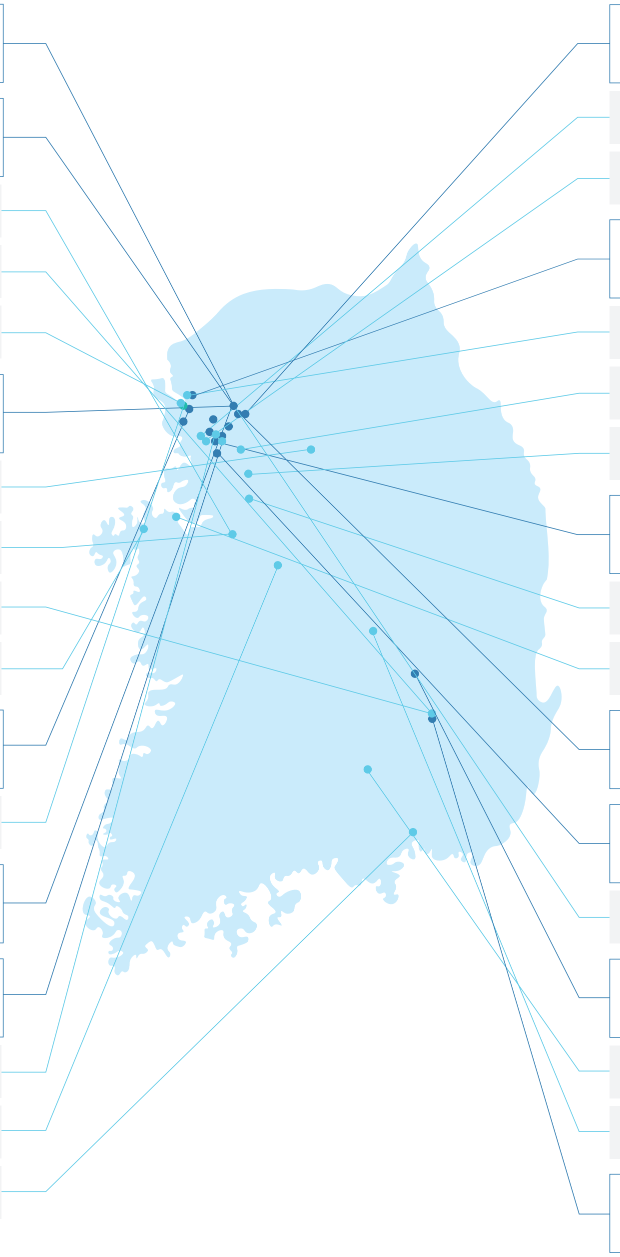
STgen Bio
45 Jisikgiban-ro, Yeonsu-gu, Incheon

- Main Campus

DA Information
3 Cheonho-daero 13-gil, Dongdaemun-gu,
Seoul

Dong-A Otsuka
96 Yeonhyeon-ro 1beon-gil, Manan-gu,
Anyang-si, Gyeonggi-do

- Anyang Plant
- Cheongju Plant
- Chilseo Plant



ST Pharm
7th Floor, 520 Yeongdong-daero,
Gangnam-gu, Seoul

- Sihwa Campus
- Banwol Campus/R&D Center

Yongma Logis
78 Arayuk-ro, Gochon-eup, Gimpo-si,
Gyeonggi-do

- Gimpo Logistics Center
- Singal Logistics Center
- Anseong Logistics Center

Soo Seok
620-5 Bakdal-dong, Manan-gu, Anyang-si,
Gyeonggi-do

- Anyang Plant
- Dangjin Plant

ABEN E&C
7th Floor, 520 Yeongdong-daero,
Gangnam-gu, Seoul

Dong-A CHAMMED
17 Gosan-ro 148beon-gil, Gunpo-si,
Gyeonggi-do

- Sub Business Site

DONGCHEONSU
1623-32 Munjang-ro, Hwabuk-myeon,
Sangju-si, Gyeongsangbuk-do

- Hapcheon Plant
- Songnisan Plant

Korea Sinto
13 Nongong-ro 91-gil, Nongong-eup,
Dalseong-gun, Daegu

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[1] Consolidated subsidiaries of Dong-A Socio Holdings: Dong-A Pharmaceutical, STgen Bio, Yongma Logis, Soo Seok, DONGCHEONSU, ABEN E&C, DA Information, DS Frontier

* This report includes financial/non-financial information on 12 Group affiliates in Korea that are associated with Dong-A Socio Holdings, among all Group affiliates, and also carry out actual business activities.

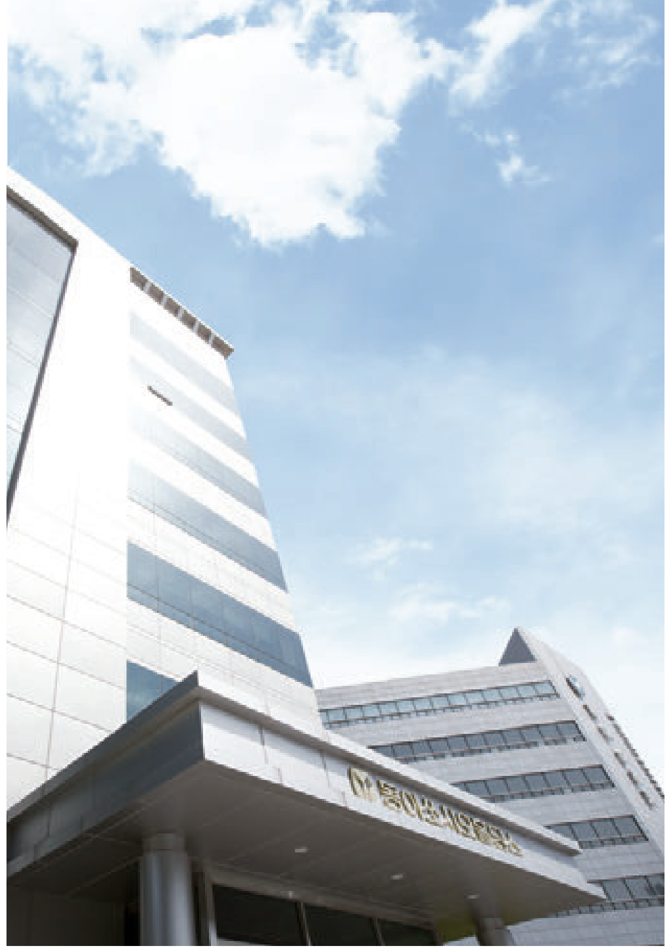
Dong-A Socio Holdings

Dong-A Socio Holdings is a holding company whose main business is the Group affiliate management and business management services. Its major income sources are dividends, brand royalties, income from business management services, and licensing-out income. In 2022, it recorded sales of KRW 60.2 billion and an operating profit of KRW 35.3 billion (based on separate financial statements).

In November 2022, in celebration of the 90th anniversary of the Group's founding, Dong-A Socio Holdings presented its role as the "Group Value Creator" that creates a blueprint for a future 100-year company to discover tangible and intangible values in the Group's business portfolio and grow together towards a single direction. Accordingly, it will provide support for discovering and nurturing talent, giving deep thought to matters and making quick decisions that is optimal for each Group affiliate, and executing decisions professionally and in detail. In addition, it will lead the Group's continued growth by strengthening the systematic connection among Group affiliates. Furthermore, it will maintain a stable core based on a sense of purpose and principles and encourage creative thinking to enable a disruptive edge to grow into a global pharmaceutical/bio group.

Dong-A Socio Group manages GHG emissions as an important index of carbon neutrality. Despite not having GHG emissions reporting and reduction obligations, four companies (Dong-A Socio Holdings, Dong-A ST, Dong-A Pharmaceutical, and ST Pharm) voluntarily received third-party verification on GHG inventory in 2019, which was followed by a third-party verification of all Group affiliates in May 2022. Dong-A Socio Holdings is making diverse efforts to reduce carbon emissions, including the replacement of disposable cups with multi-use cups at in-house cafes (effect of reducing around 4.8 tons in carbon emissions), adoption of eco-friendly vehicles for use as corporate vehicles, and establishment of more electric vehicle-charging stations.

To minimize safety risks with the enforcement of the "Serious Accidents Punishment Act", Dong-A Socio Holdings established seven major key factors of the safety and health management system. It also formed a subcontract and service company-related council to discuss service-related matters every month and also conducts a joint safety and health inspection every quarter.



Achieved sales of KRW 60.2 billion and operating profit of KRW 35.3 billion

60.2 KRW billion

Received the "Overall A Grade" in the ESG Evaluation by KCGS

A

Received the "Prime Minister's Award" as an outstanding family-friendly company

Please refer to the Sustainability Factbook for quantitative financial/non-financial performance.

Market Outlook and Future Strategy

For the next 100 years, going beyond the approaching 100th anniversary of the company's founding, Dong-A Socio Holdings will set a direction for corporate management and generate distinctive value even in the sharply-changing environment based on the two axes of stable core and disruptive edge. Stable core means to observe the management principle of acknowledging diversity and autonomy under a leadership system that places top priority on sustainability based on a sense of purpose of pursuing health and happiness for humanity, rather than concentrating only on short-term growth. Disruptive edge is a management policy that encourages creative thinking and encourages to create a company that values constant learning to develop expertise, a company that respects new, different thoughts, and a company that moves and collides and where failures are natural.

Dong-A ST

In 2022, Dong-A ST recorded sales of KRW 635.8 billion, a year-on-year increase of 7.7%, on the back of balanced growth of all business units. Its operating profit rose 97% year-on-year to reach KRW 30.5 billion, attributable to an increase in sales and licensing-out fees, achieving stable growth. In the ETC business, it recorded year-on-year growth of 4.5% in domestic sales on the back of growth of key items, including Growtropin. It recorded year-on-year growth of 10% in overseas sales as a result of increased product exports from the easing of blockades after the COVID-19 pandemic and favorable exchange rate effects. In the medical equipment business (excluding the diagnostics business), it achieved year-on-year growth of 20.3% through the expansion of new product line (based on separate financial statements).

Dong-A ST is investing more than 13% against sales in R&D every year, and chose key therapeutic areas (oncology, inflammatory disease, neurodegenerative diseases, endocrine system, digestive system, and musculoskeletal system) and is expediting innovative new drug development. As a result of these efforts, it completed a phase III global clinical trial of DMB-3115 (Stelara biosimilar), a flagship pipeline of Dong-A ST, in November 2022 and proved therapeutic equivalence with the original and confirmed safety in January 2023. As of April 2023, it is preparing drug approval application in the U.S. and Europe.

In 2022, Dong-A ST further strengthened its environmental and safety management systems. The Cheonan/Daegu Campus passed the ISO 14001 and ISO 45001 follow-up audits, and also established an energy usage and management process and received ISO 50001 certification, which is an international standard on energy management systems. The solar power plant at the Cheonan Campus commenced full operation, in addition to practical environmental improvement activities, such as replacing tape for box packaging with eco-friendly paper tape. In addition, Dong-A ST made the significant accomplishment of receiving top ratings (Overall A from KCGS, Overall AA from Sustinvest) in the Korean pharmaceutical industry in outside ESG evaluations.

Achieved sales of KRW 635.8 billion
(year-on-year growth of 7.7%)

635.8 KRW billion

R&D investment of KRW 84.8 billion
(13.3% against sales)

84.8 KRW billion

Received the "Overall A Grade" in the ESG Evaluation by KCGS
(for 2 years in a row, one of 5 pharmaceutical companies earned the A Grade among around 50 pharmaceutical companies)

A

Please refer to the Sustainability Factbook for quantitative financial/non-financial performance.

Market Outlook and Future Strategy

Dong-A ST plans to focus on R&D in the bio field, targeting anti-cancer (tumor) and immune system disease by using its strengths in the area of new chemical drugs. It also seeks to increase domestic ETC business sales by identifying new growth engines, such as digital therapeutic devices. In overseas business, it plans to complete the global clinical trial of DMB-3115 and apply for item approval in the US and Europe. In case of Suganon (Evogliptin), which is a new in-house developed drug and diabetes treatment, it plans to export finished products mainly to Southeast Asian countries, following API export to India, Russia, and Brazil, to expand its market. In addition, it will further improve ESG performance by practicing ESG management that it announced in January 2023.

Dong-A Pharmaceutical

Dong-A Pharmaceutical provides total healthcare solutions to customers in Bacchus, OTC, consumer healthcare, and derma business areas. In 2022, Dong-A Pharmaceutical achieved a record-high performance, recording sales of KRW 543.0 billion and an operating profit of KRW 67.1 billion, a year-on-year increase of 24.1% and 24.3%, respectively, on the back of increased sales of key products, including Bacchus, Orthomol, Panpyrin, Champ, Garglin, Tempo, and FATION, and efficient execution of marketing expenses (based on separate financial statements).

With the Social Value Committee performing central roles, Dong-A Pharmaceutical strived to spread ESG value in 2022 with "safety" as the slogan. It especially built and run an environmental, safety, and health management system to strengthen workplace environmental/safety management to the global level. As a result, all production plants (Icheon, Cheonan, Dangjin) received ISO 14001 and ISO 45001 certifications. In addition, Dong-A Pharmaceutical concentrated on preventing disasters and enhancing awareness by holding a competition on safety and health improvement suggestions and mock training on responding to serious disasters. It also focused on local community contribution activities. In June 2022, it held the "Endangered Animal Earth Defense Force" campaign together with Children's Garglin at the Seoul Grand Park zoo, participated in by a total 134 people that included Group affiliate employee families. To contribute to environmental protection and enhanced citizen health, Dong-A Pharmaceutical signed an MOU for "Healthy and Safe Journey Together" with Yongma Logis, the Korean Pharmaceutical Association, and local governments (Dangjin City, Wongju City) and is executing the pharmaceutical waste collection program.

For safe management of personal information that is collected through the company's online mall sales channel, it established information protection regulations and guidelines as well as an internal management plan in December 2022. As a result of continually strengthening contact point services for increased consumer trust, Dong-A Pharmaceutical received Consumer-Centered Management (CCM) certification seven straight times.

Achieved sales of KRW 543.0 billion, operating profit of KRW 67.1 billion
(Record-high performance)

543.0 KRW billion

All production plants received ISO 14001 and ISO 45001 certification

ISO 14001
ISO 45001

Received CCM certification
(for seven consecutive years)

7 years in a row

Please refer to the Sustainability Factbook for quantitative financial/non-financial performance.

Market Outlook and Future Strategy

To solidify its reputation as a consumer-centered healthcare-specializing company, Dong-A Pharmaceutical is focusing its capabilities on strengthening consumer communication, developing new products based on formulation technology and making R&D investments, establishing sales platform strategies that consider market environment changes, and developing products mainly for disease areas with high growth potential. In addition, it is focused on developing a "big brand" in the next-generation health functional food sector, increasing brands in the area of daily necessities, a new category, and establishing an R&D-based derma cosmetics brand portfolio and expanding exports. By securing distinctive production technologies and carrying out the custody business, it will demonstrate market competitiveness in various business areas and achieve balanced growth.

ST Pharm

ST Pharm is a CDMO-specializing company. Based on a global track record that it has built over around 30 years, beginning with the supply of a nucleoside API, it established an oligonucleotide-based therapeutics and mRNA CDMO infrastructure and is pioneering the gene therapy era. In 2022, it focused on improving skills to improve oligonucleotide production efficiency, improving clean work and reducing the production period through continuous production, and increasing yield by improving the synthesis process and purity. As a result, oligonucleotide-based therapeutics CDMO sales grew 69.7% over the previous year to record KRW 146.8 billion, exceeding KRW 100 billion for the first time. On the back of the oligonucleotide-based therapeutics CDMO sales growth, ST Pharm achieved sales of KRW 209.3 billion in 2022, indicating a year-on-year increase of 50.4%, thus accomplishing a record-high performance since its founding. Its operating profit substantially increased by 293.4% to reach KRW 17.9 billion (based on separate financial statements).

ST Pharm is making continuous efforts to establish a sustainable production process that considers the environment and safety. As a result of these efforts, the Sihwa Campus received a Silver Medal in an Ecovadis evaluation in 2017, and the Banwol Campus also received a Silver Medal in 2022. The two campuses both earned a high rating in a global ESG evaluation that comprehensively assesses the environment, human rights, ethics, and sustainable procurement. This is expected to enable ST Pharm to further strengthen business with global pharmaceutical/bio companies that place importance on ESG.

In August 2022, the Banwol Campus Oligonucleotide Manufactory became the first in Asia to receive Current Good Manufacturing Practice (cGMP) certification from the US FDA. In particular, it was approved for no action indicated (NAI), the top rating that does not have any matters pointed out or require the submission of additional materials, signifying that ST Pharm's drug manufacturing and quality management capabilities received recognition as being at the global top level.

Achieved sales of KRW 209.3 billion
(year-on-year growth of 50.4%)

50.4% ↑

Received phase 2a clinical trial IND approval for "STP-0404," an HIV-1 treatment drug

STP-0404

Banwol Campus received the "Silver Medal" in an Ecovadis evaluation

ecovadis

Please refer to the Sustainability Factbook for quantitative financial/non-financial performance.

Market Outlook and Future Strategy

The oligonucleotide-based therapeutics market is expected to grow to around KRW 22.4 trillion in 2026[1]. In response, ST Pharm established more oligonucleotide building facilities in 2022, through which it became the global No. 1 oligonucleotide-based therapeutics CDMO[2]. By completing the construction of its second oligonucleotide building in 2026, ST Pharm plans to solidify its leading position. Imetelstat, a new anti-cancer drug, succeeded with a phase III clinical trial on blood cancer and is expected to expand to cover various cancers as it has become possible to deliver oligonucleotide drugs to organs other than the liver/brain through AOC[3]. Equipped with the exclusive, key mRNA platform technology, ST Pharm will further enhance mRNA CDMO technology to rise as the world's only mRNA CDMO that can mass produce GMP, including lipid for LNP production.

[1] Source: "Research and Markets," a global market research institution

[2] Based on maximum production capacity

[3] AOC: Antibody Oligonucleotide Conjugation

STgen Bio

As a result of quantity reduction in contracts of affiliates and delays in Clients' project development timeline, STgen Bio recorded sales of KRW 27.9 billion in 2022, indicating a decrease from the previous year. It recorded a deficit in operating profit due to a decline in sales and an increase in the cost rates. (Based on separate financial statements) To increase sales and operating profit in 2023, STgen Bio is working towards improving operational efficiency, enhancing production capabilities, and securing new contracts to expand our global customer base. To solidify its growth foundation, STgen Bio is preparing for FDA/EMA inspections and striving to achieve global standards in quality.

In 2022, STgen Bio received both ISO 14001 and ISO 45001, which are international certifications for environmental and occupational health & safety management systems, respectively. This achievement was recognized externally as a demonstration of their global management capabilities. These certifications are given to companies that demonstrate the ability to prevent industrial accidents and environmental issues based on international standards for environmental and occupational health & safety management systems and systematically manage relevant risks.

To grow with the local community and realize shared values, STgen Bio is creating many quality jobs for local talent and continually carrying out local community volunteering activities. As of the end of 2022, local talent recruitment accounts for 68% of newly hired employees. In addition, employees voluntarily participated in the "briquette-sharing volunteering activity" that was conducted in connection with the local community as part of STgen Bio's active efforts to support marginalized groups in the local community.

Received ISO 14001 and ISO 45001 certifications

ISO 14001
ISO 45001

Local talent accounted for 68% of newly hired employees in 2022
(year-on-year increase of 11%)

11% ↑

Established a CDO[1]/CMO[2] integrated service platform

[1] Contract Development Organization

[2] Contract Manufacturing Organization

Please refer to the Sustainability Factbook for quantitative financial/non-financial performance.

Market Outlook and Future Strategy

The pharmaceutical market is continuing to grow, with the biopharmaceutical sector driving market expansion, especially due to its exceptional target specificity and low side effects. The demand for antibody drugs is also steadily increasing, projected to grow at an average annual rate of 10% until 2026. The global CDMO market is also expanding. Although the cell/gene therapy market is still relatively small, it is consistently showing growth as R&D activities intensify. As a result, the demand for CDMO services in this area is expected to increase further. In response to these trends, STgen Bio is enhancing production capacity through the expansion of DS facilities to increase its contract manufacturing of antibody drugs and establishing business strategies by exploring new modalities, such as cell and gene therapies, to strengthen its business outlook.

Dong-A CHAMMED

CHAMMED changed its company name to Dong-A CHAMMED in December 2022. Dong-A recorded a year-on-year increase of 25.3% in sales to reach KRW 11.95 billion in 2022. In the domestic market that experienced a downswing due to COVID-19, the company saw a year-on-year increase of 41.2% in sales to record KRW 6.31 billion, attributable to the opening of respiratory system-specializing clinics in accordance with government guidelines as well as purchase recovery and increased opening of ear-nose-throat (ENT) hospitals/clinics. In overseas markets, the company achieved sales of KRW 5.63 billion, a year-on-year rise of 11.3%, as a result of increased exports to Kazakhstan and Indonesia. In addition, sales of new FHD-level imaging equipment for high-definition diagnosis and surgery rose 88% from the previous year and contributed to increased sales. This also signifies a stable generation shift in the camera system sector (based on separate financial statements).

In 2022, Dong-A CHAMMED completed development of the stroboscope, previously depended on imports, and released it, thereby succeeding localization. In November, Dong-A CHAMMED's main product, the "ENT Workstation", was chosen as a global top-tier product certified by the Ministry of Trade, Industry and Energy and KOTRA, thus receiving recognition for technological prowess and global competitiveness.

Europe's medical equipment certification regulation is changing from the Medical Device Directive (MDD) to Medical Device Regulation (MDR) for the purpose of improving medical equipment stability. Accordingly, Dong-A CHAMMED changed its technical document in line with MDR standards in November 2022 and completed the MDR shift for one in vivo medical camera & endoscopic. In 2023, it will conduct an MDR shift evaluation on an ENT medical treatment device (flexible video scope) and in vivo medical camera, and also plans to receive a transition evaluation in line with the MDR standards of Medical Devices Regulation (EU) 2017/745 in case of its quality management system. In response to the global medical equipment Regulatory Affairs (RA), it will secure a medical equipment quality management system that meets the standards and an authentication certificate and also expand the surgery imaging line.

Sales of new FHD-level imaging equipment for high-definition diagnosis and surgery rose by 88%

88% ↑

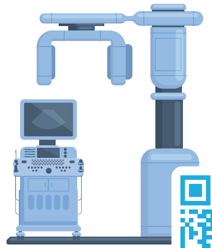
"ENT Workstation" chosen as a global top-tier product in 2022 (certified by the Ministry of Trade, Industry and Energy and KOTRA)

Completed the MDR shift for "one in vivo medical camera"

Please refer to the Sustainability Factbook for quantitative financial/non-financial performance.

Market Outlook and Future Strategy

Dong-A CHAMMED plans to become the first medical equipment company in Korea to develop and receive certification for a nasopharyngo-laryngoscope (flexible video scope) and new ENT workstation in 2023. The nasopharyngo-laryngoscope (flexible video scope) is an in-house developed product that completed a comparative clinical evaluation on global company products and 4K camera system and is planned for entry into other areas in addition to ENT. It will be newly adopted for audiometers/ultrasound diagnostic equipment and is expected to contribute to product lineup expansion and increased sales. In case of overseas markets, in accordance with nurturing of the health industry and localization policies of different countries, there will likely be increases in purchase of local medical equipment but restricted imported product purchases. DONG-A CHAMMED will respond by establishing a supply diversification strategy that covers OEM, ODM, and SKD.



Dong-A Otsuka

In 2022, Dong-A Otsuka recorded sales of KRW 341.8 billion, a year-on-year increase of 16.3%, and an operating profit of KRW 20.2 billion, an increase of 117.3%. The company expanded relevant organizations in response to distribution environment changes, including the Online Business Department, and focused on diversifying sales channels and nurturing online channels, resulting in a year-on-year increase of KRW 20 billion in online channel sales that contributed to overall sales growth (based on separate financial statements).

In 2022, POCARI SWEAT's sales rose KRW 36.2 billion over the previous year, an outcome of focusing on increasing its market share through new consumption generation as a beverage for rehydration and heat-related illness prevention as well as active responses to consumption pattern changes, such as increased outdoor activities in the transition to the endemic phase. The zero-calorie beverage market is significantly growing amid increased public interest in "healthy pleasure", which means to pursue sustainable healthy habits and the enjoyment of eating. Dong-A Otsuka's leading zero-calorie beverage brand, Narangd Cider, made steady efforts for market expansion, including product line-up expansion and active marketing that targeted consumers with high brand loyalty. As a result, sales went up KRW 10.8 billion over the previous year to record KRW 39.2 billion. Narangd Cider has been continuing sales growth of around 10% every year since 2016. Sales has been considerably rising since 2019, breaking the sales record every year.

To minimize the environmental impact of the business operation process, Dong-A Otsuka is actively making product improvements and adopting eco-friendly processes. It made PET more lightweight and increased label-free products to reduce the generation of waste plastics and replaced sales vehicles with eco-friendly vehicles (16 hybrid and 5 electric vehicles in 2022) to reduce GHG emissions, and plans to continually replace sales vehicles around the nation with eco-friendly vehicles.

Achieved sales of KRW 341.8 billion and an operating profit of KRW 20.2 billion (record-high performance)

341.8 KRW billion

Narangd Cider sales reached KRW 39.2 billion (year-on-year increase of KRW 10.8 billion)

10.8 KRW billion ↑

Chosen as the Family-Friendly Certified Company by the Ministry of Gender Equality and Family (for 15 consecutive years)

15 years in a row

Please refer to the Sustainability Factbook for quantitative financial/non-financial performance.

Market Outlook and Future Strategy

The distribution environment is rapidly evolving amid changes in consumption trends due to COVID-19. To achieve both quantitative and qualitative growth by responding to the changing environment, Dong-A Otsuka will restructure its organization to be more efficient and expedite change and innovation. It aims to develop into a health food company that targets KRW 450 billion in sales in 2027 by developing new growth drivers through various efforts, including enhancing the brand value of POCARI SWEAT and Narangd Cider, strengthening corporate competitiveness by securing new routes such as the restaurant business and food service/snacks, launching new products such as new forms of beverages and health functional food, and implementing new businesses. In addition, it will actively practice ESG management and make utmost efforts to fulfill corporate social responsibilities.

Yongma Logis

Even amid continued internal and external difficulties, including the arrival of the three high era of high exchange rates, interest rates, and prices caused by the Russia-Ukraine war and global supply chain issues as well as an outflow of logistics personnel as a result of an increase in large distributors and the delivery industry, Yongma Logis focused on external growth, such as attracting new shippers, in 2022. As a result, it recorded sales of KRW 345.3 billion, a year-on-year increase of around 13.4%, and an operating profit of KRW 6.58 billion (based on separate financial statements).

Yongma Logis tracks and manages GHG emissions by logistics process, including storage, transport, and shipping, through its carbon emissions information system. In addition, it is continuing systematic emissions reduction activities by establishing emissions goals and plans, and is building a foundation as a green logistics company that minimizes environmental impact by engaging in low-carbon logistics activities. Aiming to achieve zero serious accidents, Yongma Logis is raising employee awareness of safety and encouraging relevant action by building a safety and health compliance system and holding a safety and health cultural festival and competition. It is also actively responding to global shippers' supply chain management by establishing a system for compliance with safety and health obligations.

In July 2022, Yongma Logis established an industry-academia cooperation on "nurturing global logistics industry talent" with Induk University to nurture key talent in the logistics industry. It plans to operate an internship program to nurture experts in the smart logistics industry and a student employment support program using Yongma Logis' network, through which it seeks to achieve early recruitment and nurturing of outstanding talent and contribute to increased youth employment.

Achieved sales of KRW 345.3 billion
(year-on-year increase of 13%)

13% ↑

Named "Best in B2B" in the parcel/package delivery service evaluation by the Ministry of Land, Infrastructure and Transport in 2022

Joined the "Kind Workplace" organized by the Community Chest of Korea
(Regular donation campaign where an agreed donation amount is automatically collected from salaries every month)

Please refer to the Sustainability Factbook for quantitative financial/non-financial performance.

Market Outlook and Future Strategy

A tough business environment is expected owing to high prices and interest rates amid continued high uncertainty and volatility. However, Yongma Logis is preparing a foundation to grow into a cutting-edge logistics company. To this end, it will expand its infrastructure by building a new hub center and establish a next-generation logistics system. It will also increase sales by using its strengths as a temperature-controlled logistics company and diversify its business to include bio logistics services. Together with these efforts for substantial growth, Yongma Logis will engage in more active ESG management for sustainable growth, such as adopting electric trucks, improving the organizational culture, and carrying out local community contribution activities.

Soo Seok

Soo Seok is a comprehensive packaging container company that produces glass bottles, PET, and corrugated cardboard boxes, among others. With 50-year tradition know-how and high quality as its strengths, Soo Seok has various clients, including Dong-A Pharmaceutical, Dong-A Otsuka, and Pulmuone. In 2022, Soo Seok recorded sales of KRW 105.1 billion, a year-on-year decrease of KRW 7.6 billion, due to impact from the COVID-19 pandemic. Its operating profit indicated a year-on-year decline of KRW 6.3 billion owing to increased energy and raw material prices caused by international state of affairs (based on separate financial statements). In October 2022, the ColorPack Unit Plant that was previously located in Seoul and Yongin was relocated and integrated into the Dangjin Induspark industrial complex by investing around KRW 9.2 billion. This integration is expected to increase work efficiency and generate management synergy. Soo Seok aims to increase production by adopting additional facilities and secure business stability.

Soo Seok established a policy that considers the environmental impact that may arise during the business process and carries out environmental pollution minimization and climate change response activities. Since 2019, it has been managing GHG emissions and receiving third-party verification, and makes obligatory emissions reports to the Korea Environment Corporation. As a result of making efforts to reduce GHG emissions through the GHG allocation system and target management system, it reduced GHG emissions by 1,282 tons compared to 2021.

Soo Seok also strives to fulfill corporate social responsibilities. It conducts internal evaluations and analyses to meet ISO 26000 standards, and carries out activities to develop the organizational culture and local community, including organizational assessments, Junior Board, Together Day, and the obligatory volunteer activity system. This has led to its selection as a Family-Friendly Certified Company in 2022. Soo Seok will continue family-friendly management so that employees can maintain balance between work and personal life. In addition, it established ABMS for compliance management and bribery risk management, in addition to nurturing internal auditors and forming and operating an organization for bribery risk management.

Recorded sales of 310 million Bacchus D bottles

310 million

Built the anti-bribery management system (ABMS)

ABMS

Chosen as a "Family-Friendly Certified Company" by the Ministry of Gender Equality and Family

Please refer to the Sustainability Factbook for quantitative financial/non-financial performance.

Market Outlook and Future Strategy

Soo Seok is making utmost efforts to maintain its leading position in the packaging container market. It aims to reduce GHG emissions by replacing the bunker C fuel oil melting furnace with an oxy melting furnace when the Glass Unit is relocated, and is reviewing the adoption of a photovoltaic power generation facility and furnace waste heat generator on the roof of its product warehouse. In addition, Soo Seok plans to reduce use of plastics by making its PET products lightweight and practice carbon reduction by developing eco-friendly products, such as label-free products and bio PET. 2023 will be an important year owing to internal and external issues, such as unstable oil prices, a rise in raw material costs, and relocation of the Glass Unit. By having units located in a single region, Soo Seok seeks to generate management synergy, improve work efficiency, and increase production.

Korea Sinto

In 2022, Korea Sinto's foundry equipment business indicated a sluggish performance due to a downswing in domestic investments, but its shot blast machine business received a new shot blast machine order for POSCO E&C's electrical steel and successfully received orders for nine units of the wire surface treatment machine SND-2, which is the machine's record performance, and thus maintained growth as a result of strengthening new product sales promotion activities. The maintenance business did not achieve its goal due to a reduction in foundry-related maintenance cases, but recorded increased sales among key clients by regularly visiting clients and submitting inspection reports. The abrasive business strived to improve productivity and cut costs despite tough circumstances, including a reduced market, reduced exports, and increased raw material prices, and exceeded its sales goal. As a result, sales grew 15.4% over the previous year to reach KRW 31.6 billion and operating profit reached KRW 500 million in 2022 (based on separate financial statements).

In 2022, Korea Sinto established a safety policy to build zero-accident workplaces and carried out serious accident prevention activities by building an occupational safety and health system together with the Daegu Gyeongbuk Industrial Safety Association. In addition, Korea Sinto nurtured 10 supervisors, including production site managers, and carried out activities for internalization of a culture of safety, such as designating a Safety Inspection Day and holding safety events, as part of efforts to prevent accidents and improve the work environment.

To strengthen competitiveness of the root industry, which is the foundation of a nation's manufacturing industry, Korea Sinto contributed to automation, cost reduction, and quality improvements while striving to provide ideas on customers' facility operation rationalization. It supplied dust collectors and small dust collectors for work environment improvement to steel and automotive parts companies that are exploring ways to achieve net zero and reduce environmental impact, and also installed second filters to improve dust collector efficiency to support customers' establishment of environmental pollution prevention measures. It also established an environmental pollution prevention monitoring system at an abrasive plant as a way to provide better customer services.

Achieved sales of KRW 31.6 billion
(year-on-year increase of 15.4%)

31.6 KRW billion

Achieved an operating profit of
KRW 500 million
(year-on-year increase of 48.7%)

48.7% ↑

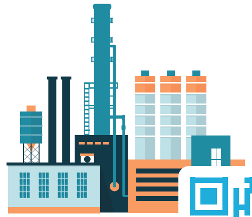
GHG emissions stood at 6,662 tCO_2-eq
(year-on-year reduction of 50 tCO_2-eq)

50 tCO_2eq ↓

Please refer to the Sustainability Factbook for quantitative financial/non-financial performance.

Market Outlook and Future Strategy

The automobile industry is anticipated to slightly grow but new demand will be partially restricted by high prices/high interest rates. The steel industry is expected to experience difficulties owing to a rise in raw material costs and shortage of personnel amid slower increases in production due to the economic downturn. Korea Sinto's foundry equipment business will supply automated facilities, including self-hardening equipment and automatic molding system, while the shot blast machine business will increase the supply of wire surface treatment machines and standard machines in response to net zero and environmental improvement investments. The maintenance business will raise sales by suggesting prevention/preservation inspection activities to customers for work environment and facility improvements, while the abrasive business will increase sales and exports by gaining trust from key clients through facility inspections.



DONGCHEONSU

In 2022, DONGCHEONSU recorded sales of KRW 32.9 billion, a year-on-year increase of 2.2%, on the back of increased sales of "Cheonnyeonsu", its mineral water brand. This is mainly attributable to efforts to increase ecommerce market sales of the Cheonnyeonsu product, resulting in year-on-year growth of 32% in relevant sales. Amid a wide-spreading zero calorie beverage trend, sales of carbonated water rose 13.9% over the previous year to reach KRW 5.8 billion. Notwithstanding, a rise in international oil prices and subsidiary material prices caused by the Russia-Ukraine war and the resulting increase in the rate of cost to sales led to a year-on-year drop of 51.8% in operating profit to KRW 1.1 billion (based on separate financial statements).

As the eco-friendly consumption trend spreads, lightweight beverage containers and label-free products that can be easily recycled are becoming a trend in the food and beverage market. In 2021, DONGCHEONSU launched a Cheonnyeonsu label-free product (500 ml, 2 L) that does not generate plastic wastes by removing PET bottle-attached labels and can be easily separated for discard. Since then, it has been increasing production and expanding target products. As a result, sales of the label-free product in 2022 significantly rose 94% over the previous year to reach 54,400,000 units. DONGCHEONSU also launched a new 1 L label-free mineral water product and sold 394,000 units.

DONGCHEONSU is managing GHG emissions to take part in tackling climate change. The Songnisan Campus reduced electric power use by 28,981 kw in 2022 by carrying out voluntary electric power demand reduction activities. In addition, it collected activity materials on GHG emission sources in workplaces to more accurately calculate and systematically manage emissions. It will also make diverse efforts to build a GHG inventory.

Achieved sales of KRW 32.9 billion

32.9 KRW billion

"Cheonnyeonsu" sales rose 32%
(as a result of increasing sales in the ecommerce market)

Increased production of the "Cheonnyeonsu" label-free product
(year-on-year increase of 94%)

94% ↑

Please refer to the Sustainability Factbook for quantitative financial/non-financial performance.

Market Outlook and Future Strategy

As the mineral water market continues to grow, online-centered price competition will likely grow in intensity. The sudden rise of zero calorie carbonated drinks is leading to consumer attrition. To strengthen its competitiveness in the mineral water market, DONGCHEONSU will make containers distinctive, including can products, add an eco-friendly label-free 1 L product, and continually expose the Cheonnyeonsu product. In addition, it will increase its market share by launching "Laqua", a carbonated water product that targets ecommerce, increasing "Rein Wasser" flavored products, and implementing the differentiation strategy, "carbonated water made of mineral water." It will also achieve its goal of launching beverage OEM production (can, PET) at the third Sangju Plant in the second quarter of 2023 to accomplish continued growth and increased added value.

ABEN Engineering & Construction

ABEN Engineering & Construction (ABEN E&C) recorded sales of KRW 64.7 billion and an operating profit of KRW 1.54 billion in 2022 by increasing the proportion of external business sales and stably executing construction for the Group affiliates. In terms of internal projects, ABEN E&C successfully completed the construction of Dong-A ST's Oral Solid Dosage (OSD) plant in Songdo and extended ST Pharm's Banwol Plant oligonucleotide building. It is currently working on ST Pharm's Banwol Plant Innovation Center and Building D extension, construction of DONGCHEONSU's third plant, and construction of the Dangjin Plant of Soo Seok's Glass Unit, and targets completion in 2023. As a result of operating a professional sales organization starting in 2022 for external business expansion, ABEN E&C handled extension of Korea Arlico Pharm's GMP plant in Jincheon, construction of Jaewoo Distribution's crop cultivation facility in Icheon, and construction of a meat processing plant in Yongin of Soonwoori, a subsidiary of Harim. In 2022, external business sales grew 307% over the previous year to total KRW 22.8 billion, accounting for 40% of overall sales. As of the end of the year, ABEN E&C secured an order receipt balance of KRW 85.2 billion, thus laying the foundation for continued growth (based on separate financial statements).

ABEN E&C focused on the social (S) sector in 2022 in implementing ESG management, and concentrated on nurturing workplace safety management employees and changing the organizational culture. Leading example incudes the establishment of its safety and health goal, the "Abengers Safety Management Vision" based on the "1% instruction, 99% check" slogan, and also pilot adopted and is operating an Internet of Things(IoT)-based field safety management system. In addition, it is preventing industrial accidents by standardizing safety and health, distributing a working-level guidebook, conducting field safety inspections at least twice a month, and directly managing high-risk tasks. To nurture experts, ABEN E&C supported the strengthening of capabilities of junior personnel to raise their expertise and implemented the "Abengers", an internal mentoring system, to improve construction competitiveness. It also continued rounds on the field and held "man to man" interviews with field personnel. It also improved the organizational culture by holding "Aben In One", a workshop for harmony between new and existing employees.

Achieved sales of KRW 64.7 billion (external business sales accounted for 40%)

64.7 KRW billion

Implemented the "Abengers & Aben In One" system (established a HRD system and promoted workplace harmony)

Adopted the "Abengers Safety Management Vision" (IoT-based field safety management system)

Please refer to the Sustainability Factbook for quantitative financial/non-financial performance.

Market Outlook and Future Strategy

ABEN E&C seeks to steadily expand its external business. To this end, it will strengthen order-receipt activities based on key capabilities, realize the economy of scale, give shape to new businesses, and diversify its business. At the time of exceeding sales of KRW 100 billion, which is ABEN E&C's goal for 2023, it seeks to have its external sales account for at least 50% of overall sales, enter the top 200 in subcontracting, and grow into a developer that takes charge of the entire process that ranges from project identification to planning, investment, finance, construction, and operation. Starting in 2025, ABEN E&C seeks to provide one-stop construction services that cover planning, approval, construction, and interior and also advance into the real estate development business, aiming to enter the top 100 in subcontracting.

DA Information

DA Information provides IT services, including IT advancement of production facilities, to various Dong-A Socio Group affiliates in various business areas including pharmaceutical, logistics, food & beverage, manufacturing, and construction, and also supports strengthening of quality GMP and stable, efficient work. It is increasing efforts to carry out external projects based on the capabilities and experience that it gained within the Group, and recorded sales of KRW 500 million in 2022. It posted sales of KRW 17.9 billion, a year-on-year increase of 22%, in 2022, and an operating profit of KRW 580 million, a year-on-year rise of 107% (based on separate financial statements).

Placing top priority on employee happiness, DA Information is carrying out various organizational culture improvement activities, based on the "Work (DA) :D diversely" motto, to create a free, horizontal work environment. Leading activities include support for an overseas benchmarking team workshop, adoption of a free desk system without any designated seats, and operation of an internal community site (Woori) for a horizontal culture and transparent information-sharing.

DA Information is also steadily conducting IT-based social contribution activities by using its business capabilities. In 2016, it developed the health management application "PWS" for Prader-Willi Syndrome (PWS) patients and applied it to a clinical site. Using this application, families directly record/manage the status of children with PWS, based on which they can check schedules for treatment and confirm information, such as checking affected parts. The company created the "Share Me" application in 2017 which allows the user to check tuberculosis examination results in real time and donated it to the Korean National Tuberculosis Association. Moreover, it developed "ZARADA", a mobile administration management application for the children prescribed with Growtropin, a human growth hormone, in 2019.

Achieved sales of KRW 17.9 billion (year-on-year growth of 22%)

17.9 KRW billion

Achieved an operating profit of KRW 580 million (year-on-year increase of 107%)

107% ↑

Chosen again as the "Family-Friendly Certified Company" by the Ministry of Gender Equality and Family

Please refer to the Sustainability Factbook for quantitative financial/non-financial performance.

Market Outlook and Future Strategy

DA Information is strengthening its internal capabilities to respond to the sharply-changing IT environment, and is striving to bring together the capabilities it developed while providing IT services within the Group with various industries. It plans to focus on spreading ERP within the Group, providing next-generation services, and securing an unrivaled position in the area of GMP-IT and Computer System Validation (CSV). In particular, it will advance businesses within the Group based on the references it secured and strengthen services to support the Group's new businesses, including the digital healthcare business, thereby expanding its business areas and establishing a foundation for joint growth with all Group affiliates.

SUSTAINABILITY PERFORMANCE

02

Our Foundation

Our Value

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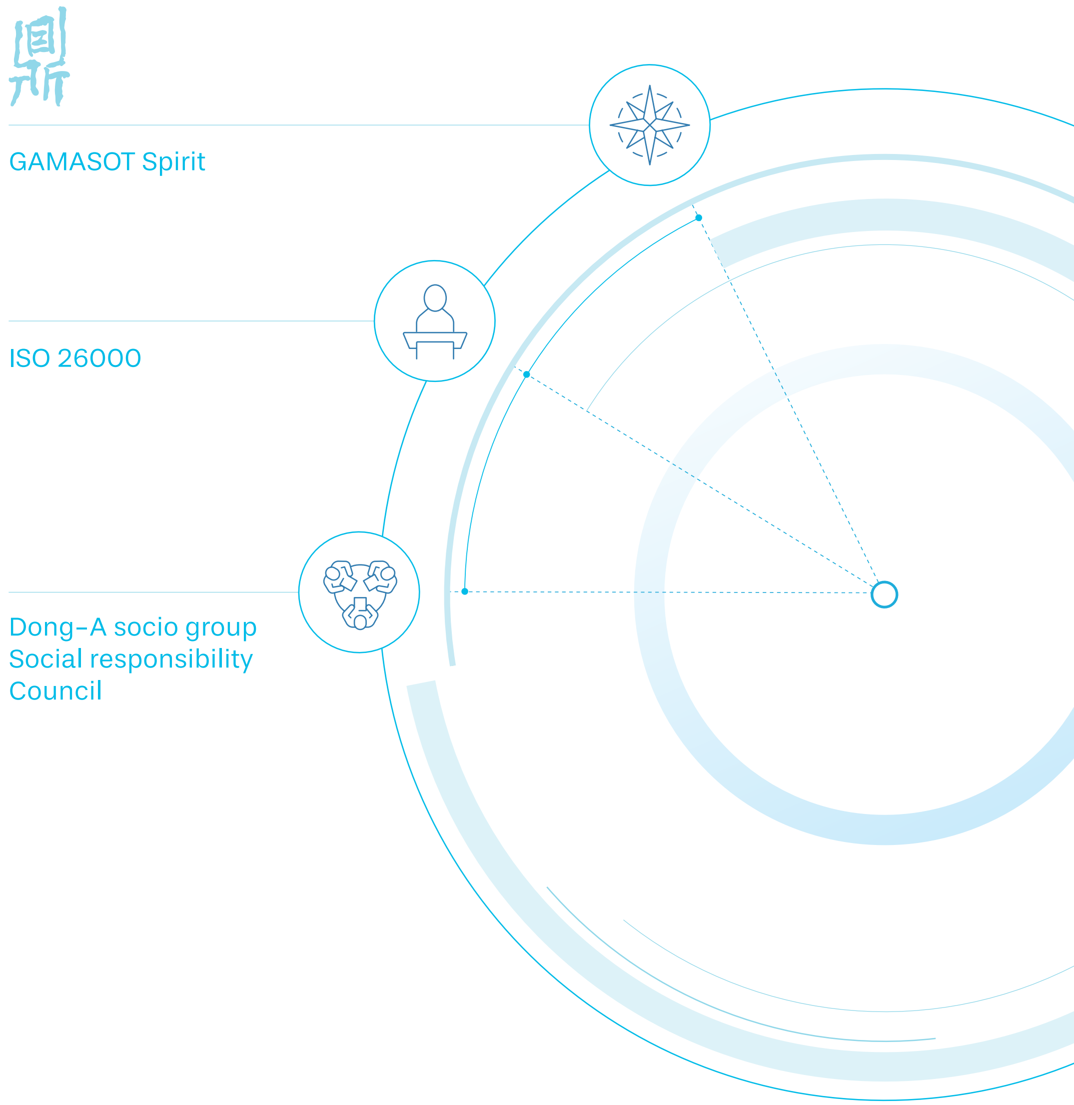
Our Found

Leveraging our mission to take "continuous challenge to pursue health and happiness for humanity" as a goal and tool for achieving sustainable growth, Dong-A Socio Group is implementing social responsibility management both at the Group level and by each Group affiliate. To this end, we have built social responsibility management system which meets global standards, based on which we make value investment in responsible development and sustainable future.

In 2022, we set clear direction of our social responsibility management by declaring the full implementation of human rights management, conducting organizational culture diagnosis of the Group affiliates, establishing GHG inventory at the Group level, while also generating tangible outcomes. We believe that these will serve as a solid ground based on which we will achieve sustainable growth with all our stakeholders.



Our Foundation

To ensure sustainable growth and maximize corporate value, Dong-A Socio Group has a governance system in which the BOD deliberates and decides on important matters regarding corporate management policy and business execution and carries out efficient management activities. It makes reasonable management decisions by internalizing a financial/non-financial risk management system.

As issues that impact corporate management steadily become diverse and demands for companies to fulfill social responsibilities as members of society grow stronger, social responsibility management that considers ESG (Environmental, Social, Governance) has become an essential factor for corporate sustainability. Based on the "GAMASOT" spirit of cherishing people, who are the starting point of the company, and treating them warmheartedly, Dong-A Socio Group implements social responsibility management, in which all Group affiliates realize their professional capabilities in an upright manner and fulfill responsibilities as a corporate citizen. We operate the Dong-A Socio Group Social responsibility Council (DSC) that consists of Group affiliate CEOs for focused implementation and development of social responsibility management of all Group affiliates, and are internalizing the Group's social responsibility management by establishing social responsibility management strategies and making relevant decisions.

Increasing Shareholder Value

Shareholders

The total number of shares that Dong-A Socio Holdings can issue pursuant to the Articles of Association is 30,000,000 shares (face value per share: KRW 5,000). As of the end of December 2022, the total number of issued shares is 6,348,913 shares. All issued shares are common shares, and fair voting rights were given in accordance with the number of shares.

Shareholder Composition

Shareholder name	Type of share	Number of shares	Ownership (%)
Jung-Seok Kang	Common stock	1,865,525	29.38
National Pension Service	Common stock	841,921	13.26
Employee stock ownership plan (ESOP)	Common stock	550,969	8.68
GLAXO GROUP LIMITED	Common stock	409,693	6.45
Treasury stocks	Common stock	98,190	1.55
Others	Common stock	2,582,615	40.68
Total		**6,348,913**	**100.00**

* As of December 31, 2022

Shareholder-friendly Policy

Protection of Shareholder Rights Dong-A Socio Holdings adopted a system for electronic voting and electronic proxy voting to actively support shareholders in their exercising of voting rights. It publishes reference documents on the Financial Supervisory Service's electronic announcement system, and recommends all shareholders to exercise their voting rights by proxy. In addition, a convocation notice for minority shareholders can be replaced by an electronic notice in accordance with the Articles of Association, but we send a convocation notice by regular mail so that all shareholders can actively exercise their rights.

Shareholder Return Policy For shareholder value enhancement, Dong-A Socio Holdings announced a mid- to long-term shareholder return policy based on a BOD resolution in March 2021. Accordingly, Dong-A Socio Holdings will use at least 30% of its consolidated profit for the year, excluding non-recurring income and loss, for shareholder return for three years from 2021 to 2023, and pay dividends of at least KRW 30 billion. We plan to provide a stable cash flow to shareholders by actively implementing interim dividends in addition to existing fiscal-year dividends, and use the remaining funds after dividends for purchase and disposition of treasury shares.

Dividend Status

(Unit: KRW million)

Classification	2020	2021	2022
Interim dividend	-	3,125	**3,125**
Fiscal-year dividend	6,057	6,251	**6,251**
Total dividend	**6,057**	**9,376**	**9,376**

Facilitating Annual General Meetings To its efforts to facilitate annual general meetings (AGMs), Dong-A Socio Holdings held the 74th AGM on March 29, 2022, avoiding the dates when many other companies held theirs. In addition, a convocation notice was made on February 28, 2022, which was four weeks prior to the AGM to enable shareholders to review agenda items over a sufficient period.

Increasing Shareholder Communication Dong-A Socio Holdings carries out diverse IR activities to ensure information transparency and raise investor trust. We regularly hold corporate briefing sessions for institutional investors after announcing our performance and frequently hold company visit meetings, non deal roadshows (NDRs), and Corporate Day to actively communicate with the market. In addition, in consideration of minority shareholders, foreign shareholders, and other various shareholders, we disclose IR information and the contact information of the department in charge on our Korean/English website. In addition, we have been issuing the Integrated Report since 2020 that provides the company's financial/non-financial information. Amid increasing market participation by individual investors, we plan to carry out more diverse efforts to remove investment-related information asymmetry based on active, continued communication.

Board of Directors

Composition of BOD

The BOD of Dong-A Socio Holdings decides on matters stipulated in laws and Articles of Association, matters delegated by AGMs, and important matters related to basic policies of company management and work execution, and also supervises execution of duties by directors and top management, aiming at representing the interests of shareholders and stakeholders and also achieving corporate growth. As of the end of December 2022, there are four outside directors (57%) out of seven BOD members and three internal directors (43%) including the CEO.

BOD Composition

Classification	Name	Gender	Position	Area of expertise	Date of appointment	Key profile
Internal Director	Jae-Hun Jung	Male	CEO & President Committee for Recommending Candidates for Outside Directors	Management	Mar. 2021	-
	Sang-Hwan Baek	Male	Executive Director of Management	Management planning	Mar. 2021	-
	Seung-Hyun Ko	Male	CFO	Finance & accounting	Mar. 2021	-
Outside Director	Dong-Chul Kim	Male	Chairman of the BOD Evaluation & Compensation Committee (Chairperson) Audit Committee Related Party Transaction Committee	Law (Lawyer)	Mar. 2018	(Current) Managing Partner of Hyun Law
	Kyoung-Bae Kwon	Male	Audit Committee (Chairperson) Related Party Transaction Committee (Chairperson) Committee for Recommending Candidates for Outside Directors	Accounting/ auditing (Accountant)	Mar. 2021	(Current) Executive Director at Sejin Accounting Corp.
	Young-Sam Geum	Male	Committee for Recommending Candidates for Outside Directors (Chairperson) Evaluation & Compensation Committee Related Party Transaction Committee	Pharmaceutical (Pharmacist, professor)	Mar. 2022	(Current) Professor of the Dongguk University College of Pharmacy (Current) CEO of Panacea
	Se-Won Kwon	Male	Audit Committee Evaluation & Compensation Committee Related Party Transaction Committee	Accounting/ESG (Accountant, professor)	Mar. 2022	(Current) Professor of Ewha School of Business (Current) Outside Director of Miwon Commercial

* As of December 31, 2022

** Outside Director Young-Sam Geum and Outside Director Se-Won Kwon were newly appointed through a resolution at the 74th AGM in 2022

Independence, Expertise, and Diversity of the BOD To maintain practical independence of the company's top-decision making body, which is the BOD, from top management and controlling shareholders, and for the BOD to exercise influence on corporate management based on reasonable decisions, Dong-A Socio Holdings has appointed an outside director as the chairman of the BOD, separate from the CEO. Also, Dong-A Socio Holdings has outside directors comprise a majority of the BOD. To enhance BOD expertise and diversity, we specify professional areas related to company management in our Committee for Recommending Candidates for Outside Directors Regulations. We currently have outside directors with expertise in pharmaceutical, legal, business administration, and accounting areas.

BOD Operation

In 2022, the BOD of Dong-A Socio Holdings held a total of 11 meetings. It received and reviewed reports on the company's business performance and pending management issues by quarter to supervise the execution of duties by top management. It deliberated and decided on many agenda items to raise corporate value from a sustainability perspective, such as a report on BOD evaluation execution and results for transparent governance and approval for quarterly dividends in accordance with the company's mid- to long-term shareholder return policy.

BOD Operations in 2022

11

Held 11 times

25

Reviewed a total of 25 agenda items
(14 resolution matters, 11 report matters)

100%

Director attendance rate of 100%

Please refer to the Governance section of our website to find more information about the BOD operations in 2022

BOD Education and Support For outside directors to perform their duties, Dong-A Socio Holdings provides support so that they can receive help from an outside expert based on company funds pursuant to BOD Regulations. To raise understanding of the Group of the outside directors who were newly appointed in 2022, the department dedicated to the BOD organized an internal orientation on the Group affiliate outline and performance as well as pending management matters, in addition to Group affiliate visits (twice). In addition, the Articles of Association was revised during the 2022 AGM to change the BOD convocation notice from one day to seven days before a meeting, thereby providing sufficient time to review agenda items before the holding of a BOD meeting.

Committees under the BOD

Dong-A Socio Holdings has set a BOD committee system in place to ensure efficient BOD operation, and operates committees under the BOD – the Audit Committee, Committee for Recommending Candidates for Outside Directors, Evaluation & Compensation Committee, and Related Party Transaction Committee. Total assets of Dong-A Socio Holdings as of 2022 year-end is less than KRW 2 trillion, which means that we are not obligated to set up an audit committee and a committee for recommending candidates for outside directors pursuant to the Commercial Act. We, however, preemptively adopted both committees to enhance corporate management and accounting transparency and perform practical supervision functions towards top management.

BOD Evaluation and Compensation

Remuneration of Dong-A Socio Holdings' internal directors is divided into base pay and performance-based bonus. Every year, the Evaluation & Compensation Committee differentially raises base pay by putting together the company performance evaluation, individual achievement evaluation, and others, and pays different performance-based bonuses, using 15% of an individual's base pay in the immediately prior business year as the target. Remuneration of outside directors is determined according to the annual remuneration payment process, in consideration of the frequency of BOD meetings, whether an outside director was appointed to a committee under the BOD, hours spent on relevant work, such as reviewing agenda materials, and level of legal responsibilities, and then paid out as a monthly fixed amount. BOD remuneration that was approved at the AGM for 2022 is KRW 2 billion. Total remuneration that was paid to seven directors as of the end of December 2022 is around KRW 990 million.

BOD Remuneration in 2021

Classification	No. of persons	Total remuneration (KRW million)	Average remuneration per person (KRW million)
Internal Director	3	751	250
Outside Director besides Audit Committee Member	1	56	56
Audit Committee Member	3	180	60

Composition of Committees under the BOD

● Chairperson ○ Member

Committee	Roles and Functions	Internal Director	Outside Director			
		Jae-Hun Jung	Dong-Chul Kim	Kyoung-Bae Kwon	Young-Sam Geum	Se-Won Kwon
Audit Committee	• Supervise directors' work • Audit the company and subsidiaries • Approve the selection and dismissal of outside auditors • Other matters stipulated in the Articles of Association or bylaws in relation to audit work	-	○	●	-	○
Evaluation & Compensation Committee	• Establish performance evaluation and compensation criteria • Evaluate the company and CEO performance • Other matters related to the compensation system	-	●	-	○	○
Committee for Recommending Candidates for Outside Directors	• Examine qualifications of outside director candidates • Recommend an outside director candidate as an agenda item submitted to an AGM	○	-	○	●	-
Related Party Transaction Committee	• Approve internal trading with specially related persons • Manage and supervise internal trading execution details • Determine and change basic policies regarding internal trading	-	○	●	○	○

* As of February 28, 2023

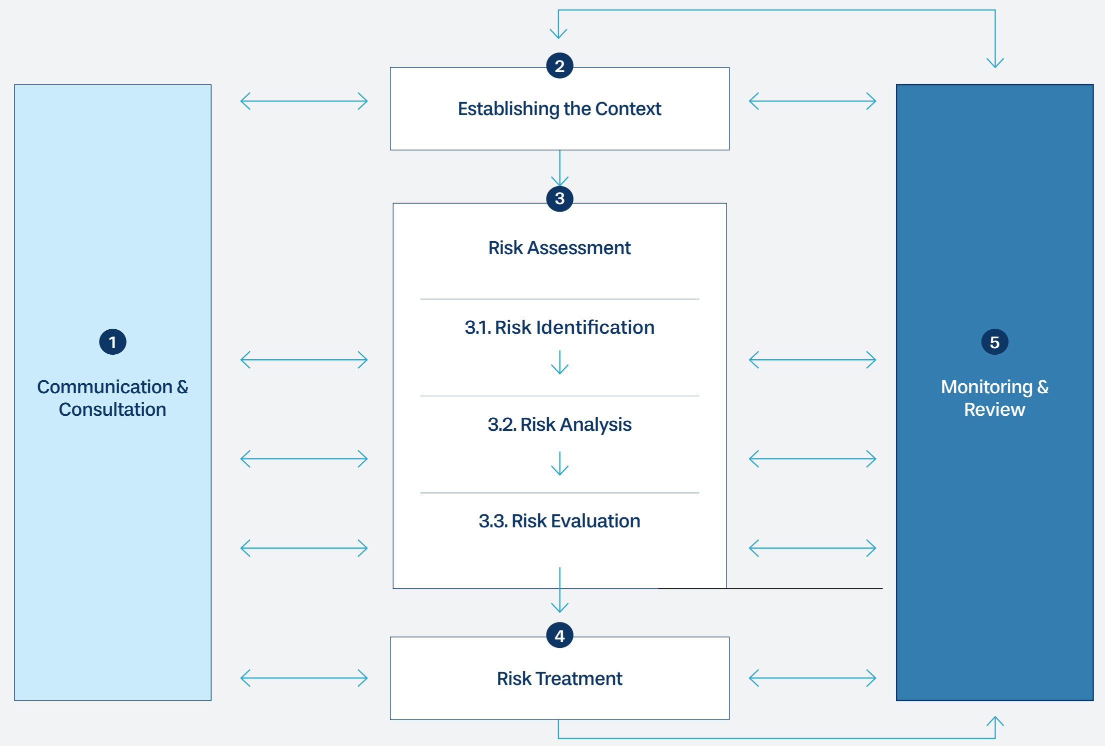
Integrated Risk Management

Risk Management System

Risk Management Process

To systematically respond to the rapidly-changing management environment, Dong-A Socio Holdings established the Enterprise Risk Management (ERM) system and manages a management process by applying the risk management system of ISO 31000, an international standard.

Risk Identification and Response System



Risk Management Areas

Dong-A Socio Holdings seeks to minimize internal and external uncertainties by identifying financial/non-financial risks that can have an impact on overall management and preventing and responding to the risks. To this end, we categorized types of opportunities and crises that impact the achievement of organizational goals into five areas – strategic, operational, compliance, external environment, financial – and 15 detailed types based on the ERM system. We are strengthening our response capabilities by establishing a process of devising and executing countermeasures for the identified risks in consideration of business characteristics and strategies and continually reporting relevant matters.

Risk Management Organization

All 15 teams at Dong-A Socio Holdings systematically identify and constantly respond to various potential risks according to a risk management process, based on support and monitoring from the Audit Office. Also, we are strengthening capabilities so that this can be reflected in strategies to achieve business goals and in the execution of relevant work. Major matters related to the risk management process are reported to top management and the Audit Committee. Operation results for 2022 were reported.

Types and Definition of Risks

Area	Risk type	Risk definition
Strategic	Strategic	Risk that arises from a judgment error regarding management strategies, error in implementing management strategies, failure to adapt to new financial and market environment changes, etc.
	Reputation	Risk that arises from the company's negative external reputation, such as poor management, financial incident, and social criticism. In other words, it is risk that arises from public opinion.
	Investment business	Loss risk that may arise from the outcome of real investments (facility, inventory, construction) that accompany corporate activities and financial investment activities
	Top management	Loss risk that may arise from top management's illegal act or unethical behavior
Operational	Operational	Risk that may arise from an inadequate or faulty internal process, personnel, or system, or the company's internal control failure, lack of organizational member management, or weak point in the organizational system
	Technology	Loss risk that may arise from failure to keep up with quickly-evolving technologies or from a security vulnerability
	Resource	Risk caused by a lack of material, human resources needed to achieve goals
	Business partner	Risk caused by a business partner's corrupt, anti-human rights, anti-environment, or anti-social activities
CP	Compliance	Risk of suffering a loss due to a violation of laws and relevant various regulations related to corporate activities or improper legal act, etc.
	Regulatory	Loss risk caused by a downswing in corporate activities caused by government policies and various regulations
	Ethics	Risk that may arise from the company's or organizational member's unethical activity, non-compliance with company rules, or deviant behavior
External environment	Pandemic	Risk from a human disease pandemic across extensive areas
	Natural disaster	Risk from a natural disaster, including an earthquake, flood, volcanic activity, and extreme weather
Financial	Financial	Risk that may arise from a company's financial activities, such as credit and liquidity, changes in the financial market, such as interest and exchange rates, changes in oil and raw material prices, etc.
	Financing	Loss risk that may arise from an unexpected funds outflow, lack of operating funds, and in the financing process

Risk Management Organization

Risk Management Activities

Activities to Prevent Risks

Dong-A Socio Holdings' Audit Office focuses on preventing risks that may arise within the Group, and inspects work and establishes a process that leads up to institutional improvements to take preemptive measures before the occurrence of risks. We also share information with the Group affiliates on changes in laws, government policies, and systems, and make relevant preparations for response and conduct risk prevention activities. In addition, we disseminate outstanding and inadequate cases to improve the Group's overall risk management capabilities.

Key Areas of Risk Prevention in 2022 In 2022, Dong-A Socio Holdings derived 110 financial/non-financial risks and set response measures. According to the level of risks, we categorized them into seven high risks and 67 mid-level risks, based on which we have established appropriate control measures and conduct monitoring for prevention. In addition, we strive to prevent risk from occurring at the Group level. The importance of quality management is being emphasized in the pharmaceutical/bio area after the COVID-19 pandemic. We have therefore advanced the quality management system at the company-wide level for four Group affiliates that are in the relevant business which are Dong-A ST, Dong-A Pharmaceutical, STgen Bio, and ST Pharm. We will provide support to the four Group affiliates in carrying out quality management-strengthening activities and to the remaining Group affiliates in establishing a quality management system and conducting risk prevention activities, thereby achieving advancement of quality management at the Group level.

Follow-up Activities to Respond to Risks

As follow-up activities for management and control of identified risks, Dong-A Socio Holdings conducts various regular/non-regular audits, including a comprehensive audit, irregular audit, special audit, and correction inspection, under supervision by the Audit Office. By doing so, it checks process and institutional improvement progress about weaknesses of each Group affiliate, and provides support so that systems can be improved and fully established through additional consulting on shortcomings. In addition, the Audit Office performs constant audit functions through the Audit Hotline Reporting, "CLEAN :D", which receives reports. From among the reports that were received in 2022, the Office conducted a total inspection on major reported matters, such as employee corruption and slackness of work discipline.

Social Responsibility Management

Social Responsibility Management System

Social Responsibility Management Strategy

Based on the founding principles of integrity, sincerity, and consideration, Dong-A Socio Group has set the promotion of social justice, rather than simply pursuing the generation of profit, as the corporate goal and established the "social responsibility management strategy" for the happiness of members of the company and society. By executing our social responsibility management strategy, we will express our commitment toward sustainability and social responsibility, enhance corporate reputation and stakeholder relations, and contribute to a sustainable future.

In January 2022, we carried out an assessment on Dong-A Socio Holdings and 12 Group subsidiaries based on ISO 26000 (international standard on corporate social responsibility), which was adopted as the Group's social responsibility management implementation strategy. Assessment results were shared at a DSC meeting that was held in June, and requests were made for the Group affiliates to carry out activities for advancement, such as deriving mid- to long-term strategic tasks and improvable indexes. As a result, the Group affiliates are continually carrying out social responsibility management advancement activities in consideration of the respective company's status and issues. Our plan for the second half of 2023 is to conduct an audit, using the ISO 26000 self-assessment guideline as a new tool shared by all Group affiliates to examine the current status of our social responsibility management.

Social Responsibility Management Governance

Dong-A Socio Group launched DSC, consisting of the CEOs of 13 Group affiliates, in March 2020 to implement more systematic social responsibility management. DSC meetings are held twice a year (June, December), with DSC in charge of deliberating and making decisions on the Group's social responsibility management-related matters. To enhance efficiency in the planning and execution of social responsibility management strategies, we integrated the DSC Secretariat and ESG Planning Division, which were previously working-level affairs and steward organizations, into the Social Responsibility Planning Division in December 2022. Dong-A Socio Holdings' Jeong-Do Management Department Head was appointed as the Social Responsibility Planning Division Head. Dong-A Socio Holdings' Jeong-Do (Fair) Management Team is in charge of Social Responsibility Planning Division operations, with participation by Dong-A Socio Holdings' HR Strategy Team and Corporate Culture Innovation Team and Dong-A Pharmaceutical's CSR Team.

Dong-A Socio Group's Social Responsibility Management Strategy

Mission

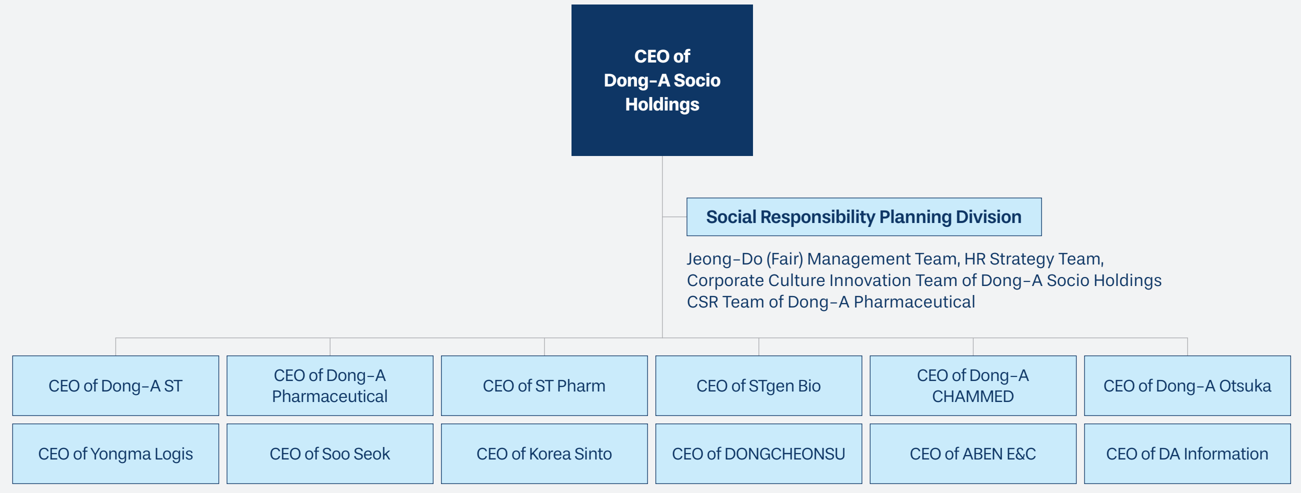
Continuous challenge to pursue health and happiness for humanity

Vision

Focused implementation and development of social responsibility management through ISO 26000 internalization at all Group affiliates

Core Values of Social Responsibility Management	G Guiding principle	A Always respect human right	M More and better labour practices	A Act green	S Sustainability fair	O Open communication	T Together with community
	Organizational governance	**Human rights**	**Labour practices**	**The environment**	**Fair operating practices**	**Consumer issues**	**Community involvement and development**
Strategic Goals of Social Responsibility Management	Respond to global disclosure and ESG evaluations	Fully establish a human rights management system at the Group affiliates	Communicate and cooperate with internal/external stakeholders to establish human rights management	Establish and operate an Environmental Management System (EMS)	Establish and operate an anti-bribery management system (ABMS) at all Group affiliates	Establish and operate a privacy information management system (PIMS)	Carry out social contribution activities for local community development
	Enhance governance transparency	Identify and assess human rights-related risks and improve	Establish a process for improving the organizational culture that reflects employee opinions	Manage and expand the management of Scope 1, 2, and 3 emissions	Apply and expand the Group's supply chain management process	Internalize information protection by assessing the Group affiliates' information protection (personal information) level	Build a network with local community stakeholders

DSC Organization



Roles of the Social Responsibility Planning Division

Department		Role
Dong-A Socio Holdings	Jeong-Do (Fair) Management Team	ISO 26000; support global evaluation and disclosure responses by the Group affiliates; promote the Group's fair operating practices; establish environmental measures and strategies, etc.
	HR Strategy Team	Establish the Group's human rights/labor practices implementation measures and strategies, etc.
	Corporate Culture Innovation Team	Establish an organizational culture system in relation to stakeholders (employees), etc.
Dong-A Pharmaceutical	CSR Team	Promote the Group's local community participation and development, internalizes social contributions; establish and execute strategies, etc.

Major Agenda Items of DSC in 2022

Meeting	Date	Major Agenda
6th	June 24	1. Report the results of assessing the Group affiliates for each of the six indexes of ISO 26000 2. Report the publication of the Group's Integrated Report 2021 3. Report the Korea Institute of Corporate Governance and Sustainability (KCGS) and MSCE ESG evaluation rating of the listed Group affiliates 4. Report on a plan to implement the Group's human rights management 5. Report on the Group's organizational culture assessment plan for 2022 6. Report on the Group's CSR performance in the first half of the year and plan for the second half of the year
7th	December 16	1. Report on ESG trends in 2023 2. Report on KCGS evaluation results 3. Report on the status of each Group affiliate's execution of an improvement plan in relation to ISO 26000 assessment results 4. Plan on ABMS establishment at the Group affiliates in 2023 5. Operation plan for the Group's Social Responsibility Planning Division 6. Group's human rights management operation plan 7. Results of the Group's organizational culture assessment in 2022 and plan for 2023 8. Review of the Group's CSR in 2022 and plan for 2023

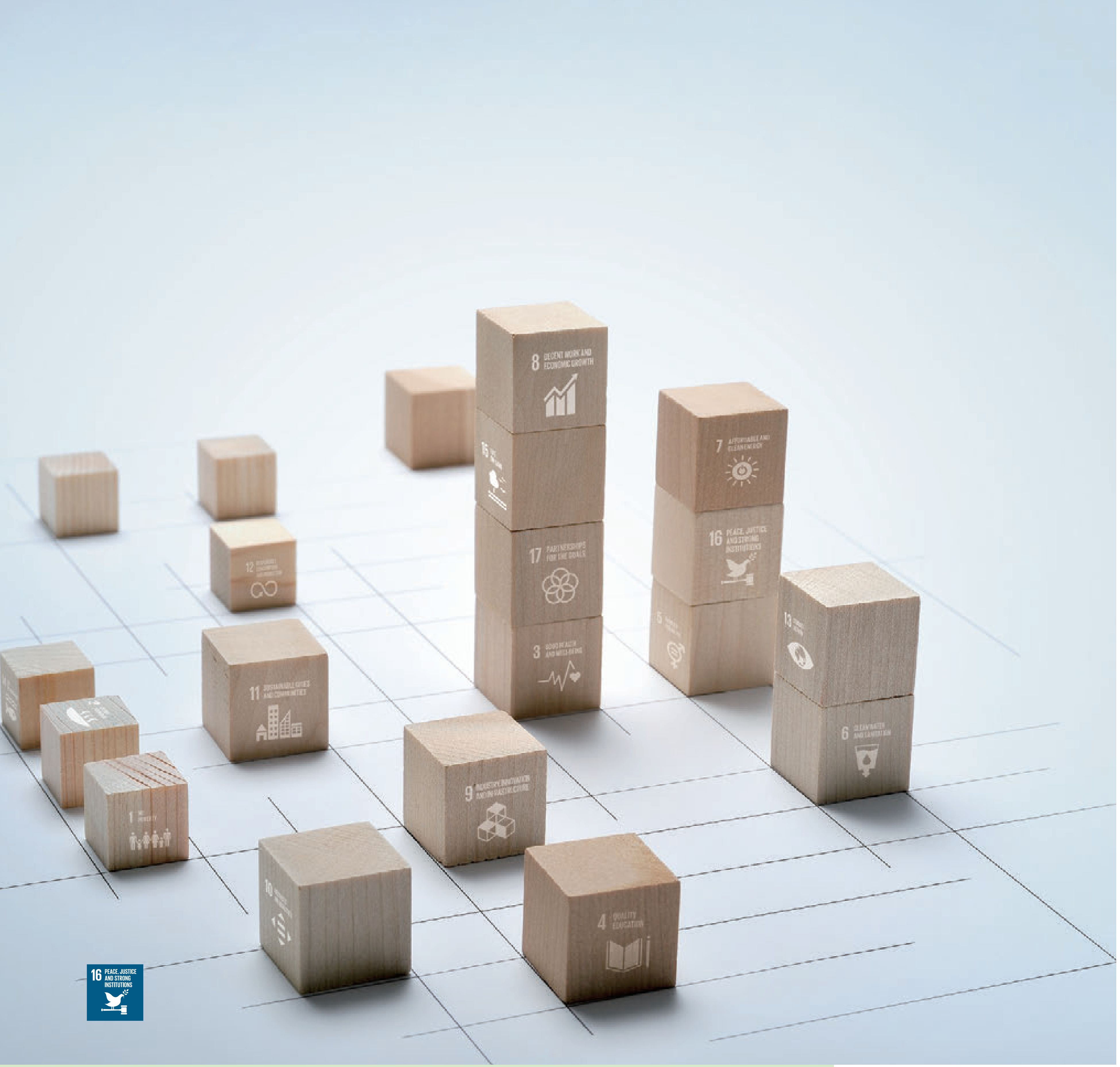
Major Social Responsibility Management Activities

Participated in the ESG Mentoring Program organized by UN Global Compact Network Korea

Dong-A Socio Holdings participated in the 2022 ESG Mentoring Program organized by UN Global Compact Network Korea. The ESG Mentoring Program helps mentor/mentee companies jointly establish ESG response strategies and explore ways to enhance corporate sustainability. Dong-A Socio Holdings had an opportunity to learn about ESG issues and carry out benchmarking, while networking with various participating companies. Based on the mentoring, we hold more in-depth discussions on each department's direction for internalization of social responsibility management.

Held the Briefing Session on Social Responsibility Management Performance Evaluation

The Jeong-Do (Fair) Management Team of Dong-A Socio Holdings took charge of evaluating social responsibility management performance starting in 2023. Accordingly, the Jeong-Do Management Team held a "Briefing Session on Social Responsibility Management Performance Evaluation" in February 2023 for each Group affiliate's Management Planning Team and departments related to managing social responsibility management indexes. It provided an outline of social responsibility management indexes in Group affiliate performance evaluation and shared information on management personnel and future schedule. Of the eight indexes that were formed to execute the seven core subjects of ISO 26000, six indexes are the Group's common social responsibility management indexes, while two are specialized indexes per Group affiliate. The Jeong-Do (Fair) Management Team will advance the social responsibility management indexes every year to make them into indexes that are practiced jointly by all employees.



16 PEACE, JUSTICE AND STRONG INSTITUTIONS

77.7%

Employee participation rate in anti-corrupt education

95.9%

Employee participation rate in pledge to Jeong-Do Management

ISO 37001

International standards for ABMS
As of 2022 year-end Dong-A Socio Holdings, Dong-A ST, and Dong-A Pharmaceutical acquired the certification

* Based on the figures of Dong-A Socio Holdings

Our Value

INTEGRITY

To fully establish Dong-A's unique business ethics as the organizational culture and enhance management transparency, Dong-A Socio Holdings is making diverse efforts, such as building anti-bribery management systems (ABMS), receiving international standard ISO 37001 certification, establishing relevant guidelines and systems, operating an organization in charge and appointing a compliance officer, and operating a compliance management reporting system.

A company's responsibilities toward information security and personal information protection are steadily expanding amid IT advancements and an increase in areas that apply to corporate management. Dong-A Socio Holdings is strengthening its security system based on an information security process; receiving international certifications, such as the ISO 27001 for information security management systems and ISO 27701 for personal information protection management systems; and securing information security stability while minimizing relevant risks. In addition, we make continuous effort to improve our information security system and make investments to protect our intellectual property.

Compliance Management

Compliance Management System

Establishment of Anti-Bribery Management System

After receiving ISO 37001 certification, an international Anti-Bribery Management System (ABMS) standard, from the British Standards Institution (BSI) in 2018, Dong-A Socio Holdings passed two renewal audits and proved its outstanding ABMS capabilities. According to the ABMS, Dong-A Socio Holdings reports to the BOD every year a management review of anti-bribery goals and activity results. In 2022, it made a report and received approval at a regular BOD meeting that was held in October. Based on Dong-A Socio Holdings, a total of 60 corruption risks were identified from a total of 15 teams, of which three were assessed as teams with more than mid-level of corruption risks.

Dong-A Socio Group aims to establish the ABMS at all Group affiliates by 2024 to internalize anti-bribery as a corporate culture and establish ethical business practices. We completed ABMS establishment at Dong-A Otsuka and Soo Seok in 2022; and in 2023 we plan to establish the ABMS at Korea Sinto and DONGCHEONSU and receive ISO 37001 certification for STgen where the ABMS establishment was completed. As of 2022 year-end, three Group affiliates (23.1%) – Dong-A Socio Holding, Dong-A ST, Dong-A Pharmaceutical – acquired the ISO 37001 certification, and five Group affiliates (38.5%) – Yongma Logis, ST Pharm, STgen Bio, Dong-A Otsuka, Soo Seok – completed the establishment of ABMS system.

Compliance Management Governance

Compliance Management Execution Organization The Dong-A Socio Holdings Jeong-Do Management Team supervises the Group's compliance management and anti-bribery. It continually runs training for new ABMS internal auditors of Group affiliates and holds the Anti-bribery Audit Committee every quarter to systematically support the full establishment of the ABMS at Group affiliates and internalization of an anti-bribery culture. It will also continually communicate with Group affiliates' risk management departments to strengthen the ability to respond to relevant risks.

Appointment of a Compliance Officer Dong-A Socio Holdings appointed a compliance officer for compliance control and support in relation to execution of employee duties. The compliance officer examines whether employees are appropriately complying with duty execution-related laws and company rules. If there is a violation, the compliance officer investigates the violation and reports it to the CEO or BOD. The compliance officer also comprehensively examines and analyzes details of various legal risks that arose in the corporate management process, the size of impact, and frequency of occurrence. Based on analysis results, the officer forecasts the potential of illegality in all corporate sales activities and employee execution of duties, in addition to confirming and controlling major matters that have legal risks. In 2022, the compliance officer reviewed legality of BOD agenda and procedure execution, provided advice on legal risks in relation to employee execution of duties and reviewed contracts, and protected human rights in the company, prevented human rights violations, and took measures through the Human Respect Committee.

Dong-A Socio Group's ISO 37001 Certification Acquisition Status

Classification	Certification Agency	Certification Year	Renewal Year	Expiration
Dong-A Socio Holdings	BSI	2018	2021	2024
Dong-A ST	Korean Standards Association	2018	2021	2024
Dong-A Pharmaceutical	BSI	2019	2022	2025
STgen Bio	BSI	2023 (Planned)	-	-

Compliance Officer Profile

Name	Seong-Yeon Jeong
Born in	February 1982
Profile	2006 Bachelor's degree in pharmacy from Seoul National University
	2008 Master's degree in pharmaceutical sciences (organic pharmaceutical manufacturing chemistry) from Seoul National University
	2012 1st Class of Kyungpook National University Law School (1st Bar Exam)
	2012-2017 LK Partners
	Mar 2017 – Currently Compliance Officer, Dong-A Socio Holdings
Disqualification	Non applicable

Major Activities of the Compliance Officer

Prior risk management

- **Monitors unfair conduct**
  Examines whether employees observe relevant regulations in carrying out asset management, risk management, and customer management
- **Establishes/amends and applies internal regulations**
  Establishes and reviews the amendment of various internal regulations for compliance control and support, applies disciplinary action rules, and collaborates with others for internal investigations

Business and project support

- **Domestic and overseas business**
  Establishes dispute and company risk minimization measures and provides relevant support when conducting various projects
- **Investment project**
  Manages and reviews investment and M&A-related risks

ESG and Jeong-Do management philosophy

- **ESG**
  Identifies trends in relevant areas based on ESG value and enhances value
- **Pursues the Jeong-Do management philosophy**
  Supports Group affiliates' business execution in consideration of social value based on the Jeong-Do management philosophy

Compliance Management Reporting System

Dong-A Socio Group operates reporting channels so that all stakeholders, including employees, suppliers, and customers, can freely report, without anxiety, unlawful and corrupt (accepting bribes, etc.) as well as unethical (unfair trade, unreasonable demand, violation of laws, etc.) conduct. A leading reporting channel, the "K-Whistle Helpline," is connected to the company homepage's compliance management and the Group's Jeong-Do management homepage reporting menu. Reports are received through an independent third-party organization and managed based on security management principles, including IP tracking prevention, to result in strict protection of the whistleblower's anonymity. According to the whistleblower anonymity protection policy, even after report details are delivered to the employee in charge of anti-bribery at Dong-A Socio Holdings, the issue is resolved through anonymous communication. For corrupt conduct, factors such as intentionality and gravity are comprehensively considered to refer the matter to the HR Committee and take HR measures. For reported content, prize money is provided after deliberation according to internal regulations, such as the level of public interests and company contribution. No unlawful, corrupt, or unethical conduct was reported through the K-Whistle Helpline in 2022.

Dong-A Socio Group operates the "Online Audit Office CLEAN :D", which is a system for reporting an employee's unfair work-handling or unreasonable demands and corruption using his or her post. CLEAN :D is also operated based on the principle of whistleblower anonymity and security and connected to the company homepage's audit reporting menu. Any stakeholder can make a report and will engage in bi-directional communication with the relevant Group affiliate's Audit Division.

Receipt and Handling Status of Grievance Counseling Center

Classification		No. of cases received	No. of cases handled
Unlawful and corrupt conduct	Improper solicitation, graft, wrongful budget execution, unfair trade, internal information leakage, etc.	6	6
Power trip and workplace harassment	Using one's superior position at work to issue unreasonable orders, give mental and physical pressure, and create a sense of anxiety	4	4
Indiscipline (sexual harassment, sexual violence)	Irrational action, including sexual harassment and sexual violence	8	8
Corruption associated with personnel hiring and appointment	All actions that violate fairness, including those related to personnel hiring and appointment	7	7
Others (unethical conduct)	Violation that does not fall under the above categories	27	26
Total		52	51

Online Audit Office CLEAN :D

K-Whistle Helpline

Raising Compliance Management Awareness

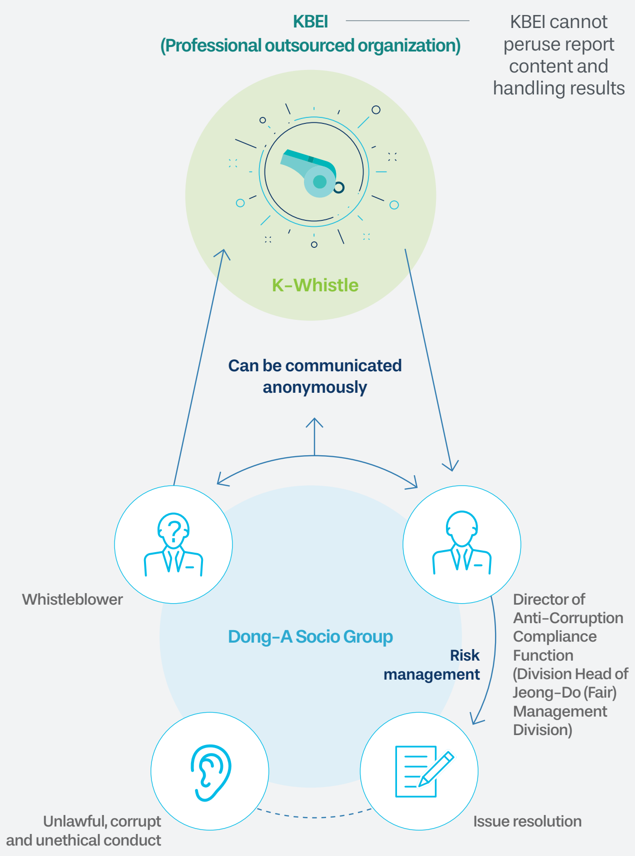
Jeong-Do Management Survey

Every year, Dong-A Socio Holdings conducts an online anonymous employee survey to identify the level of Jeong-Do management implementation. A total 85.9% of all employees responded (73 out of 85 persons) to the 2022 survey. Survey results indicate that employees' understanding of the level of Jeong-Do management execution is similar to the previous year or positive.

Results of the Jeong-Do Management Survey

Main survey questions	2021 results		2022 results	
Level of anti-bribery efforts made by the affiliated department	Positive	98.7%	Positive	100.0%
	Negative	1.3%	Negative	0.0%
Level of improvement from a year before in bribery awareness level of the affiliated department	Positive	98.7%	Positive	100.0%
	Negative	1.3%	Negative	0.0%
Effectiveness of the affiliated department's anti-bribery operations	Positive	98.6%	Positive	98.6%
	Negative	1.4%	Negative	1.4%

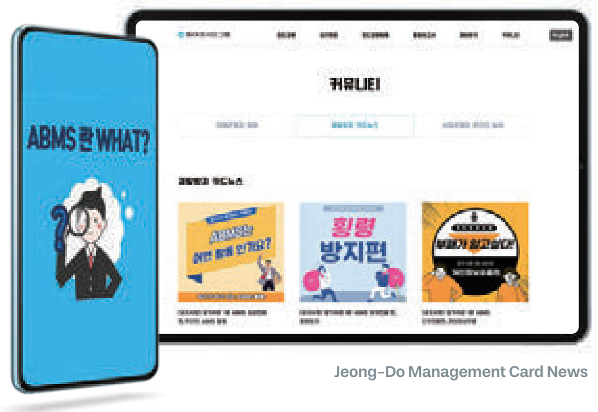
Process of K-Whistle Helpline



Compliance Management Training

In July 2022, Dong-A Socio Holdings was chosen as a leading private company of ethical management of integrity by the Anti-Corruption & Civil Rights Commission. All employees, including the CEO, participated in training on ethical management of integrity. From among many companies that applied to receive the training, companies were chosen based on the top management's level of participation and effectiveness of the training. The training's main content included ways for an organization to practice compliance management with a focus on the four values of compliance, transparency, fairness, and responsibility.

Dong-A Socio Holdings conducts a company-wide bribery risk evaluation every year, and provides in-depth training to teams with a mid-level or higher bribery risk. When new internal auditors and assistant internal auditors are appointed for teams, capability training is provided for bribery prevention.



Jeong-Do Management Card News

Pledge to Observe Compliance Management

All 94 employees of Dong-A Socio Holdings wrote and submitted a pledge to practice Jeong-Do management, mainly to "fulfill responsibilities and duties to fully establish and realize the company's Jeong-Do management culture" (as of October 20, 2022).

Compliance Management Information-Sharing

Dong-A Socio Holdings regularly creates "Jeong-Do Management Card News" and posts it on the Jeong-Do management homepage and bulletin board to raise compliance management understanding among various stakeholders, including Dong-A Socio Group employees and business partners, and to spread the compliance management culture. In 2022, it created and posted nine Jeong-Do Management Card News on bribery factors that may arise when handling work based on the title, "Easy-to-Understand 1-Minute ABMS".

Expanding Compliance Management for Business Partners

Dong-A Socio Holdings prohibits improper solicitation and graft with all stakeholders in relation to work. It applies the Improper Solicitation and Graft Act to parties in accordance with the Act. For stakeholders to which the Improper Solicitation and Graft Act does not apply, it limits the amount of a gift to KRW 100 thousand, a meal to KRW 100 thousand, and money for family events to KRW 200 thousand. A graft report is created through electronic approval and submitted to the Jeong-Do Management Team. To prevent recurrence, the Jeong-Do Management Team sends a letter in the CEO's name to the relevant stakeholder as part of steady efforts to establish an anti-bribery culture. In addition, compliance management training was provided to major business partners of Group affiliates in September 2022. Starting in 2023, the scope of compliance management will be expanded to include overall supply chain management.

Dong-A Socio Holdings' Compliance Management Training in 2022

Training name	Provided to	Frequency	Content	No. of trainees
Company-wide training on ethical management of integrity	All employees	Annual	• Compliance management	66
In-depth training for teams evaluated to have a mid-level or higher corruption risk	Teams evaluated to have a mid-level or higher corruption risk	Annual	• Background for being chosen as a team evaluated to have a mid-level or higher corruption risk and required activities • ABMS and social responsibility management • Dong-A Socio Holdings' ABMS operation framework • ABMS activities that must be kept in mind for working-level affairs	9
Capability training on the anti-bribery compliance function for new auditors	New internal auditors	Annual	• ABMS theory	7
Major business partner training	Major business partner training	Annual	• Dong-A Socio Holdings' anti-bribery policy and graft criteria • Outline of the "K-Whistle" Helpline • Supply chain management measures	15

Information Security

Information Security Management System

Information Security Process

To protect the company's intellectual property and customers' personal information, Dong-A Socio Holdings has established an information security process that is based on four activities – "governance, establishment of system, control & monitoring, awareness increase" – and implements it according to an annual plan, while promoting continuity and internalization.

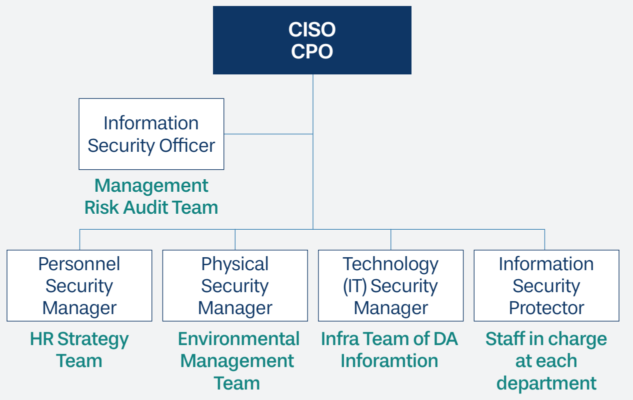
Information Security Process Overview

Governance	• Held Dong-A Socio Holdings' Information Security Committee meetings twice • Held the Dong-A Socio Information Security Committee meeting once, held a gathering of staff in charge of information security at Group affiliates once • Measured information security effectiveness and conducted a management review once • "Public notification of information security" of four Group affiliates
Establishment of System	• Established/amended Dong-A Socio Holdings' information security policy and guidelines (26 items including personal information security, information assets, and information systems) • Established/amended information security guidelines for the Group affiliates (53 items) • Dong-A Socio Holdings received ISO 27001 re-certification and initial ISO 27701 certification
Control & Monitoring	• Diagnosed the level of Dong-A Socio Group's information security management system • Conducted a security audit on all departments of Dong-A Socio Holdings • Diagnosed vulnerabilities for external service systems
Awareness Increase	• Provided personal information security and information security trainings to Dong-A Socio Holdings employees 8 times a year • Held Dong-A Socio Holdings' corporate-wide Information Security Day (2 times) • Conducted training to respond to infringement incidents at all Group affiliates (malicious email mock training)

Information Security Policy Dong-A Socio Holdings established an information security policy and 11 lower-level guidelines for different areas, and shares them with all stakeholders related to the company's operations, including employees, partner companies and visitors, and encourages strict compliance. We are continually amending the relevant policy and guidelines every year in accordance with changing work processes and strengthening regulations. Amid increasing importance of personal information protection in 2022, we improved such policies as "personal information impact assessment" and "outsourced destruction and processing of personal information" in the personal information protection guidelines to enable effective responses in relation to personal information protection. When a personal information impact assessment led to concerns over an information subject's personal information infringement, we analyzed risk factors and derived required improvements as part of efforts to prevent personal information infringement incidents.

Information Security Governance Dong-A Socio Holdings' Management Risk Audit Team is overseeing management of the internal information security system and performing control tower roles for all Group affiliates by disseminating the holding company's commitment towards information security to the entire Group in consideration of the Group's characteristic of having many information resources and much interpersonal exchange, thereby contributing to improving information security levels. To strengthen information security-related responsibilities and roles, we appoint a Chief Information Security Officer (CISO) and Chief Privacy Officer (CPO), who are top officials in the area of information security, and also operate the Information Security Committee. We also formed the Dong-A Socio Information Security Committee, which consists of each Group affiliate's CISO, thereby enabling quick decision-making on rapidly-changing operational matters related to information security.

Information Security Organization of Dong-A Socio Holdings



Information Security and Personal Information Protection Management System Certification Dong-A Socio Holdings has established and operates an information security management system by applying ISO/IEC 27001, an international standard, based on the "Personal Information Protection Act" and "Act on Promotion of Information and Communications Network Utilization and Information Protection". To verify the effectiveness of the information security management system, we received ISO 27001 certification, an information security management system standard, in 2019 and are receiving a follow-up evaluation every year. In 2022, we passed the renewal audit and proved that information security has become a part of the corporate culture.

In addition, we received ISO 27701 certification for personal information protection management system in December 2022. As an extension of ISO 27001, ISO 27701 verifies if a company is meeting requirements for personal information protection by reviewing compliance with guidelines set forth by the EU General Data Protection Regulation (GDPR) across 49 criteria in a total eight areas, including an organization's personal information management process, de-identification, and guarantee of rights of the data subject. Beginning with ISO 27701 certification, Dong-A Socio Holdings plans to expand the personal information protection management system to overall Group affiliates in various industries, including manufacturing, production, research, and logistics.

Information Security Investment

Concerns over information security and safety are growing together with increased demand for data use. As such, such non-financial factors as information security personnel and investment status are rapidly emerging as significant variables that should be considered in corporate management. As of 2021, Dong-A Socio Holdings invested around KRW 3.5 billion (around KRW 3.2 billion in information technology, around KRW 290 million in information security), 8.9% of the total IT budget, in IT security personnel expenses and service costs as well as physical and security services.

Information Security Disclosure

With the amendment to the regulation on public notification of information security stipulated in the "Act on the Promotion of Information Security Industry" in 2021, a voluntary/obligatory disclosure. Accordingly, companies disclose their information security status, such as information security investments, personnel, certifications, and activities, to promote users' Internet safety and investments in information security. In response, four Group affiliates disclosed their information security data in June 2022. Those completed the information disclosure include Dong-A Socio Holdings, Dong-A Pharmaceutical, and ST Pharm in addition to Dong-A ST which is subject to mandatory disclosure.

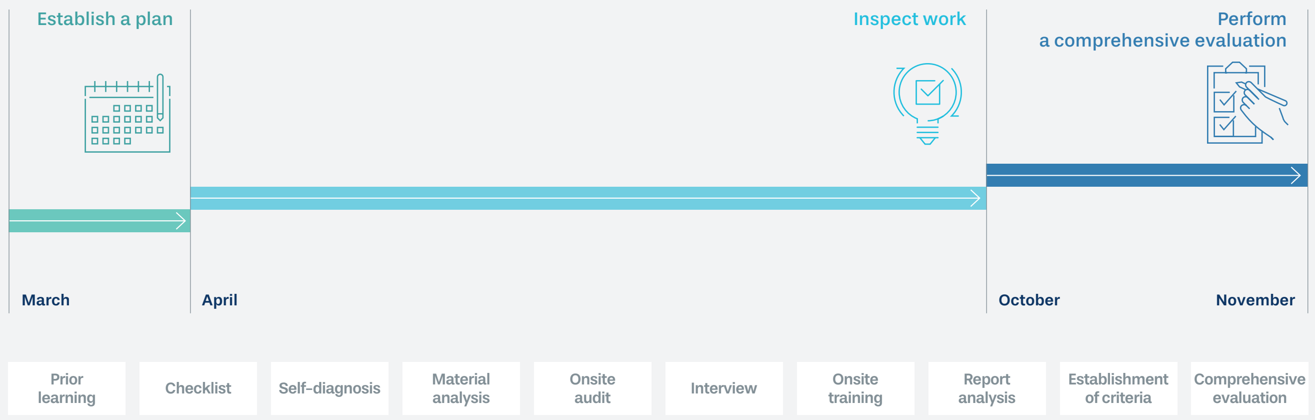
Security Incident Prevention and Response

Diagnosis of the Level of the Information Security Management System

Amid growing importance of managing intellectual property, including technology/sales, and personal information, we conduct a "diagnosis of the level of the information security management system" of the Group affiliates every year to prevent leakage of such information, aimed at preventing direct damage to the company's information assets as well as such indirect damage as negative corporate image. In 2022, we carried out a diagnosis on Dong-A Socio Holdings and 12 Group affiliates based on inspection items in five areas – information security management, IT, physical, HR, and personal information. The evaluation was centered on the grade of each inspection item and company.

2021 diagnosis results and improvement points were delivered to each company through the Dong-A Socio Information Security Committee that was held in January 2022. To establish preventive measures for derived vulnerabilities, we established and announced the "Information Security Guidelines for the Group Affiliates" in February 2022. By doing so, we built a foundation to continually educate/train and support the information security activities of all employees at Group affiliates.

Overview of Diagnosis of the Level of the Information Security Management System



Purpose and anticipated effects	• Diagnose the Group affiliates' information security level and facilitate prevention of information leakage through information security inspections • Protect the Group affiliates' information assets by complying with relevant laws (Personal Information Protection Act and the Act on Promotion of Information and Communications Network Utilization and Information Protection) and ISO 27001
Inspection target and scope	• Security audit on the production sector: 4 companies, 8 plants, 30 departments, 64 persons • Security audit of Group affiliates – Correction inspection: 7 companies, 15 departments, 37 teams, 72 persons – Voluntary security inspection: 3 companies (using management diagnosis platform)
Inspection location	• Work-related on/offline space

Prior Inspection of Information Security Risks and Response Training

Inspection of IT Infrastructure Through DA Information, one of the Group affiliates, Dong-A Socio Holdings conducts an inspection on networks, security equipment, websites, operating systems, and databases every year to identify vulnerabilities related to extensive security threats and implement improvement activities, leading to strengthened IT system infrastructure security.

Mock Hacking Training To respond to recently-increasing cyber threats, we conducted mock cyber hacking of 10 serviced websites of Group affiliates in November 2022 and took immediate measures for discovered vulnerabilities. In addition, continuous improvements are being made for similar cases.

Malicious Email Response Training We chose employees in charge of major work in the Group and provided them with malicious email response training, after which training results were delivered to each company's CISO to result in enhanced security awareness. We created a scenario where malicious code was included in advertising mail similar to real mail. Through simulations of such events as clicking an email link, downloading an attached file, entering personal information, and executing an attached file, we examined the level of awareness of employees. As such we are striving to prevent incidents from occurring in the first place through training.

Raising Information Security Awareness

Information Security Internalization Activities

Information Security Campaign Dong-A Socio Holdings holds the "Information Security Day" event twice a year to share information on related trends and activity results, thereby raising employee awareness of information security. In addition, "Clean Day" is implemented once a quarter to destroy and delete unnecessary documents, encouraging employees to spontaneously prevent leakage of confidential information. We also choose an "Information Guardian" from among manager-level employees by department to enable quick execution of information security-related work and independent management of the work environment's information security. In addition, we created an information security tab on SooSeok Universität, an in-house online training website, and distribute information security training videos that were produced in-house through the tab for internalization of information security at all Group affiliates.

Information Security Training Dong-A Socio Holdings provides employees with information security training at least twice a year to emphasize the importance of information security and amended the "Ten Commandments for Information Security" to enable employees to take interest in information security, thus promoting increased awareness. In addition, to raise information security expertise, we encouraged relevant staff in charge and CISO to participate in external workshops and conferences, including the international security conference "ISEC 2022." To secure the eligibility of staff in charge of information security at major Group affiliates, we provided support so that they could become qualified as an ISO 27001 lead auditor. To raise awareness of the importance of personal information protection and to manage it, Dong-A Socio Holdings' CISO and five staff members in charge of information security completed a lead auditor course on the ISO 27701 personal information protection management system and acquired qualifications.

Expanding Information Security Management to Partner Companies

Even if information security is strengthened internally, there is a risk of information leakage while collaborating with partners, so continuous management is needed. Dong-A Socio Holdings therefore demands partner companies to comply with essential information security policy, and amends policy and provides relevant training. It plans to support the strengthening of the information security management system of its partners to prevent security accidents and reduce information security risks.

19.7%

Percentage of female employees

26.8 hours/person

Job training hours per employee

18.4 hours/person

Industrial safety & health
training hours per employee

* Based on the figures of Dong-A Socio Group

HUMANITY

Attracting and nurturing outstanding talent are key factors for a company's sustainable development and enhanced competitiveness. Dong-A Socio Group is providing support to employees so that they can develop their professional capabilities and leadership and achieve growth through self-designed learning based on an advanced human capital development system. In addition, it is focusing on organizational culture changes to raise employees' sense of pride towards the organization and employee engagement, and also operates various welfare systems in consideration of balance between work and personal life.

Dong-A Socio Group also respects human rights and strives to protect human rights. It established human rights management principles that consist of matters that should be observed to protect and respect the rights of stakeholders, including employees, and the human rights management framework. It identifies in advance and prevents human rights risks through human rights impact assessments. In addition, it is establishing a safety management system and governance so that employees can work in a safe environment, thus preemptively responding to steadily increasing social demand for safety and health. In particular, it makes continued efforts to strengthen safety management capabilities, such as establishing a safety and health management system that meets international standards, receiving ISO 45001 certification, conducting worksite risk assessments to prevent safety incidents and improving risk factors, and internalizing a culture of safety. It is thus making utmost efforts so that all employees can receive recognition for their value at a safe and happy workplace.

Human Capital Development

Talent Pipeline Development

Dong-A Socio Group seeks to reflect, in its employment process, Dong-A's model person that was officially announced on the occasion of the 90th anniversary of its founding. In addition, we are striving to recruit appropriate talent who can generate organizational performance and realize innovation by improving the recruitment process, such as strengthening the process of verifying an applicant's job expertise and the interviewer training program curriculum.

Nurturing Human Capital

Human Resources Development Strategy

The ultimate goal of nurturing human capital is the company's development along with employee growth. To realize the corporate value of "thrive together," Dong-A Socio Group has been operating a problem solving-centered learning organization since 2019. To reduce unnecessary costs incurred from redundant participation in external training, Dong-A Socio Group actively nurtured internal instructors and job experts, and established and operates the business/field-centered job training system.

:DNA (Talent Model)

PROBLEM SOLVER
who resolves humankind's issues

- Look for issues in surroundings and systematizes them to present solutions
- Discover the fundamental causes of issues and prevent them, rather than being satisfied with superficial solutions
- Active actions that assume possibilities and inclusion of various approaches
- Become obsessed with solving issues, going beyond simple curiosity

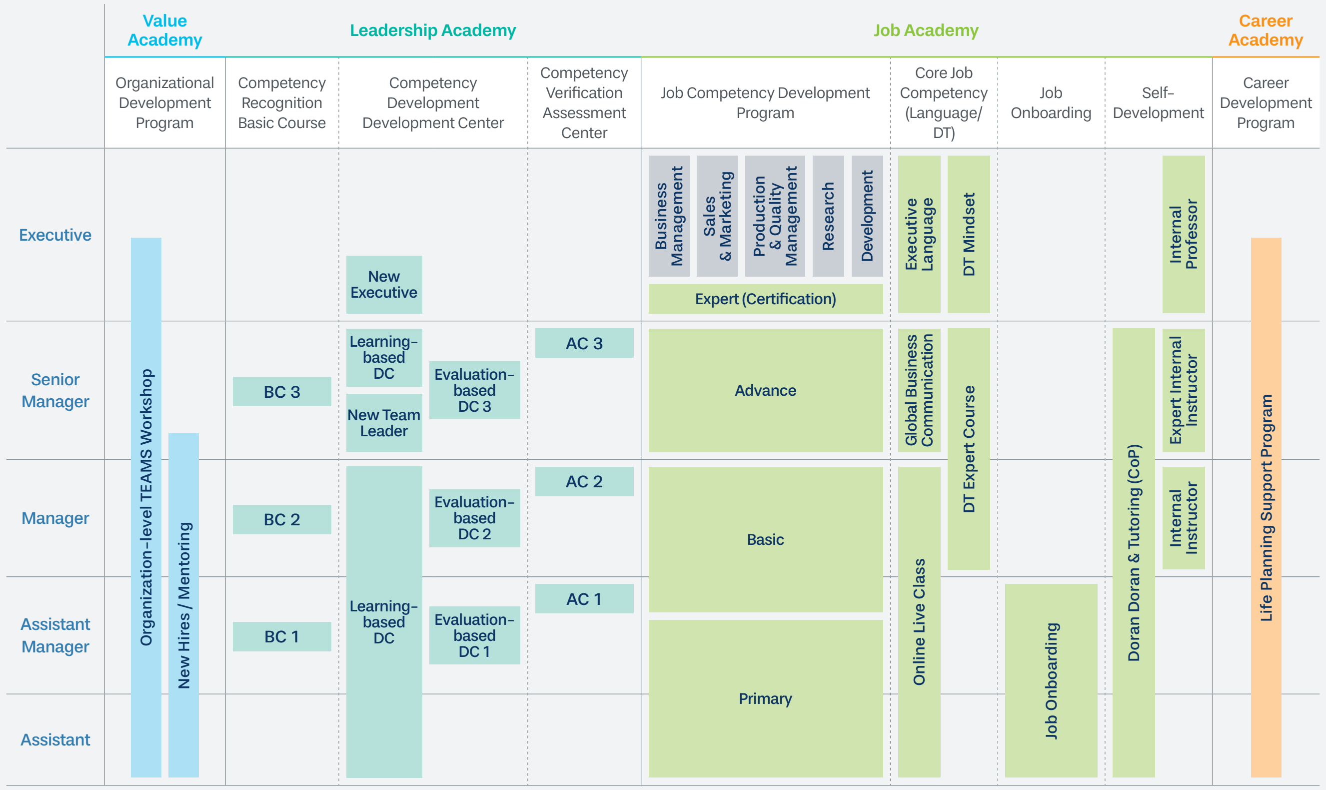
CHANGE LEADER
who leads changes based on expertise

- Harness work opportunities to apply various ideas and expand experiences through execution
- Adapt to changes flexibly and quickly and go further by leading change
- Make efforts with modesty to become top-tier rather than becoming complacent with being in first place
- Set an example in enjoying learning and take on challenges without fearing failure

TRUST BUILDER
who establishes a sustainable system

- Have courage to act with integrity, showing oneself honestly and transparently
- Make continuous efforts to do what we believe is right with faithfulness
- Spare no time in helping others and act sincerely
- Do not crave for results that damage trust and boldly raise issues

Dong-A Socio Group's Training System



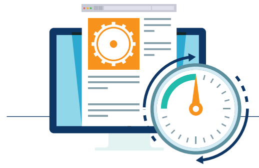
Self-Designed Competency Development In 2021, Dong-A Socio Holdings adopted the Individual Development Plan (IDP), where an employee takes the lead in establishing and executing a competency development plan in accordance with the career development path and role system. IDP was then expanded to four Group affiliates, including Dong-A ST, Dong-A Pharmaceutical, and STgen Bio, in 2022. In addition, an IDP system was established to systematically support employees' self-designed learning. Through the IDP system, internally-developed curriculums and online content provided by SooSeok Universität, a learning management system (LMS), are matched by competency. Employees can autonomously choose and take training that is matched to the corresponding competency. To support employees' establishment of an IDP, we issued and provided a training guidebook (in PDF format) that consists of the training system and annual curriculums.

Nurturing Leaders for Dong-A

Advancement of the Leadership Competency Model To choose and nurture leaders who will lead the future 100 years, Dong-A Socio Group has been advancing its "leadership competency model" since February, aiming at completion in May 2023. By doing so, we seek to overhaul our leadership course by position whose learning elements are detailed leadership knowledge and skills, and to develop our company-based competency Assessment Center (AC) tasks with the goal of active use for selection and nurturing of key talent.

Operation of the "Dong-A Leadership Center" based on the Leadership Pipeline In 2021, we established the "Dong-A Leadership Center", a leadership-nurturing track that consists of three steps – Basic Course (BC), Development Center (DC), and Assessment Center (AC). In 2022, a total of 130 employees completed BC, which helps understand top-level roles through 12 sessions. Survey results indicated a high figure of 4.5/5.0 in the top-level role awareness level. A total of 870 employees completed the learning DC, where an employee chooses according to his/her competency development plan, through 48 sessions. The level of will towards business application was 4.3/5.0. Through AC, a top-level role verification assessment, a total of 189 employees received verification as a "Leader for Dong-A". Our plan for 2023 is to overhaul the BC and DC course modules by advancing leadership competencies and also subdivide the course by competency.

Employee training hours of Dong-A Socio Group



28.3
hours/person

Leadership-Nurturing Track for New Leaders Dong-A Socio Group operates a new leader (team leaders, executives) track, which is most important among leadership pipeline steps. In 2022, we provided training on practical leadership skills that are required from leaders to 30 new team managers and 20 new executives. We are planning a new team manager course for 2023 that has added microlearning and a workshop by team. We are planning a six-month coaching program for new executives that is based on multifaceted diagnosis and disposition diagnosis results.

New Employee Onboarding Program To help new hires quickly adapt to the organization and improve their work capabilities, we run a new employee onboarding program that consists of a basic course for new employees (online), new employee training, and the Dong-A mentoring system. In 2022, a total 414 employees took part in the program.

Team-level "TEAMS" Workshop We operated the TEAMS Workshop aimed at organizational development based on prior leader interviews to facilitate team communication and support the resolution of business issues. In 2022, a total of 13 teams consisting of 101 employees from five Group affiliates completed the workshop. Our plan for 2023 is to expand the program at the company level so that the TEAMS Workshop aimed at organizational development can be used by a greater number of organizations through a high-performance team key factor-based employee survey and module matching.

Training to Strengthen Professional Job Competencies

Job Competency Development Program To develop distinctive competitiveness of all business areas, we established a common job competency curriculum and have been running it as an optional course since 2019. In 2022, we formed a total of 32 courses in business administration, finance, and accounting; sales and marketing; R&D and global; production; and office work common areas, and a total of 702 employees completed the courses through 36 sessions. In 2023, we plan to expand training subjects to include business management, sales and marketing, production and quality, clinical trial and development, and research areas and divided learning difficulty to three steps (Primary, Basic, Advance) to raise training program expertise.

Job Certification Program We created a certification program (general qualifications, internal certification) to secure job expertise. In 2022, general qualifications courses included GMP Engineer and Validation Engineer, while five internal certification courses were provided which are the Data Analysis Workshop, Web Design Improvement, Smart Work Tool Use, Practical HR Affairs, and Report Design Improvement. A total of 93 employees completed the program.

SooSeok Universität

Since 2021, we have been operating “SooSeok Universität,” an advanced learning management system. SooSeok Universität enables 24/7 learning using PCs and mobile devices. In 2022, employee IDP establishment data was reflected to automatically inform employees of beginning the corresponding learning course at the planned time, enabling more efficient use. We also built a system that automatically stores each employee’s learning data in an individual’s HR data to enable more effective talent-development.

Training of In-house Instructors

We are operating a system to train internal instructors to realize “thrive together” by sharing an employee’s experiences and know-how with colleagues, along with achieving individual growth, by discovering and training internal experts. In 2022, we provided a level-up course for internal instructors. The curriculum consisted of a training session to improve teaching skills and an on/offline teaching skill-acquiring course. In addition, an outstanding internal instructor contest was held for the 18 instructors who took part in the curriculum to result in higher quality content and lectures by internal instructors. By choosing and awarding outstanding internal instructors through a lecture evaluation, we enabled internal instructors to develop a sense of pride in their roles and motivated them.

Lifecycle Tailored Program

We plan and operate various experiences and courses to help employees carry out life planning by age group, based on five major areas of life (finance, family, leisure, health, retirement), and to offer positive employee experiences through a happy balance between personal life and work. In 2022, around 2,000 employees took part in the program, which recorded a high satisfaction level with 4.7 points out of a total 5 points on average. Our plan for 2023 is to strive to provide more diverse courses by creating a leisure and financial area course.

Performance Evaluation and Compensation

Dong-A Socio Holdings changed its performance management process to an absolute evaluation system in 2021. We share organizational goals and set goals in a way that individual competencies are fully demonstrated through mutual feedback between evaluators and the evaluated. Goal-setting details and evaluation results are verified through a separate session, thereby increasing goal validity as well as evaluation credibility and receptivity. We plan to steadily increase differences in compensation according to evaluation results to strengthen the performance-centered compensation system.

Building a Happy Organizational Culture

Organizational Culture Change Management

To create a company where employees are happy and an organizational culture where diverse values are respected, Dong-A Socio Group conducts an organizational assessment every year and continues improvement activities based on assessment results. As a result, it is changing into an organization where employees voice, listen to, and share various opinions and where an individual’s creativity and diversity are respected. Rather than becoming complacent with the present, Dong-A Socio Group will continue to make efforts to create a happy corporate culture and to become a company that employees find it good to work at, thereby securing our unique and distinctive cultural heritage.

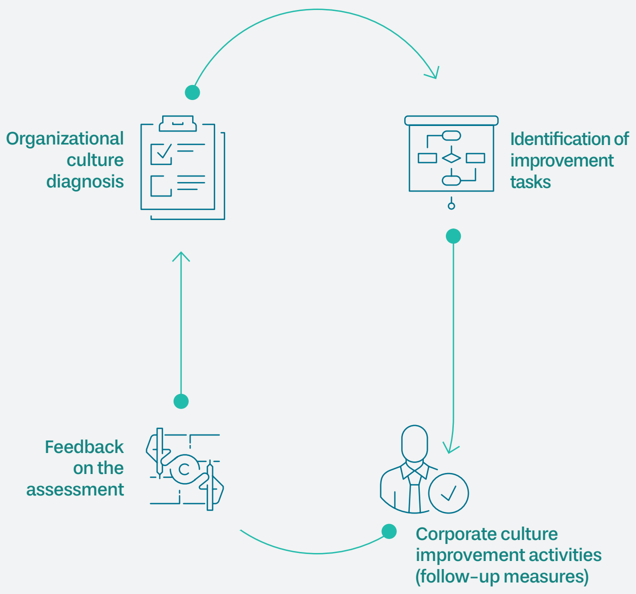
Organizational Culture Diagnosis Dong-A Socio Group conducts organizational culture diagnosis with an aim to give concrete shape to the management philosophy from the employee and organization happiness perspective and to build a competitive organizational culture. To this end, we are forecasting organizational culture risks by accurately identifying the current state and causes, establishing improvement tasks based on employee opinions, and developing a company-wide consensus by sharing diagnosis results. Each Group affiliate derives improvement tasks based on organizational culture diagnosis results and implements annual organizational culture improvement activities. It establishes a continuous process that includes performance analysis on the progress and company evaluation and is establishing a sustainable organizational culture diagnosis framework.

The 2022 organizational culture diagnosis consisted of an online survey of all Group affiliate employees and a focus group interview (FGI) by position that was held 66 times. Assessment results were derived through an in-depth analysis of survey and interview results. An information-sharing meeting for leaders, including top management, was held 14 times. In the first quarter of 2023, an information-sharing meeting was held for all Group affiliate employees with the goal of developing a company-wide consensus. To strengthen organizational culture improvement continuity, we will include improvement task implementation results, execution rate, and whether assessment results were shared in Group affiliates’ non-financial evaluation to monitor the status of organizational culture improvements.

Outline of the 2022 Organizational Culture Diagnosis

Diagnosis items	• Restructured the culture diagnosis framework based on the “happiness of employees and the organization” concept, which is the Group’s organizational culture goal • Seven culture diagnosis factors (employee happiness, organizational happiness, strategy, leadership, organizational structure, work management, people management), 69 questions
Diagnosis period	• August 18 – August 31, 2022 (10 work days)
Diagnosis method	• Email and mobile survey of all Group affiliate employees (response rate of 76.3%) • 66 one-on-one in-depth interviews of the CEOs and executives, FGI per position (team leaders, senior managers and higher positions, managers and lower position) at the Group affiliates

Organizational Culture Diagnosis Operation Framework



Pursuing Balance Between Work and Personal Life

Work competencies and an organizational culture that are competitive and are created in balance between work and personal life develop into a significant driver of individual employee and company development and form a positive virtuous cycle that enables joint growth. Dong-A Socio Group operates family-friendly management and various welfare systems to realize balance between employees’ work and personal life.

Family-friendly Management Dong-A Socio Group operates various family-friendly programs to increase employees’ pride in the organization and work engagement through a healthy balance between work and family life. As a result of exemplary operation of the family-friendly system, including childbirth and child-raising support and the flexible work system, Dong-A Socio Holdings has been maintaining family-friendly company certification since 2017. To enable many Group affiliates to experience success cases of family-friendly management, it provides support for establishing a family-friendly management direction, identifying and sharing outstanding cases of Group affiliates, and adopting systems. Receiving recognition for promoting balance between work and personal life and making efforts to spread the family-friendly organizational culture, Dong-A Socio Holdings received the “Prime Minister’s Award” as an outstanding family-friendly company in 2022.

Major Family-Friendly Programs

Flexible work system	• Establish and operate a flexible work plan through full implementation of the flexible work system that is suitable for department characteristics • Operate the PC-OFF system and leave-work-at-regular-time system to ensure a flexible work environment and improve the way employees work • Implement digital-based work to expedite the full establishment of the flexible work system, including the adoption of mobile office, establishment of a cloud-based document management system, and a shift to electronic approval • Increase work concentration levels during work hours and reduce unnecessary work to address long work hours
Childbirth and child-raising support	• Actively encourage use of maternity and childcare leave, conduct campaigns to improve internal perception • Analyze the status and changes in childcare leave and share information on cases of male employees’ childcare leave as part of change management and execution efforts • Establish relevant regulations so that there are no promotion-related disadvantages when employees use a leave, including for childcare and family care

Employee Welfare System Dong-A Socio Group operates various welfare systems to raise employees' sense of pride in the organization and employee engagement and to create a happy workplace for employees. In addition, the scope of welfare system beneficiaries is being expanded to include employee families to establish an environment where employees can fully engage themselves in the organization and respective job and provide memories in which employees share common positive experiences with their families.

Major Welfare Systems

Education/daily life stability	Child tuition support, self-development support, home purchase/rental support, funeral service support, operation of the Employee Welfare Fund (loan support), support for family relocation costs owing to a transfer, and others
Leisure	Adoption of the selective welfare system, operation of corporate condominiums and resorts, support for in-house club activities, operation of cafeterias/in-house cafes/rooftop gardens, and others
Health	Comprehensive health check-up for employees aged 45 or more, medical expense support for an employee's hospitalization/discharge, purchase of a group insurance policy for employees and spouses, operation of sick leave, and others
W&L Balance	Reward and leave for long service, childcare leave/family care leave, flexible work system, flexible dress code, Family Day (third Friday of each month), Phoenix Camp (vacation camp for employees' children), support for retired employee's office, and others
Family-friendly	Payment of congratulatory funds for marriage/childbirth, gift for the May Family Month, Christmas gift for employee children (aged 5-13)/gift for the national college entrance exam for employee children, family-friendly education, and others

* Please refer to the HR System section on Dong-A Socio Group's recruitment website to find more information about employee welfare system

Retirement Pension System Dong-A Socio Holdings set in place a retirement pension (DB, Defined Benefit) system for retirees' entitlement guarantee. As of December 31, 2022, 93 persons are subscribed to the retirement pension run by Dong-A Socio Holdings and the amount under operation is KRW 7.3 billion.

Rooftop garden of the office building

Win-Win Labor-Management Culture

Dong-A Socio Group is engaging in continuous communication and close cooperation, mainly based on a labor-management discussion organization, to establish growing labor-management relations while respecting workers' rights that are guaranteed by relevant laws, including the labor law.

Group Affiliate Status

Dong-A Socio Holdings

- Hold the Labor-Management Council once a quarter, based on mutual trust between workers and the company, to share information on the annual performance and management strategies and discuss talent-nurturing strategies, the work environment, and welfare system improvements. A meeting is held by position every quarter to strengthen communication.

Dong-A ST

- Strengthen cooperative labor-management relations, mainly based on the labor union and Labor-Management Council.
- Have continued its tradition as a zero-dispute business site without even a single strike since the company's founding in 1932.
- Stipulate that the collective agreement applies only to labor union members in principle, but can be applied to non-union members within a certain scope in accordance with a labor-management agreement, if needed.
- The Hanmaeum-day, the Labor Union Delegate Convention, and an event held on the anniversary of the labor union's founding were held in 2022 after being suspended due to COVID-19.

Dong-A Pharmaceutical

- Operate the labor union and Labor-Management Council for win-win relationship between labor and management and the advancement of the labor-management culture.
- Have continued its tradition as a zero-dispute business site without even a single strike since the labor union's establishment in 1975.
- Stipulate that the collective agreement applies only to labor union members in principle, but can be applied to non-union members within a certain scope in accordance with a labor-management agreement, if needed.
- Through active labor-management cooperation in 2022, it quickly resolved worker confusion that may have been caused by the completion of a new plant in Dangjin and the end of Dalseong Plant operation.

ST Pharm

- Hold the Labor-Management Council by quarter to establish a win-win labor-management culture that is based on trust and strive to improve working environment and employee welfare.
- Set a Grievance Settlement Committee to provide counseling on concerns that may arise during organizational life.
- ST Pharm's labor union is not a majority labor union, and therefore the collective agreement applies only to labor union members. However, it is also applied to non-union members depending on the need. In accordance with matters concluded in the collective agreement in 2022, ST Pharm increased welfare in relation to family events and created Family Day.

Dong-A ST's Collective Bargaining Coverage Rate

Classification	Unit	2020	2021	2022
No. of employees covered by the collective agreement	Person	1,559	1,612	**1,631**
No. of employees with labor union membership	Person	229	222	**206**
Collective bargaining coverage rate	%	14.7	13.8	**12.6**

Dong-A Pharmaceutical's Collective Bargaining Coverage Rate

Classification	Unit	2020	2021	2022
No. of employees covered by the collective agreement	Person	916	913	**916**
No. of employees with labor union membership	Person	200	226	**207**
Collective bargaining coverage rate	%	21.8	24.8	**22.6**

ST Pharm's Collective Bargaining Coverage Rate

Classification	Unit	2020	2021	2022
No. of employees covered by the collective agreement	Person	466	500	**576**
No. of employees with labor union membership	Person	202	194	**230**
Collective bargaining coverage rate	%	43.3	38.8	**39.9**

* Number of employees covered by the collective agreement at Dong-A ST, Dong-A Pharmaceutical, and ST Pharm is total number of employees excluding registered and unregistered executives. Number of employees with labor union membership is based on the year-end figure every year.

** There is no employee covered by the collective agreement at Dong-A Socio Holdings.

Human Rights Management System

Human Rights Management Policy

Dong-A Socio Group supports and complies with the Universal Declaration of Human Rights, UN Guiding Principles on Business and Human Rights (UNGPs), and international standards and guidelines related to human rights/labor. To establish a human rights management system that places importance on human dignity and value in accordance with the Jeong-Do management philosophy and ISO 26000, which is an international standard on corporate social responsibility, and to have it root down in overall management systems, we established human rights management principles that consist of matters that should be observed to protect and respect the rights of stakeholders, including employees. The principles are planned to be disclosed to internal/external stakeholders in 2023 through the Intranet and Jeong-Do management website. In addition, Dong-A Socio Group prohibits all types of discrimination that is based on gender, disability, age, race, religion, political opinions, and individuals' sexual orientation, and provides equal opportunities throughout the entire process that ranges from employment to nurturing, evaluation, and compensation to promote workplace diversity.

To enhance employee awareness and understanding of human rights and diversity, we provided training on preventing workplace sexual harassment, which is a legally obligated training, preventing workplace harassment, and improving perception towards the disabled (at least an hour once a year) to all Group affiliate employees, who completed the training.

Detailed Components of the Human Rights Management Principles

1. Prohibit discrimination
2. Comply with working conditions
3. Humanitarian treatment
4. Guarantee freedom of association and collective bargaining
5. Prohibit forced labor and child labor
6. Guarantee occupational safety
7. Protect the human rights of local residents
8. Protect the human rights of customers

Human Rights Management Framework

Dong-A Socio Group declared at the Dong-A Socio Group Social responsibility Council (DSC) that was held on December 16, 2022 that it will identify, in advance, potential risks in overall management activities based on the human rights management framework, prevent and ease the risks, and practice human rights management with a more responsible stance to have it take root as soon as possible. The human rights management framework is formed in a way to cover the entire human rights management process, including policies to prevent human rights violations, human rights due diligence, remedy process for victims, information disclosure, and stakeholder communication.

Key Elements of Human Rights Management Framework

Human rights management policy	Support and comply with the Universal Declaration of Human Rights, UNGPs, Constitution of the International Labor Organization, and OECD Due Diligence Guidance to implement human rights management
Governance	BOD, DSC, Social Responsibility Planning Bureau, departments in charge of practical matters related to human rights management at Group affiliates
Human rights due diligence	Use the Human Right Impact Assessment Guideline and Checklist provided by the National Human Rights Commission
Remedy for victims	Report and receipt, check if there was a human rights violation, report to the Human Respect Committee and lay agenda items, make a notice on the results of corrective action, follow-up management
Transparent disclosure	Disclose human rights respect activities through the Integrated Report
Stakeholder communication	Use various channels to communicate with Group affiliates, shareholders and investors, local communities, government, employees, and suppliers

Human Rights Management Governance

Dong-A Socio Holdings' BOD and DSC, consisting of all Group affiliate CEOs, receive reports on major human rights issues and reviews human rights management outcomes. Departments in charge of practical affairs related to human rights management and various relevant departments identify and assess human rights risks, carry out improvement and enhancement activities, and conduct evaluations. Dong-A Socio Holdings provides support so that the human rights of Group affiliate employees are respected at the same level as at the holding company. It will make utmost efforts so that human rights management is expanded to business partners.

Human Rights Impact Assessment

Dong-A Socio Holdings conducts human rights impact assessments to identify vulnerable areas or potential risks and implement improvement activities to prevent human rights violations. Based on the guidelines and checklist provided by the National Human Rights Commission, we finalized 185 indices in 11 areas in 2022 in consideration of corporate connection. We collected opinions from relevant departments and carried out a human rights impact assessment by means of a self-inspection to ensure a more effective assessment. Starting in 2023, we will conduct a human rights impact assessment on all Group affiliates and make continued improvements to matters that were identified through regular human rights impact assessments. We will remove human rights violation factors by making such efforts and reduce human rights risks by conducting activities aimed at raising human rights awareness.

Human Rights Impact Assessment Process

Human rights impact assessment

- Self-assessment of human rights impact index
- Review risk influence and importance level
- Identify vulnerable areas or potential risks

Improvement and enhancement activities

- Derive improvement points per risk
- Discuss risk improvement points and methods
- Conduct activities aimed at spreading the mindset of respecting human rights, including education and establishment of a relevant culture

Report on assessment results

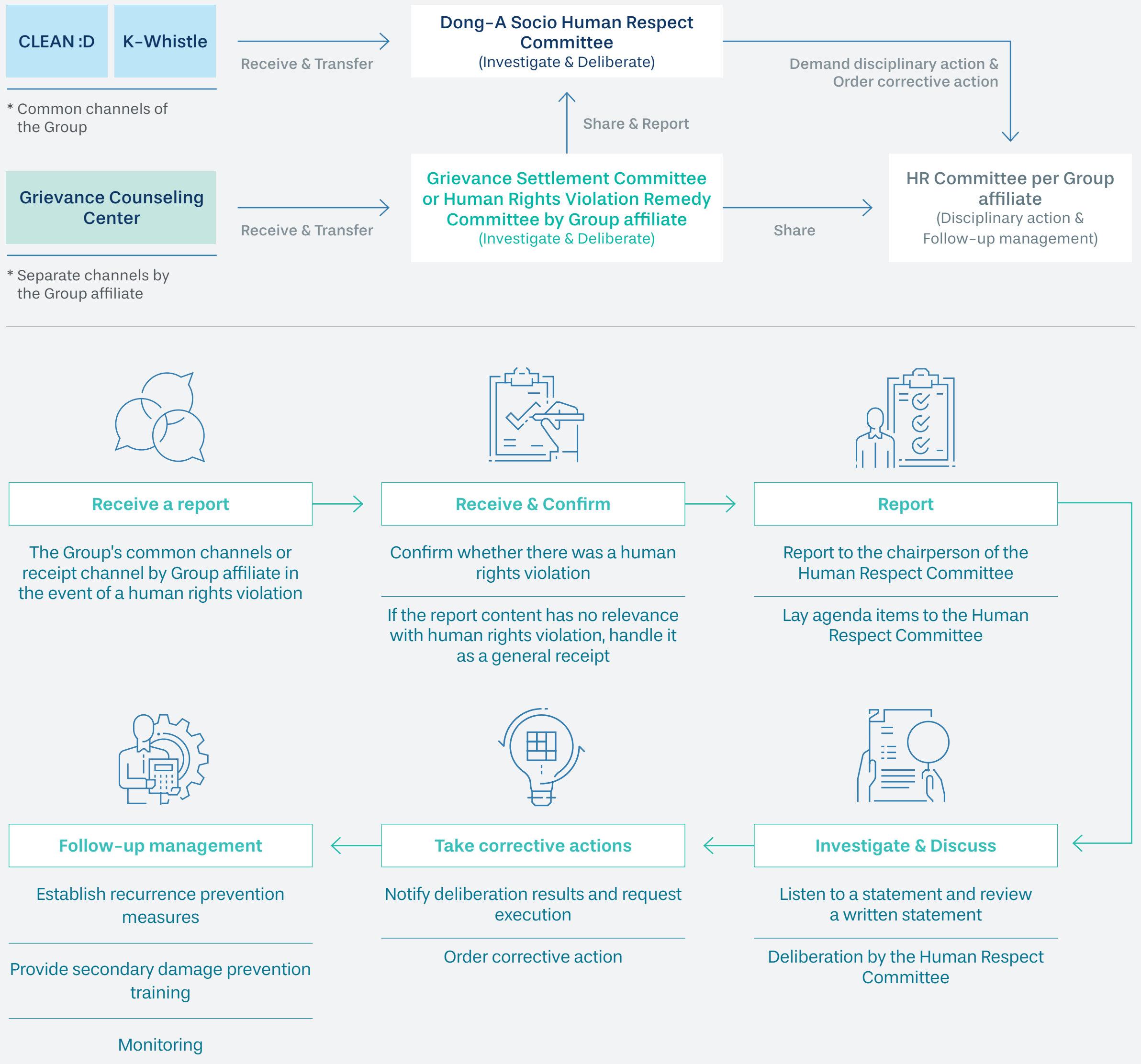
- Report to top management and DSC, reflect feedback
- Disclose major assessment results in the Integrated Report
- Disclose risks and improvement details to stakeholders and collect opinions

Grievance Counseling and Remedy for Human Rights Violation Victims

To listen to employee opinions and grievances through diverse channels, Dong-A Socio Group appointed a Grievance Handling Officer at each Group affiliate. We also operate on/offline grievance counseling channels that can be used by anyone and the "K-Whistle", an outsourced reporting system that receives anonymous reports on human rights violations.

Before implementing human rights management, Dong-A Socio Group established a remedy process for human rights violation victims in the work process, and provided information to all employees to enable access and use of the process. Each Group affiliate operates the Human Rights Violation Remedy Committee, which determines relief for victims in the event of a human rights violation and recommends measures to the CEO. Matters are quickly resolved in accordance with a set procedure based on objective facts and the "zero tolerance principle".

Channels for Receiving Human Rights Violation Reports and Remedy Process



CLEAN :D **K-Whistle**

* Common channels of the Group

Receive & Transfer

Dong-A Socio Human Respect Committee
(Investigate & Deliberate)

Demand disciplinary action & Order corrective action

Share & Report

Grievance Counseling Center

* Separate channels by the Group affiliate

Receive & Transfer

Grievance Settlement Committee or Human Rights Violation Remedy Committee by Group affiliate
(Investigate & Deliberate)

Share

HR Committee per Group affiliate
(Disciplinary action & Follow-up management)

Receive a report

The Group's common channels or receipt channel by Group affiliate in the event of a human rights violation

Receive & Confirm

Confirm whether there was a human rights violation

If the report content has no relevance with human rights violation, handle it as a general receipt

Report

Report to the chairperson of the Human Respect Committee

Lay agenda items to the Human Respect Committee

Investigate & Discuss

Listen to a statement and review a written statement

Deliberation by the Human Respect Committee

Take corrective actions

Notify deliberation results and request execution

Order corrective action

Follow-up management

Establish recurrence prevention measures

Provide secondary damage prevention training

Monitoring

Workplace Safety & Health

Prevention-Centered Safety & Health Management

Safety and Health Management System

Safety and health management is the foundation of corporate management and an essential factor for fulfilling social responsibilities. Dong-A Socio Group carries out prevention-centered safety and health management activities based on a safety and health management system, establishes and declares each Group affiliate's safety and health management policy, and strives to build safe workplaces.

Group Affiliate Status

ST Pharm

- Established 54 types of standard operation processes that include responsibilities and rights in relation to the safety and health environment, decision-making, execution, and measures.

Dong-A Otsuka

- To achieve its "zero serious accident, serious incident, and violation of the law" goal, it established relevant work processes by establishing a safety & health management system and integrated manual, promoted pre-work safety meetings (TBM: Tool Box Meeting), and strengthened safety management activities, such as the Safety Sinmungo.

Yongma Logis

- Established seven safety & health regulations based on the Occupational Safety and Health Act and Serious Accidents Punishment Act. The Safety Management Team has set in place the safety and health management system.

Soo Seok

- Systematized the safety and health management system in response to the enforcement of the Serious Accidents Punishment Act in 2022 and established a safe culture at workplaces.

Group Affiliate Status in Safety and Health Management System (ISO 45001) Certification

Company	Initial certification	Certified business site	Note
Dong-A ST	2021	Cheonan/Dalseong Campus	Planning to receive certification for the Songdo Campus in the third quarter of 2023
Dong-A Pharmaceutical	2022	Icheon/Cheonan/Dangjin Plant	Completed acquisition of certification for all manufacturing facilities
STgen Bio	2022	Songdo Plant	-

Safety and Health Management System Status of Group Affiliates

3 companies based on ISO, 2 companies (Soo Seok, ST Pharm) based on the Occupational Safety and Health Act, and 8 companies not established yet

* The occupational safety and health management system is applied to all employees and partner companies

Workplace Safety & Health Risk Management

Identifying Risk Factors and Making Improvements

We conduct workplace risk assessments and walk-around field inspections to prevent safety incidents, and also identify potential hazards in workplaces and implement improvement activities.

Group Affiliate Status

Dong-A ST

- Conducting a workplace risk assessment on 20 target items according to its safety & health management policy and management plan. Based on the results of a risk assessment on all workplaces in 2022, it implemented improvement measures, such as adopting a computer program for harmful factors at the Yongin R&D Center and receiving chemicals management consulting at the Cheonan Campus.

Dong-A Pharmaceutical

- Conducting a risk assessment on all workplaces once a year according to standard work guidelines, derives risk factors, and makes improvements. As a result of a risk assessment conducted in 2022, it derived 152 risk factors and implemented 122 improvement measures.

ST Pharm

- The Sihwa/Banwol Campus is a workplace subject to Process Safety Management (PSM) and regularly receives an inspection and evaluation on the hazards management status from the Ministry of Employment and Labor. As a result of an evaluation in 2022, the Sihwa Campus received the S Grade (Banwol Campus received the S Grade in 2020).

STgen Bio

- Conducted a risk assessment on 45 types related to process, mechanical equipment, and work in 2022 and derived risk factors. Established risk factor reduction measures and carried out improvement activities.

DONGCHEONSU

- Internal staff in charge of safety and an external professional organization oversee regular and nonscheduled field inspections to improve the work environment and prevent accidents. In 2022, it eliminated risk factors for 66 cases (21 cases at headquarters and 45 cases at branches).

Internalizing a Culture of Safety

Safety Training Along with legally mandatory training, we create and continually provide safety training programs that consider worksite characteristics and status to raise workers' awareness of safety and improve expertise.

Group Affiliate Status

Dong-A Pharmaceutical

- A total of 3,551 employees/10,147 hours (cumulative) completed a regular safety & health training course in 2022.

ST Pharm

- Operating a safety & health training program for employees as well as suppliers and visitors.
- Conducted a regular evaluation in 2022 to measure safety & health environment training effects and outcomes.

STgen Bio

- Provided competency-strengthening training to supervisors and employees handling chemicals with a high level of safety management work relevance.

Employee Health Management

Support for Employee Health

Dong-A Socio Group continues to operate a company medical office, provide medical health check-ups for employees, and manage work-related stress as part of efforts to promote employees' health and to preemptively prevent and manage illnesses.

Working Environment Managing

Dong-A Socio Group continues to check into the work environment, improve hazardous work environments, prevent potential work-related diseases caused by work characteristics, such as muscular skeletal disease, and provide individual protective gear that has secured safety. We minimize factors that cause harm to workers' health and strives to provide a safe, pleasant working environment.

Group Affiliate Status

Dong-A ST, Dong-A Pharmaceutical

- To minimize harmfulness to health, they manage MSDS exposure indexes, post MSDS and attach warning signs, and provide training on precautions that should be taken for handling and appropriate use of protective gear, thereby minimizing harm caused to health by harmful chemical substances.

ST Pharm

- Operating the Occupational Exposure Band (OEB), which is a leading occupational exposure containment standard for worker protection.
- Adopted an exposure containment system to satisfy OEB and checked exposure containment performance in accordance with guidelines of the International Society for Pharmaceutical Engineering (ISPE).

Dong-A CHAMMED

- Planning to conduct work environment measurements to improve the work environment in 2023.

Dong-A Otsuka

- A workplace with 50 or more workers appoints a professional company as a health manager and measures the work environment twice a year to minimize hazard factors and establish a pleasant work environment.

Yongma Logis

- Through safety and health inspection round checks held from March 24 to May 9, 2022, it examined the status of business site safety and health management and matters related to voluntary risk assessments.

7 AFFORDABLE AND CLEAN ENERGY

13 CLIMATE ACTION

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

2,948TJ

Energy consumption

156,740tCO_2eq

GHG emissions

3.6KRW billion

Social contribution expenditures

* Based on the figures of Dong-A Socio Group

RESPONSIBILITY

With a sense of duty and responsibility on how our products and services influence the healthy lives of humanity, Dong-A Socio Group is internalizing safety principles and management system in the management process across entire product life processes and is applying an optimal quality management system that meets international standards, including GMP. In addition, we implement consumer-centered management and seek to generate distinctive customer value by raising customer convenience and satisfaction. Furthermore, we regard suppliers that are with us throughout this process as an important factor of stable business operation and partners of sustainable growth. We seek to strengthen suppliers' ESG risk management and capabilities, and are making utmost efforts to enhance supply chain sustainability.

To minimize the negative impact that companies have on the environment and to protect the natural environment, Dong-A Socio Group faithfully abides by environmental regulations and policies, advances its environmental management system, increases environmental investments, and continually strengthens environmental management levels. To respond to net zero, which has become a global issue, we are making diverse efforts to reduce greenhouse gas emissions. With Dong-A Socio Holdings performing a central role, we plan to establish a climate change response strategy and roadmap. To contribute to the development of local communities, which are the reason and foundation of corporate activities, Dong-A Socio Group carries out various social contribution activities in consideration of business relevance and is realizing the value of "thrive together".

Product Responsibility

Product Safety

Product Safety Principle

As a company that carries out R&D, production, and sales of pharmaceuticals, food and beverages, and medical equipment that are directly connected to life, Dong-A Socio Group is internalizing safety principles that consider the entire product cycle in the management process with a sense of responsibility to protect customers' health and safety.

Activities to Strengthen Product Safety

Improving Product Package We are providing products with improved safety and convenience to customers, continually identifying matters that require improvement, and renewing product packages.

Dong-A Pharmaceutical's package design with clear administration information

Group Affiliate Status

Dong-A ST

- Received an opinion on difficulty in separating each unit of the Leucostim PFS product in 2022 and improved the packaging to make each unit's separation easy by adjusting the perforated line (deeper setting).

Dong-A Pharmaceutical

- Developed a package design that considers readability and visibility of administration information (one-time dosage, age group for dosage, time, volume, etc.) that consumers should check before taking a product for 10 types of items in 2022.

Dong-A CHAMMED

- Made improvements to resolve the issue of lack of inner space of box packaging, such as changing the package layout and organizing the interior of small boxes, and applied them to mass production.
- Received Forest Stewardship Council (FSC) certification and applied water-based ink-using informational phrases to enhance eco-friendliness of packaging materials and completed adoption in the first quarter of 2023.

Dong-A Otsuka

- Changed from the harmful chemical substance, methyl ethyl ketone (MEK), to nontoxic ink for printing products' expiration dates, and changed the OPP label adhesive to water-separable material.

DONGCHEONSU

- Planning to launch a label-free product with an inserted QR code in 2023 by applying labeling standards officially announced by the Ministry of Environment.

Harmful Chemical Substance Management and Training As chemical substance standards become segmented and strengthened, companies must respond and manage them more actively. To handle chemical substances safely, Dong-A Socio Group has been making continuous efforts, including writing material safety data sheet (MSDS) based on the chemical substance management system, training to raise worker awareness, making investments in harmful substance reduction facilities, and conducting analysis testing.

Group Affiliate Status

ST Pharm

- Installed RTO, a chemical substance discharge reduction facility, by investing KRW 1.2 billion and reduced annual dichloromethane emissions by 98.98% in 2022 over the previous year.

Dong-A CHAMMED

- Began documentation of RoHS II regulation compliance in 2021 for exports to Europe, and conducted a hazardous substance analysis and obtained RoHS II certification for one item in 2022.

Strengthened Clinical Trial Responsibilities

Complying with Ethical Regulations on Clinical Trials Clinical trials are an essential process that proves pharmaceutical safety and treatment efficacy. Regulatory organizations in different countries and relevant international organizations demand that strict ethical regulations be applied to minimize risk factors that may arise during the clinical trial process. Dong-A ST and ST Pharm conduct clinical trials in compliance with the Good Clinical Practice (GCP) of the International Council for Harmonisation (ICH).

Group Affiliate Status

Dong-A ST

- Established ethical principles on clinical trials in compliance with pharmaceutical-related laws in different countries as well as ethical regulations and guidelines of regulatory organizations.
- All clinical trials are conducted after approval from regulatory organizations in different countries, including Ministry of Food and Drug Safety, the Institutional Review Board (IRB), and Ethics Committee.

ST Pharm

- Monitoring, managing, and supervising the status of implementation of test ethics regulations by a clinical trial Contract Research Organization.
- Strictly complying with selection and exclusion criteria according to a clinical trial plan established prior to the clinical trial.

Protecting Clinical Trial Participants IRB, which deliberates important matters on clinical trials, demands that institutions make utmost efforts to protect participants' safety, rights, and dignity.

Group Affiliate Status

Dong-A ST

- Conducting clinical trials after obtaining voluntary consent from clinical trial subjects to protect their safety and rights.
- Protecting the confidentiality of the records identifying clinical trial subjects in accordance with regulations and legal requirements.
- Established clinical trial indemnity rules and purchased a compensation insurance policy to provide compensation in the event of damage caused by participating in a clinical trial.
- Conducting monitoring on a constant basis in accordance with domestic and overseas ethical regulations and the company's SOP to prevent situations that harm participant safety and rights in the clinical trial process.

ST Pharm

- Strictly observing subject selection and exemption criteria according to a clinical trial plan that is established beforehand and conducts monitoring to guarantee the safety of participants throughout all steps of a clinical trial.

Quality Management

Quality Management Scheme

Quality Management System Dong-A Socio Group adopted quality as a management principle that must be observed rather than a matter that can be compromised. It runs a strict quality management system that places top priority on product quality in all steps, ranging from R&D to production, storage, sales, and consumer use.

Group Affiliate Status

Dong-A ST

- Strengthening its quality guarantee work that has applied overseas regulations with the goal of upgrading Songdo Campus' cGMP in the first half of 2023, while also preparing an inspection by campus to establish global GMP, moving forward.

Dong-A Pharmaceutical

- Improving the GMP level by monitoring regulatory agencies and the media, holding regular meetings of the quality organization, and strengthening data integrity by adopting and operating IT systems, including EDMS[1], QMS[2], CISPro[3], LES[4] and LIMS[5].
- Completed obtaining quasi-drug GMP certification for the new Dangjin Plant in March 2022. Planning to acquire drug GMP certification in 2023.

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[1] EDMS: Electronic document management system

[2] QMS: Quality management system

[3] CISPro: Inventory management system for chemicals and supplies including controlled substances, using barcode

[4] LES: Laboratory execution system

[5] LIMS: Laboratory information management system

ST Pharm

- Implementing quality control by strictly complying with the latest global GMP guidelines and requirements, including those of Europe and the US, as well as cGMP standards.
- Conducting a US FDA Pre Approval Inspection (PAI) on manufactory before new drug approval for the oligonucleotide building at Banwol Campus in May 2022. It received a zero-defect rating (No Action Indicated) in August and became the first in Asia to receive FDA cGMP certification for an oligonucleotide manufactory.

STgen Bio

- Conducting regular voluntary inspections and monitoring on overall GMP systems, including raw material management and product storage, manufacturing process, validation, and quality control.
- Set in place a quality management system that is based on cGMP regulations.

Dong-A CHAMMED

- Established quality policies and quality management system based on the "quality first" policy. In January 2023, it received Europe's EN ISO 13485 certification for quality management systems.

Dong-A Otsuka

- Observes the principles of "securing product credibility, improving productivity and realizing cost reduction, and satisfying internal and external customers".
- Established the food safety management system (FSSC 22000), and received food quality and safety-related certifications, including HACCP.

Yongma Logis

- Created a quality assurance (QA) manual that is based on domestic and overseas regulations, and established and is operating a quality management system.
- Received ISO 9001 certification for quality management system and ISO 13485 certification for medical device quality management system.

Activities to Strengthen Quality Management

Quality Inspection and Audit By examining the status of quality management system operation and conducting field audits on raw materials and manufacturing processes, we are identifying issues that impact quality and continually implementing improvement activities as part of our efforts to maintain quality.

Group Affiliate Status

Dong-A ST

- Strengthening drug quality and safety management by receiving GMP audits from domestic and overseas regulatory organizations and conducting regular voluntary internal inspections. In 2022, it completed an internal voluntary GMP inspection by dosage form on a unit campus and completed an external inspection by the Ministry of Food and Drug Safety and relevant suppliers.

Dong-A Pharmaceutical

- Planning to unify quality management system management standards in 2023 to systematically manage deviations that occur at production plants.

STgen Bio

- Formed and maintaining a GMP culture through continued data integrity training.
- Implementing improvement activities through product quality evaluations and regular trend analysis.
- Managing major processes and evaluating suppliers to maintain uniform quality of raw materials.

Dong-A Otsuka

- Inspecting import, production process, and product shipment of raw materials through an internal FSSC 22000 audit organized by the Quality Management Department once a year and a regular HACCP evaluation. Also conducting quality assessment, including statistical process management of raw materials, process, and products.

Yongma Logis

- Conducting monitoring for improvements through regular internal audits on Third Party Logistics (TPL) centers and Incheon bonded warehouse.

Soo Seok

- Conducting an internal FSSC 22000 audit, with the Quality Management Team performing a central role, twice a year. Also strengthening quality inspection and audit activities.

DONGCHEONSU

- Conducting FSSC 22000 and HACCP audits, and receiving guidance and inspection from the approval agency with jurisdiction (at least twice a year).
- Planning to conduct an internal audit in 2023 based on quality management cross-checking of three campuses.

Customer Satisfaction

Consumer-Centered Management

Dong-A Socio Group conducts all corporate management activities, ranging from product development to production and sales, from the customer perspective and with a focus on customer opinions, and strives to enhance customer satisfaction.

Group Affiliate Status

Dong-A Pharmaceutical

- Established the vision, "development of innovative products and services that satisfy consumer needs in the health care industry" in 2022, and customer-centered management strategies with a focus on expanding power brand, improving consumer-centered fundamentals, and digital transformation.
- Received CCM[1] certification for the seventh consecutive time in 2022.

Dong-A Otsuka

- Adopted a science part that consists of the top expert committee in the field of wellness in Korea to support the nation's and individuals' growth and development, with a focus on customer health and safety.

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[1] Consumer-Centered Management. This system is for evaluating whether all activities of a company are consumer-centered and if continued improvements are being made to management activities. The Korea Consumer Agency conducts the evaluation and the Fair Trade Commission provides certification. The certification is valid for two years.

Customer Communication We listen to the voice of customers (VOCs) through diverse channels, identify issues and inquiries, and implement measures to quickly resolve issues and establish improvement measures.

Group Affiliate Status

Dong-A ST

- Developed a template on informational text by VOC situation in 2022 to enhance customer counseling convenience.
- Established a customer information system to report supply details.
- Worked on establishing new PV guidelines, and improved the statistical analysis system of the complaint management system to smoothly derive VOC insight.

Dong-A Pharmaceutical

- All VOCs are registered in the customer counseling system, categorized according to the type and importance, and shared with relevant departments to analyze the cause, establish measures, and implement improvement activities.
- The Customer Satisfaction Team manages a VOC until it is completely processed for quick, systematic VOC responses.

Activities to Increase Customer Satisfaction

Providing Product Information By quickly and accurately providing product information that is required by customers, we seek to raise customer trust and satisfaction in our products.

Group Affiliate Status

Dong-A ST

- Delivering product information in a proactive manner through product briefing sessions for HCP; "Mediflix", a web-based online medical information-providing System; and field activities of MRs.
- Providing product information through its website and product brochures to final consumers since there are many restrictions on providing information that are specified in ethical drug-related laws.
- Sending an official notice to relevant parties, ranging from clients to pharmacies, and publishing an article on a technical magazine to prevent confusion when there is a change in product information.

Dong-A Pharmaceutical

- Registering seller dara to provide information on pharmacies where drugs can be purchased and information on the inventory status in connection with the Marketing Department, including out-of-stock, discontinued, and restocked products.

Customer-Centered Product Improvement We seek to enhance customer satisfaction and raise product competitiveness by reflecting customer opinions in product improvement and development.

Group Affiliate Status

Dong-A ST

- Implemented various improvement activities, such as changing the Jublia container to translucent material, changing the insert of the Melanon, changing the PV guidelines of frequently-used products, developing a template on text by situation to enhance customer convenience, and changing the product carton when there is change, etc.

Dong-A Pharmaceutical

- Made active improvements for customer complaints, among collected VOCs, including defective product-opening and printing as well as barcode recognition.

Dong-A Otsuka

- Became the first in Korea to adopt a cut-line for easy separation of labels and applied it to all of its PET products amid growing social demand for easily-recyclable packaging containers.

Responsible Marketing

Marketing Principles

Dong-A Socio Group recognizes its social responsibility to disclose information properly and maintain fair distribution competition regulations, and strictly complies with relevant laws and engages in responsible marketing activities.

Group Affiliate Status

Dong-A ST

- Complying with fair competition regulations related to drug and medical device trade, including the Medical Service Act, Pharmaceutical Affairs Act, Medical Devices Act, Monopoly Regulation and Fair Trade Act, and Improper Solicitation and Graft Act.
- Operating a compliance management system for monitoring on marketing activities.

Dong-A Pharmaceutical

- Complying with fair trade-related laws, including the Framework Act on Consumers, to realize consumer rights and interests and maintain fairness in the industry.
- Established basic principles and compliance details on preventing false and exaggerated advertising.
- Establishing prior mechanisms to minimize the possibility of misconceptions and confusion related to product efficacy/effect through advertising reviews by relevant organizations, including the Korea Pharmaceutical and Bio-Pharma Manufacturers Association's Pharmaceutical Advertising Review Committee, Korea Health Functional Food Association, and Korea Medical Devices Industry Association, and internally conducts additional reviews on compliance.

ST Pharm

- Conducting marketing activities under monitoring by a compliance organization, in addition to making it mandatory to comply with the Monopoly Regulation and Fair Trade Act in Korea and the mutual anti-bribery code of conduct in case of API supply with global pharmaceutical companies.

Accurate Product Information and Labeling

Because drugs have direct impact on customers' health, it is important to deliver accurate information on product administration and methods of use. Doing-A Socio Group complies with relevant regulations and conducts prior inspections on product information that can be misunderstood based on an internal review process, thereby supporting consumers' proper administration and use. Thanks to these efforts, there is no case of violation of labeling and marketing-related laws.

Group Affiliate Status

Dong-A Pharmaceutical

- Going through the inspecting process for indicated phrases, aimed at accurate product information labeling and evidence-based marketing; and an internal labeling and advertising process to prevent exaggerated and misleading advertising and comply with relevant regulations.
- Operating the "myvlar.meliane" Instagram channel to provide accurate information to consumers in an easy, familiar way. Received the Grand Prize in the Pharmaceutical Instagram Category at the 2022 Social i-Award.

Dong-A Otsuka

- Reviewing the possibility of distortion of customer and product-related information before marketing and PR activities, and indicating accurate information based on facts for product labels.

Dong-A Pharmaceutical's "myvlar, meliane" Instagram channel to deliver information about contraceptive symptom

Establishment of a Sustainable Supply Chain

Supply Chain Management

Dong-A Socio Holdings established the Group's common supply chain management process to adapt to the changing industrial environment together with suppliers to fulfill its social responsibilities and thrive together, and implemented, first of all, the identification, selection, and management of critical suppliers related to work.

Supplier Selection Process

When choosing a supplier, Dong-A Socio Holdings identifies risks and categories them according to their degree, followed by classification of suppliers depending on the possibility of risk occurrence and severity. We then conduct a due diligence on suppliers categorized as "mid-level or higher". For transparent and fair supplier selection, a collaborating department conducts an evaluation and due diligence according to pre-established criteria and the Jeong-Do Management Team checks the due diligence results. For chosen suppliers, we request them to check matters that they should pay attention to when creating a contract and the graft criteria that should be met when carrying out work in accordance with "business partner selection draft electronic approval".

Status of Dong-A Socio Holdings' Suppliers

Tier-1[1] Suppliers

65 companies
(including double count)

Classification		No. of suppliers (company)	Portion (%)
Investment	Direct	6	8.7
	Indirect	3	4.3
Service		49	71.0
Purchase		11	15.9

Tier-2[2] Suppliers

972 companies

Critical Tier-2: 20 companies (20.6%)

[1] Suppliers that directly signed a contract with the company
[2] Subcontractor of tier-1 suppliers

Strengthening Supply Chain ESG

Dong-A Socio Group is striving to enhance sustainability by strengthening supply chain ESG based on the belief that thriving together with suppliers leads to enhanced corporate value and competitiveness.

Establishment of a Supply Chain ESG Management Process

Dong-A Socio Holdings established the "Supplier Code of Conduct" that covers anti-bribery, human rights and labor, and environmental fields for transparent supply chain management and also created the "supply chain checklist", which it began to apply to suppliers of Group affiliates that require supply chain management first and plans to steadily expand the scope. By doing so, we seek to have suppliers examine matters that they should essentially observe through a self-diagnosis based on the supply chain checklist when carrying out work with Dong-A Socio Group, and also to provide training and conduct monitoring.

Supply Chain Management Process of Dong-A Socio Group

Commitment → **Identification** → **Assessment** → **Implementation** → **Communication**

- **Commitment**: Establish and disclose the Supplier Code of Conduct
- **Identification**: Define the scope of supply chain for key products and services
- **Assessment**: Conduct the supply chain risk assessment
- **Implementation**: Conduct the supply chain due diligence
- **Communication**: Monitoring and training

Supply Chain ESG Risk Assessment

Dong-A Socio Holdings established Dong-A Socio Group's supply chain management process. First of all, we set a scope that requires supply chain management, identify risks that may arise in the overall supply chain aspect across direct/indirect supply chains, and determine the degree of risks based on the possibility of occurrence and impact. In addition, we sort out critical suppliers that can have a significant impact on Dong-A Socio Group products and services in supply chain management to give concrete shape to the primary critical supplier scope.

Supply Chain ESG Due Diligence

Dong-A Socio Holdings created a checklist that consists of around 30 items in the anti-bribery, human rights and labor practices, and environmental areas that require supply chain ESG management commonly for Dong-A Socio Group. We plan to conduct a supply chain ESG due diligence based on the supply chain, beginning with Dong-A Socio Holdings in 2023 which will be expanded to all Group affiliates to strengthen supply chain ESG capabilities.

Dong-A Socio Group's Supply Chain ESG Due Diligence Items

Area	Details
Anti-bribery	Bribery and rebate, gift, meal, and other similar benefits, fair competition and prohibition of collusion, conflict of interests, transparent information disclosure, reporting of unlawful conduct, etc.
Human rights and labor practices	Prohibition of discrimination, compliance with working conditions, humane treatment, guarantee of freedom of association and collective bargaining, prohibition of forced labor and child labor, guarantee of occupational safety, protection of local residents' human rights, protection of customers' human rights, etc.
Environment	Resource efficiency and minimization of wastes, reduction of pollution and discharge, management of harmful chemical substances, management of water resources, energy consumption and GHG emissions, etc.

Minimizing Environmental Impact

Environmental Management

Environmental Management System

Dong-A Socio Group is establishing an environmental management system and working on receiving ISO 14001 certification for environmental management system to minimize environmental impact and comply with relevant laws, based on which it will strengthen the level of environmental management.

Status of the Group Affiliates' Environmental Management System (ISO 14001) Certification

Company	Initial certification	Certified business site	Note
Dong-A ST	2021	Cheonan/Daegu Campus	Planning to receive certification for Songdo Campus in the second quarter of 2023
Dong-A Pharmaceutical	2022	Icheon/Cheonan/ Dangjin Plant	Completed certification acquisition for all manufacturing facilities
STgen Bio	2022	Songdo Plant	Completed certification acquisition for all manufacturing facilities
Dong-A Otsuka	2015	Anyang/Cheongju/ Chilseo Plant	Completed certification acquisition for all manufacturing facilities
Yongma Logis	2017	Headquarters, Anseong Logistics Center	Planning to receive a renewal audit in 2023

Group Affiliate Status

Dong-A Socio Holdings

- Planning to establish an environmental management system and receive ISO 14001 certification for Seoul Headquarters (Dong-A Socio Holdings, Dong-A ST, Dong-A Pharmaceutical) and Sangju HR Development Center in 2023.

Dong-A ST, Dong-A Pharmaceutical

- Taking the lead in complying with relevant laws and standards by receiving environmental management system certification for plants that have production facilities based on recognition of the environment as an important factor of corporate management.

ST Pharm

- Established an environmental management system that focuses on managing seven areas (waste, water quality, air, soil, leakage, GHG, energy) to minimize environmental impact.
- Established a climate change response strategy to counter climate change and achieve net zero.

STgen Bio

- Received ISO 14001 certification for environmental management system by preventing environmental issues and systematically managing relevant risks based on the environmental management system. Planning to establish an energy management system and receive ISO 50001 certification in 2023.

Environmental Management Activities

Environmental Investment

We are minimizing environmental impact by making continued investments to adopt environmental pollutant reduction facilities and clean technologies.

Group Affiliate Status

ST Pharm

- Installed environmental pollutant reduction facilities at the Sihwa Campus in 2022, including an activated carbon filtration tank, regenerative thermal oxidizer (RTO), and electric precipitation.

Dong-A CHAMMED

- Developed reusable packaging and biodegradable package in October 2022 (equivalent amount of CO$_2$ emissions reduction by planting 5,139 pine trees per year).

Dong-A Otsuka

- Reduced energy use by installing high-efficiency boilers and LED lights in 2022.
- Reduced environmental pollutants by adopting the reverse osmosis (RO) system.
- Improved the processing capacity of the wastewater treatment facility by applying a conveyor lubricant collection system.

Soo Seok

- Planning to replace the bunker C fuel oil melting furnace with an LNG melting furnace at the Dangjin Plant in 2023, aiming to reduce nitrogen oxide (NOx) emissions compared to the current melting furnace capacity (goal of 3.2% → 2.0%).
- Planning to install waste heat and solar heat generators to reduce GHG emissions.

Workplace Environmental Management

We are regularly inspecting environmental pollutant reduction and prevention facilities at workplaces to comply with legal emissions standards and minimize emissions of substances that impact the environment, and taking rapid measures for matters that are identified as requiring improvement.

Wastes We manage the amount of waste generation and reuse on a constant basis to minimize waste discharge, legitimately discharge and process wastes through the "Allbaro System" and professional outsourced processing company, and comply with the Wastes Control Act.

Group Affiliate Status

Dong-A ST, Dong-A Pharmaceutical, ST Pharm

- Managing the waste discharge, transport, and treatment process through the "Allbaro System" which is a comprehensive waste management system of the Ministry of Environment, and separately discharge and process designated wastes by choosing an external professional company.

Soo Seok

- Complying with the storage period of designated wastes (dust, waste oil, etc.) and recyclable wastes to manage them and outsources processing to a legitimate final waste processing company. Recycled at least 86% of wastes generated at the workplace in 2022.

DONGCHEONSU

- As of 2022, 96.5% of workplace-generated wastes are recyclable items, and the company is striving to minimize the generation of foreign substances to improve the recycling rate and to separately discharge wastes.

Air Environment We identify the types and characteristics of air pollutants that are discharged by workplaces and install appropriate discharge reduction and prevention facilities to comply with discharge standards stipulated in relevant laws.

Group Affiliate Status

Dong-A Pharmaceutical

- Measuring the amount of air pollutant discharge on a regular basis. Installed a low NOx burner on boiler facilities.

ST Pharm

- Installed RTO for THC and VOC reduction. Conducting regular monitoring, air pollutant management, and improvement activities.

Soo Seok

- Measuring pollutant concentration in real time and making reports to relevant organizations and local government.
- Planning to install new air pollution prevention facilities and TMS when the Glass Unit is relocated to the Dangjin Plant in 2023.

Responding to Climate Change

Establishment of a Climate Change Response System

Dong-A Socio Holdings seeks to establish GHG emissions reduction and climate change response goals and strategies based on the results of evaluating/analyzing the financial impact of climate change's potential risks to the company and stakeholders as well as opportunities, and plans to establish a systematic response system that is implemented according to decisions made by the BOD and top management. We will also closely monitor the implementation status of our execution plans every year and reflect the results in our new goals and strategies, while promoting active stakeholder participation through appropriate communication channels.

Climate Change Response Strategy Dong-A Socio Holdings plans to establish a climate change response strategy and execution roadmap in 2023 that includes its detailed direction in managing climate change's impact on the company's business, products, services, and supply chain. The purpose of the climate change response strategy is to address climate change's negative impact on the health and welfare of people and the local community, reduce GHG emissions, increase use of renewable energy, and improve resource efficiency, thereby securing corporate sustainability and competitive edge.

Process of Establishing a Climate Change Response Strategy

Assessment

Asset the climate change impact, including energy/water use and GHG emissions

Goal-setting

Based on the assessment, set a challenging yet achievable goal to reduce GHG emissions and pollutant discharge, enhance energy and resource efficiency, and address climate change's impact on health and the local community

Establishment and execution of a plan

Establish and execute a climate change response program plan to achieve the goal, such as making renewable energy and energy efficiency-related investments and securing supply chain and production process sustainability

Monitoring and continued improvement

Conduct the proves monitoring on a regular basis, based on which the climate response strategy is reviewed and maintained to be appropriate for the improvement goal

Climate Change Governance Dong-A Socio Holdings established the Environmental Management Committee that is supervised by the CEO through which it establishes environmental policies and goals and responds to major environmental issues, including those related to energy, GHG, and wastes. In addition, we plan to establish a system where a report is made to the BOD on the progress regarding a climate change response strategy that will be established, followed by BOD-level supervision of strategy execution.

Expansion of Information Disclosure Dong-A Socio Holdings discloses information about GHG emissions (Scope 1, 2, 3) based on the GRI Standards through the Group's Integrated Report. In addition, according to the recommendation made by the Task Force on Climate-related Financial Disclosures (TCFD), we plan to disclose relevant information starting in 2024. To this end, we joined the launch of the Korea TCFD Alliance, a voluntary, private sector-led alliance that was established to raise TCFD execution ability and response capability in 2022, and are taking part in the alliance as a working group.

Dong-A Socio Holdings will transparently disclose the progress it makes in the process of reducing GHG emissions and achieving climate change goals to various stakeholders, including customers, suppliers, employees, investors, and regulatory organizations.

GHG Management & Renewable Energy Adoption

Management of GHG Emissions Dong-A Socio Group began establishing a GHG inventory (Scope 1 & 2) in 2019 for Dong-A Socio Holdings, Dong-A ST, Dong-A Pharmaceutical, ST Pharm, and Soo Seok and then completed the establishment of an inventory that includes even Scope 3 (calculation scope: volume of water use), in addition to Scope 1 and Scope 2, for all Group affiliates in 2021, which was followed by a third-party verification by the Korea Standards Association.

Adoption of Renewable Energy Dong-A ST began operation of a 200 kW-capacity solar panel at the Cheonan Campus in March 2022 and anticipates an annual 276 MW of renewable energy production and GHG reduction effects of 128 tons. Gaining strength from this achievement, the Daegu Campus also plans to install a solar panel in 2023.

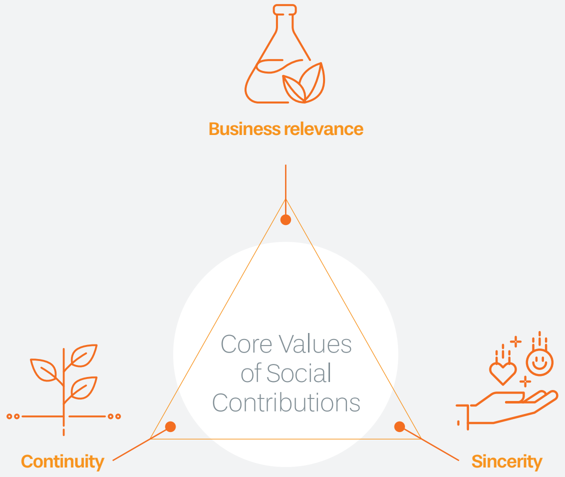
Dong-A Pharmaceutical completed the construction of a 420 kW-level solar panel at the Dangjin Plant in August 2021 and plans to install an additional 800 kW-level panel by August 2023. This will enable the company to procure around 14.8% of its annual electricity consumption of 10,350 MW (based on 2022) through renewable energy. In addition, it completed installation of a 200 kW-level panel at the Cheonan Plant in January 2023. Dong-A Otsuka is reviewing the adoption of a photovoltaic system at its Chilseo Plant in 2023.

Social Contributions

Social Contribution System

Dong-A Socio Group is carrying out diverse activities in consideration of continuity, sincerity, and business relevance in "health, environment, people, and society", which are its major social contribution activity areas, to realize happiness of overall society. In addition, we are taking the lead in establishing a culture of employees' voluntary participation in social contribution activities and realizing the corporate value of "thrive together".

Core Values of Dong-A Socio Group's Social Contributions



Major Social Contribution Activities

Dong-A Socio Group

:D-Style Walking Campaign - a Healthy Donation by Walking

Since 2021, Dong-A Socio Group has been carrying out the ":D-Style Walking" campaign, participated by employees to make donations by walking. Around 2,400 Group affiliate employees took part in the campaign across three occasions in 2022 to achieve a total of 420 million steps. Donations totaling KRW 300 million that were raised through the steps of employees were delivered to forest fire-damaged areas in Gangwon Province and North Gyeongsang Province through the Korea Disaster Relief Association's Hope Bridge, and were used to support local residents and firefighters.

Volunteer Pharmacy Truck

Dong-A Socio Group's volunteer pharmacy truck was launched as an activity to support residents who suffered losses due to wildfire in Gangwon Province in April 2019. In addition to transporting relief supplies in the event of a disaster, the volunteer pharmacy truck serves as a mobile pharmacy aimed at helping residents in damaged regions. In 2022, we used a volunteer pharmacy truck to provide relief supplies to local residents in Uljin, which suffered from wildfire in March.

40th Marronier Women's Composition Contest

Dong-A Socio Group and Sooseok Cultural Foundation have been sponsoring the holding of the "Marronier Women's Composition Contest" to expand the base of Korean literature and discover female writers. On the occasion of the 40th anniversary of the "Marronier Women's Composition Contest" in October 2022, we held various programs, including a photo exhibition, literary lecture, and talk concert. The contest was held face-to-face in three years after COVID-19 and was a success, with participation by around 530 people.

Areas of Dong-A Socio Group's Social Contributions

Health
Promotion of health of citizens and society

Environment
Clean environment for future generations

People
Nurturing of talent who fulfill social responsibilities

Society
Happy lives of all members of society

Dong-A ST

6.5 km Walking Campaign – Going beyond Diabetes and Walking with Hope

Dong-A ST has been making continuous efforts to help diabetes patients enjoy a healthy life full of hope by running a social contribution campaign through which it turns participant's walking steps to donations in partnership with the Korean Diabetes Research Foundation. To raise awareness among diabetes patients of the importance of walking and to motivate them, the "6.5 km Walking Campaign" was launched in May 2021 and reflects the goal of maintaining glycated hemoglobin, which is one of diabetes diagnosis criteria, to less than 6.5%. Donations are raised when participants, including diabetes patients and their families as well as the general public, donate to this campaign their walking steps that were measured during their daily lives through "Big Walk," a walking step donation application. The campaign was conducted twice, from May 10 to June 30, 2022 and from September 1 through November 13. More than 77,000 participants gathered an excess of 7 billion walking steps to raise funds, which were used to support underprivileged diabetes patients. Through the 6.5 km Walking Campaign, Dong-A ST will root for diabetes patients, hoping that they enjoy healthy and happy daily lives by keeping a regular schedule and exercising regularly.

Supplying a Treatment for Underprivileged Osteoporosis Patients

To contribute to enhanced quality of life of elderly female osteoporosis patients who are excluded from welfare benefits, Dong-A ST entered an "MOU on providing medicine to osteoporosis patients" with the Hanmaeum Social Welfare Foundation for the second consecutive year in 2022. The Hanmaeum Social Welfare Foundation choose recipients through an evaluation, after which Dong-A ST donates as much as a year's portion of "Teribone Inj". In addition, Dong-A ST has been continuing a low-income class human growth hormone donation project every year since 2013 with the Korean Society of Pediatric Endocrinology. It also provided medical expense support to low-income cancer patients together with the Korea Medical Assistance Foundation in 2020. It will continue to make efforts so that a greater number of patients can receive benefits, thereby contributing to health and medical enhancement.

6.5 km Walking Campaign

40th Marronier Women's Composition Contest

Dong-A ST

Activities to Identify and Manage Negative Impact on the Local Community

Dong-A ST recognizes that water, wastes, and GHG that are discharged during the production and R&D process can have a negative impact on local communities located near the production campuses (Cheonan, Daegu, Songdo) and research campuses (Yongin, Songdo). To minimize such impact on local communities, it internally processes wastewater and wastes and purifies air. In addition, it internally conducts a surrounding environment purification campaign by campus and improves risk factors.

Dong-A Pharmaceutical

One Tempo Warmer – Feminine Pad Donation Campaign

"Tempo," which is Dong-A Pharmaceutical's feminine product brand, has been carrying out the "One Tempo Warmer" campaign that provides feminine pads to low-income-family teenage girls with GFOUNDATION, an international development cooperation NGO. On the occasion of "First Period Day" on October 20, 2022, it donated 182,400 feminine pads which is the greatest number of pads donated until now. In particular, mid-sized, large-sized, and overnight products were all provided for use according to personal circumstances. In addition, Tempo is continually provided to underprivileged teenagers in Sangju City, North Gyeongsang Province and Dongdaemun-Gu of Seoul City. Along with donating feminine pads for underprivileged women, Dong-A Pharmaceutical will provide other support so that all women can enjoy healthy, safe lives.

Dong-A Pharmaceutical & Yongma Logis

Pharmaceutical Waste Collection Support

Pharmaceutical waste negatively impacts water quality and the soil environment if it is discharged as sewage or landfill as highly-enriched chemicals. In other words, pharmaceuticals that are intended to promote health can become poison if they are discarded incorrectly. For this reason, discarding pharmaceuticals is as important as proper administration. For safe discard of pharmaceutical waste, Dong-A Pharmaceutical and Yongma Logis signed an MOU for "Healthy and Safe Journey Together" with the Korean Pharmaceutical Association in October 2021 and launched a pharmaceutical waste collection program. In March 2022, they signed an additional MOU for pharmaceutical waste collection with Wonju City in Gangwon Province, Wonju City Pharmaceutical Association, and Health Insurance Review & Assessment Service, and are implementing pharmaceutical waste collection activities, targeting around 180 pharmacies in Wonju City.

Yongma Logis held an internal pharmaceutical waste collection event for 132 employees in May 2022. During the two-day event, Yongma Logis shared information with employees and their families on how to correctly discard pharmaceutical waste. Thanks to active participation, around 30 kg of pharmaceutical waste was collected and safely discarded. Starting in July 2022, Yongma Logis took part in the "pilot project on narcotics waste collection" that was organized by the Ministry of Food and Drug Safety and implemented by the Korean Pharmaceutical Association, and is planning to participate also in the secondary pilot project that is scheduled to take place from May through November 2023. Pharmacies participating in the pilot project collect narcotics waste, while Yongma Logis, which has permission to handle narcotics, takes charge of safe transport and storage, thus performing an important role in the safe discard of narcotics waste.

Pharmaceutical Waste Collection Support

03

SUSTAINABILITY FACTBOOK

Stakeholder Participation

Dong-A Socio Holdings places importance on all stakeholder opinions that are collected through diverse communication channels. In addition, we encourage stakeholder participation by transparently disclosing our management performance and plan, and carefully evaluate the explicit or potential impact that the company's decision-making and management activities may have on stakeholders.

Stakeholder Communication Channels

Stakeholder	Communication channel	Frequency	Major issues and expectations
Group Affiliates	DSC	Biannually	Establish the Group-level policies and share information on the status
	Employee training for the Group affiliates	Yearly	
	Website of Dong-A Socio Holdings	Year-round	
	Jeong-Do management website	Year-round	
Shareholders & Investors	BOD	Quarterly	Minimize management risks, enhance shareholder and investor value
	AGM	Yearly	
	E-mail, meetings, phone-calls, Fax	When an issue arises	
	Public disclosure	When an issue arises	
Local Communities	CSR activities	When an issue arises	Support the underprivileged, contribute to the development of local communities
	Provide training facilities of the HR Development Center in Sangju	When an issue arises	
Government	Presentations of and meetings with the Ministry of Employment and Labor	When an issue arises	Respond to policies and regulations
	Allbaro System (Waste management system of the Ministry of Environment)	When treating waste (once a year for final performance)	
	E-mail, meetings, phone-calls, Fax	When an issue arises	
Employees	Intranet (D-Portal)	Year-round	Pursue balance between employees' work and personal life by improving the labor environment. Share human rights management policies and prevent human rights violations.
	Online welfare center (Ezwelfare)	Year-round	
	Webzine (With Dong-A)	Year-round	
	Dong-A Pharmaceutical Magazine	Monthly	
	Online Training Institute (SooSeok Universität)	Year-round	
	Labor-Management Council	Quarterly	
	Employee meeting	When an issue arises	
	Grievance Handling Counseling Center	When an issue arises	
	"K-Whistle" Helpline & Audit Hotline Reporting "CLEAN :D"	Year-round	
Partner Companies	Jeong-Do management website	When an issue arises	Fully establish fair operation practices by implementing anti-corruption, transparent management
	E-mail, meetings, phone-calls, Fax	When an issue arises	
	Anti-corruption training	Yearly	
	"K-Whistle" Helpline & Audit Hotline Reporting "CLEAN :D"	Year-round	

Double Materiality Assessment

Dong-A Socio Holdings conducts a materiality assessment every year to identify stakeholder demands in relation to sustainability and to identify issues that should be managed with focus and reported at the Group level.

In 2022, we chose material issues through a double materiality assessment that analyzes financial impact along with the previous environmental/social impact analysis. For environmental/social impact analysis, we evaluated issues that can impact sustainable development of the Earth and society as well as stakeholder human rights by referring to the impact identification and evaluation method that is recommended by the GRI Standards.

Characteristics of the 2022 materiality assessment

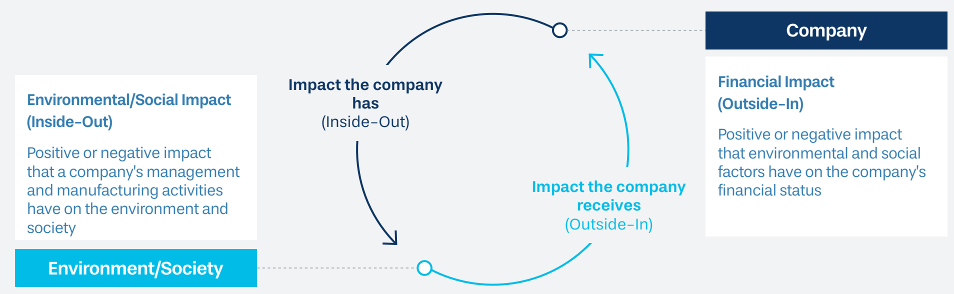
Materiality assessment that considers double materiality

Through a double materiality assessment, we conducted an assessment that simultaneously considers the impact that a company has on the environment and society (Inside-Out) and the impact that environmental and social factors have on a company (Outside-In)

Derived top issues by the Group affiliate

We analyzed the impact of sustainability issues of each pharmaceutical company among the Group affiliates (Dong-A ST, Dong-A Pharmaceutical, ST Pharm, and STgen Bio) and aligned it with report content

Concept of Double Materiality



Materiality Assessment Process

Dong-A Socio Holdings' important issues were derived through the process of "forming a sustainability issue pool – evaluating the issues' impact and priority – selecting material issues and reviewing validity". We strived to collect information on matters of interest of stakeholders, including stakeholder participation throughout the entire process.

Step 1

Forming a sustainability issue pool

Derived a total 63 issues through an environmental analysis

Of these issues, we chose 22 issues with a high level of relevance with Dong-A Socio Holdings and formed an issue pool

- Analyzed 6,317 media articles from the last three years
- Analyzed material issues of similar companies in Korea and abroad
- Reviewed global sustainability standards/framework: GRI Standards, SASB Standards
- Reviewed ESG evaluation indexes: MSCI ESG Rating, KCGS ESG evaluation
- In-depth stakeholder interview

Step 2

Assessing the issues' impact and priority

Environmental/Social Impact (Inside-Out)

- Assessed possible positive/negative impact on the sustainable development of Earth and society and stakeholder interests
- Assessed the level of environmental/social impact and impact on stakeholders' human rights

Financial Impact (Outside-In)

- Assessed the positive/negative impact that sustainability issues can have on the company's financial performance
- Assessed the level of impact on profit and cost, business, regulation, and reputation

Stakeholder participation
Online stakeholder survey

- Period: December 12 – December 23, 2022
- Target: Dong-A Socio Holdings' internal/external stakeholders, including employees, partner companies, consumers, the government and relevant organizations, local communities, shareholders and investors, and professional organizations
- Response status: Total of 301 persons responded (100 employees, 201 external stakeholders)

Step 3

Selecting material issues and reviewing validity

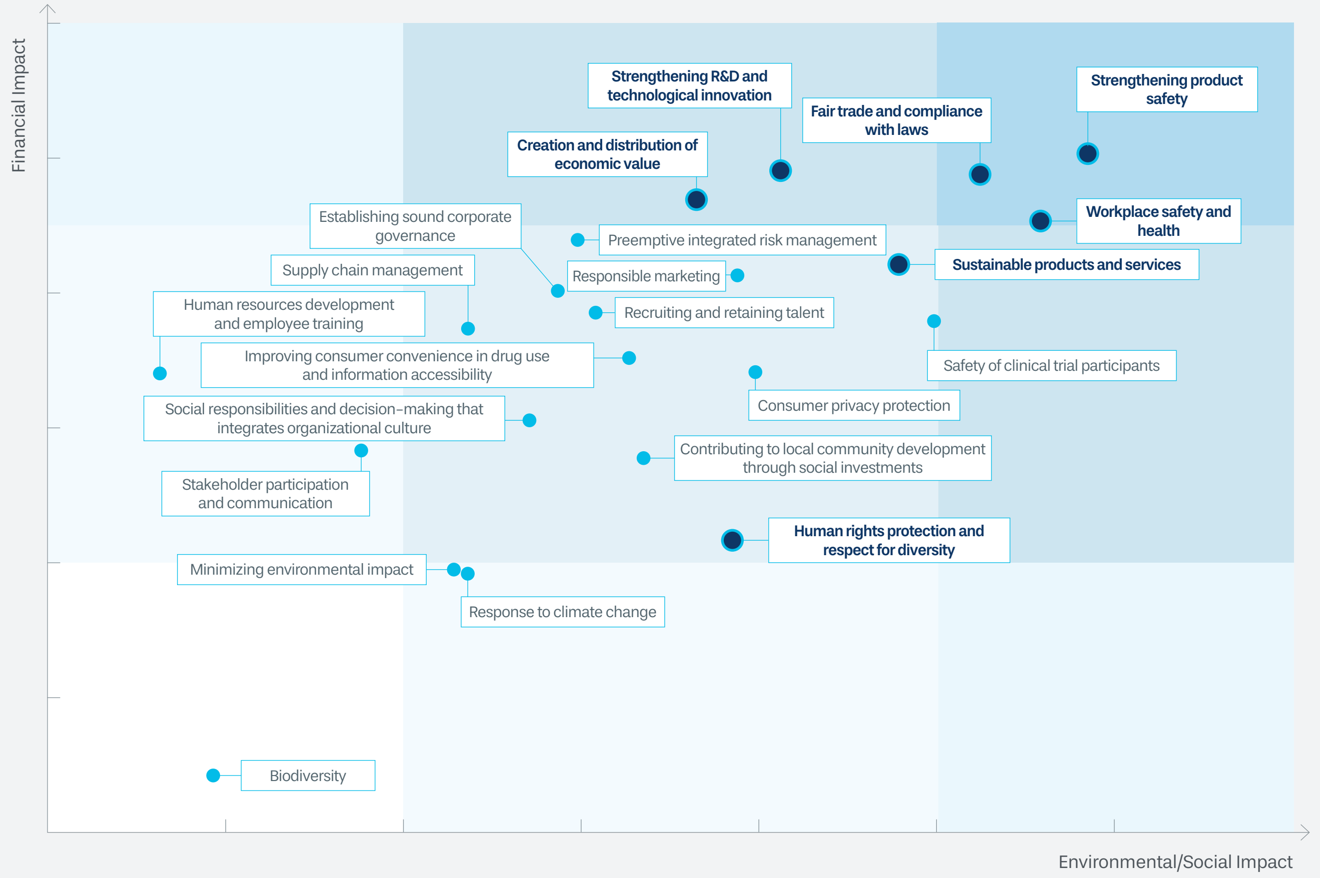
Chose 7 material issues through an internal review and outside expert review among the 22 issues

- Outside expert review: Review by a sustainability management expert
- Internal review and final selection: Final approval was given on material issues after a review by a department in charge at Dong-A Socio Holdings and by top management and BOD

Materiality Assessment Results

As a result of the materiality assessment, we chose a total seven issues as material issues from among the 22 sustainability issues that consist of five top issues for which we analyzed environmental/social impact and financial impact and additional two issues in consideration of pharmaceutical industry issues and domestic and overseas trends which are sustainable products and services and protection of human rights and respect for diversity. Dong-A Socio Holdings reported response activities regarding the material issues, performance, and future plan in the overall report, through which it seeks to provide information that is in line with stakeholders' demands.

Materiality Assessment Results



Material issue

No.	Category	Material Issue	GRI Index	Page
1	Social	**Strengthening product safety**	GRI 416	82-85
2	Governance/Economic	**Fair trade and compliance with laws**	GRI 2-27, GRI 205	62-64, 107
3	Social	**Workplace safety and health**	GRI 403	78-79
4	Governance/Economic	**Strengthening R&D and technological innovation**	-	83, 124-147
5	Governance/Economic	**Creation and distribution of economic value**	GRI 201	108, 124-147
6	Social	**Sustainable products and services**	GRI 417	86-87
7	Social	**Human rights protection and respect for diversity**	GRI 2-23	3, 15, 75-77

* Please download the PDF version of this report from our website to find the reporting page.

Level of Issue Impact by the Group Affiliate

Based on materiality assessment results, we derived issues with a high level of impact by Group affiliate. In case of issues that were chosen as having a high level of impact, efforts were made to report the issues with focus when reporting about the Group affiliate.

✓ Material issue ▨ Top-ranking Issue by the Group affiliate | Level of impact ● High ◐ Medium ○ Low

		Dong-A Socio Holdings	Dong-A ST	Dong-A Pharmaceutical	ST Pharm	STgen Bio
Governance/ Economic	Establishing sound corporate governance	◐	◐	◐	●	◐
	Social responsibilities and decision-making that integrates organizational culture	○	◐	○	◐	○
	Preemptive integrated risk management	◐	▨ ●	◐	▨ ●	◐
	✓ Fair trade and compliance with laws	▨ ●	▨ ●	▨ ●	▨ ●	▨ ●
	✓ Creation and distribution of economic value	▨ ◐	▨ ●	▨ ●	▨ ●	▨ ◐
	Stakeholder participation and communication	○	○	○	○	○
	✓ Strengthening R&D and technological innovation	▨ ●	▨ ●	▨ ●	▨ ●	▨ ◐
Environmental	Biodiversity	○	○	○	○	○
	Response to climate change	○	○	○	○	○
	Minimizing environmental impact	○	○	○	○	○
Social	Supply chain management	○	◐	○	◐	○
	✓ Sustainable products and services	▨ ●	▨ ●	▨ ●	▨ ●	▨ ●
	Recruiting and retaining talent	◐	◐	○	●	▨ ◐
	Human resources development and employee training	○	◐	○	○	○
	✓ Workplace safety and health	▨ ●	▨ ●	▨ ●	▨ ●	▨ ●
	✓ Human rights protection and respect for diversity	▨ ○	○	○	○	○
	Contributing to local community development through social investments	○	◐	○	◐	○
	✓ Strengthening product safety	▨ ●	▨ ●	▨ ●	▨ ●	▨ ●
	Responsible marketing	◐	●	▨ ◐	●	▨ ◐
	Consumer privacy protection	◐	◐	◐	○	○
	Safety of clinical trial participants	◐	●	◐	●	◐
	Improving consumer convenience in drug use and information accessibility	◐	●	◐	◐	○

Material Issues of Social Responsibility Management

Dong-A Socio Group is managing the key seven material issues for ESG management that were derived through the materiality assessment results. To realize sustainable development by resolving environmental/social/economic issues, we connected the issues with the Sustainable Development Goals (SDGs) adopted by the UN and international community, seeking to contribute to the accomplishment of the international community's goals. Dong-A Socio Group will continue to review and respond to material issue-related opportunities and crises as part of efforts to become a company that meets stakeholder expectations.

Material Issue	Context	Performance	UN SDGs
Strengthening product safety	With the emergence of new diseases, it is becoming more important to guarantee product safety and thereby fulfill responsibilities as a pharmaceutical company. In the biopharmaceutical industry, a company must always systematically make efforts to strengthen safety, placing value on safety and quality.	• As a company that researches and develops/produces/sells pharmaceuticals/food and beverages/medical devices that are directly connected to life, we internalized safety principles that consider the entire product lifecycle in our management process. • To enhance safety and convenience, we identify matters that need improvement and continually renew product packages. • To maintain product quality levels, we examine the operation status of the quality management system, conduct field inspections on raw materials and manufacturing processes, and take other such measures to identify issues that impact quality and conduct improvement activities.	3 GOOD HEALTH AND WELL-BEING 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
Fair trade and compliance with laws	Regulations on fair trade and anti-corruption are becoming stricter around the world, while corporate social responsibilities are strengthening. Against this backdrop, stakeholders are demanding companies to comply with fair trade and laws. Since a company's credibility and competitiveness increase through fair and transparent competition, it is important to practice the compliance spirit.	• To fully establish fair trade as an organizational culture and raise management transparency, we established the Anti-Bribery Management System (ABMS), obtained international standard ISO 37001 certification, established relevant guidelines and systems, and operate a compliance management reporting system, with Dong-A Socio Holdings performing central roles. • Establishing ABMS at all Group affiliates and expanding ISO 37001 certification – With an aim to establish ABMS at all Group affiliates by 2024, we completed ABMS establishment at Dong-A Otsuka and Soo Seok in 2022, and are planning to build ABMS at Korea Sinto and DONGCHEONSU in 2023. – STgen Bio plans to receive ISO 37001 certification in 2023. • We appointed a compliance officer for compliance control and support in relation to employees' performance of duties, and engage in prior risk management, provide business and project support, and pursue ESG and Jeong-Do management philosophy.	16 PEACE, JUSTICE AND STRONG INSTITUTIONS
Workplace safety and health	Safety-related laws were enforced, including the Serious Accidents Punishment Act, while stakeholders' interest in safety and health protection is rising. As a result, companies must actively manage safety to prevent and mitigate safety risks and to establish a safe work environment	• To have employees work in a safe environment, we established a safety and health management system that is in line with international standards and received ISO 45001 certification. • We conducted a business site risk assessment and addressed risk factors to prevent safety accidents and provided safety training to internalize a safety culture. • Expanding safety and health management system ISO 45001 certification across the Group affiliates – Dong-A ST, Dong-A Pharmaceutical, and STgen Bio plants received certification by 2022. – Dong-A ST's Songdo Campus plans to receive certification in the third quarter of 2023.	3 GOOD HEALTH AND WELL-BEING
Strengthening R&D and technological innovation	To provide stakeholders with healthy, better lives and develop future growth engines through investments, biopharmaceutical R&D and technologies need to be continually strengthened. Development of pharmaceuticals can provide healthy daily lives to society, while enabling companies to build a foundation for growth.	• Dong-A ST chose anti-cancer, immunity/neurodegenerative diseases, endocrine system, digestive system, and musculoskeletal system as key treatment areas and is conducting R&D. – It signed a licensing-in agreement with KANAPH Therapeutics in December 2022 for an immuno-oncology candidate of a dual fusion antibody mode and is conducting joint research. • ST Pharm established an oligonucleotide-based therapeutics and mRNA CDMO infrastructure and is expanding the development of gene therapy. – Completed a phase 1 clinical trial for the AIDS treatment STP0404 in 2022 and received phase 2a clinical trial approval from the US FDA, thus securing safety and tolerability. – Anti-cancer drug STP1002 (Basroparib) is undergoing a dose increase clinical trial to confirm safety/tolerability on advanced solid tumor patients at three clinical sites in the U.S.	8 DECENT WORK AND ECONOMIC GROWTH
Creation and distribution of economic value	A company must fundamentally create economic value and distribute it fairly. Distributing profits that were generated through products and services to several stakeholders in various forms is needed for a company to continually achieve economic growth.	• Our Integrated Report reports each Group affiliate's creation of economic value and distribution to stakeholders.	16 PEACE, JUSTICE AND STRONG INSTITUTIONS
Sustainable products and services	Providing sustainable products and services has a positive impact on a company's strengthening of competitiveness and its image. It is also important to disclose information to stakeholders on how products and services have sustainable benefits in environmental and social aspects.	• We adopted quality as Dong-A Socio Group's management principle that must be observed and carry out various quality management activities, such as complying with the latest GMP guidelines and requirements of Europe/US, making cGMP upgrades, and conducting regular monitoring. • We comply with regulations on accurate delivery of information on drug administration and usage methods, and conduct prior inspections on product information that can be misunderstood based on an internal review process. • ST Pharm conducted a US FDA due diligence on its manufactory before new drug approval at its Banwol Plant oligonucleotide building in May 2022 and received No Action Indicated (NAI) in August, becoming the first in Asia to receive FDA cGMP certification for an oligonucleotide manufactory.	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 12 RESPONSIBLE CONSUMPTION AND PRODUCTION
Human rights protection and respect for diversity	The importance of human rights is steadily growing in Korea and abroad, while demands are increasing for companies to establish a culture that acknowledges diversity. Accordingly, there is an emphasis on the need for companies to advance their human rights management system to respect stakeholders' human rights and to establish a culture of respect so that decisions can be made from various perspectives.	• We established a human rights management framework based on our Jeong-Do management philosophy and international standards on corporate social responsibility. All Group affiliates declared human rights management in December 2022 to fully establish a human rights management system. • We operate the Grievance Counseling Center at each Group affiliate and the Group-level Human Rights Violation Remedy Committee (human rights violation information-receipt channel and relief process) to take quick, systematic responses in case of an employee human rights violation. • Planning to issue a "Human Rights and Diversity Report" in the first half of 2024.	5 GENDER EQUALITY 8 DECENT WORK AND ECONOMIC GROWTH 10 REDUCED INEQUALITIES

Financial & Non-financial Performance Summary

Sustainable Management Performance of Dong-A Socio Group

Classification		Unit	2020	2021	2022
Financial Performance	Total assets	KRW	1,511,106,332,704	1,691,388,335,986	1,731,452,067,203
	Total liabilities	KRW	622,382,702,032	706,347,761,608	732,791,277,454
	Total shareholders' equity	KRW	888,723,630,672	985,040,574,378	998,660,789,749
	Sales	KRW	783,315,662,469	881,944,084,032	1,014,860,897,959
	Operating profit	KRW	50,609,922,157	61,564,188,030	37,854,827,137
	Operating profit margin	%	6.5	7.0	3.7
	R&D investment	KRW	18,847,451,998	6,518,281,409	6,423,389,145
	R&D investment to sales	%	2.4	0.7	0.6
Non-financial Performance	No. of employees	Person	5,444	5,438	5,653
	No. of full-time employees	Person	5,226	5,209	5,407
	No. of part-time employees	Person	218	229	246
	No. of female employees	Person	1,068	1,065	1,111
	Percentage of female employees	%	19.6	19.6	19.7
	Safety training hours per person	Hour	11.4	13.0	18.1
	Job training hours per person	Hour	39.4	18.3	28.3
	Industrial accident	Case	13	14	30
	Private treatment of industrial accident	Case	43	43	47
	Violation of laws[1]	Case	4	9	11
	Employee turnover rate	%	9.6	11.8	13.0
	Average length of service	Year	8.3	8.8	8.6
	Childcare leave rate of male employees	%	1.0	1.6	2.7
	Childcare leave rate of female employees	%	27.1	24.7	26.2
	CSR expenditures	KRW	2,896,055,405	3,223,107,167	3,617,391,938
	CSR expenditures to operating profit	%	5.7	5.2	9.6
	Energy consumption	TJ	2,041	3,041	2,948
	Greenhouse gas (GHG) emissions	tCO$_2$eq	136,862	140,236	156,740
	GHG emissions (Scope 1)	tCO$_2$eq	61,043	51,766	57,425
	GHG emissions (Scope 2)	tCO$_2$eq	74,538	87,815	96,859
	GHG emissions (Scope 3)	tCO$_2$eq	-	655	2,456
	GHG intensity	tCO$_2$eq/KRW 100 million	17.5	15.9	15.4
	Water consumption	Ton	1,793,065	1,845,892	1,886,436
	Wastewater discharge	Ton	971,645	852,028	970,796
	Volume of waste generated	Ton	12,033	13,217	16,594
	Waste recycling rate	%	55.6	57.1	70.5

* Including Dong-A Socio Holdings, Dong-A ST, Dong-A Pharmaceutical, ST Pharm, STgen Bio, Dong-A CHAMMED, Dong-A Otsuka, Yongma Logis, Soo Seok, Korea Sinto, DONGCHEONSU, ABEN E&C, DA Information

[1] The number of violation of laws was calculated based on the company's internal standard (criminal punishment and fine of KRW 1 million or more)

Sustainable Management Performance of Dong-A Socio Holdings

Financial Performance

Summarized Consolidated Statements of Comprehensive Income

(Unit: KRW)

Performance indicators	2020	2021	2022
Operating revenues	783,315,662,469	881,944,084,032	1,014,860,897,959
Operating expenses	732,705,740,312	820,379,896,002	977,006,070,822
Operating profit	50,609,922,157	61,564,188,030	37,854,827,137
Other income	140,049,238,501	37,768,534,787	4,042,179,474
Other expenses	2,302,028,021	31,263,414,661	21,474,943,288
Finance income	7,427,438,040	8,664,194,669	8,994,486,534
Finance costs	17,519,632,662	15,653,362,880	26,850,430,668
Gain (Loss) using the equity method	(8,084,508,676)	5,024,388,030	15,042,460,848
Profit before income tax expense	170,180,429,339	66,104,527,975	17,608,580,037
Income tax expense	7,818,437,715	5,592,832,127	9,773,384,392
Profit for the year	162,361,991,624	60,511,695,848	7,835,195,645
Other comprehensive income (loss)	(4,686,548,013)	3,027,334,508	15,119,240,840
Total comprehensive income for the year	157,675,443,611	63,539,030,356	22,954,436,485

Summarized Statements of Comprehensive Income

(Unit: KRW)

Performance indicators	2020	2021	2022
Operating revenues	54,495,087,013	57,840,774,477	60,251,312,822
Operating expenses	37,090,336,660	26,447,697,392	24,927,367,644
Operating profit	17,404,750,353	31,393,077,085	35,323,945,178
Other income	90,410,673,990	2,993,791,637	156,927,968
Other expenses	29,577,936,925	9,298,351,819	13,232,613,731
Finance income	6,142,965,271	6,187,054,139	3,762,404,689
Finance costs	10,757,128,763	10,680,745,156	17,301,991,357
Profit before income tax expense	73,623,323,926	20,594,825,886	8,708,672,747
Income tax expense	742,608,549	(294,654,602)	(179,705,914)
Profit for the year	72,880,715,377	20,889,480,488	8,888,378,661
Other comprehensive income (loss)	(809,114,840)	(1,851,832,766)	1,624,579,659
Total comprehensive income for the year	72,071,600,537	19,037,647,722	10,512,958,320

Summarized Consolidated Statements of Financial Position

(Unit: KRW)

Performance indicators	2020	2021	2022
Current assets	329,423,167,200	358,552,483,675	**338,341,608,434**
Non-current assets	1,181,683,165,504	1,332,835,852,311	**1,393,110,458,769**
Total assets	1,511,106,332,704	1,691,388,335,986	**1,731,452,067,203**
Current liabilities	348,420,246,226	467,281,724,372	**566,085,715,566**
Non-current liabilities	273,962,455,806	239,066,037,236	**166,705,561,888**
Total liabilities	622,382,702,032	706,347,761,608	**732,791,277,454**
Equity attributable to owners of the Parent Company	888,711,347,855	965,159,499,705	**981,988,995,564**
Share capital	30,776,730,000	31,744,010,000	**31,744,565,000**
Share premium	287,803,006,247	309,972,741,278	**309,984,350,533**
Capital adjustment	(206,307,305,407)	(206,307,305,407)	**(206,307,305,407)**
Other components of equity	137,018,155,097	135,895,558,494	**135,047,349,576**
Retained earnings	639,420,761,918	693,854,495,340	**711,520,035,862**
Non-controlling interest	12,282,817	19,881,074,673	**16,671,794,185**
Total equity	888,723,630,672	985,040,574,378	**998,660,789,749**
Total liabilities and equity	1,511,106,332,704	1,691,388,335,986	**1,731,452,067,203**

Summarized Statements of Financial Position

(Unit: KRW)

Performance indicators	2020	2021	2022
Current assets	85,740,943,455	74,937,197,650	**44,758,014,238**
Non-current assets	827,955,160,649	910,772,195,696	**921,903,696,987**
Total assets	913,696,104,104	985,709,393,346	**966,661,711,225**
Current liabilities	130,735,591,348	193,350,845,474	**224,143,295,041**
Non-current liabilities	164,712,535,969	141,835,882,298	**90,847,013,404**
Total liabilities	295,448,127,317	335,186,727,772	**314,990,308,445**
Share capital	30,776,730,000	31,744,010,000	**31,744,565,000**
Share premium	287,803,006,247	309,972,741,278	**309,984,350,533**
Capital adjustment	(201,730,231,905)	(201,730,231,905)	**(201,730,231,905)**
Other components of equity	88,541,957,914	86,027,168,365	**87,277,171,804**
Retained earnings	412,856,514,531	424,508,977,836	**424,395,547,348**
Total equity	618,247,976,787	650,522,665,574	**651,671,402,780**
Total liabilities and equity	913,696,104,104	985,709,393,346	**966,661,711,225**

Non-financial Performance

Classification		Unit	2020	2021	2022
Business Ethics	Employee participation rate in anti-corruption training	%	97.5	81.8	**77.7**
	Employee participation rate in pledge to Jeong-Do management	%	97.0	96.9	**95.9**
	Violation of laws	Case	-	-	**-**
Human Rights & Labour	No. of employees	Person	165	97	**98**
	No. of full-time employees	Person	146	84	**84**
	No. of part-time employees	Person	19	13	**14**
	Percentage of part-time employees	%	11.5	13.4	**14.3**
	No. of veteran employees	Person	3	1	**2**
	Percentage of veteran employees	%	1.8	1.0	**2.0**
	No. of female employees	Person	50	21	**26**
	No. of female top executives	Person	1	1	**0**
	No. of female managers	Person	1	0	**0**
	Percentage of female employees	%	31.5	22.7	**26.5**
	Voluntary employee turnover rate	%	7.6	12.3	**6.2**
	Involuntary employee turnover rate	%	1.2	0.8	**3.1**
	Safety training hours per person	Hour	1.6	8.5	**11.2**
	Industrial accident	Case	0	0	**0**
	Private treatment of industrial accident	Case	0	0	**0**
	No. of employees subject to regular performance evaluation	Person	119	71	**76**
	Percentage of employees subject to regular performance evaluation	%	72.1	73.2	**77.6**
	Total hours of job raining	Hour	3,150	2,686	**4,453**
	Average length of service	Year	10.0	11.0	**11.6**
	Childcare leave rate of female employees	%	25.0	33.3	**50.0**
	Childcare leave rate of male employees	%	2.3	0	**3.7**
Sustainable Value Chain	CSR expenditures	KRW	139,388,000	71,652,749	**163,074,020**
	CSR expenditures to operating profit	%	0.8	0.2	**0.5**
	No. of people benefited from employee volunteering	Person	26,069	25,007	**34,083**
Environment	Water consumption	Ton	17,597	6,163	**5,951**
	Wastewater discharge	Ton	2,564	1,351	**4,837**
	Volume of waste generated	Ton	53	32	**39**
	Greenhouse gas (GHG) emissions	tCO_2eq	1,606	630	**490**
	GHG emissions (Scope 1)	tCO_2eq	487	286	**152**
	GHG emissions (Scope 2)	tCO_2eq	1,119	342	**291**
	GHG emissions (Scope 3)	tCO_2eq	-	2	**47**
	GHG intensity	tCO_2eq/KRW 100 million	2.9	1.1	**0.8**
	Energy consumption	TJ	31	12	**8**

Creation and Distribution of Economic Value

Classification		Unit	2020	2021	2022
Creation of economic value	Sales	KRW	54,495,087,013	57,840,774,477	60,251,312,822
Shareholders & investors	Dividend	KRW	6,138,297,000	9,181,814,000	9,375,973,500
	Interest expense	KRW	7,699,778,912	7,696,495,484	8,389,132,092
Employees	Salaries	KRW	15,035,291,973	9,041,736,027	10,999,310,570
	Employee benefits	KRW	2,464,144,298	2,102,125,835	2,267,352,177
Suppliers	Raw material expenses	KRW	0	0	0
	Outsourcing expenses	KRW	2,835,107,607	1,356,765,308	1,189,429,133
Government & local communities	Income tax	KRW	742,608,549	(294,654,602)	(179,705,914)
	CSR expenditures	KRW	139,388,000	71,652,749	163,074,020

* Based on separate financial statements

Social Performance of Dong-A Socio Holdings

Employees

(Unit: Person)

Classification			2020	2021	2022
Total number of employees			165	97	98
By employment type	Full-time		146	84	84
		Male	95	63	59
		Female	51	21	25
	Part-time		19	13	14
		Male	18	12	13
		Female	1	1	1
By gender		Male	113	75	72
		Female	52	22	26
By age		Under 30 years old	33	16	14
		30-50 years old	113	69	75
		Over 50 years old	19	12	9

New Employee Hires & Employee Turnover

(Unit: Person, %)

Classification			2020	2021	2022
Total number of new hires			11	11	9
New hires	By gender	Male	7	6	6
		Female	4	5	3
	By age	Under 30 years old	7	5	4
		30-50 years old	4	5	4
		Over 50 years old	0	1	1
Total number of people who left			15	17	9
Turnover	By gender	Male	9	11	8
		Female	6	6	1
	By age	Under 30 years old	4	5	1
		30-50 years old	11	7	3
		Over 50 years old	0	5	5
	Turnover rate	Voluntary	7.6%	12.3%	6.2%
		Involuntary	1.2%	0.8%	3.1%

Employee Diversity

(Unit: Person, %)

Classification		2020	2021	2022
Female	Female employees	50	21	26
	Female executives	1	1	0
	Female managers	1	0	0
	Percentage of female employees	31.5%	22.7%	26.5%
Person with disability	Number	0	0	0
	Percentage	0.0%	0.0%	0.0%
Foreigners	Number	1	0	0
	Percentage	0.6%	0.0%	0.0%
Veterans	Number	3	1	2
	Percentage	1.8%	1.0%	2.0%

Childcare Leave

(Unit: Person)

Classification		2020	2021	2022
Number of employees eligible for childcare leave	Male	44	30	27
	Female	16	6	6
	Subtotal	60	36	33
Number of employees taking childcare leave	Male	1	0	1
	Female	4	2	3
	Subtotal	5	2	4
Number of employees who returned to work after childcare leave	Male	1	0	1
	Female	6	1	2
	Subtotal	7	1	3
Number of employees who worked for 12 months or longer after returning to work	Male	0	1	0
	Female	2	1	0
	Subtotal	2	2	0

Employee Job Training

(Unit: Hour, KRW)

Classification	2020	2021	2022
Total hours of training	3,150	2,686	4,453
Average training hour per person	19.1	27.7	45.4
Total cost of training	146,648,086	182,349,406	88,496,593
Average training cost per person	888,776	1,879,891	903,026

UNGC & UN SDGs

UN calls for precipitating in supporting The Ten Principles of the UN Global Compact (UNGC), composed of Human Rights, Labour, Environment, and Anti-Corruption; as well as 17 Sustainable Development Goals (SDGs) which it announced in 2015 to solve the economic, environmental, and social problems facing humanity.

With its joining of the UNGC in 2020, Dong-A Socio Holdings has been supporting the Ten Principles and striving to fulfill its corporate social responsibility by participating in initiatives and programs implemented by the UN Global Compact Network Korea. In addition, as a global corporate citizen, Dong-A Socio Holdings is carrying out diverse social responsibility management activities, aimed at contributing to the achievement of the UN SDGs.

UN Global Compact – Ten Principles

Principles		Page
Human Rights	1. Businesses should support and respect the protection of internationally proclaimed human rights; and	P. 3, 15, 75~77
	2. Make sure that they are not complicit in human rights abuses.	
Labour	3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	P. 3, 74~75, 89
	4. The elimination of all forms of forced and compulsory labour;	
	5. The effective abolition of child labour; and	
	6. The elimination of discrimination in respect of employment and occupation.	
Environment	7. Businesses should support a precautionary approach to environmental challenges;	P. 3, 18~21, 90~93
	8. Undertake initiatives to promote greater environmental responsibility; and	
	9. Encourage the development and diffusion of environmentally friendly technologies	
Anti-Corruption	10. Businesses should work against corruption in all its forms, including extortion and bribery.	P. 22, 62~64, 89

UN SDGs – 17 Golas

SASB Index

Health Care Sector, Biotechnology and Pharmaceuticals Industry

Subject	Code	Metric	Report Content
Safety of clinical trial participants	HC-BP-210a.1	Discussion, by world region, of management process for ensuring quality and patient safety during clinical trials	[Dong-A ST] For all clinical trials in Korea and abroad, it follows the Good Clinical Practice (GCP) of the International Council for Harmonisation (ICH). It manages whether there are circumstances that harm the participant's safety and rights in the clinical trial process through monitoring in accordance with domestic and overseas ethical regulations and the company's standard operating procedure (SOP). [ST Pharm] It strives to ensure that all clinical trials are performed in compliance with ICH's GCP. It monitors the execution status of trial ethics regulations of contract research organizations (CROs), and manages/supervises whether CROs implement regulations. In particular, to guarantee the safety of participants across all steps of a clinical trial, it strictly abides by the selection and exclusion criteria according to the clinical trial plan established beforehand, and also conducts clinical trials based on medical monitoring plans. Moreover, it supervises whether there is a violation of the clinical trial plan and enhances compliance to prevent violation.
	HC-BP-210a.2	Number of FDA Sponsor Inspections related to clinical trial management and pharmacovigilance that resulted in: 1) Voluntary Action Indicated (VAI), 2) Official Action Indicated (OAI) * VAI: Voluntary Action Indicated. Case where unreasonable matters were discovered as a result of an inspection but the violations are not serious * OAI: Official Action Indicated. Case where inspection results indicate that the scope of the violation is serious and significant	[Dong-A ST] There is nothing applicable during the report period (2020-2022). [ST Pharm] There were no voluntary and official actions reported to the FDA during the report period (2020-2022).
	HC-BP-210a.3	Total amount of monetary losses as a result of legal proceedings associated with clinical trials in developing countries	[Dong-A ST] When Dong-A ST performs a clinical trial in India and some Eastern European countries that are categorized as developing countries, a global CRO company carries out clinical trial work. There is no monetary loss as a result of legal proceedings. [ST Pharm] ST Pharm did not perform clinical trials in developing countries. There is no monetary loss as a result of legal proceedings associated with clinical trials.
Access to medicines	HC-BP-240a.1	Description of actions and initiatives to promote access to health care products for priority diseases and in priority countries as defined by the Access to Medicine Index	[Dong-A ST] Dong-A ST has Suganon (evogliptin), a treatment for diabetes that falls under the 17 major non-communicable diseases included in priority diseases according to the Access to Medicine Index, and exports APIs to India, Russia, Brazil, and other regions. In addition to finished product exports to Thailand, it plans to expand exports to Southeast Asian countries, including the Philippines and Indonesia. ST Pharm is developing a treatment for AIDS (STP0404, Pirmitegravir), among the 11 major infectious diseases included in priority diseases according to the Access to Medicine Index. It will successfully complete clinical trials in priority countries and advance into Africa, where there are many AIDS patients.
	HC-BP-240a.2	List of products on the WHO List of Prequalified Medicinal Products as part of its Prequalification of Medicines Programme (PQP)	[Dong-A ST] As products that received pre-qualification for the four major infectious diseases designated by the WHO, two products of Dong-A ST – Cycloserine (after 2013) and Clofazimine (after 2021) used in the treatment of tuberculosis – are included in the list. [ST Pharm] Although ST Pharm did not receive PQ, we have an API that received PQ. (Holder: Dong-A ST, Cycloserine in 2012/Clofazimine in 2021)

Subject	Code	Metric	Report Content
Affordability and pricing	HC-BP-240b.1	Number of settlements of Abbreviated New Drug Application (ANDA) litigation that involved payments and/or provisions to delay bringing an authorized generic product to market for a defined time period * ANDA litigation: Lawsuit that can be filed by a patent owner regarding an abbreviated process to manufacture and sell generic drugs, and agreement	[Dong-A ST] There is no case related to abbreviated new drug application litigation for a generic product during the report period (2020-2022). [ST Pharm] There is nothing applicable to the company.
Drug safety	HC-BP-250a.1	List of products listed in the Food and Drug Administration's (FDA) MedWatch Safety Alerts for Human Medical Products database * MedWatch: FDA's safety information and hazard case-reporting program and a drug safety monitoring system for reporting a drug's hazard event or case	[Dong-A ST] There is nothing applicable to the company during the report period (2020-2022). [ST Pharm] ST Pharm's main business is API manufacturing. As such, it has no direct association with MedWatch, whose main purpose is pharmacovigilance of finished pharmaceutical products after market release.
	HC-BP-250a.2	Number of fatalities associated with products as reported in the FDA Adverse Event Reporting System	[Dong-A ST] There is nothing applicable to the company during the report period (2020-2022). [ST Pharm] ST Pharm's main business is API manufacturing. As such, it has no direct association with the adverse event reporting system for finished pharmaceutical products.
	HC-BP-250a.3	Number of recalls issued, total units recalled	[Dong-A ST] 0 cases in 2020, 5 cases in 2021, and 3 cases in 2022.

Category	2020	2021	2022
No. of Cases	0	5	3
Item	N/A	1. Cozartan 50mg 2. Cozartan Plus Pro 3. Cozartan Plus F 4. Cozartan 100mg 5. Cozartan Plus	1. Monotaxel Inj. 2. Nicetile Tab. 3. Nicetile Pow.
Content	N/A	Concerns about the detection of azido impurities exceeding limits in Losartan	1. Labeling error (20mg label attached to 80mg dosage) 2, 3. Reevaluation results of Acetyl-L-Carnitine preparations: Usefulness not recognized

			[ST Pharm] During the report period (2020-2022), there were 0 recalls issued and 0 number of products recalled.
	HC-BP-250a.4	Total amount of product accepted for take-back, reuse, or disposal	[Dong-A ST] There is nothing applicable to the company during the report period (2020-2022). [ST Pharm] There is nothing applicable to the company.
	HC-BP-250a.5	Number of FDA enforcement actions taken in response to violations of current Good Manufacturing Practices (cGMP), by type	[Dong-A ST] There is nothing applicable to the company during the report period (2020-2022). [ST Pharm] No FDA enforcement actions were taken during the report period (2020-2022).

Subject	Code	Metric	Report Content
Counterfeit drugs	HC-BP-260a.1	Description of methods and technologies used to maintain traceability of products throughout the supply chain and prevent counterfeiting	[Dong-A ST] To maintain traceability of products throughout the supply chain and prevent counterfeiting, Dong-A ST assigns a serial number (serialization) to all products supplied to the market in the shipment stage and strictly manages the goods receipt and issuance status. [ST Pharm] There is nothing applicable to the company.
	HC-BP-260a.2	Discussion of process for alerting customers and business partners of potential or known risks associated with counterfeit products	[Dong-A ST] Although Dong-A ST does not have a process in place to alert customers and business partners of potential or known risks associated with counterfeit drugs, it plans to establish a process and creates usage guidelines. [ST Pharm] There is nothing applicable to the company.
	HC-BP-260a.3	Number of actions that led to raids, seizure, arrests, and/or filing of criminal charges related to counterfeit products	[Dong-A ST] There was no counterfeit drug-related case during the report period (2020-2022). [ST Pharm] There is nothing applicable to the company.
Ethical marketing	HC-BP-270a.1	Total amount of monetary losses as a result of legal proceedings associated with false marketing claims	[Dong-A ST] There were no legal proceedings associated with false marketing during the report period (2020-2022). [ST Pharm] There is nothing applicable to the company.
	HC-BP-270a.2	Description of code of ethics governing promotion of off-label use of products	[Dong-A ST] As an ethical drug company, Dong-A ST strives to prevent false, exaggerated, and misleading advertising when delivering drug information and to ensure that evidence-based medical and pharmaceutical information is delivered in an objective, neutral way. To this end, it separates the material-producing department with the review department, thoroughly manages through compliance-based guidelines, and regularly conducts monitoring. [ST Pharm] There is nothing applicable to the company.

<table>
<tr><th>Subject</th><th>Code</th><th>Metric</th><th>Report Content</th></tr>
<tr><td>Employee recruitment, development, and retention</td><td>HC–BP–330a.1</td><td>Discussion of talent recruitment and retention efforts for scientists and research and development personnel</td><td>[Dong–A ST]
Dong–A ST understands the importance of recruiting and retaining R&D personnel for global–level new drug development. By providing various training opportunities and welfare to recruit the nation's top research experts, it is focusing on nurturing key talents who will lead Dong–A ST's development into a global research company.

[ST Pharm]
To expand its main businesses – API CDMO, in–house new drug, mRNA – ST Pharm is increasing investments in R&D personnel.

Development and research of new pharmaceuticals
In 2021, Levatio Therapeutics, a biotech company that develops new pharmaceuticals that utilize mRNA, circRNA, and CAR–NKT platform technologies, and VERNAGEN, an mRNA pipeline biotech company were newly established. Dr. Hyun–Bae Jie, who is a global expert in anti–cancer and immunology, joined as Levatio's CSO & CEO and Professor Baek Kim, who is a global expert in the area of infectious disease, was appointed as the CEO of VERNAGEN. Together, we are making efforts for ST Pharm's expansion into the area of gene therapy CDMO through xRNA and CAR–NKT platforms.</td></tr>
<tr><td></td><td>HC–BP–330a.2</td><td>(1) Voluntary and (2) involuntary turnover rate for: (a) executives/senior managers, (b) mid–level managers, (c) professionals, and (d) all others</td><td>[Dong–A ST]
<table>
<tr><th>Category</th><th>Unit</th><th>2020</th><th>2021</th><th>2022</th></tr>
<tr><td>Voluntary turnover rate</td><td>%</td><td>4.2</td><td>6.6</td><td>6.7</td></tr>
<tr><td>Involuntary turnover rate</td><td>%</td><td>2.5</td><td>1.1</td><td>1.2</td></tr>
</table>
* For the Group affiliate's detailed social responsibility management performance, please download the pdf from the website and review page 125.

[ST Pharm]
<table>
<tr><th>Category</th><th>Unit</th><th>2020</th><th>2021</th><th>2022</th></tr>
<tr><td>Voluntary turnover rate</td><td>%</td><td>10.5</td><td>10.9</td><td>12.7</td></tr>
<tr><td>Involuntary turnover rate</td><td>%</td><td>1.6</td><td>0.4</td><td>0.5</td></tr>
</table>
* For the Group affiliate's detailed social responsibility management performance, please download the pdf from the website and review page 129.
** Turnover rate is calculated based on the number of persons who voluntarily or involuntarily left the company against the annual average number of employees. Persons who involuntarily left the company did so as a result of contract expiration and retirement at the regular retirement age. There was no resignation under instruction or dismissal.</td></tr>
<tr><td>Supply chain management</td><td>HC–BP–430a.1</td><td>Percentage of (1) entity's facilities and (2) Tier I suppliers' facilities participating in the Rx–360 International Pharmaceutical Supply Chain Consortium audit program or equivalent third–party audit programs for integrity of supply chain and ingredients</td><td>[Dong–A ST]
Dong–A ST is making continued efforts to establish a sustainable supply chain. In 2022, it categorized business partners into grades and conducted a due diligence for 98% of them. It will establish a systematic internal system for supply chain management and also manage business partners.

[ST Pharm]
ST Pharm is making continued efforts to establish a sustainable supply chain through supply chain ESG evaluations. It conducts ESG monitoring on major partner companies, including key partner companies (tier 1).
* Please refer to page 88 of this report 88 to find more information about supply chain management.</td></tr>
<tr><td>Business ethics</td><td>HC–BP–510a.1</td><td>Total amount of monetary losses as a result of legal proceedings associated with corruption and bribery</td><td>[Dong–A ST]
There were no legal proceedings associated with corruption and bribery during the report period (2020–2022).

[ST Pharm]
There were no legal proceedings associated with corruption and bribery during the report period (2020–2022).</td></tr>
<tr><td></td><td>HC–BP–510a.2</td><td>Description of code of ethics governing interactions with health care professionals</td><td>[Dong–A ST]
In addition to complying with laws in Korea and abroad to fulfill social responsibilities concerning marketing activities, Dong–A ST observes the fair competition code and detailed operation criteria on pharmaceutical and medical device trade that is demanded by the Korea Pharmaceutical and Bio–Pharma Manufacturers Association and Korea Medical Devices Industry Association.

[ST Pharm]
There is nothing applicable to the company.</td></tr>
</table>

GRI Content Index

Statement on standard use Dong–A Socio Group has reported in accordance with the GRI Standards for the period from Jan. 1 to Dec. 31, 2022
Used GRI 1 GRI1: Foundation 2021
GRI industry standard N/A

GRI Standard	Disclosure		Location	Note
GRI 2 : General Disclosure 2021				
The organization and its reporting practices	2–1	Organizational details	34	
	2–2	Entities included in the organization's sustainability reporting	34	
	2–3	Reporting period, frequency and contact point	122	
	2–4	Restatements of information	122	
	2–5	External assurance	120–121	
Activities and workers	2–6	Activities, value chain and other business relationships	31–47, 88–89	
	2–7	Employees	104, 107, 109, 125–147	
	2–8	Workers who are not employees	No sufficient information	
Governance	2–9	Governance structure and composition	52–54	
	2–10	Nomination and selection of the highest governance body	–	Corporate Governance Report 5–6p, 29–32p, 34–35p
	2–11	Chair of the highest governance body	53	
	2–12	Role of the highest governance body in overseeing the management of impacts	57–59	
	2–13	Delegation of responsibility for managing impacts	57–59	
	2–14	Role of the highest governance body in sustainability reporting	99	Business Report 251–257p
	2–15	Conflicts of interest	–	Corporate Governance Report 18–20p, 31–32p, 34–36p
	2–16	Communication of critical concerns	57–59	
	2–17	Collective knowledge of the highest governance body	–	Business Report 257p
	2–18	Evaluation of the performance of the highest governance body	–	Business Report 252–253p Corporate Governance Report 6p, 38–39p, 46–47p
	2–19	Remuneration policies	–	Business Report 267–270p Corporate Governance Report 39p, 101–102p
	2–20	Process to determine remuneration	54	Corporate Governance Report 21p, 23p, 39–40p, 46–47p, 55p, 75p, 101p
	2–21	Annual total compensation ratio	No sufficient information	
Strategy, policies and practices	2–22	Statement on sustainable development strategy	3–5	
	2–23	Policy commitments	58, 62–64, 75–76	
	2–24	Embedding policy commitments	57–59	
	2–25	Processes to remediate negative impacts	77, 89	
	2–26	Mechanisms for seeking advice and raising concerns	57, 63	
	2–27	Compliance with laws and regulations	107	
	2–28	Membership associations	122	
Stakeholder engagement	2–29	Approach to stakeholder engagement	98	
	2–30	Collective bargaining agreements	74–75	

GRI Standard	Disclosure		Location	Note
GRI 3: Material Topics 2021				
GRI 3: Material Topics 2021	3-1	Process to determine material topics	99-103	
	3-2	List of material topics	99-103	
Topic Standard – Economic Disclosures (GRI 200)				
GRI 3: Material Topics 2021	3-3	Management of material topics	102-103	
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	108, 124-147	
GRI 3: Material Topics 2021	3-3	Management of material topics	102-103	
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	62-63	
	205-2	Communication and training about anti-corruption policies and procedures	63-64	
	205-3	Confirmed incidents of corruption and actions taken	63	
Topic Standard – Environmental Disclosures (GRI 300)				
GRI 302: Energy 2016	302-1	Energy consumption within the organization	104, 107, 124-147	
	302-2	Energy consumption outside of the organization	104, 107, 124-147	
	303-5	Water consumption	104, 107, 124-147	
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	104, 107, 124-147	
	305-2	Energy indirect (Scope 2) GHG emissions	104, 107, 124-147	
	305-3	Other indirect (Scope 3) GHG emissions	104, 107, 124-147	
	305-4	GHG emissions intensity	104, 107, 124-147	
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	91, 96	
	306-2	Management of significant waste-related impacts	91, 96	
	306-3	Waste generated	104, 107	
	306-4	Waste diverted from disposal	104	
	306-5	Waste directed to disposal	91	

GRI Standard	Disclosure		Location	Note
Topic Standard – Social Disclosures (GRI 400)				
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	104, 107, 109, 124-147	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	74	
	401-3	Parental leave	109, 124-147	
GRI 3: Material Topics 2021	3-3	Management of material topics	102-103	
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	78	
	403-2	Hazard identification, risk assessment, and incident investigation	78-79	
	403-3	Occupational health services	78-79	
	403-4	Worker participation, consultation, and communication on occupational health and safety	79	
	403-5	Worker training on occupational health and safety	79	
	403-6	Promotion of worker health	79	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	78-79	
	403-9	Work-related injuries	104, 107, 124-147	
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	71, 104, 107, 109, 124-147	
	404-2	Programs for upgrading employee skills and transition assistance programs	70-72	
	404-3	Percentage of employees receiving regular performance and career development reviews	104, 107	
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	104, 107, 109, 124-147	
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	94-96	
GRI 3: Material Topics 2021	3-3	Management of material topics	102-103	
GRI 416: Customer Health and Safety 2016	416-1	Assessment of the health and safety impacts of product and service categories	82-85	
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	No violation	
GRI 3: Material Topics 2021	3-3	Management of material topics	102-103	
GRI 417: Marketing and Labeling 2016	417-1	Requirements for product and service information and labeling	86-87	
	417-2	Incidents of non-compliance concerning product and service information and labeling	87	
	417-3	Incidents of non-compliance concerning marketing communications	87	
GRI 3: Material Topics 2021	3-3	Management of material topics	102-103	
Strengthening R&D and technological innovation	-	R&D expenditures and strengthening of the clinical trial responsibility	83, 124-147	

* For the detailed social responsibility management performance the Group affiliates, please download the PDF format of this report from our website and check the related page.
** For the Business Report, please download the Business Report of Dong-A Socio Holdings from our website and check the related page.

GHG Verification Statement

Verification Scope

Korean Standards Association has conducted verification for GHG emissions under limited assurance level, based on GHG report provided by DONG-A SOCIO HOLDINGS Co., Ltd. and 12 other group companies which includes 2022's Scope1, Scope2 and Scope3 emissions.

Verification Standards and Guidelines

To conduct verification activities, verification team applied verification standards and guidelines. The standards and guidelines are as follows.

- Verification guideline for management of GHG Emissions Trading Scheme provided by Ministry of Environment, Republic of Korea
- Guideline for reporting and certification of GHG Emissions Trading Scheme provided by Ministry of Environment, Republic of Korea
- 2006 IPCC Guidelines for National Greenhouse gas Inventories
- WRI Corporate Value Chain (Scope 3) Accounting and Reporting Standard
- Technical Guidance for Calculating Scope 3 Emissions, version1.0(WRI)
- KS I ISO 14064-1 : 2006

Verification Conclusion

As a result of verification activities, verification team has found no significant errors, omissions, and misstatements. Therefore, Korean Standards Association confirms that following emissions data are adequately quantified.

•2022 GHG Emissions & Energy

No.	Site	GHG Emission (tCO_2-eq)				Energy (TJ)		
		Direct (Scope1)	Indirect (Scope2)	Other Indirect (Scope3)	Total	Direct (Scope1)	Indirect (Scope2)	Total
1	Dong-A Socio Holdings	152	291	47	490	2	6	8
2	Dong-A ST	6,790	15,585	809	23,184	123	369	492
3	Dong-A Pharmaceutical	3,449	11,715	378	15,542	87	244	331
4	ST Pharm	599	21,055	147	21,801	5	407	412
5	STgen Bio	2,033	5,858	112	8,003	39	122	161
6	Dong-A Chammed	32	52	26	110	_	1	1
7	Dong-A Otsuka	7,827	10,869	624	19,320	152	227	379
8	Yongma Logis	10,990	1,983	168	13,141	156	41	197
9	Soo Seok	_	_	9	9	_	_	_
10	Korea Sinto	1,221	5,401	39	6,661	23	112	135
11	DONGCHEONSU	303	3,865	70	4,238	4	80	84
12	ABEN E&C	90	81	11	182	1	1	2
13	DA Informatio	26	19	16	61	_	_	_
Total		33,512	76,774	2,456	112,742	592	1,610	2,202

May 12, 2023

Myung So Kang

KOREAN STANDARDS ASSOCIATION

Third-party Assurance Statement

Dear Management and Stakeholders of DONG-A SOCIO GROUP

Introduction

The Korean Standards Association ("KSA") was commissioned by DONG-A SOCIO GROUP("DONG-A SOCIO GROUP") to perform a third-party Assurance Engagement of '2022 DONG-A SOCIO GROUP Integrated Report'(the "Report"). KSA presents independent opinions as follows as a result of feasibility of the data contained in this Report. DONG-A SOCIO GROUP has sole responsibility for content and performance contained in this Report.

Independence

As an independent assurance agency, KSA does not have any kinds of commercial interest in businesses of DONG-A SOCIO GROUP apart from undertaking a third-party assurance on the Report. We have no other contract with DONG-A SOCIO GROUP that may undermine credibility and integrity as an independent assurance agency.

Assurance Standards and Level

This Assurance Engagement followed the AA1000AS v3 assurance standards to provide Moderate Level assurance. We checked the four principles of inclusivity, materiality, responsiveness and impact in combination with information credibility of the Report. We reviewed Universal Standard and Topic Specific Standard whether the Report content was created in accordance with the GRI Standards. We also checked compliance with the Biotechnology&Pharmaceuticals industry standards of Sustainability Accounting Standards Board.

Assurance Type and Scope

Assurance Provider performed Type2 assurance that assessed compliance with four principles of AA1000AP (AccountAbility Principles) 2018, as well as the accuracy and reliability of performance information contained in the report.

- Topic-specific Standards
  - Economic : 201-1, 205-1, 205-3
  - Environmental : 305-1, 305-2, 305-3
  - Social : 401-2, 403-1, 403-3, 403-5, 403-6, 416-2, 417-2, 417-3

- Company-specific Indicator
  - Reinforcing R&D and technological innovation : R&D

The assurance scope is from January 1 2022 to December 31 2022 and the assurance focused on systems and activities including policies and goals, businesses and programs, standards, and achievements of the Company's sustainability management. While the company's environmental and social data as well as financial data was verified, the scope of review concerning stakeholder engagement was limited to the materiality assessment process.

Assurance Methodology

We used the following methods to gather information, documents and evidence with respect to the assurance scope.

- Confirmation of DONG-A SOCIO GROUP's stakeholder participation and materiality assessment process by sustainability expert.
- Analyses of articles related to DONG-A SOCIO GROUP's sustainability management published by domestic media outlets
- Review of the consistency between the financial performance data and the company's audit report/publicly announced data by Certified Public Accountant.
- Verification of consistency between environmental information disclosure data and information provided by environmental expert.
- Examination of internal documents and basic materials

Assurance Results and Opinions

KSA reviewed the draft version of this Report to present our opinions as an assurance provider. Modifications were made of the Report content if deemed necessary. We were not aware of any significant errors or inappropriate descriptions in this Report as a result of our Assurance Engagement. As such, we present our opinions of the 2022 DONG-A SOCIO GROUP Integrated Report as follows.

- **Inclusivity**

- Has DONG-A SOCIO GROUP engaged its stakeholders in strategically responding to sustainability?

KSA believe DONG-A SOCIO GROUP is aware of the importance of stakeholder participation and is making an all-out effort to establish a process that will increase their participation. DONG-A SOCIO GROUP has selected stakeholders including group company, shareholders and investors, local communities, government, employee and partner companies to receive diverse feedbacks and opinions.

- **Materiality**

- Has DONG-A SOCIO GROUP included material information in the Report to help stakeholders make informed decisions?

We are not aware of any significant omissions or exclusions of data that is material to stakeholders. We verified that DONG-A SOCIO GROUP conducted materiality assessment with issues identified from analyses of internal and external environments and reported according to the result.

- **Responsiveness**

– Has DONG-A SOCIO GROUP appropriately responded to stakeholder requirements and interest in this Report?

We verified that DONG-A SOCIO GROUP responded stakeholders' needs and interests through reflecting stakeholders' opinions in the Report. We are not aware of any evidence that DONG-A SOCIO GROUP's response to significant issues of stakeholders was reported inappropriately.

- **Impact**

– Has DONG-A SOCIO GROUP appropriately monitored its impact on the stakeholders?

We verified that the Company is monitoring and assessing its impact on the stakeholders by conducting an enhanced verification of its standard business activities. Furthermore, it has been verified that the Company appropriately publishes its findings in the Report.

- **Reliability and quality of specified performance**

– Has DONG-A SOCIO GROUP appropriately collected and disclosed specified performance information based on reliable process?

The assurance provider performed a reliability assurance of the sustainability performance information on the subject of Type 2 assurance. To assure this information, interviews were conducted with relevant personnel, and it was determined that the performance information disclosed in the report was collected and disclosed based on a reliable process and evidence. Additionally, no evidence was found indicating that specific sustainability information was inaccurately reported.

GRI Standards Disclosure

We confirmed that this Report was prepared in accordance with GRI Standards. Based on data DONG-A SOCIO GROUP provided, we also confirmed a validity of the contents related to Universal Standards and Topic Standards.

June 2023

Myung Soo Kang
KSA Chairman & CEO

Myung Soo Kang

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Licensed Report
000-70/V3-7RF6Z

The Korean Standards Association (KSA), established as a special corporation in accordance with the Law for Industrial Standardization in 1962, serves as a knowledge service provider that distributes and disseminates such services as industrial standardization, quality management, sustainability management, KS certification and ISO certification. The KSA is committed to the sustainable development of Korean society as an ISO 26000 national secretary, certified GRI training partner, AA1000 assurance provider, KSI (Korea Sustainability Index) operator, and UN CDM DOE (development operational entity), and as an assurance provider of the Korean government's greenhouse gas energy target management system.

Membership

- UNGC (Global Compact Network Korea)
- The Korean Dietetic Association
- United Defense Council of Dongdaemun-gu
- Seoul Chamber of Commerce & Industry
- Union of Faithful Pharmaceuticals Report
- International Management Institute, The Federation of Korean Industries
- Korea Association for Chief Financial Officers
- Korea Exchange
- Korea Industrial Technology Association
- Executive Company, Korea Industrial Technology Association
- Korea Listed Companies Association
- Korea Listed Companies Audit Association
- Korea-Japan Economic Association

* As of December 2022; and based on the membership of Dong-A Socio Holdings

About This Report

This report is Dong-A Socio Group's fourth Integrated Report since the first one published in 2020. Its purpose is to transparently disclose the efforts made during the past year for the company's sustainable growth and fulfillment of social responsibilities as well as financial/non-financial performance and to communicate with various stakeholders. Dong-A Socio Group issues the Integrated Report on an annual basis.

Reporting Standards

Dong-A Socio Group's Integrated Report 2022 is in accordance with the Global Reporting Initiative (GRI) Standards 2021, which are international sustainability reporting standards, and was created in consideration of the Sustainability Accounting Standards Board's (SASB) "Biotechnology and Pharmaceuticals Industry" standards to reflect important issues that consider industry characteristics. In addition, the report reflects connection with The Ten Principles of the UN Global Compact (UNGC) and the UN Sustainable Development Goals (SDGs), global initiatives for socially responsible management.

Reporting Scope and Boundary

In this report, "Dong-A Socio Group" refers to major subsidiary companies of Dong-A Socio Holdings that are subject to consolidation according to the Korean International Financial Reporting Standards (K-IFRS) and includes 12 major Group affiliates in Korea that are connected to Dong-A Socio Holdings in their actual execution of business activities. If the reporting scope is different per performance, the detailed scope was separately indicated. In case of individual activities of Group affiliates, the Group affiliate name was specified. Unless otherwise indicated in the general descriptions and information, information of Dong-A Socio Group's overseas branches, sub-subsidiaries, and investment companies is excluded.

The geographical boundary is the Republic of Korea, where business sites that account for at least 99% of sales are located, and the time boundary is from January 1, 2022 to December 31, 2022 (Some performance data includes data through April 2023 in consideration of timeliness of information). For quantitative data, we disclosed data for three years, from 2020 to 2022, in the "Sustainability Factbook" to enable identification of changes in trends.

Third Party Assurance & Disclaimer

Financial information disclosed in this report is data that went through an audit by an independent audit firm. Dong-A Socio Group received third-party assurance that falls under Type 2 of the AA1000AS v3 assurance standard from Korean Standards Association to secure credibility of non-financial information that was disclosed in the report. Details on assurance criteria, assurance organization opinions, and other assurance results can be found in this report's Sustainability Factbook.

This report includes financial circumstance, operation, business performance, top corporate management's plan, and goal-related outlook statements of Dong-A Socio Holdings and the Group affiliates. Despite the third-party assurance, there may be a difference between the company's actual performance and future performance that was stated or implied through outlook statements. We fully reviewed and revised social/environmental data due to an aggregation error in the previous year, and plan to manage performance based on 2022 data.

CONTACT INFORMATION

This report is available in PDF format which can be downloaded at Dong-A Socio Group Jeong-Do management website. Stakeholder opinions on this report are collected through various channels, including phone and postal mail.

Address Jeong-Do (Fair) Management Team, Dong-A Socio Holdings 64, Cheonho-daero, Dongdaemun-gu, Seoul 02587, Korea
Phone +82-2-920-8421
Fax +82-2-923-8224

ADDITIONAL INFORMATION

Dong-A Socio Holdings Website
http://en.donga.co.kr

Dong-A Socio Group Jeong-Do Management Website
https://gamasot.dongasocio.com/index.php/en

With Dong-A Website
http://with.donga.co.kr

社是

우리는 社會正義에 따라
企業의 社會的責任을 다하고
global 市場에서 認定받는
優秀한 製品을 開發하여
人類의 健康과 福祉向上에 이바지한다.

東亞쏘시오그룹 會長 姜信浩

OUR PLEDGE

To fulfill the demands of social justice, we endeavor to fulfill our corporate social responsibility.
We also use new sciences and technologies to contribute to the promotion of human health and welfare.

Company Philosophy | Handwritten by Shin-Ho Kang, Honorary Chairman, Dong-A Socio Group

Group Affiliates' Social Responsibility Management Performance

Dong-A ST

Classification			Unit	2020	2021	2022
Financial Performance	Total assets		KRW	984,913,587,053	1,115,282,177,058	**1,135,143,085,866**
	Total liabilities		KRW	338,487,727,133	455,482,775,648	**463,178,727,686**
	Total shareholders' equity		KRW	646,425,859,920	659,799,401,410	**671,964,358,180**
	Sales		KRW	586,576,702,090	590,123,656,392	**635,839,633,102**
	Operating profit		KRW	34,061,589,437	15,492,239,339	**30,527,351,413**
	Operating profit margin		%	5.8	2.6	**4.8**
Non-financial Performance	No. of employees		Person	1,595	1,653	**1,660**
	Industrial accident		Case	1	2	**2**
	Private treatment of industrial accident		Case	10	11	**20**
	Violation of laws		Case	1	0	**1**
	Safety training hours per person		Hour	1.5	6.8	**16.6**
	Percentage of female employees		%	28.3	29.3	**28.9**
	Employee turnover rate		%	6.7	7.7	**7.8**
	Average length of service		Year	11.0	12.0	**12.0**
	R&D investment		KRW	76,151,291,387	82,273,063,931	**86,760,663,133**
	Product improvement		Case	–	–	**5**
	Water consumption		Ton	157,998	167,583	**145,573**
	Greenhouse gas (GHG) emissions		tCO_2eq	14,082	21,852	**23,184**
	GHG emissions (Scope 1)		tCO_2eq	5,448	7,085	**6,790**
	GHG emissions (Scope 2)		tCO_2eq	8,633	14,712	**15,585**
	GHG emissions (Scope 3)		tCO_2eq	–	55	**809**
	GHG intensity		tCO_2eq/KRW 100 million	2.4	3.7	**3.6**
	Energy consumption		TJ	307	470	**492**
Creation and Distribution of Economic Value	Creation of economic value	Sales	KRW	586,576,702,090	590,123,656,392	**635,839,633,102**
	Shareholders & investors	Dividend	KRW	8,438,390,000	8,438,390,000	**8,440,847,000**
		Interest expense	KRW	5,193,369,292	5,614,852,571	**8,039,875,416**
	Employees	Salaries	KRW	100,576,014,218	105,157,707,517	**112,408,417,473**
		Employee benefits	KRW	13,864,054,340	14,036,326,849	**14,808,947,560**
	Suppliers	Raw material expenses	KRW	76,929,233,656	75,112,105,246	**67,480,221,972**
		Outsourcing expenses	KRW	16,791,887,460	17,958,026,161	**18,938,013,151**
	Government & local communities	Income tax	KRW	6,184,864,087	-627,558,660	**4,527,303,644**
		CSR expenditures	KRW	1,181,451,222	839,662,746	**972,161,336**

Employees

(Unit: Person)

Classification		2020	2021	2022
Total number of employees		1,595	1,653	**1,660**
By employment type	Full-time	1,547	1,606	**1,621**
	Male	1,101	1,129	**1,147**
	Female	446	477	**474**
	Part-time	48	47	**39**
	Male	43	39	**33**
	Female	5	8	**6**
By gender	Male	1,144	1,168	**1,180**
	Female	451	485	**480**
By age	Under 30 years old	352	335	**323**
	30-50 years old	1,110	1,172	**1,166**
	Over 50 years old	133	146	**171**

New Employee Hires & Employee Turnover

(Unit: Person, %)

Classification			2020	2021	2022
Total number of new hires			89	111	**130**
New hires	By gender	Male	52	70	**86**
		Female	37	41	**44**
	By age	Under 30 years old	73	77	**99**
		30-50 years old	14	33	**29**
		Over 50 years old	2	1	**2**
Total number of people who left			107	124	**129**
Turnover	By gender	Male	70	83	**79**
		Female	37	41	**50**
	By age	Under 30 years old	29	46	**45**
		30-50 years old	66	59	**67**
		Over 50 years old	12	19	**17**
	Turnover rate	Voluntary	4.2%	6.6%	**6.7%**
		Involuntary	2.5%	1.1%	**1.2%**

Employee Diversity

(Unit: Person, %)

Classification		2020	2021	2022
Female	Female employees	430	464	**458**
	Female executives	3	3	**3**
	Female managers	18	18	**19**
	Percentage of female employees	28.3%	29.3%	**28.9%**
Person with disability	Number	26	28	**29**
	Percentage	1.6%	1.7%	**1.7%**
Foreigners	Number	11	10	**10**
	Percentage	0.7%	0.6%	**0.6%**
Veterans	Number	54	55	**55**
	Percentage	3.4%	3.3%	**3.3%**

Childcare Leave

(Unit: Person)

Classification		2020	2021	2022
Number of employees eligible for childcare leave	Male	366	318	**298**
	Female	131	112	**109**
	Subtotal	497	430	**407**
Number of employees taking childcare leave	Male	3	5	**11**
	Female	25	23	**19**
	Subtotal	28	28	**30**
Number of employees who returned to work after childcare leave	Male	7	3	**7**
	Female	24	23	**20**
	Subtotal	31	26	**27**
Number of employees who worked for 12 months or longer after returning to work	Male	6	2	**0**
	Female	23	23	**4**
	Subtotal	29	25	**4**

Employee Job Training

(Unit: Hour, KRW)

Classification	2020	2021	2022
Total hours of training	47,861	25,206	**34,250**
Average training hour per person	30.0	15.2	**20.6**
Total cost of training	295,220,013	479,669,652	**518,280,701**
Average training cost per person	185,091	290,181	**312,217**

Dong-A Pharmaceutical

Classification			Unit	2020	2021	2022
Financial Performance	Total assets		KRW	271,910,477,118	325,393,760,120	331,438,972,311
	Total liabilities		KRW	139,360,890,559	176,033,566,602	161,470,208,794
	Total shareholders' equity		KRW	132,549,586,559	149,360,193,518	169,968,763,517
	Sales		KRW	414,800,478,841	437,370,044,248	543,014,296,400
	Operating profit		KRW	50,088,029,666	54,044,543,462	67,140,944,302
	Operating profit margin		%	12.1	12.4	12.4
Non-financial Performance	No. of employees		Person	922	919	922
	Industrial accident		Case	1	2	4
	Private treatment of industrial accident		Case	6	8	3
	Safety training hours per person		Hour	4.3	7.6	11.0
	Percentage of female employees		%	20.8	20.2	20.7
	Employee turnover rate		%	5.6	9.0	12.5
	Average length of service		Year	11.1	11.2	11.3
	R&D investment		KRW	420,260,730,523	5,686,077,575	6,323,924,138
	Product improvement		Case	-	-	5
	Water consumption		Ton	343,880	421,878	445,335
	Greenhouse gas (GHG) emissions		tCO_2eq	10,378	12,352	15,542
	GHG emissions (Scope 1)		tCO_2eq	3,798	3,666	3,449
	GHG emissions (Scope 2)		tCO_2eq	6,580	8,546	11,715
	GHG emissions (Scope 3)		tCO_2eq	0	140	378
	GHG intensity		tCO_2eq/KRW 100 million	2.5	2.8	2.7
	Energy consumption		TJ	247	605	331
Creation and Distribution of Economic Value	Creation of economic value	Sales	KRW	41,800,478,841	437,370,044,248	543,014,296,400
	Shareholders & investors	Dividend	KRW	33,000,000,000	35,400,000,000	36,000,000,000
		Interest expense	KRW	1,111,010,479	846,231,422	1,677,364,441
	Employees	Salaries	KRW	59,547,737,442	72,675,204,195	87,129,722,274
		Employee benefits	KRW	9,352,681,356	10,011,664,045	11,246,799,320
	Suppliers	Raw material expenses	KRW	151,957,050,672	98,557,445,814	117,951,125,930
		Outsourcing expenses	KRW	26,787,523,439	51,293,566,393	60,321,526,136
	Government & local communities	Income tax	KRW	6,265,649,995	2,409,380,003	11,060,172,568
		CSR expenditures	KRW	891,588,124	1,610,596,328	2,015,078,280

Employees

(Unit: Person)

Classification			2020	2021	2022
Total number of employees			922	919	922
By employment type	Full-time		898	892	895
		Male	710	712	708
		Female	188	180	187
	Part-time		24	27	27
		Male	20	21	23
		Female	4	6	4
By gender		Male	730	733	731
		Female	192	186	191
By age		Under 30 years old	242	213	199
		30-50 years old	553	579	582
		Over 50 years old	127	127	141

New Employee Hires & Employee Turnover

(Unit: Person, %)

Classification			2020	2021	2022
Total number of new hires			96	75	76
New hires	By gender	Male	64	58	50
		Female	32	17	26
	By age	Under 30 years old	65	43	42
		30-50 years old	31	32	34
		Over 50 years old	0	0	0
Total number of people who left			50	82	115
Turnover	By gender	Male	36	61	68
		Female	14	21	47
	By age	Under 30 years old	17	28	37
		30-50 years old	20	29	39
		Over 50 years old	13	25	39
	Turnover rate	Voluntary	3.5%	6.1%	6.9%
		Involuntary	2.1%	2.8%	5.7%

Employee Diversity

(Unit: Person, %)

Classification		2020	2021	2022
Female	Female employees	184	176	180
	Female executives	0	1	1
	Female managers	8	9	10
	Percentage of female employees	20.8%	20.2%	20.7%
Person with disability	Number	5	5	5
	Percentage	0.5%	0.5%	0.5%
Foreigners	Number	0	2	2
	Percentage	0.0%	0.2%	0.2%
Veterans	Number	14	14	14
	Percentage	1.5%	1.5%	1.5%

Childcare Leave

(Unit: Person)

Classification		2020	2021	2022
Number of employees eligible for childcare leave	Male	160	168	180
	Female	39	42	38
	Subtotal	199	210	218
Number of employees taking childcare leave	Male	4	4	5
	Female	11	7	16
	Subtotal	15	11	21
Number of employees who returned to work after childcare leave	Male	0	1	6
	Female	7	6	5
	Subtotal	7	7	11
Number of employees who worked for 12 months or longer after returning to work	Male	0	0	2
	Female	8	5	3
	Subtotal	8	5	5

Employee Job Training

(Unit: Hour, KRW)

Classification	2020	2021	2022
Total hours of training	14,238	8,667	10,952
Average training hour per person	15.4	9.4	11.9
Total cost of training	137,919,319	109,705,430	184,226,142
Average training cost per person	149,587	119,375	199,811

ST Pharm

Classification			Unit	2020	2021	2022
Financial Performance	Total assets		KRW	444,862,931,712	494,693,772,496	**555,145,839,726**
	Total liabilities		KRW	143,949,845,482	165,893,102,042	**214,450,724,031**
	Total shareholders' equity		KRW	300,913,086,230	328,800,670,454	**340,695,115,695**
	Sales		KRW	109,049,508,034	139,139,307,909	**209,270,013,087**
	Operating profit		KRW	-13,058,344,799	4,539,423,833	**17,855,973,772**
	Operating profit margin		%	-12.0	3.3	**8.5**
Non-financial Performance	No. of employees		Person	505	560	**639**
	Industrial accident		Case	1	0	**3**
	Private treatment of industrial accident		Case	3	9	**6**
	Safety training hours per person		Hour	26.4	23.8	**25.3**
	Percentage of female employees		%	23.4	25.5	**24.6**
	Employee turnover rate		%	12.1	11.3	**13.2**
	Average length of service		Year	6.6	6.5	**6.3**
	R&D investment		KRW	12,820,331,295	18,367,791,359	**26,278,396,043**
	Water consumption		Ton	131,358	140,904	**163,789**
	Greenhouse gas (GHG) emissions		tCO_2eq	18,365	16,788	**21,801**
	GHG emissions (Scope 1)		tCO_2eq	503	462	**599**
	GHG emissions (Scope 2)		tCO_2eq	17,862	16,282	**21,055**
	GHG emissions (Scope 3)		tCO_2eq	0	44	**147**
	GHG intensity		tCO_2eq/KRW 100 million	16.8	12.1	**10.4**
	Energy consumption		TJ	366	355	**412**
Creation and Distribution of Economic Value	Creation of economic value	Sales	KRW	109,049,508,034	139,139,307,909	**209,270,013,087**
	Shareholders & investors	Dividend	KRW	-	9,404,387,500	**-**
		Interest expense	KRW	442,163,281	3,791,289,712	**2,808,545,006**
	Employees	Salaries	KRW	5,129,186,050	7,260,461,096	**7,890,056,757**
		Employee benefits	KRW	2,376,177,848	2,650,639,739	**3,844,614,525**
	Suppliers	Raw material expenses	KRW	29,278,306,417	39,105,179,910	**63,163,509,688**
		Outsourcing expenses	KRW	62,633,912	569,246,669	**360,942,944**
	Government & local communities	Income tax	KRW	- 3,842,747,661	- 2,509,449,311	**1,138,807,584**
		CSR expenditures	KRW	21,257,160	22,810,944	**42,218,545**

Employees

(Unit: Person)

Classification			2020	2021	2022
Total number of employees			505	560	**639**
By employment type	Full-time		480	518	**595**
		Male	366	381	**441**
		Female	114	137	**154**
	Part-time		25	42	**44**
		Male	21	36	**41**
		Female	4	6	**3**
By gender		Male	387	417	**482**
		Female	118	143	**157**
By age		Under 30 years old	149	175	**212**
		30-50 years old	318	344	**376**
		Over 50 years old	38	41	**51**

New Employee Hires & Employee Turnover

(Unit: Person, %)

Classification			2020	2021	2022
Total number of new hires			78	116	**155**
New hires	By gender	Male	53	68	**108**
		Female	25	48	**47**
	By age	Under 30 years old	36	72	**115**
		30-50 years old	40	43	**39**
		Over 50 years old	2	1	**1**
Total number of people who left			60	60	**79**
Turnover	By gender	Male	41	40	**45**
		Female	19	20	**34**
	By age	Under 30 years old	27	21	**42**
		30-50 years old	29	33	**34**
		Over 50 years old	4	6	**3**
	Turnover rate	Voluntary	10.5%	10.9%	**12.7%**
		Involuntary	1.6%	0.4%	**0.5%**

Employee Diversity

(Unit: Person, %)

Classification		2020	2021	2022
Female	Female employees	114	139	**152**
	Female executives	1	1	**1**
	Female managers	3	3	**4**
	Percentage of female employees	23.4%	25.5%	**24.6%**
Person with disability	Number	5	7	**7**
	Percentage	1.0%	1.3%	**1.1%**
Foreigners	Number	4	5	**6**
	Percentage	0.8%	0.9%	**0.9%**
Veterans	Number	0	0	**0**
	Percentage	0.0%	0.0%	**0.0%**

Childcare Leave

(Unit: Person)

Classification		2020	2021	2022
Number of employees eligible for childcare leave	Male	99	96	**94**
	Female	4	11	**15**
	Subtotal	103	107	**109**
Number of employees taking childcare leave	Male	0	1	**4**
	Female	10	7	**7**
	Subtotal	10	8	**11**
Number of employees who returned to work after childcare leave	Male	0	1	**2**
	Female	8	2	**5**
	Subtotal	8	3	**7**
Number of employees who worked for 12 months or longer after returning to work	Male	0	0	**1**
	Female	5	7	**8**
	Subtotal	5	7	**9**

Employee Job Training

(Unit: Hour, KRW)

Classification	2020	2021	2022
Total hours of training	6,779	5,879	**7,012**
Average training hour per person	13.4	10.5	**11.0**
Total cost of training	24,335,319	58,465,588	**89,516,460**
Average training cost per person	48,189	104,403	**140,088**

STgen Bio

Classification			Unit	2020	2021	2022
Financial Performance	Total assets		KRW	147,488,341,822	140,740,356,150	**143,550,610,849**
	Total liabilities		KRW	54,318,988,946	50,402,282,840	**69,744,625,433**
	Total shareholders' equity		KRW	93,169,352,876	90,338,073,310	**73,805,985,416**
	Sales		KRW	15,940,986,771	40,329,462,695	**27,865,314,936**
	Operating profit		KRW	-17,763,721,358	-2,666,969,215	**-15,692,051,836**
	Operating profit margin		%	-111.4	-6.6	**-56.3**
Non-financial Performance	No. of employees		Person	212	219	**224**
	Violation of laws		Case	0	0	**1**
	Industrial accident		Case	1	-	**2**
	Private treatment of industrial accident		Case	0	0	**0**
	Safety training hours per person		Hour	17.5	9.1	**21.2**
	Percentage of female employees		%	33.5	34.7	**33.0**
	Employee turnover rate		%	9.4	29.7	**20.4**
	Average length of service		Year	4.5	4.6	**4.4**
	Percentage of local talent		%	62.3	57.1	**67.5**
	Water consumption		Ton	42,706	63,273	**62,968**
	Greenhouse gas (GHG) emissions		tCO_2eq	7,307	7,262	**8,003**
	GHG emissions (Scope 1)		tCO_2eq	1,642	1,623	**2,033**
	GHG emissions (Scope 2)		tCO_2eq	5,665	5,618	**5,858**
	GHG emissions (Scope 3)		tCO_2eq	0	21	**112**
	GHG intensity		tCO_2eq/KRW 100 million	45.8	18.0	**28.7**
	Energy consumption		TJ	149	148	**161**
Creation and Distribution of Economic Value	Creation of economic value	Sales	KRW	15,940,986,771	40,329,462,695	**27,865,314,936**
	Shareholders & investors	Dividend	KRW	-	-	**-**
		Interest expense	KRW	1,120,521,911	1,083,900,049	**1,559,201,013**
	Employees	Salaries	KRW	13,123,565,511	12,978,851,552	**15,233,363,535**
		Employee benefits	KRW	1,843,255,680	2,160,731,495	**2,251,702,282**
	Suppliers	Raw material expenses	KRW	3,675,156,413	5,753,149,322	**5,650,996,717**
		Outsourcing expenses	KRW	3,062,986,520	3,697,887,425	**4,086,492,224**
	Government & local communities	Income tax	KRW	544,299,540	-	**-**
		CSR expenditures	KRW	-	3,971,718	**7,449,968**

Employees

(Unit: Person)

Classification			2020	2021	2022
Total number of employees			212	219	**224**
By employment type	Full-time		204	211	**212**
		Male	137	140	**143**
		Female	67	71	**69**
	Part-time		8	8	**12**
		Male	4	3	**7**
		Female	4	5	**5**
By gender	Male		141	143	**150**
	Female		71	76	**74**
By age	Under 30 years old		109	100	**103**
	30-50 years old		98	114	**116**
	Over 50 years old		5	5	**5**

New Employee Hires & Employee Turnover

(Unit: Person, %)

Classification			2020	2021	2022
Total number of new hires			53	50	**40**
New hires	By gender	Male	33	28	**24**
		Female	20	21	**16**
	By age	Under 30 years old	40	41	**25**
		30-50 years old	13	8	**14**
		Over 50 years old	0	0	**1**
Total number of people who left			18	64	**46**
Turnover	By gender	Male	15	39	**25**
		Female	3	25	**21**
	By age	Under 30 years old	8	38	**33**
		30-50 years old	9	24	**11**
		Over 50 years old	1	2	**2**
	Turnover rate	Voluntary	8.4%	23.7%	**18.2%**
		Involuntary	1.0%	6.0%	**2.2%**

Employee Diversity

(Unit: Person, %)

Classification		2020	2021	2022
Female	Female employees	68	73	**72**
	Female executives	1	2	**1**
	Female managers	2	1	**1**
	Percentage of female employees	33.5%	34.7%	**33.0%**
Person with disability	Number	0	0	**0**
	Percentage	0.0%	0.0%	**0.0%**
Foreigners	Number	3	1	**0**
	Percentage	1.4%	0.5%	**0.0%**
Veterans	Number	5	5	**4**
	Percentage	2.4%	2.3%	**1.8%**

Childcare Leave

(Unit: Person)

Classification		2020	2021	2022
Number of employees eligible for childcare leave	Male	15	19	**28**
	Female	3	2	**6**
	Subtotal	18	21	**34**
Number of employees taking childcare leave	Male	1	0	**0**
	Female	1	0	**1**
	Subtotal	2	0	**1**
Number of employees who returned to work after childcare leave	Male	0	0	**0**
	Female	1	1	**0**
	Subtotal	1	1	**0**
Number of employees who worked for 12 months or longer after returning to work	Male	0	0	**0**
	Female	0	1	**1**
	Subtotal	0	1	**1**

Employee Job Training

(Unit: Hour, KRW)

Classification	2020	2021	2022
Total hours of training	1,578	1,226	**3,013**
Average training hour per person	7.4	5.6	**13.5**
Total cost of training	38,550,775	59,836,691	**60,211,142**
Average training cost per person	181,843	273,227	**268,800**

Dong-A CHAMMED

Classification			Unit	2020	2021	2022
Financial Performance	Total assets		KRW	10,889,659,546	11,479,462,188	7,548,671,658
	Total liabilities		KRW	3,847,137,674	3,856,800,003	3,025,997,949
	Total shareholders' equity		KRW	7,042,521,872	7,622,662,185	4,522,673,709
	Sales		KRW	9,349,367,383	9,535,709,057	11,950,506,641
	Operating profit		KRW	178,886,110	408,793,773	917,307,259
	Operating profit margin		%	1.9	4.3	7.7
Non-financial Performance	No. of employees		Person	53	50	54
	Industrial accident		Case	1	0	0
	Private treatment of industrial accident		Case	0	0	0
	Safety training hours per person		Hour	17.7	17.4	20.2
	Percentage of female employees		%	20.8	22.0	16.7
	Employee turnover rate		%	18.9	44.0	50.9
	Average length of service		Year	4.5	4.7	3.3
	R&D investment		KRW	1,103,195,130	1,033,731,352	976,474,059
	Water consumption		Ton	112	94	79
	Greenhouse gas (GHG) emissions		tCO_2eq	50	93	110
	GHG emissions (Scope 1)		tCO_2eq	0	32	32
	GHG emissions (Scope 2)		tCO_2eq	50	61	52
	GHG emissions (Scope 3)		tCO_2eq	–	0.03	26
	GHG intensity		tCO_2eq/KRW 100 million	0.5	1.0	0.9
	Energy consumption		TJ	1	1	1
Creation and Distribution of Economic Value	Creation of economic value	Sales	KRW	9,349,367,383	9,535,709,057	11,950,506,641
	Shareholders & investors	Dividend	KRW	–	–	–
		Interest expense	KRW	–	–	–
	Employees	Salaries	KRW	2,384,588,436	2,268,207,928	2,539,816,265
		Employee benefits	KRW	150,387,689	246,387,640	272,601,503
	Suppliers	Raw material expenses	KRW	3,586,593,077	3,272,788,868	3,956,600,734
		Outsourcing expenses	KRW	31,732,300	95,981,070	176,506,927
	Government & local communities	Income tax	KRW	44,381,350	–	185,567,638
		CSR expenditures	KRW	–	1,692,303	2,675,002

Employees

(Unit: Person)

Classification			2020	2021	2022
Total number of employees			53	50	54
By employment type	Full-time		45	44	43
		Male	36	35	36
		Female	9	9	7
	Part-time		8	6	11
		Male	6	4	9
		Female	2	2	2
By gender		Male	42	39	45
		Female	11	11	9
By age		Under 30 years old	18	20	17
		30-50 years old	31	24	32
		Over 50 years old	4	6	5

New Employee Hires & Employee Turnover

(Unit: Person, %)

Classification			2020	2021	2022
Total number of new hires			11	19	29
New hires	By gender	Male	10	17	27
		Female	1	2	2
	By age	Under 30 years old	5	11	10
		30-50 years old	6	6	18
		Over 50 years old	0	2	1
Total number of people who left			10	20	25
Turnover	By gender	Male	9	18	21
		Female	1	2	4
	By age	Under 30 years old	7	7	11
		30-50 years old	3	13	12
		Over 50 years old	0	0	2
	Turnover rate	Voluntary	18.9%	40.0%	47.2%
		Involuntary	0.0%	4.0%	3.8%

Employee Diversity

(Unit: Person, %)

Classification		2020	2021	2022
Female	Female employees	10	9	7
	Female executives	0	0	0
	Female managers	1	2	2
	Percentage of female employees	20.8%	22.0%	16.7%
Person with disability	Number	0	0	0
	Percentage	0.0%	0.0%	0.0%
Foreigners	Number	0	0	0
	Percentage	0.0%	0.0%	0.0%
Veterans	Number	0	0	0
	Percentage	0.0%	0.0%	0.0%

Childcare Leave

(Unit: Person)

Classification		2020	2021	2022
Number of employees eligible for childcare leave	Male	8	8	7
	Female	3	3	2
	Subtotal	11	11	9
Number of employees taking childcare leave	Male	0	0	1
	Female	1	1	0
	Subtotal	1	1	1
Number of employees who returned to work after childcare leave	Male	0	0	1
	Female	0	1	0
	Subtotal	0	1	1
Number of employees who worked for 12 months or longer after returning to work	Male	0	0	0
	Female	0	1	1
	Subtotal	0	1	1

Employee Job Training

(Unit: Hour, KRW)

Classification	2020	2021	2022
Total hours of training	462	263	226
Average training hour per person	8.7	5.3	4.2
Total cost of training	2,226,893	5,617,318	2,906,297
Average training cost per person	42,017	112,346	53,820

Dong-A Otsuka

Classification			Unit	2020	2021	2022
Financial Performance	Total assets		KRW	251,729,006,174	245,795,139,116	**264,753,016,941**
	Total liabilities		KRW	100,630,468,548	88,653,015,727	**89,677,168,886**
	Total shareholders' equity		KRW	151,098,537,626	157,142,123,389	**175,075,848,055**
	Sales		KRW	268,875,455,184	293,856,228,556	**341,845,548,834**
	Operating profit		KRW	-1,260,762,090	9,298,378,577	**20,201,606,584**
	Operating profit margin		%	-0.5	3.2	**5.9**
Non-financial Performance	No. of employees		Person	872	867	**867**
	Violation of laws		Case	0	0	**0**
	Industrial accident		Case	4	4	**6**
	Private treatment of industrial accident		Case	14	7	**8**
	Safety training hours per person		Hour	14.2	13.0	**15.1**
	Percentage of female employees		%	4.8	5.3	**5.1**
	Employee turnover rate		%	8.4	9.7	**8.5**
	Average length of service		Year	9.9	10.4	**10.9**
	R&D investment		KRW	119,787,731	65,611,883	**51,634,110**
	Product improvement		Case	-	-	**5**
	Water consumption		Ton	748,820	743,768	**752,860**
	Greenhouse gas (GHG) emissions		tCO_2eq	16,095	17,474	**19,320**
	GHG emissions (Scope 1)		tCO_2eq	6,989	7,350	**7,827**
	GHG emissions (Scope 2)		tCO_2eq	9,106	9,878	**10,869**
	GHG emissions (Scope 3)		tCO_2eq	0	246	**624**
	GHG intensity		tCO_2eq/KRW 100 million	6.0	5.9	**5.7**
	Energy consumption		TJ	323	346	**379**
Creation and Distribution of Economic Value	Creation of economic value	Sales	KRW	268,875,455,184	293,856,228,556	**341,845,548,834**
	Shareholders & investors	Dividend	KRW	-	1,980,000,000	**4,620,000,000**
		Interest expense	KRW	812,684,032	483,840,059	**309,021,852**
	Employees	Salaries	KRW	57,293,209,714	62,057,122,672	**68,939,909,136**
		Employee benefits	KRW	7,322,250,459	7,559,381,384	**8,509,977,529**
	Suppliers	Raw material expenses	KRW	119,020,406,707	121,373,582,585	**156,683,244,089**
		Outsourcing expenses	KRW	6,621,395,171	6,046,105,136	**7,785,822,736**
	Government & local communities	Income tax	KRW	- 264,872,200	2,076,098,100	**4,784,514,417**
		CSR expenditures	KRW	422,703,099	206,817,486	**153,671,911**

Employees

(Unit: Person)

Classification		2020	2021	2022
Total number of employees		872	867	**867**
By employment type	Full-time	862	850	**850**
	Male	822	810	**810**
	Female	40	40	**40**
	Part-time	10	17	**17**
	Male	8	11	**13**
	Female	2	6	**4**
By gender	Male	830	821	**823**
	Female	42	46	**44**
By age	Under 30 years old	177	153	**137**
	30-50 years old	558	558	**569**
	Over 50 years old	137	156	**161**

New Employee Hires & Employee Turnover

(Unit: Person, %)

Classification			2020	2021	2022
Total number of new hires			41	63	**66**
New hires	By gender	Male	39	56	**59**
		Female	2	7	**7**
	By age	Under 30 years old	36	45	**51**
		30-50 years old	5	17	**15**
		Over 50 years old	0	1	**0**
Total number of people who left			74	84	**74**
Turnover	By gender	Male	70	78	**64**
		Female	4	6	**10**
	By age	Under 30 years old	36	36	**34**
		30-50 years old	36	36	**29**
		Over 50 years old	2	12	**11**
	Turnover rate	Voluntary	8.2%	8.1%	**7.3%**
		Involuntary	0.2%	1.6%	**1.3%**

Employee Diversity

(Unit: Person, %)

Classification		2020	2021	2022
Female	Female employees	41	45	**43**
	Female executives	1	1	**1**
	Female managers	0	0	**0**
	Percentage of female employees	4.8%	5.3%	**5.1%**
Person with disability	Number	16	21	**20**
	Percentage	1.8%	2.4%	**2.3%**
Foreigners	Number	0	0	**0**
	Percentage	0.0%	0.0%	**0.0%**
Veterans	Number	20	19	**19**
	Percentage	2.3%	2.2%	**2.2%**

Childcare Leave

(Unit: Person)

Classification		2020	2021	2022
Number of employees eligible for childcare leave	Male	385	360	**337**
	Female	9	10	**10**
	Subtotal	394	370	**347**
Number of employees taking childcare leave	Male	2	7	**5**
	Female	3	5	**2**
	Subtotal	5	12	**7**
Number of employees who returned to work after childcare leave	Male	0	1	**4**
	Female	1	3	**1**
	Subtotal	1	4	**5**
Number of employees who worked for 12 months or longer after returning to work	Male	1	0	**1**
	Female	0	1	**3**
	Subtotal	1	1	**4**

Employee Job Training

(Unit: Hour, KRW)

Classification	2020	2021	2022
Total hours of training	64,984	43,070	**62,383**
Average training hour per person	74.5	49.7	**72.0**
Total cost of training	174,044,126	249,358,698	**251,578,214**
Average training cost per person	199,592	287,611	**290,171**

Yongma Logis

Classification			Unit	2020	2021	2022
Financial Performance	Total assets		KRW	214,498,985,447	217,393,326,803	235,900,459,105
	Total liabilities		KRW	105,944,690,376	100,040,270,768	113,460,261,341
	Total shareholders' equity		KRW	108,554,295,071	117,353,056,035	122,440,197,764
	Sales		KRW	275,912,922,494	304,853,278,609	345,326,410,578
	Operating profit		KRW	13,069,823,941	12,834,093,859	6,580,858,567
	Operating profit margin		%	4.7	4.2	1.9
Non-financial Performance	No. of employees		Person	578	532	642
	Industrial accident		Case	2	0	2
	Private treatment of industrial accident		Case	0	0	1
	Safety training hours per person		Hour	24.1	26.3	26.9
	Percentage of female employees		%	13.1	7.3	11.2
	Employee turnover rate		%	19.7	17.5	22.4
	Average length of service		Year	8.0	9.5	8.2
	CSR expenditures to operating profit		%	0.1	0.4	1.3
	Water consumption		Ton	8,637	5,123	6,000
	Greenhouse gas (GHG) emissions		tCO_2eq	26,369	7,155	13,141
	GHG emissions (Scope 1)		tCO_2eq	17,636	5,184	10,990
	GHG emissions (Scope 2)		tCO_2eq	8,733	1,970	1,983
	GHG emissions (Scope 3)		tCO_2eq	0	1	168
	GHG intensity		tCO_2eq/KRW 100 million	9.6	2.3	3.8
	Energy consumption		TJ	0	113	191
Creation and Distribution of Economic Value	Creation of economic value	Sales	KRW	275,912,922,494	304,853,278,609	345,326,410,578
	Shareholders & investors	Dividend	KRW	2,490,000,000	2,490,000,000	2,490,000,000
		Interest expense	KRW	1,553,991,010	1,547,029,672	2,230,464,964
	Employees	Salaries	KRW	30,863,510,866	32,428,811,741	37,320,203,065
		Employee benefits	KRW	5,770,905,866	6,234,135,158	6,990,936,548
	Suppliers	Raw material expenses (storage & transportation)	KRW	190,526,521,145	211,608,575,126	242,751,343,919
		Outsourcing expenses	KRW	36,909,058,670	41,086,810,561	51,248,888,036
	Government & local communities	Income tax	KRW	1,699,592,704	2,150,227,351	2,056,854,718
		CSR expenditures	KRW	17,000,000	47,034,355	32,265,468

Employees

(Unit: Person)

Classification		2020	2021	2022
Total number of employees		578	532	642
By employment type	Full-time	569	522	635
	Male	493	483	563
	Female	76	39	72
	Part-time	9	10	7
	Male	9	10	7
	Female	0	0	0
By gender	Male	502	493	570
	Female	76	39	72
By age	Under 30 years old	184	184	187
	30-50 years old	309	284	350
	Over 50 years old	85	64	105

New Employee Hires & Employee Turnover

(Unit: Person, %)

Classification			2020	2021	2022
Total number of new hires			118	95	201
New hires	By gender	Male	93	72	164
		Female	25	23	37
	By age	Under 30 years old	74	58	116
		30-50 years old	32	23	57
		Over 50 years old	12	14	28
Total number of people who left			111	95	133
Turnover	By gender	Male	76	65	107
		Female	35	30	26
	By age	Under 30 years old	39	30	56
		30-50 years old	46	39	47
		Over 50 years old	26	26	30
	Turnover rate	Voluntary	9.4%	10.5%	21.1%
		Involuntary	10.3%	7.0%	1.3%

Employee Diversity

(Unit: Person, %)

Classification		2020	2021	2022
Female	Female employees	75	38	71
	Female executives	0	0	0
	Female managers	1	1	1
	Percentage of female employees	13.1%	7.3%	11.2%
Person with disability	Number	6	4	3
	Percentage	1.0%	0.8%	0.5%
Foreigners	Number	0	0	0
	Percentage	0.0%	0.0%	0.0%
Veterans	Number	4	4	3
	Percentage	0.7%	0.8%	0.0%

Childcare Leave

(Unit: Person)

Classification		2020	2021	2022
Number of employees eligible for childcare leave	Male	82	70	68
	Female	4	7	8
	Subtotal	86	77	76
Number of employees taking childcare leave	Male	0	0	0
	Female	1	2	2
	Subtotal	1	2	2
Number of employees who returned to work after childcare leave	Male	0	0	0
	Female	0	3	0
	Subtotal	0	3	0
Number of employees who worked for 12 months or longer after returning to work	Male	0	0	0
	Female	0	0	3
	Subtotal	0	0	3

Employee Job Training

(Unit: Hour, KRW)

Classification	2020	2021	2022
Total hours of training	65,762	4,257	28,980
Average training hour per person	113.8	8.0	45.1
Total cost of training	240,575,193	292,677,744	325,713,020
Average training cost per person	416,220	550,146	507,341

Soo Seok

Classification			Unit	2020	2021	2022
Financial Performance	Total assets		KRW	161,427,902,246	158,342,526,481	**162,920,438,703**
	Total liabilities		KRW	71,141,179,829	71,194,669,036	**73,572,633,159**
	Total shareholders' equity		KRW	90,286,722,417	87,147,857,445	**89,347,805,544**
	Sales		KRW	114,510,125,150	112,794,265,131	**105,149,980,520**
	Operating profit		KRW	6,200,623,349	2,313,221,799	**-3,455,451,087**
	Operating profit margin		%	5.4	2.1	**-3.3**
Non-financial Performance	No. of employees		Person	254	250	**226**
	Industrial accident		Case	1	0	**2**
	Private treatment of industrial accident		Case	0	0	**0**
	Safety training hours per person		Hour	24.9	17.9	**23.2**
	Percentage of female employees		%	7.9	8.0	**7.1**
	Employee turnover rate		%	11.0	14.4	**17.3**
	Average length of service		Year	9.8	9.9	**11.3**
	R&D investment		KRW	0	0	**98,865,007**
	Water consumption		Ton	33,485	42,371	**41,202**
	Greenhouse gas (GHG) emissions		tCO_2eq	34,399	45,833	**44,007**
	GHG emissions (Scope 1)		tCO_2eq	23,717	24,586	**23,913**
	GHG emissions (Scope 2)		tCO_2eq	10,682	21,283	**20,085**
	GHG emissions (Scope 3)		tCO_2eq	-	17	**9**
	GHG intensity		tCO_2eq/KRW 100 million	30.0	40.6	**41.9**
	Energy consumption		TJ	539	776	**746**
Creation and Distribution of Economic Value	Creation of economic value	Sales	KRW	114,510,125,150	112,794,265,131	**105,149,980,520**
	Shareholders & investors	Dividend	KRW	-	-	**-**
		Interest expense	KRW	1,137,058,095	1,020,019,098	**1,343,020,932**
	Employees	Salaries	KRW	16,081,824,341	16,993,788,130	**16,054,594,760**
		Employee benefits	KRW	2,930,158,462	3,335,811,358	**3,142,351,719**
	Suppliers	Raw material expenses	KRW	25,237,070,839	29,843,312,430	**35,093,888,955**
		Outsourcing expenses	KRW	4,331,502,055	3,868,062,289	**4,737,059,514**
	Government & local communities	Income tax	KRW	535,500,064	728,746,400	**668,015,235**
		CSR expenditures	KRW	813,600	198,025,595	**88,718,004**

Employees

(Unit: Person)

Classification			2020	2021	2022
Total number of employees			254	250	**226**
By employment type	Full-time		245	241	**218**
		Male	226	222	**202**
		Female	19	19	**16**
	Part-time		9	9	**8**
		Male	8	8	**8**
		Female	1	1	**0**
By gender		Male	234	230	**210**
		Female	20	20	**16**
By age		Under 30 years old	54	53	**36**
		30-50 years old	142	136	**135**
		Over 50 years old	58	61	**55**

New Employee Hires & Employee Turnover

(Unit: Person, %)

Classification			2020	2021	2022
Total number of new hires			29	32	**15**
New hires	By gender	Male	26	31	**13**
		Female	3	1	**2**
	By age	Under 30 years old	17	14	**6**
		30-50 years old	10	11	**3**
		Over 50 years old	2	7	**6**
Total number of people who left			28	36	**39**
Turnover	By gender	Male	27	34	**32**
		Female	1	2	**7**
	By age	Under 30 years old	13	11	**7**
		30-50 years old	9	14	**18**
		Over 50 years old	6	11	**14**
	Turnover rate	Voluntary	9.8%	13.2%	**15.5%**
		Involuntary	1.2%	1.2%	**1.8%**

Employee Diversity

(Unit: Person, %)

Classification		2020	2021	2022
Female	Female employees	19	19	**16**
	Female executives	1	1	**0**
	Female managers	0	0	**0**
	Percentage of female employees	7.9%	8.0%	**7.1%**
Person with disability	Number	5	5	**5**
	Percentage	2.0%	2.0%	**2.2%**
Foreigners	Number	4	7	**0**
	Percentage	1.6%	2.8%	**0.0%**
Veterans	Number	0	0	**0**
	Percentage	0.0%	0.0%	**0.0%**

Childcare Leave

(Unit: Person)

Classification		2020	2021	2022
Number of employees eligible for childcare leave	Male	37	42	**39**
	Female	1	2	**1**
	Subtotal	38	44	**40**
Number of employees taking childcare leave	Male	1	1	**2**
	Female	0	2	**1**
	Subtotal	1	3	**3**
Number of employees who returned to work after childcare leave	Male	0	0	**1**
	Female	0	2	**1**
	Subtotal	0	2	**2**
Number of employees who worked for 12 months or longer after returning to work	Male	2	2	**2**
	Female	0	0	**1**
	Subtotal	2	2	**3**

Employee Job Training

(Unit: Hour, KRW)

Classification	2020	2021	2022
Total hours of training	7,858	4,842	**5,454**
Average training hour per person	30.9	19.4	**24.1**
Total cost of training	22,242,001	30,813,232	**26,160,325**
Average training cost per person	87,567	123,253	**115,754**

Korea Sinto

Classification			Unit	2020	2021	2022
Financial Performance	Total assets		KRW	30,013,261,270	28,846,278,962	30,620,746,078
	Total liabilities		KRW	5,159,475,669	3,675,694,727	4,973,888,751
	Total shareholders' equity		KRW	24,853,785,601	25,170,584,235	25,646,857,327
	Sales		KRW	20,500,996,295	27,369,007,700	31,577,517,574
	Operating profit		KRW	-484,745,357	305,550,479	454,455,567
	Operating profit margin		%	-2.4	1.1	1.4
Non-financial Performance	No. of employees		Person	95	88	88
	Violation of laws		Case	0	0	1
	Industrial accident		Case	0	1	2
	Private treatment of industrial accident		Case	4	7	6
	Safety training hours per person		Hour	16.7	17.2	17.1
	Percentage of female employees		%	3.2	3.4	3.4
	Employee turnover rate		%	0.0	8.0	6.9
	Average length of service		Year	14.7	16.0	16.5
	CSR expenditures to operating profit		%	-0.5	2.7	1.2
	Water consumption		Ton	27,581	36,512	40,454
	Greenhouse gas (GHG) emissions		tCO$_2$eq	4,945	6,711	6,661
	GHG emissions (Scope 1)		tCO$_2$eq	927	1,190	1,221
	GHG emissions (Scope 2)		tCO$_2$eq	4,018	5,521	5,401
	GHG emissions (Scope 3)		tCO$_2$eq	0	0	39
	GHG intensity		tCO$_2$eq/KRW 100 million	24.1	24.5	21.1
	Energy consumption		TJ	0	137	135
Creation and Distribution of Economic Value	Creation of economic value	Sales	KRW	20,500,996,295	27,369,007,700	31,577,517,574
	Shareholders & investors	Dividend	KRW	-	125,000,000	125,000,000
		Interest expense	KRW	-	-	-
	Employees	Salaries	KRW	5,876,982,157	5,915,310,691	6,470,363,169
		Employee benefits	KRW	648,201,418	644,191,315	694,629,664
	Suppliers	Raw material expenses	KRW	6,709,320,548	11,759,575,882	12,957,822,388
		Outsourcing expenses	KRW	1,760,559,045	3,868,120,201	4,051,033,519
	Government & local communities	Income tax	KRW	-	11,792,129	24,986,260
		CSR expenditures	KRW	2,400,000	8,180,512	5,436,527

Employees

(Unit: Person)

Classification			2020	2021	2022
Total number of employees			95	88	88
By employment type	Full-time		84	81	82
		Male	81	78	79
		Female	3	3	3
	Part-time		11	7	6
		Male	11	7	6
		Female	0	0	0
By gender		Male	92	85	85
		Female	3	3	3
By age		Under 30 years old	6	6	5
		30-50 years old	50	46	44
		Over 50 years old	39	36	39

New Employee Hires & Employee Turnover

(Unit: Person, %)

Classification			2020	2021	2022
Total number of new hires			0	0	6
New hires	By gender	Male	0	0	6
		Female	0	0	0
	By age	Under 30 years old	0	0	3
		30-50 years old	0	0	3
		Over 50 years old	0	0	0
Total number of people who left			0	7	6
Turnover	By gender	Male	0	7	6
		Female	0	0	0
	By age	Under 30 years old	0	0	1
		30-50 years old	0	2	4
		Over 50 years old	0	5	1
	Turnover rate	Voluntary	0.0%	8.0%	5.7%
		Involuntary	0.0%	0.0%	1.1%

Employee Diversity

(Unit: Person, %)

Classification		2020	2021	2022
Female	Female employees	3	3	3
	Female executives	0	0	0
	Female managers	0	0	0
	Percentage of female employees	3.2%	3.4%	3.4%
Person with disability	Number	1	1	1
	Percentage	1.1%	1.1%	1.1%
Foreigners	Number	1	1	1
	Percentage	1.1%	1.1%	1.1%
Veterans	Number	0	0	0
	Percentage	0.0%	0.0%	0.0%

Childcare Leave

(Unit: Person)

Classification		2020	2021	2022
Number of employees eligible for childcare leave	Male	23	18	18
	Female	0	0	0
	Subtotal	23	18	18
Number of employees taking childcare leave	Male	0	0	1
	Female	0	0	0
	Subtotal	0	0	1
Number of employees who returned to work after childcare leave	Male	0	0	1
	Female	0	0	0
	Subtotal	0	0	1
Number of employees who worked for 12 months or longer after returning to work	Male	0	0	0
	Female	0	0	0
	Subtotal	0	0	0

Employee Job Training

(Unit: Hour, KRW)

Classification	2020	2021	2022
Total hours of training	77	208	222
Average training hour per person	0.8	2.4	2.5
Total cost of training	20,725,549	9,081,375	9,618,971
Average training cost per person	218,164	103,197	109,306

DONGCHEONSU

Classification			Unit	2020	2021	2022
Financial Performance	Total assets		KRW	63,311,036,109	65,663,379,038	**78,738,294,237**
	Total liabilities		KRW	13,989,887,888	15,128,640,742	**27,353,422,303**
	Total shareholders' equity		KRW	49,321,148,221	50,534,738,296	**51,384,871,934**
	Sales		KRW	26,703,445,859	32,193,492,143	**32,892,947,996**
	Operating profit		KRW	1,708,052,958	2,202,209,882	**1,062,486,426**
	Operating profit margin		%	6.4	6.8	**3.2**
Non-financial Performance	No. of employees		Person	83	89	**95**
	Percentage of local talent		%	51.9	74.3	**61.3**
	Industrial accident		Case	0	0	**1**
	Private treatment of industrial accident		Case	6	1	**4**
	Safety training hours per person		Hour	25.2	32.4	**30.0**
	Percentage of female employees		%	18.1	20.2	**14.7**
	Employee turnover rate		%	30.7	33.3	**26.9**
	Average length of service		Year	5.3	5.6	**5.8**
	R&D investment		KRW	31,653,444	35,392,297	**35,004,627**
	Water consumption		Ton	212,863	258,429	**242,116**
	Greenhouse gas (GHG) emissions		tCO_2eq	3,245	3,985	**4,238**
	GHG emissions (Scope 1)		tCO_2eq	220	276	**303**
	GHG emissions (Scope 2)		tCO_2eq	3,025	3,577	**3,865**
	GHG emissions (Scope 3)		tCO_2eq	-	132	**70**
	GHG intensity		tCO_2eq/KRW 100 million	12.2	12.4	**12.9**
	Energy consumption		TJ	66	78	**84**
Creation and Distribution of Economic Value	Creation of economic value	Sales	KRW	26,703,445,859	32,193,492,143	**32,892,947,996**
	Shareholders & investors	Dividend	KRW	400,000,000	400,000,000	**800,000,000**
		Interest expense	KRW	243,022,568	172,531,894	**197,723,613**
	Employees	Salaries	KRW	3,572,777,000	4,160,572,912	**4,582,974,543**
		Employee benefits	KRW	551,815,000	589,996,246	**696,600,623**
	Suppliers	Raw material expenses	KRW	13,499,265,000	15,473,927,143	**16,607,923,834**
		Outsourcing expenses	KRW	107,306,422	159,067,090	**102,198,823**
	Government & local communities	Income tax	KRW	144,464,761	458,546,123	**-752,807,667**
		CSR expenditures	KRW	125,454,200	139,466,750	**76,831,146**

Employees

(Unit: Person)

Classification			2020	2021	2022
Total number of employees			83	89	**95**
By employment type	Full-time		51	56	**57**
		Male	44	45	**49**
		Female	7	11	**8**
	Part-time		32	33	**38**
		Male	24	26	**32**
		Female	8	7	**6**
By gender		Male	68	71	**81**
		Female	15	18	**14**
By age		Under 30 years old	27	26	**30**
		30-50 years old	27	31	**32**
		Over 50 years old	29	32	**33**

New Employee Hires & Employee Turnover

(Unit: Person, %)

Classification			2020	2021	2022
Total number of new hires			27	35	**31**
New hires	By gender	Male	21	30	**25**
		Female	6	5	**6**
	By age	Under 30 years old	21	15	**13**
		30-50 years old	5	12	**15**
		Over 50 years old	1	8	**3**
Total number of people who left			25	29	**25**
Turnover	By gender	Male	22	28	**15**
		Female	3	1	**10**
	By age	Under 30 years old	9	14	**8**
		30-50 years old	10	9	**14**
		Over 50 years old	6	6	**3**
	Turnover rate	Voluntary	30.7%	33.3%	**26.9%**
		Involuntary	0.0%	0.0%	**0.0%**

Employee Diversity

(Unit: Person, %)

Classification		2020	2021	2022
Female	Female employees	15	18	**14**
	Female executives	0	0	**0**
	Female managers	0	0	**0**
	Percentage of female employees	18.1%	20.2%	**14.7%**
Person with disability	Number	1	1	**1**
	Percentage	1.2%	1.1%	**1.1%**
Foreigners	Number	0	0	**0**
	Percentage	0.0%	0.0%	**0.0%**
Veterans	Number	0	0	**0**
	Percentage	0.0%	0.0%	**0.0%**

Childcare Leave

(Unit: Person)

Classification		2020	2021	2022
Number of employees eligible for childcare leave	Male	7	8	**8**
	Female	0	0	**0**
	Subtotal	7	8	**8**
Number of employees taking childcare leave	Male	0	0	**0**
	Female	0	0	**0**
	Subtotal	0	0	**0**
Number of employees who returned to work after childcare leave	Male	0	0	**0**
	Female	0	0	**0**
	Subtotal	0	0	**0**
Number of employees who worked for 12 months or longer after returning to work	Male	0	0	**0**
	Female	0	0	**0**
	Subtotal	0	0	**0**

Employee Job Training

(Unit: Hour, KRW)

Classification	2020	2021	2022
Total hours of training	796	1,491	**1,244**
Average training hour per person	9.6	16.7	**13.1**
Total cost of training	6,399,992	16,061,852	**10,042,029**
Average training cost per person	77,108	180,470	**105,706**

ABEN Engineering & Construction

Classification			Unit	2020	2021	2022
Financial Performance	Total assets		KRW	16,818,388,236	16,554,055,498	**19,731,960,202**
	Total liabilities		KRW	10,081,711,974	6,874,662,141	**10,553,342,535**
	Total shareholders' equity		KRW	6,736,676,262	9,679,393,357	**9,178,617,667**
	Sales		KRW	47,855,354,837	81,309,267,545	**64,653,858,199**
	Operating profit		KRW	1,224,882,084	4,537,570,222	**1,544,005,405**
	Operating profit margin		%	2.6	5.6	**2.4**
Non-financial Performance	No. of employees		Person	40	44	**57**
	Industrial accident		Case	1	4	**6**
	Private treatment of industrial accident		Case	0	0	**0**
	Safety training hours per person		Hour	14.0	14.7	**12.0**
	Percentage of female employees		%	20.0	15.9	**14.0**
	Employee turnover rate		%	27.5	25.0	**24.6**
	Average length of service		Year	4.0	4.0	**2.7**
	Employee volunteer hours		Hour	69	1,405	**695**
	Water consumption		Ton	194	322	**0[1]**
	Greenhouse gas (GHG) emissions		tCO_2eq	2	11	**182**
	GHG emissions (Scope 1)		tCO_2eq	0	7	**90**
	GHG emissions (Scope 2)		tCO_2eq	2	4	**81**
	GHG emissions (Scope 3)		tCO_2eq	0	0	**11**
	GHG intensity		tCO_2eq/KRW 100 million	0.0	0.0	**0.3**
	Energy consumption		TJ	2	0	**2**
Creation and Distribution of Economic Value	Creation of economic value	Sales	KRW	47,855,354,837	81,309,267,545	**64,653,858,199**
	Shareholders & investors	Dividend	KRW	1,020,000,000	2,040,000,000	**2,040,000,000**
		Interest expense	KRW	–	488,880	**–**
	Employees	Salaries	KRW	3,391,450,723	4,335,739,762	**4,525,195,995**
		Employee benefits	KRW	423,429,994	626,225,026	**626,225,026**
	Suppliers	Raw material expenses	KRW	8,479,848,562	11,726,168,002	**13,190,478,924**
		Outsourcing expenses	KRW	31,562,080,145	55,664,756,501	**39,468,647,634**
	Government & local communities	Income tax	KRW	166,364,178	1,086,933,741	**282,124,193**
		CSR expenditures	KRW	–	5,792,160	**6,082,139**

[1] Water consumption data for 2022 was not collected for the company shared the office space with ST Pham during the year.

Employees

(Unit: Person)

Classification			2020	2021	2022
Total number of employees			40	44	**57**
By employment type	Full-time		27	36	**38**
		Male	20	30	**31**
		Female	7	6	**7**
	Part-time		13	8	**19**
		Male	12	7	**18**
		Female	1	1	**1**
By gender		Male	32	37	**49**
		Female	8	7	**8**
By age		Under 30 years old	6	6	**5**
		30-50 years old	23	24	**36**
		Over 50 years old	11	14	**16**

New Employee Hires & Employee Turnover

(Unit: Person, %)

Classification			2020	2021	2022
Total number of new hires			9	11	**20**
New hires	By gender	Male	8	11	**19**
		Female	1	0	**1**
	By age	Under 30 years old	3	2	**2**
		30-50 years old	2	4	**16**
		Over 50 years old	4	5	**2**
Total number of people who left			11	11	**14**
Turnover	By gender	Male	11	10	**14**
		Female	0	1	**0**
	By age	Under 30 years old	1	1	**5**
		30-50 years old	7	5	**5**
		Over 50 years old	3	5	**4**
	Turnover rate	Voluntary	27.5%	20.5%	**15.8%**
		Involuntary	0.0%	4.5%	**8.8%**

Employee Diversity

(Unit: Person, %)

Classification		2020	2021	2022
Female	Female employees	6	5	**6**
	Female executives	1	1	**1**
	Female managers	1	1	**1**
	Percentage of female employees	20.0%	15.9%	**14.0%**
Person with disability	Number	0	0	**0**
	Percentage	0.0%	0.0%	**0.0%**
Foreigners	Number	0	0	**0**
	Percentage	0.0%	0.0%	**0.0%**
Veterans	Number	0	0	**0**
	Percentage	0.0%	0.0%	**0.0%**

Childcare Leave

(Unit: Person)

Classification		2020	2021	2022
Number of employees eligible for childcare leave	Male	0	5	**5**
	Female	0	1	**1**
	Subtotal	0	6	**6**
Number of employees taking childcare leave	Male	0	0	**0**
	Female	0	0	**0**
	Subtotal	0	0	**0**
Number of employees who returned to work after childcare leave	Male	0	0	**0**
	Female	0	0	**0**
	Subtotal	0	0	**0**
Number of employees who worked for 12 months or longer after returning to work	Male	0	0	**0**
	Female	0	0	**0**
	Subtotal	0	0	**0**

Employee Job Training

(Unit: Hour, KRW)

Classification	2020	2021	2022
Total hours of training	751	893	**910**
Average training hour per person	18.8	20.3	**16.0**
Total cost of training	11,587,133	11,681,499	**22,391,906**
Average training cost per person	289,678	265,489	**392,840**

DA Information

Classification			Unit	2020	2021	2022
Financial Performance	Total assets		KRW	3,449,758,374	3,337,193,279	4,467,967,830
	Total liabilities		KRW	2,218,415,640	1,773,111,041	1,960,548,554
	Total shareholders' equity		KRW	1,231,342,734	1,564,082,238	2,507,419,276
	Sales		KRW	12,711,606,453	14,710,591,985	17,899,840,107
	Operating profit		KRW	202,204,646	288,238,687	580,647,065
	Operating profit margin		%	1.6	2.0	3.2
Non-financial Performance	No. of employees		Person	70	70	81
	Industrial accident		Case	0	1	0
	Private treatment of industrial accident		Case	0	0	0
	Safety training hours per person		Hour	11.9	11.7	14.1
	Percentage of female employees		%	12.9	12.9	21.0
	Employee turnover rate		%	14.4	25.5	62.3
	Average length of service		Year	7.9	8.0	7.0
	CSR expenditures to operating profit		%	46.5	23.4	8.9
	Water consumption		Ton	300	310	276
	Greenhouse gas (GHG) emissions		tCO$_2$eq	19	40	61
	GHG emissions (Scope 1)		tCO$_2$eq	0	19	26
	GHG emissions (Scope 2)		tCO$_2$eq	19	21	19
	GHG emissions (Scope 3)		tCO$_2$eq	0	0	16
	GHG intensity		tCO$_2$eq/KRW 100 million	0.1	0.3	0.3
	Energy consumption		TJ	0	10	0
Creation and Distribution of Economic Value	Creation of economic value	Sales	KRW	12,711,606,453	14,710,591,985	17,899,840,107
	Shareholders & investors	Dividend	KRW	-	-	-
		Interest expense	KRW	-	-	-
	Employees	Salaries	KRW	4,240,610,389	4,476,734,000	5,258,518,898
		Employee benefits	KRW	763,083,449	823,545,000	919,804,109
	Suppliers	Raw material expenses	KRW	2,772,939,225	3,353,916,000	3,001,015,845
		Outsourcing expenses	KRW	3,106,517,115	3,989,099,000	6,265,016,006
	Government & local communities	Income tax	KRW	48,369,217	66,202,285	25,644,270
		CSR expenditures	KRW	94,000,000	67,403,521	51,729,592

Employees

(Unit: Person)

Classification		2020	2021	2022
Total number of employees		70	70	81
By employment type	Full-time	68	68	77
	Male	59	59	60
	Female	9	9	17
	Part-time	2	2	4
	Male	2	2	4
	Female	0	0	0
By gender	Male	61	61	64
	Female	9	9	17
By age	Under 30 years old	22	22	28
	30-50 years old	43	40	44
	Over 50 years old	5	8	9

New Employee Hires & Employee Turnover

(Unit: Person, %)

Classification			2020	2021	2022
Total number of new hires			5	7	24
New hires	By gender	Male	5	5	16
		Female	0	2	8
	By age	Under 30 years old	4	5	12
		30-50 years old	1	1	10
		Over 50 years old	0	1	2
Total number of people who left			5	9	25
Turnover	By gender	Male	4	6	21
		Female	1	3	4
	By age	Under 30 years old	0	5	7
		30-50 years old	3	4	17
		Over 50 years old	2	0	1
	Turnover rate	Voluntary	14.4%	25.5%	59.7%
		Involuntary	0.0%	0.0%	2.6%

Employee Diversity

(Unit: Person, %)

Classification		2020	2021	2022
Female	Female employees	9	9	17
	Female executives	0	0	0
	Female managers	0	0	0
	Percentage of female employees	12.9%	12.9%	21.0%
Person with disability	Number	1	1	1
	Percentage	1.4%	1.4%	1.2%
Foreigners	Number	0	0	0
	Percentage	0.0%	0.0%	0.0%
Veterans	Number	0	0	0
	Percentage	0.0%	0.0%	0.0%

Childcare Leave

(Unit: Person)

Classification		2020	2021	2022
Number of employees eligible for childcare leave	Male	3	3	6
	Female	0	0	0
	Subtotal	3	3	6
Number of employees taking childcare leave	Male	0	0	0
	Female	0	0	0
	Subtotal	0	0	0
Number of employees who returned to work after childcare leave	Male	0	0	0
	Female	0	0	0
	Subtotal	0	0	0
Number of employees who worked for 12 months or longer after returning to work	Male	0	0	0
	Female	0	0	0
	Subtotal	0	0	0

Employee Job Training

(Unit: Hour, KRW)

Classification	2020	2021	2022
Total hours of training	419	665	609
Average training hour per person	6.0	9.5	7.5
Total cost of training	88,000	425,000	1,717,620
Average training cost per person	1,257	6,071	21,205

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