GLOBAL LEAD DEVELOPER

2020
SUSTAINABILITY
REPORT

DAELIM

2020 DAELIM SUSTAINABILITY REPORT

Overview

This is our sixth publication of the sustainability report since 2008 and contains the progress and commitment we made towards sustainable growth in 2019. This will serve as a communication channel for us to share our performance and activities for the previous year and reflect stakeholders' inputs in our practice.

Reporting Period and Scope

This report covers our sustainability performance from January 1, 2019 to December 31, 2019, based on the data of head office and domestic and overseas worksites. Depending on the timeliness and importance of the information, it includes data from the first half of 2020. Some performances were classified into the E&C sector and the petrochemical sector while data from the past three years (2017-2019) were included for comparison when it comes to quantitative performance.

Reporting Principles

This report has been prepared in accordance with the Core Option of the GRI (Global Reporting Initiative) Standards. Other indicators such as the SASB (Sustainability Accounting Standards Board) and the UN SDGs (Sustainable Development Goals) were also considered.

Assurance

This report has been verified by the KoSIF (Korea Sustainability Investing Forum), a third-party assurance agency, to ensure its objectivity and accuracy. The result of the verification can be found on pages 104-105.

Contact Information

Please use the contact information below for any questions about this report.

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Overview

Highlights

Sustainability Management

Governance

CEO Message

Dear stakeholders,

I would like to express my sincere gratitude for your continued interest and support for our growth and development.
Last year, Daelim Industrial reached KRW 1 trillion in operating income for the first time since our foundation despite the challenging business environment.

By leveraging the experience and expertise we have gained over the years, we are expanding our global presence to step up as Global Developer through innovation and creative thinking from project planning to investment, financing, construction, and operation. To this end, we focus on sustainable practices and profit-driven financial results as we continue to fulfill our social and environmental responsibilities.

Financial performance with a focus on profitability

First, we will maximize our competitive advantages and corporate value by promoting stable growth and profitability with a focus on our core businesses. In addition, we will secure talents and expertise and focus on developing new business models to create growth engines for the future. By incorporating big data-driven digital innovation into our operation, we will build a solid foundation for sustainable revenue generation.

Environment and safety as the top priority

In response to climate change, we have launched initiatives to strengthen our R&D expertise and create green solutions based on innovative technologies. Safety is an integral part of our growth and the safety of employees should be our top priority. By granting access to our Safety Training Center to the employees of our subcontractors, we will prevent industrial disasters and create a safe and healthy workplace.

Mutual growth with subcontractors and local communities

By internalizing ethical practice based on our corporate philosophy of honesty and trust, we're promoting mutual growth and cooperation. Aligning the growth of our subcontractors with our business strategy, we are implementing unmatched mutual growth programs that provide management, financial and technical support for our supply chain. We are also committed to social responsibility programs to support our local communities and contribute to their growth.

Going forward, we will continue to fulfill our corporate social responsibility and pave the way towards a sustainable future.

We look forward to your continued interest and support.

Thank you.

August 2020
CEO **Bae Weon Bog**

BAE WEONBOG

Company Overview

Founded in 1939, Daelim Industrial consists of E&C Division including Housing & Building Business, Civil Business, Plant Business and Petrochemical Division. Based on our proprietary technological know-how and extensive project experience, we deliver products and services around the world. In addition to the E&C operation focusing on design and construction, we are strengthening our position as a leading developer that covers the entire process including project discovery, planning, investment, financing, construction, and operation management. Based on our continuous technological innovation for petrochemical business and strategic partnerships with global leading companies, we have led the domestic industry and transformed into a high value-added chemical company.

Company Name	**Founded**	**Address** (Head Office)	**Employee**	**Business areas**
Daelim Industrial Co., Ltd.	Oct. 10, 1939	36, Jongro 1-gil, Jongro-gu, Seoul	5,946 employees	Housing & Building, Civil, Plant, Petrochemical

Management Philosophy

Daelim Industrial's management philosophy is "Create a Comfortable and Abundant Life and Promote Infinite Growth and Development", rooted in our guiding principle, "Hansup Spirit". "Hansup" is a Korean word of Daelim which implies the company's principles of "Creation of Future", "Respect for Humanity" and "Customer Trust". Daelim Industrial operates its business with the goal of fulfilling its social responsibilities, creating value and pursuing the highest level of customer satisfaction under the principle of "Hansup Spirit" as a foundation for our competitiveness.

VISION
Corporate Philosophy = CSR

Create a Comfortable and Abundant Life and Promote Infinite Growth and Development

Creation of Future | **Respect for Humanity** | **Customer Trust**

Domestic Subsidiaries

Company	Location (Head Office)
Daelim Construction Co., Ltd.	Incheon
Daelim Motor Co., Ltd.	Changwon, Gyeongnam
GLAD Hotels & Resorts Co., Ltd.	Jeju
Songdo Power Co., Ltd.	Seoul
A Plus D Co., Ltd.	Seoul
Daelim Energy Co., Ltd.	Pocheon
Chungjin Project Co., Ltd.	Seoul
Chungjin Asset Management Company	Seoul
Daelim No. 5 Cheonan Wonseong Newstay REIT Co., Ltd.	Seoul
KORAMCO REIT No.103	Seoul
KORAMCO REIT No.102	Seoul
Daelim No. 7 Masan Hoewon Newstay REIT Co., Ltd	Seoul
Poseung Green Power Co., Ltd.	Pyeongtaek
Yeongju Eco Power Co., Ltd.	Yeongju, Gyeongbuk

Overseas Subsidiaries

Company	Location (Head Office)
Daelim Saudi Arabia Co., Ltd.	Saudi Arabia
PT. Daelim Utama Construction	Indonesia
DALIN (Nanjing) Construction	China
Daelim USA Inc.	U.S.A.
DAELIM INSAAT GELISTIRME A.S.	Turkey
Daelim Chemical USA, INC.	U.S.A.
Daelim Chemical USA LLC.	U.S.A.
Daelim RUS LLC	Russia
DE NILES, LLC	U.S.A.
Cariflex PTE.LTD.	Singapore

*Consolidated subsidiary

Housing & Building Business Division

Korea’s leading landmark developer, setting a new standard in the housing industry

Daelim Industrial Housing & Building Business Division opened up a new era of branded apartments with e-Pyeonhansesang, the first of its kind in Korea, and successfully has launched its premium brand ACRO in the market. We have acquired extensive experience, know-how and expertise by working on such landmarks as the National Assembly Building and the Sejong Cultural Center. Based on this know-how and technical expertise, we have introduced a new housing platform, “C2 House” to meet the latest housing trends and customer’ needs.

1ST
Korea’s first apartment brand “e-Pyeonhansesang”

C2-HOUSE
Lifestyle housing platform “C2-HOUSE”

HIGH-END
High-end housing standard “ACRO”

242,902
Total No. of household units supplied since the launch of e-Pyeonhansesang in 2000

ACRO Seoul Forest, South Korea

Civil Business Division

Expanding into the international markets by securing competitiveness on bridges/ports

The Civil Business Division of Daelim industrial is known for the highest level of performance and know-hows in diverse fields such as roads/bridges, hydroelectric power plants & dams/ports, railways/subways in the domestic market. In particular, we were successful in developing our own self-reliant suspension bridge technology for the first time in South Korea and the sixth in the world. While focusing on our leading expertise in bridge and port technologies, which allow us to have competitive edges over competitors with unique and differentiated technologies, we are expanding our geographical footprint into new overseas markets while securing competitiveness in previously involved markets.

2,023M
The World's Longest Suspension Bridge (L=2,023m)

1-2-3
Competitive Experience in Construction of 1-2-3 Pylon Suspension Bridge

221
The World's Largest Port Facility, Caisson Type 221 Caissons (15,000 tons/EA)

No. 1
No.1 in Korea, Retains the Track Record and Technology for the Construction of the World's Longest Suspension Bridge

Cheonsa Bridge, South Korea

Plant Business Division

World’s leading technology in the overseas plant market

Based on cutting-edge technology and expertise in various fields including oil refinery, gas, petrochemical, and power generation, Daelim Industrial Plant Business Division provides a total service that encompasses FEED (Front End Engineering Design), EPC (Engineering, Procurement and Construction), O&M (Operation & Maintenance) in the global plant markets. Specifically, we have outstanding competency in the petrochemical and refinery sectors with quality management capabilities accumulated through more than 30 years’ direct operation of petrochemical plants.
We are making improvements in the accuracy and efficiency of our projects by preemptively introducing new technologies including BIM (Building Information Modeling), AI (Artificial Intelligence), AWP (Advanced Work Packaging), and modularization approaches to prepare for the fast-changing business environment.

600+
Completed more than 600 projects in 35 countries around the world

47 YEARS
47 years of experience in plant design

30+
More than 30 years of experience in petrochemical plant operation and O&M service

TOTAL
A total service provider with FEED, EPC and O&M

S-Oil Residue Upgrading Complex Project, South Korea

Petrochemical Division

Leading the petrochemical industry with global companies

As a leader in the petrochemical industry in Korea, Daelim Industrial Petrochemical Division has 46 years' experience in operating petrochemical plants and unmatched technical expertise with its unique technology. In 2015, we sold our technology to the US-based company, Lubrizol, and became the first company to export technology to the US. Going forward, we will continue to strengthen our foundation for growth as we improve productivity through cost reduction, enhance competitiveness in manufacturing, and lead high value-added business models through R&D operation and investment in high-yield specialty businesses.

1ST

First Korean petrochemical company to export technology to the U.S. and develop/commercialize Metallocene PE technology

46 YEARS

46 years' experience in operating NCC-based petrochemical plants

1,950,000 ton

Annual ethylene output of 1.95 million tons with the No. 4 NCC JV in Northeast Asia

No. 1

Annual polyisobutylene output capacity of 200,000 tons (based on the open market) and acquired Cariflex, the No. 1 synthetic rubber surgical glove manufacturer

PE Plant, Yeosu, South Korea

Highlights

- Medium/Long-Term Strategy in E&C Sector
- Medium/Long-Term Strategy in Petrochemical Sector
- Eco-friendly Construction
- Improving Quality Competency
- Safety First

01

Medium/Long-Term Strategy in E&C Sector

In response to the growing uncertainty in the global market, it is important to gain competitive advantages by exploring new business opportunities and focusing resources on specific areas as well as strengthening the competitiveness of existing business models.

Daelim Industrial is committed to developing new growth engines for the future by building a strong foundation for sustainable growth and restructuring with a focus on its core business areas.

Mid- and Long-term Directions

With the twin goals of sustainable and stable profit generation and value creation for its shareholders, Daelim Industrial is dedicated to maximizing profits in its core business areas by focusing on its strengths. We have also incorporated a data-based management process into our practices to further improve our profitability and drive growth.

Directions : Sustainable and Stable Profit Growth

1	2	3
Restructuring the portfolio with a focus on core areas	**Profit from the Core**	**Digital Transformation (Data-driven Construction)**
Building a foundation for stable profit growth	Operating each core business to promote sustainable profit growth in terms of structure and directions	Improving profitability through data-driven project order and performance

Profit from the Core

Core Businesses

Housing & Building Business	Civil Business	Plant Business
In the housing sector, we focus on profit generation and sustainable growth by selecting key areas and exploring new business opportunities based on market forecasts. We will continue to maximize our corporate value for shareholders by selecting projects through their scale and feasibility analysis and gaining competitive advantages with unmatched product development and business models tailored to customers' needs.	We conduct extensive analysis on the feasibility of sustainable growth and selectively engage in projects in a fair and ethical manner. When it comes to overseas projects, we will continue to promote growth by leveraging available expertise with a focus on products and countries that have favorable conditions and potential.	It is expected that the power generation market will undergo rapid change and the demand for petrochemical products will continue to grow as the need for renewable energy increases. In response to this trend, we will predict structural changes in the global plant market over the next 10 years and take a proactive approach and show initiative to support sustainable growth based on our experience and expertise.
Promote steady growth in profit and explore new business opportunities by strengthening position in the housing market	**Secure revenue stream through risk control, fair competition, and stable operation**	**Focus on areas with a great potential for growth in consideration of structural change and competency**

Direction

Digital Transformation

In order to gain a competitive edge in the era of the 4th Industrial Revolution, Daelim Industrial is focusing its resources on digital transformation. We actively utilize the data analysis technology of AI and IoT for project order, implementation, and risk management while applying BIM[1]) and modular technology to support innovation in terms of productivity. By establishing a data-drive order and execution system, we will lead the digital transformation in the construction industry.

1) **BIM** : Building Information Modeling

Digital Transformation in Construction

Order	Execution	Risk
Quick and accurate quotation!	Cost/real-time schedule management, resource saving	Risk/accident identification

BIM | Modular | AI | IoT

Daelim's Digital Transformation

Data-driven Construction

Data-driven order and execution system

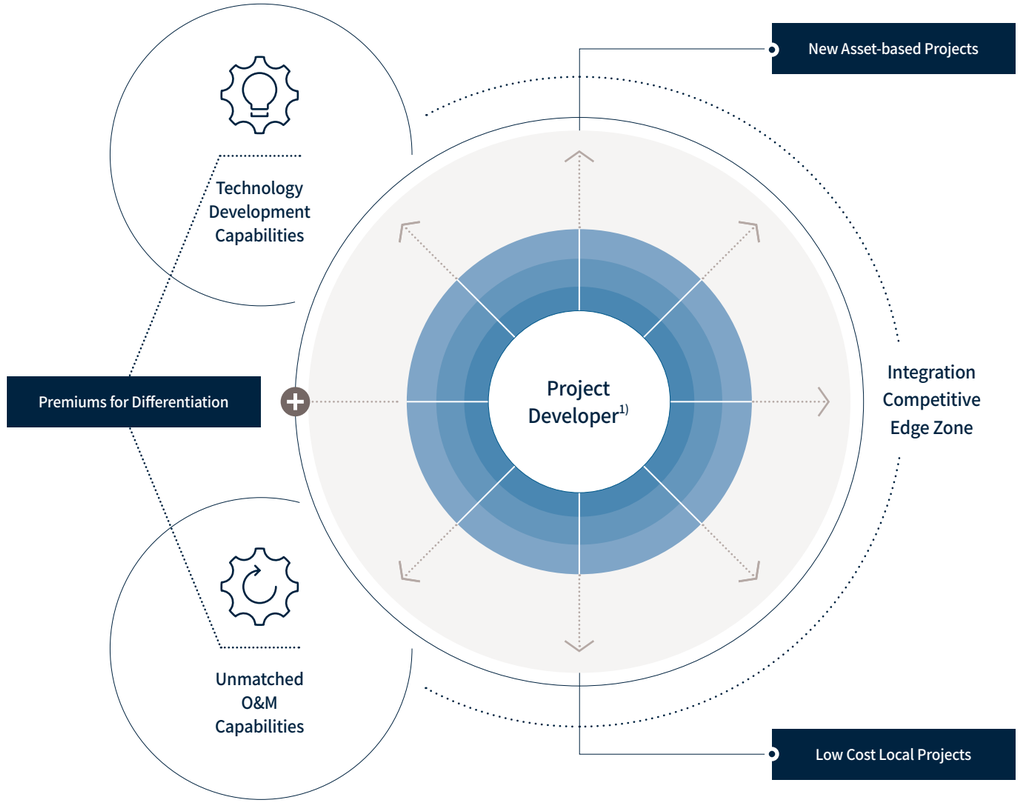
- **Strategy** — Gain competitive advantages through data-based project order/execution system
- **Structure** — Create specialized agile organization in relation to data
- **System** — Build an integrated management system for 8 Key Data Set*
- **Shared Value** — Achieve performance through data literacy
- **Style** — Perform work and make business decisions based on data analysis instead of relying on feelings and intuition
- **Skill** — Link data analysis/utilization technology and BIM
- **Staff** — Hire data experts and develop HR through training

* 1) Association/Project Owner 2) Region/Competitor 3) 3D Shape 4) Materials 5) Standard Process 6) Implementation History by Process 7) Construction Performances 8) Quality/Safety

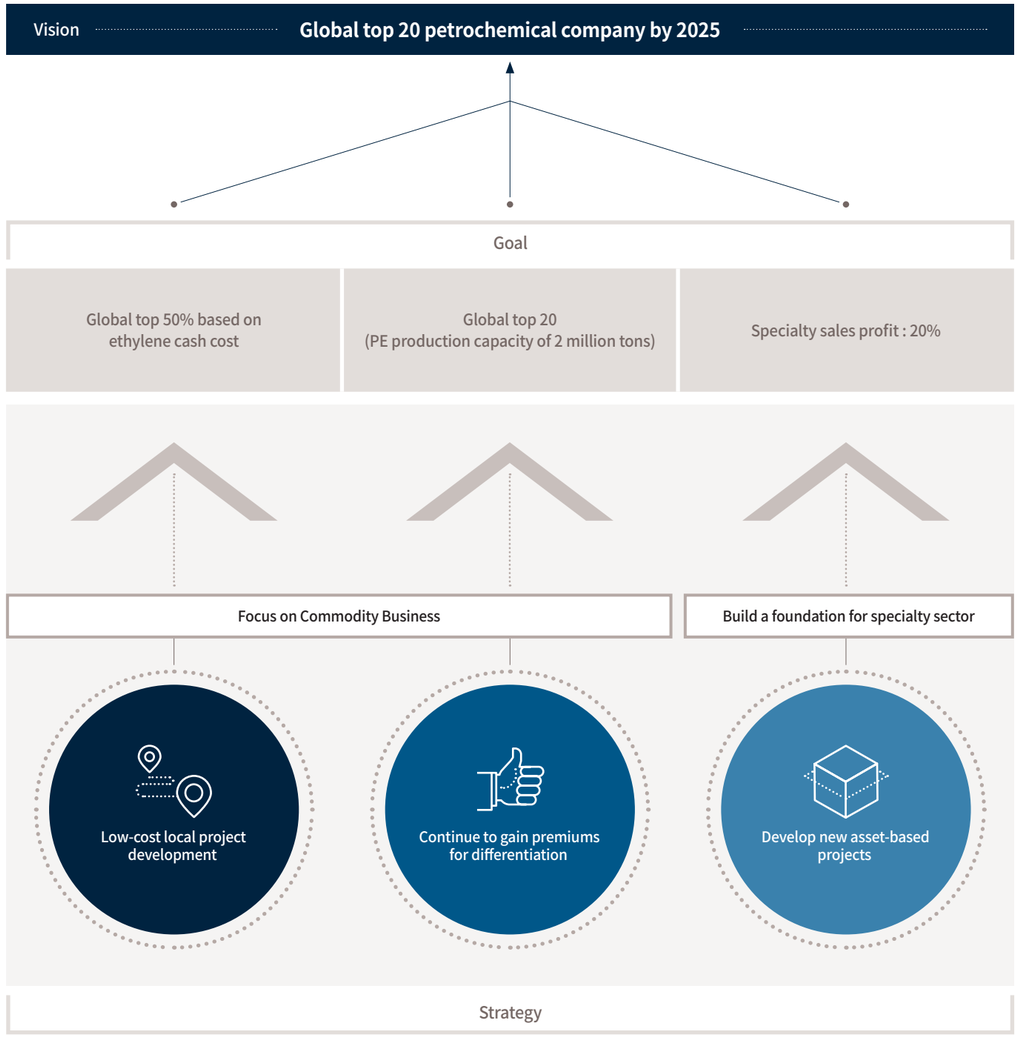
Medium/Long-Term Strategy in Petrochemical Sector

Medium/Long-Term Focus

Daelim Industrial Petrochemical Division continues to increase attain differentiated premiums based on its proprietary technology expertise and unmatched O&M capabilities. At the same time, we have been able to undertake new asset-based projects and low-cost local projects by strengthening core capabilities as a developer with the goal of becoming a global top 20 petrochemical company by 2025.



1) **Project Developer Competency :** Organization competency of creating unique values of Petrochemical Division through Biz Modeling•Financing•Clearance of Regulation including the entire process (Project exploration → planning → EPC → O&M)



Eco-friendly Construction

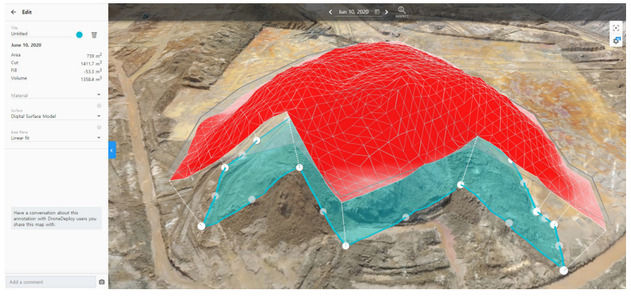
With increasing GHG emissions and climate change, there is a growing awareness and demand for eco-friendly operation in the construction sector. As a result, leading global companies are making various efforts to reduce GHG emissions and energy consumption in the building sector.

At Daelim Industrial, we are pursuing sustainability by supporting innovative eco-friendly technology and responsible business operation with a focus on eco-friendly design and smart construction, and renewable energy to develop high-efficiency energy buildings.

Resource Conservation through Smart Construction

Daelim Industrial is committed to reducing wasted resources with a focus on BIM, drones, and AI. Based on existing 2D drawings, BIM can prevent analytical errors and over-designs that may occur during the design and construction process to calculate the optimal amount of materials to be invested while reducing raw materials such as reinforcing bars. By developing a software program that automatically inputs BIM 3D model-based data from the information input method of 2D design drawings in water pipe analysis, we managed to improve the accuracy of the calculated values. As a result, it was possible to prevent over-supply of each household by maintaining an appropriate balance of the flow rate, thereby reducing the amount of water and gas used per household and power consumption. During construction, we estimate the appropriate amount of construction volume using GPS and inclination sensors through heavy machinery automation technology and drone platform while preventing over-excavation and failure through level management in mm to reduce the amount of concrete pouring as part of eco-friendly technology. The successful implementation of eco-friendly technologies will not only result in the reduction of raw materials but also GHG emissions from construction equipment as it minimizes the construction period.

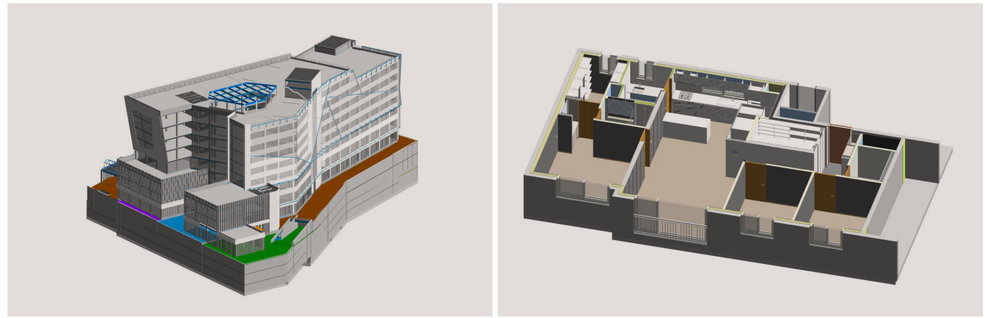
Estimation of construction volume using drone platform



Examples of eco-friendly design and work through smart construction

Classification	Expected Benefits
Reduction of input materials based on optimal design through BIM 3D modeling	• Reduce consumption of rebar materials by 7% from the design requirement
Prevention of over-excavation and over-pouring using heavy equipment automation technology (Machine Control)	• Reduce the amount of concrete poured by 5% • Reduce GHG emissions by minimizing equipment operation time
Development of reusable/recyclable high-density modular shell system	• Reduce wasted resource through mass production of prefabricated units • Save resources and reduce waste emissions through reuse/recycle
Eco-friendly design using VE system and reduction of input materials	• Save materials e.g. steel, mortar, and concrete • Replace with eco-friendly materials based on environmental review

Estimation of the optimal quantity of input materials using BIM



Heavy machinery automation technology (Machine Control)

Energy Slab Geothermal System for Green Construction

Daelim Industrial is developing technologies based on various types of renewable energy to improve the energy efficiency of buildings. As part of this initiative, we developed the foundations such as Energy Pile, Energy Slab, and Energy Structure where heat exchange units are installed to maximize the efficiency of heat exchange, and incorporated them into our housing designs such as e-Pyeonhansesang Songpa. This not only reduces GHG emissions by supplying stable and eco-friendly heating and cooling energy, but also reduces costs and prevents environmental pollution due to noise, leachate, and sludge caused by drilling during construction, which is a problem of the existing construction method(Geohil). Going forward, we will achieve green construction by monitoring energy efficiency and standardizing construction guidelines.

Improving Quality Competency

In this rapidly changing and increasingly competitive business environment, quality management is an integral part of corporate sustainability and growth. In response to the growing demand for quality assurance and product liability from stakeholders, the importance of quality management cannot be overstated.

In order to achieve the highest quality and step up as a global leader, Daelim Industrial continues to improve its quality management system by establishing and implementing quality targets for each unit while reviewing its status.

TQM (Total Quality Management) from Customers' Perspective

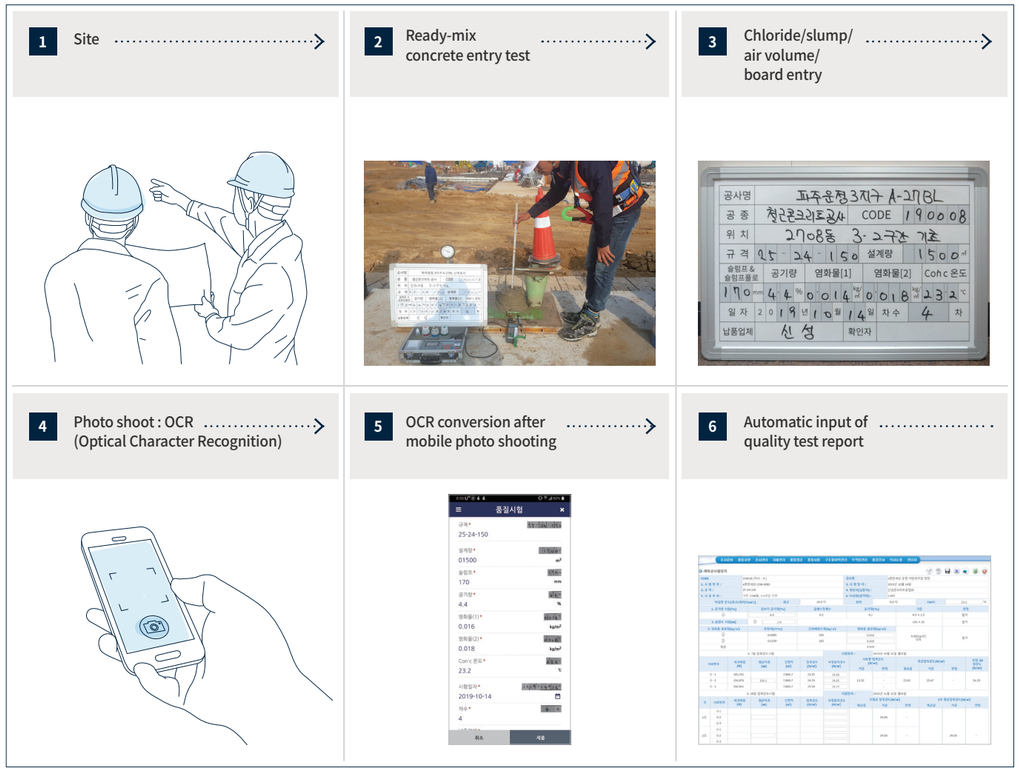
Daelim Industrial understands the level of quality required by customers from the customers' perspective and sets the goal accordingly to ensure their satisfaction while all of our employees perform the TQM (Total Quality Management) process from project planning to execution and operation to maximize the value for customers.

Recognizing the importance of seeing quality defects from their point of view, we listen to their inputs and seek the best ways to improve based on stringent analysis while applying solutions. Then, the results are managed using big data and applied to the entire project process from planning to design and construction to prevent defects.

Data-based Quality Management

Daelim Industrial is committed to preventing quality issues including defects through proactive quality management based on quality data such as building structure history and defect information at each construction stage.

From mixing ready-mixed concrete to crack management after pouring, a building structure history management system is operated. The building structure history management system is designed to input data such as the origin of raw materials, ready-mixed concrete subcontractors, working environment, strength and material standards and enables analysis and tracking management. Currently, we operate the formulation design and pouring stage, and we are also developing a system to expand and support functions such as mobile material inspection and crack history management through mobile. In addition, the quality data such as defect type during and after construction, and external inspection points are categorized, and the causes of quality issues by type are identified while solutions for each cause are developed and provided in the form of solution case study books and training materials as part of the on-site quality risk mitigation process.



Safety First

In corporate management, there is a growing awareness that safety is an integral part of sustainable growth and competitiveness depends on safety management. As a result, global leaders put safety as the top priority when it comes to business operation.

Recognizing that health and safety are an essential part of sustainable growth, we use safety data analysis systems to prevent accidents and create a safe working environment.

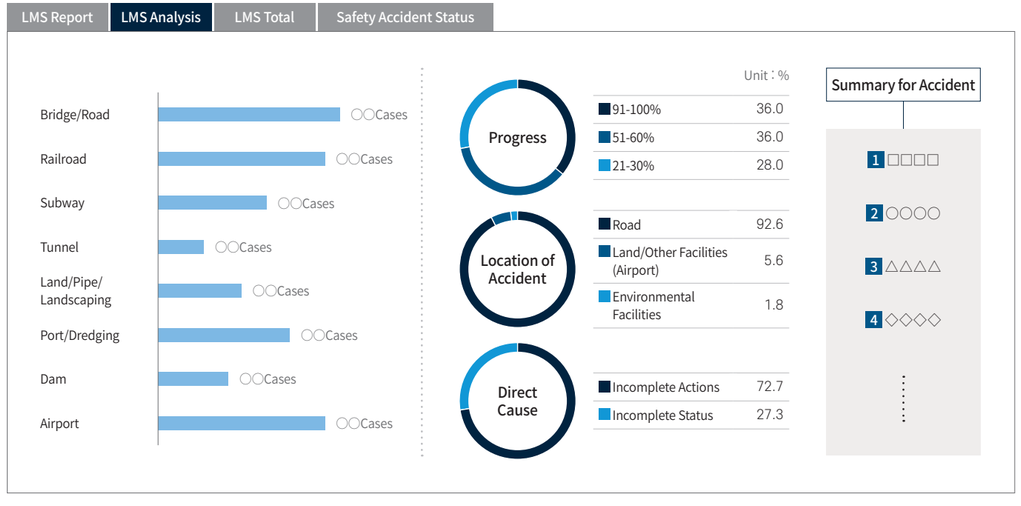
Advancement of Accident Data Analysis System

In order to expedite the reporting process of accidents and support big data-based analysis, Daelim Industrial has established an accident data analysis system. Accident data collected and managed by the end of 2019 have been analyzed by type and cause. In 2020, the types of cause will be subdivided into about 7,000 sub-categories to ensure more accurate and detailed analysis and will be created into big data.

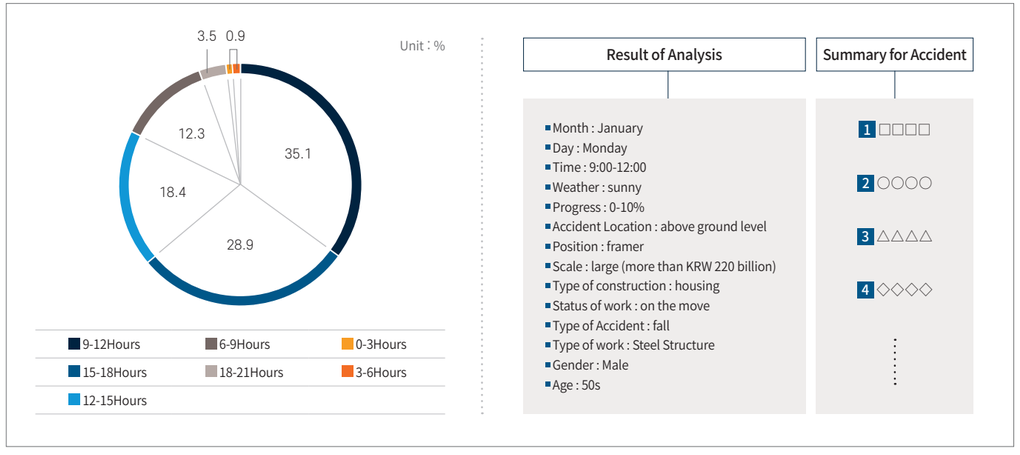
With the auto emailing system in place, monthly accident analysis reports are automatically sent to all employees on the site. This enhances to increase the efficiency of the Health and Safety management system by ensuring that information can be accessed on time and used anytime for Health and Safety management on site.

Furthermore, We will establish action plans optimized for our company to prevent accidents through the analysis of safety accident cases that occur frequently at certain times such as hot weather, rainy season, winter and thawing seasons or occurred for past 10 years.

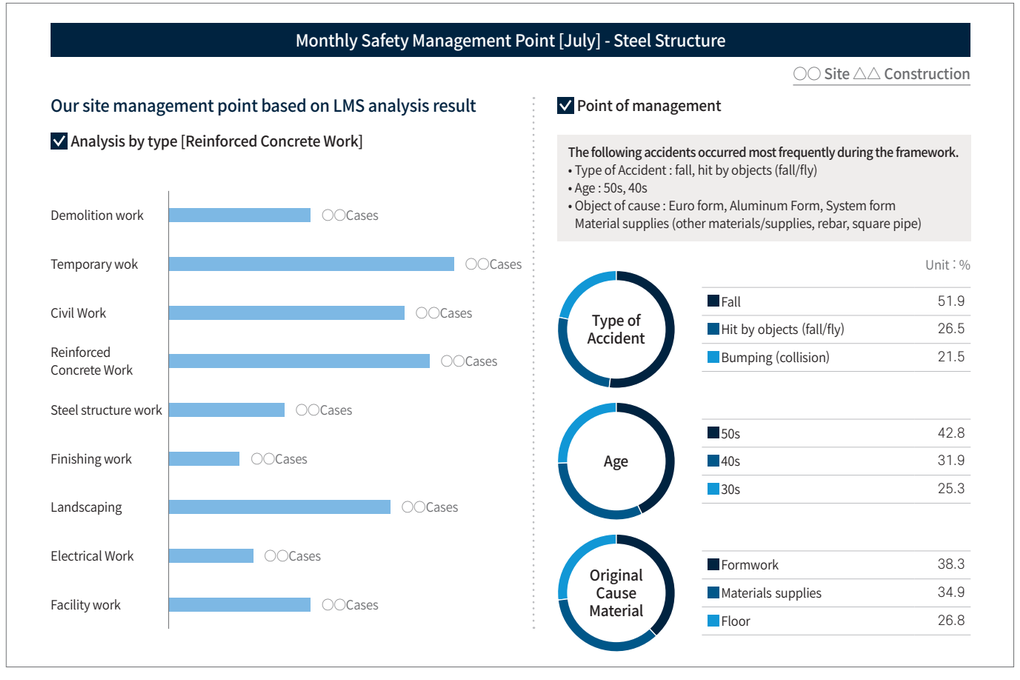
Accident Data Analysis System



Accident Data Analysis System



Accident Data Analysis Report



Sustainability Management

- Talent Management
- Health and Safety Management
- Customer-oriented Management
- Shared Growth Management
- Environmental Management
- Social Contribution

02

Talent Management

Management Approach

With the growing importance of human resources as a source of corporate innovation and creativity, many companies are focusing on various talent management programs to help companies recruit and retain talented individuals.

Principle & Strategy

Recognizing human resources as an integral part of paving the way towards a sustainable future, we are investing in a variety of human resource development programs, from hiring to performance evaluation and training opportunities.

KEY Performance Indicators (KPIs)

2020
Improvement of
"Essential Competencies & Professional Development Programs"

Rate of returning to work after maternity leave
100 %

Talent Selection and Recruitment

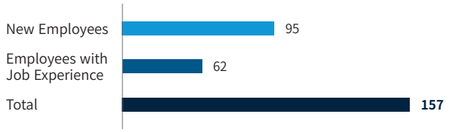
Ideal Employees of Daelim Industrial

Daelim Industrial hires talented individuals who can pave the way for a sustainable future for the company and grow into global leaders. The talents sought by Daelim are those who can implement the "Concept of Hansup Person". We propose seven concepts of Hansup persons, "Look ahead", "Look for something new", "Be the best in one's area", "Be a team player", "Know the customers", "Keep promises", and "Be economical".

Fair Recruitment Based on Talent and Competency

Recognizing human resources as a foundation for sustainable growth and the future in the global markets, we are committed to establishing a fair and transparent recruitment process. In 2019, we focused on targeted recruiting to acquire global talents in major countries, along with ongoing open-hiring programs (new/experienced) in the first and second half of the year. When it comes to the selection process, we prioritize the level of interest and enthusiasm for the job and make sure to hire the best talent for the company through document screening and personality test, as well as specialized interviews for each job applied by the applicants.

2019 Ongoing Open Recruitment Data Unit : person



Talent Development System and Strategy

Talent Development Programs

In 2019, under the value of "Timely HR Development", Daelim Industrial defined the competencies needed for the key positions (for example Site Manager) of business at each division and developed effective training programs. We operate the programs based on Lessons Learned[1] which we have accumulated and improved on over the years. Starting in 2020, we are organizing the "essential competencies and professional development programs", and implementing long-term training activities in conjunction with online training instead of a one-time session. In addition, we are creating an environment where we use real-time video lectures and online content to go beyond the conventional training forms and allow more employees to take various training programs while working so that they can gain and apply knowledge and information needed for the jobs.

1) **Lessons Learned** : documents containing facts and improvements needed for the job on-site

Fair Evaluation System

At Daelim Industrial, we provide employees with rewards and opportunities for growth regardless of their seniority through a fair performance evaluation system. In order to ensure fairness and reliability, we conduct a 360-degree assessment and a calibration session to review the results from different perspectives. We have also implemented a process where employees can request a review of the results to increase acceptance. Since 2020, we have introduced an ongoing feedback system so that employees can exchange their timely feedback during the work process. It enhances the objectivity of evaluation and improves performances with talent development.

Talent Development Programs

Key Personnel Development

We provide employees' professional development programs for those who are essential for our business operation. By identifying the competencies of essential position for our business, we offer professional development programs so they can internalize their essential competencies by themselves. The programs are not conducted in the form of a one-way lecture but aim to present the topic and encourage discussion while sharing ideas through their introspection.

Job Training (E-learning, Third-Party Training, Internal Training)

Our job training session is designed to provide agile prevention of issues arising while working on a project and share expertise with the next generation. When a contract manager is designated on the new project (domestic/overseas), in particular, we implement customized contract management training programs (the process of providing preliminary guidance on the characteristics and risks of the site and planning to prevent risks) for each project to find potential risk and hedge the risk while conducting project.

Global Training (English Program)

Global training is not just "to improve language skills" but rather to strengthen the core competencies in key positions necessary for conducting business. For instance, prior to overseas project site deployment, employees in key positions such as Site Manager and Project Control Manager, responsible for project sites, are required to take the "Intensive English Program". Simulated training sessions are also available based on situations that may occur at each overseas construction site so that they can acquire language skills that can be applied in practice. At the same time, we support external and online training programs to the extent set by our policies so that all employees can acquire language skills on their own.

Human Rights Management

Diversity based on Equal Opportunities

When it comes to compensation and promotion, Daelim Industrial provides equal opportunities without discrimination based on gender, age, nationality, marital status, health, or political opinions. Recognizing diversity as a foundation for improving competitiveness and fulfilling social responsibility, we are committed to promoting diversity in our organization by giving equal opportunities to social minorities such as women, foreigners, veterans, and people with disabilities. We continue to put our efforts into identifying and developing outstanding female workforces, and instead of hiring female employees for the sake of hiring, we provide equal opportunities for career development based on talent and competency regardless of gender as we assign them to key positions and appoint female executives. As a global developer, we make sure to hire not only local talents but also overseas applicants of various nationalities for successful business operations in various countries.

2019 Social Minorities

Unit : person

Foreigners (0.7%)	41
Disabled (0.8%)	45
Female Managers (1.5%)	91
Veterans (2.0%)	121
Elderly (60 or older) (5.6%)	332
Female Employees (13.5%)	803
Total (100%)	5,946

Family-Friendly Programs

As a part of our work schedule management programs, we have introduced a PC On-Off system. Employees work up to 52 hours per week according to their work plan, the "2-week flexible work schedule, 3-month flexible work schedule" programs are implemented to adapt to the flexible work conditions at the site. We also support flexible commuting schedules and leave system with the approval of the managers to improve the working environment for employees. By registering employees subject to maternity policy, we provide various programs to help employees work during their pregnancy, shorter working hours during pregnancy, leave for medical examination, leave before and after childbirth, leave for miscarriage, leave for childcare, shorter working hours for childcare and operating of the Hansup Day Care Center in the workplace. In addition, various family-friendly events are held every year through the Hansup Council (labor-management council). In 2019, we organized Children's Day Event, Run with Family! Mission Running Man Event, Healing Camp with Children, and Camping with Parents.

Grievance-Handling Channels

We have various grievance-handling channels to prevent bullying and resolve grievances in our workplace. There are Grievance Counseling Office and Hansup Council Office as well as online channels. The Grievance Handling Committee consists of the chairman and vice-chairman of the Hansup Council, female committee members, and an honorary employment equality supervisor. They investigate complaints and notify the employee of the results within 10 days. Any matters that cannot be settled by the committee are submitted to the meeting for resolution.

Human Rights Protection in Supply Chain

At Daelim Industrial, we identify and take necessary measures against all potential violations of human rights in our supply chain as well as our employees. To this end, we plan to establish a code of ethics to manage and improve human rights and promote the ethical practice of our subcontractors in 2020.

Employee Benefits

We offer various benefits for our employees so they can focus on their job and improve the quality of life, including group insurance, support for children's tuition, health check-ups, medical expenses, and access to resort facilities. Since 2008, we have operated the Point Mall where employees can use their Welfare Points to make purchases.

Employee Benefits

Family Support	Child tuition
	Money and leave for special family occasions
	Hansup Daycare Center (in-house)
	Congratulatory money for multi-child birth
Livelihood Support	In-house loans
	Moving expenses
	Group insurance
	Echo of Love Fund (employee mutual aid)
	Disaster relief fund
Health Support	Health checkup
	Medical expenses
	In-house medical service
Leisure Support	Welfare Points and Point Mall
	Access to resort facilities (condominium)
	In-house clubs
Educational Support	Online education (Hansup e-Campus)
	Language education/test support
	Legal education/outside education support
	Support for recommended certifications
Others	Reward for long-term employment
	Mutual assistance for employee's death
	Cafeteria/commuter bus
	Special benefits for acquiring technical qualifications

Organizational Culture

Open Communication

We are committed to creating a communication-friendly environment through various internal channels. In particular, we focus on increasing our communication channels to keep pace with environmental changes in and outside the organization while promoting harmony and horizontal communication. Our "Hansup Speech Forum" is designed to break away from wrong practices of the company and to support direct communication with the management while those who are unable to communicate directly can ask questions through the Hansup Council (labor-management council) Chairpersons. The management communicates directly with employees through "quarterly dialogues with the head of Division" and the Hansup Council serves the role of facilitating communication with the management on an ongoing basis.

Communication Channels

Channels	Contents
• Hansup Bulletin Board • Hansup Talk Talk • Hansup Clubs	Employee communication channel
• Grievance Handling Group	Reporting workplace harassment and violation of working hours (to the chairman of the Hansup Council) Reporting complaints from female employees (to the Female Grievance Handling Committee)
• Hansup Council Q&A	Communication channel for Hansup Council Chairman Group
• Hansup Broadcasting	Weekly/daily news on policy and performance
• Hansup Speech Forum	Policy proposals to practice improvement and development of the company

Labor-Management Relations

The Hansup Council has been organized based on the engagement and cooperation of employees from each division to adapt to new corporate environment and promote sustainable growth. The council visits domestic and overseas worksites to collect input from employees, and through the activities of the Central Operation Committee held on a regular and ongoing basis, it shares ideas for sustainable growth and employee motivation with management. We also engage in various activities to improve working conditions with a focus on salary, welfare benefits, job security, social contribution, health and safety. The chairman and vice-chairman communicate with employees through various channels while organizing a "conversation with the head of Division" on a monthly basis as part of efforts to facilitate communication between management and employees.

Health and Safety Management

Management Approach

Establishing a Health and Safety management system organized becomes an integral part of sustainable growth as part of corporate responsibility and regal requirement such as the government's Occupational Safety and Health Act.

Principle & Strategy

Daelim Industrial places Health and Safety as the top priority in our business and focuses on implementing a Health and Safety management system. We are committed to establishing a policy and management system to promote health and safety culture by conducting intelligent safety management and by operating training programs such as safety experience school.

KEY Performance Indicators (KPIs)

No. of participants who completed training in safety experience school
(Jan. 15 - Dec. 20, 2019)
2,604

D-SEP
(Daelim-Safety Enhancement Program for partner)
Established

Health and Safety Policy

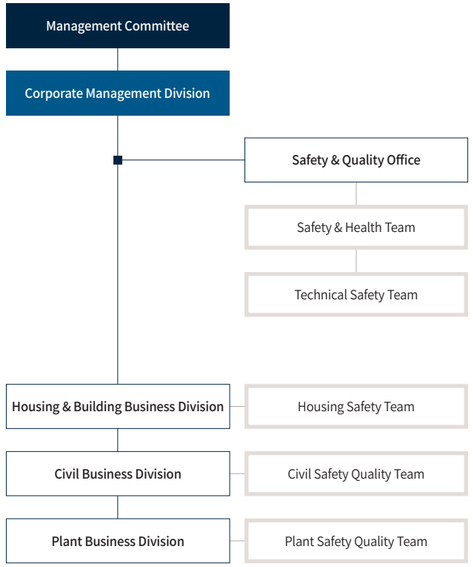
Daelim Industrial has built trust with customers through proactive Health and Safety management activities, carrying out various EPC projects both in and outside Korea. In order to encourage our efforts, we have established and implemented a Health and Safety Policy. Going forward, we will continue to improve our Health and Safety management system by announcing the policy with stakeholders, setting goals, and monitoring progress on a regular basis for successful implementation.

Health and Safety Policy

- We recognize that health and safety is an absolute priority for sustainable development.
- We strictly comply with applicable health and safety laws and regulations and settle a world best safety culture.
- We recognize risk in advance and establish safety measures at every single stage.
- We ensure a healthy and safe workplace and maintain it all the time.
- We get workers involved in the health & safety activities and encourage them to conduct safety initiatives.
- Management consistently shows commitment to health and safety and provides resources needed.

Health and Safety System

Daelim Industrial organized the Safety & Quality Office and Safety Department for each division to implement a company-wide health and safety activities. The Safety & Quality Office is divided into the Safety & Health Team and the Technical Safety Team, and the safety department has been organized under the Housing & Building Business Division, the Civil Business Division, and the Plant Business Division. The Safety & Health Team is in charge of establishing long-term strategies, planning safety activities, safety training, HR management, and Health and Safety management system while the Technical Safety Team conducts onsite inspections and training through experts in the field of equipment, structure, foundation, and electricity. The Safety Department of each division supports on-site safety management by operating a regional PM system, monitoring on-site activities, instructions and inspections, depending on the characteristics and types of work in each business division.



Health and Safety Management Activities

Safety Procedures for 53 types of work

Based on the analysis of serious accidents over the past 10 years, we have established Safety Procedures for 53 types of work. The procedures standardize 53 types of work into six categories (work order, safety regulation, checklist, key areas of management, best/worst practices, and case study), and include videos and photos to make them more accessible and easier to understand. They can be used by supervisors of Daelim Industrial and its subcontractors for safety activities and training as they can access directly using their mobiles. In addition, improvements have been made on the efficiency of Safety Management by integrating the maintenance process through the collection and standardization of different procedures for easy access and understanding.

Daelim Industrial uses BIM for efficient safety management. (BIM : Building Information modeling)

This is mainly used to communicate the risk of work to workers on site as well as identify hazardous locations, establish emergency response plan and safety work plans. This improves the understanding of the workplace and helps to visualize the risks, enabling detailed safety management plans. So that BIM increases the effectiveness of our employees' health and safety activities and benefits of training.

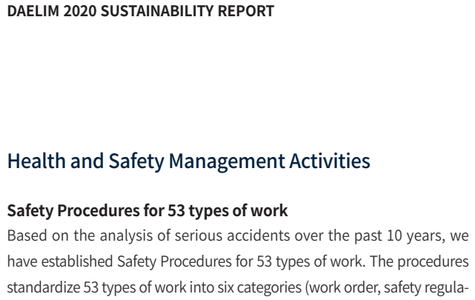
Increasing Full-Time Position of Health and Safety Manager

In order to strengthen the authority and competency of Health and Safety Manager who play a significant role in the operation of Health and Safety management on site, we hired a large number of full-time health and safety managers in the first half of 2018. We promoted health and safety manager on temporary positions to full-time positions, maintaining full-time staff level above 50%, which is the highest in the industry in 2019. By doing so, we create a strong sense of responsibility and loyalty as part of the organization while contributing to safety awareness and implementation of management. In response to the government's policy on direct hiring permanent positions when it comes to management, we plan to further raise the percentage of permanent positions for managers.

Noise Reduction

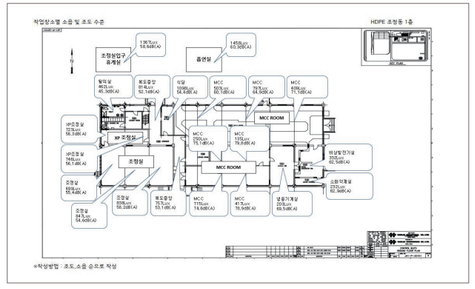
As part of our commitment to creating a safe and pleasant working environment, we have implemented a hearing protection program where we established noise maps for all areas of operation and focused management. We expect this will help prevent occupational injuries and diseases such as noise-induced hearing loss and other types of accidents. Going forward, we will continue to make improvements to facilities that generate noise.

1



2

1. Standard Safety Training 2. Mobile System



Noise Map

Employee Safety Training

Safety Experience School

The Safety Experience School was established to present a new paradigm for safety training and improve the effectiveness of health and safety-related activities. The school consists of "19 safety experience training" and "virtual training" using VR where participants can get hands-on experience on risk factors by type. Starting with new employee training in January 2019, we provide safety experience training for the executive officers and employees/supervisors of our subcontractors. As of 2019, a total of 2,604 participants have experienced the facilities and gained knowledge through a specialized training program. The goal is to provide hands-on experience for the risk factors and unsafe conditions at the site so they can understand how accidents occur, identify risks, and establish safety measures so that we can develop response capabilities in case of emergency. In addition, the school acquired IS0 21001, the Educational Organization Management Systems certification in 2020. With the certification, Daelim Industrial became the first large construction company to acquire an international standard certification and improved the reliability of the safety training in and outside the company.

2,604

No. of participants of Safety Experience School
[Jan. 15 – Dec. 20, 2019]

Safety Experience School

Health and Safety Certification

Daelim Industrial was recognized for its commitment to health and safety and acquired domestic and international health and safety certifications. After acquiring OHSAS 18001, the international Health and Safety management system in 2009, we managed to complete the conversion process and obtained the ISO 45001 which was established in 2018. We also obtained KOSHA 18001, a Health and Safety management certification given by the Korea Occupational Safety and Health Agency. Thus, we are operating our safety management systems in accordance with international standards and will make continuous improvements and optimize the systems at all our worksites.

ISO 45001

Domestic & Overseas Worksites

KOSHA 18001

Domestic Worksites

Emergency Response System for COVID-19

Recognizing the seriousness of COVID-19 and to minimize its impact, Daelim Industrial has organized an H/Q control tower with dedicated personnel. By establishing a COVID-19 prevention and response process in case of its outbreak, we classify our actions into Plan A (response), Plan B (dissemination to local communities), and Plan C (infection within the organization) to take control measures according to the situation. We are also monitoring our domestic and overseas projects on a daily basis while establishing emergency response processes of COVID-19 for employees on overseas projects as part of our prevention efforts.

CASE COVID-19 On-site Response Activities

1 Intelligent Safety Management for COVID-19

We have installed CCTVs to ensure that all personnel wear masks and check their health in real-time. In the case of blind spots or places where it is difficult to access, we use drones with cameras. We also use IoT systems such as beacon[1] and tracker[2] to check the movements of workers in real-time. If the SOS button is pressed or no motion is detected, their location is instantly sent to the safety manager through SMS. In addition, when it is monitored that several employees are working in the same spot, we coordinate their work process and distribute the traffic in rest facilities as part of our efforts to ensure compliance with social distancing.

Real-time personnel location tracking

2 COVID-19 Local Community Support Activities

As part of our efforts to prevent the spread of COVID-19 in local communities, we engage in quarantine activities and donate medical supplies around our sites. We conducted quarantine activities for community halls, senior citizens' centers, and common areas of apartment buildings, and donated masks and hand sanitizers for local residents such as fire departments and elementary schools. We also donated cash and necessities for the vulnerable and underprivileged in the local community.

Donations of Money and Goods

1) **Beacon** : a wireless Bluetooth communication device that sends location information to a smart device (tracker) over a short distance
2) **Tracker** : as individually carried by personnel, it reads and transmits the current location to the central system

Health and Safety Management in Supply Chain

Subcontractor CEO Seminar and Safety Experience Training

Daelim Industrial holds a CEO seminar and safety experience training to raise safety awareness and promote cooperation with subcontractors. The training focused on the aspects of mindset and experience and in July 2019, five training sessions were held for 142 CEOs from our subcontractors. It gave them a sense of responsibility and encourage dedicated participation for health and safety activities. In May 2020, the training was conducted for 67 subcontractors.

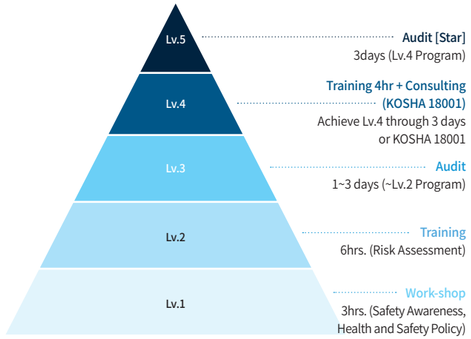
Reward Program Based on Safety Performance of Business Partners

In 2019, Daelim Industrial introduced a reward program based on the safety performance of business partners to promote voluntary safety activities at 9 worksites and 16 subcontractors and provide incentives to motivate subcontractors. The management including the CEO conducted the "Safety Inspection Day" event and safety inspections to encourage our commitment to safety and encouraged supervisors to participate in safety activities to raise awareness. We also support subcontractors by providing safety standards for 53 types of work, training of safety experience school and provide rewards to 16 subcontractors based on their performance. As a result, 15 of them had no accidents in their worksites. In 2020, we will increase the number of subcontractors joining the program to 30 companies and provide consultation to 10 companies in order to improve the level of their Health and Safety management system.

Introduction of D-SEP
(Daelim-Safety Enhancement Program for partner)

We introduced D-SEP (Daelim-Safety Enhancement Program for partner), a step-by-step health and safety enhancement program for subcontractors, to overcome the limitations of safety management led by the main contractor, and established a system to support Health and Safety management system of subcontractor. D-SEP consists of five levels of enhancement and supports subcontractors to improve the level of Health and Safety management. To achieve Levels 1, 2, and 4, they are required to conduct workshops, training, and consultation. Incentives such as safety penalty reduction are given if they reach Level 3 or above. By doing so, we can justify their commitment to safety and help them recognize safety as an integral part of corporate management. We also select subcontractors with excellent performance based on assessment and expect this will help improve the level of overall safety management in our value chain.

D-SEP (Daelim-Safety Enhancement Program for partner)



Safety Experience Training & Seminar with CEOs of subcontractors

Ceremony for Reward Program Based on Safety Performance in 2019

Customer-oriented Management

Management Approach

Customers are the broadest aspects of stakeholders and customer-oriented management is an essential part of corporate sustainability. Therefore, it is important for companies to adopt the customer-oriented approach to their business operation and deliver the best quality and services based on trust.

Principle & Strategy

Daelim Industrial is committed to building a customer-focused quality management system and maximize their values in response to their demands. To improve the quality of finished products, we carry out preventive quality management in each process.

KEY Performance Indicators (KPIs)

No. of remaining AS cases at the time of move-in

1.0 case/household

Minimum no. of defect inspection/dispute cases

1st

*Defect dispute review system by the Ministry of Land, Infrastructure and Transport
determining defects by the parties at a dispute mediation committee meeting in the case of defects, questions, or disputes in relation to each structural unit of a building or by various facilities.

Building Customer-oriented Quality Management System

Daelim Industrial focuses on proactive quality management to improve the quality of the finished products while working on the prevention of quality issues. In order to achieve “3 Zero” in terms of inspection omissions, design errors, and material defects through integrated quality management processes of all organizations, including subcontractors, from customers’ perspectives, we establish and implement measures to strengthen quality management.

Zero omissions in inspection due to self-process quality completion	• Establishment of ITP for each type of work and compliance with plans • Completion of self-process between previous and following work process
Removal of all design errors before starting work	• Establishment and implementation of D-day for preliminary review for all types of work in each stage of preparation prior to commencement
Zero defective material by conducting quality inspection by material class	• Determination of material inspection class • Management and record management by class

Building On-site Support System by Process

Daelim Industrial supports initial set-up for new worksites to establish customized quality control plans based on the Construction Technology Promotion Act and related laws. For sites under construction, we carry out quality inspections on implementations and issues and provide additional on-site training for those with poor quality performance. In addition, we distribute quality management and test manuals to support more consistent quality control and assurance across all worksites.

Strengthening Quality Assurance Procedures for Prevention of Defective Materials

In response to growing social and legal requirements on the use of non-conforming materials, Daelim Industrial established quality management standards on carry-in and finishing materials in addition to base materials with the goal of achieving zero defective materials. We also clarify and implement the division of work at each stage, from supply and demand planning to storage management in order to implement the established standards more effectively.

Establishing Material Quality Management Process and R&R

Material inspection rating (quality)	- Rating by evaluation score (A/B/C)
Planning material requirements (construction)	- monthly requirement check and inventory management
Approving the use of materials (quality)	- verification of manufacturer conformity
Factory inspection (quality)	- verification of production facilities/equipment
Material entry inspection/implementation (construction, quality)	- management by material inspection rating
Material storage check (construction)	- establishment and inspection of storage methods for each item

Quality Inspection

From preparation to completion, Daelim Industrial conducts an extensive quality inspection at each stage and monitors the progress on-site through personnel in charge.

Self-Quality Inspection (D-70 days prior to moving in)
The pre-inspection is conducted from the user's perspectives through a group of homemakers so that repairs can be made prior to the pre-inspection of tenants.

Move-in Fair (D-35)
The site managers and teams from head office share the results of quality inspections and seek ways to deliver better products to customers.

Pre-inspection by Tenants (D-30)
Through pre-inspections, tenants inspect their flats on-site and request repairs before move-in.

Mobile Defect Management Service

Since 2018, we have developed and provided a mobile defect management service that allows customers to request repairs and monitor progress using their smartphones for the first time in the industry. The service was received with a high level of satisfaction as it makes it easy to request repairs without having to visit or contact the CS center.

CS Service

Daelim Industry offers "LOHAS Service" to improve customer satisfaction. "LOHAS Service" is designed to operate fitness/GX/golf driving range for 6 months after moving in. This is part of our community support in response to a growing demand for leisure activities.

CS Training

By providing training with professional CS instructors for employees and subcontractors, we improve the level of customer satisfaction and service quality. Through workshops and campaigns (emotional labor management, kind words, appreciation diary) in particular, we promote growth and enhancement of internal customer satisfaction.

Customer Communication

We listen to customers' opinion and feedback through various channels including Customer Contact Center (CCC) and Voice of Customers (VOC) in order to resolve their complaints. Customer inquiries are forwarded to the relevant departments and project sites for a direct response so that employees may experience customer needs and respond.

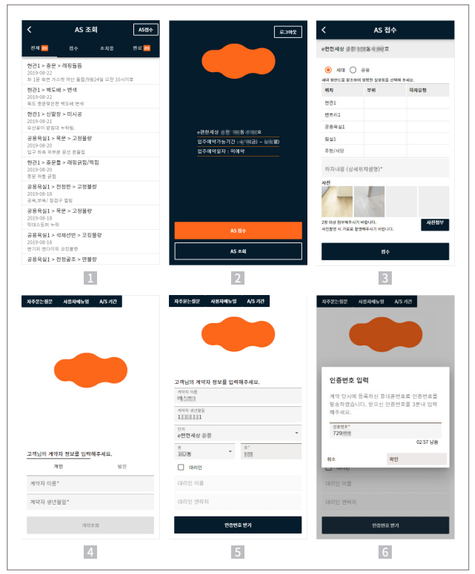
Personal Data Protection

We apply strict security standards to protect customers' personal information and prevent any breaches or violations through on-site inspection. In addition, employees who have access to personal information are required to complete the training every year as part of our efforts to raise awareness of privacy.

Customer Satisfaction Survey

At the point of contact with customers such as pre-inspection and CS service, we conduct surveys to identify the level of satisfaction and areas of improvement. For customer satisfaction surveys, we use Happy Call text messages, and worksites with excellent performance are rewarded while those with a lower rating are subject to training for improvement.

Family Visit Event (Resident Preliminary Inspection) at Yongin Hansup City



User Screen on Mobile Defect Management Service

1. LOHAS Service Photo and Poster 2. CS Training

Excellent CS Agent Award

R&D

R&D for Polymer Materials

Polyethylene is a material widely used in industrial sites and everyday life such as films, large containers, and pipes, and accounts for the largest proportion of production in the petrochemical industry. It is manufactured using a metallocene catalyst and can be adjusted to its molecular structure according to its function and properties, so it is possible to manufacture material for the desired application. Based on more than 25 years of R&D on metallocene catalysts and experience we gained over the years through polyethylene commercial production, we develop and supply the most suitable type of polyethylene for both industrial and everyday applications. Recently, we have successfully commercialized the next-generation metallocene polyethylene with improved quality and processability and launched promotion and marketing activities.

R&D for Liquid Materials

Polybutene is used as an eco-friendly material that reduces the emissions of environmental pollutants as it is used for lubricant additives and fuel detergent. We successfully developed and commercialized this material and currently, only three companies in the world have the technology for the production of highly reactive polybutene (HRPB). Our production technology is the only one that enables conventional polybutene and HRPB in a single production facility based on which we sold the technology to Lubrizol, a global major lubricant additive manufacturer.

Development of New Materials

In order to create a new growth engine for the future and drive sustainable growth, we have been developing new materials in the specialty sector including adhesives, lubricant materials, and high value-added synthetic rubber. The recently acquired Cariflex[1)] anionic polymerization reaction and latex technology in particular serves as a great foundation for the development of new customer-specific high value-added materials. Meanwhile, we are making inroads into new markets while strengthening the competitiveness of existing business models based on customized mix technology and expertise we gained to meet the needs of our customers.

1) **Cariflex** : A company that produces isoprene rubber and isoprene latex

Research on Catalyst/Process/Mix

In addition to our metallocene catalyst technology, cationic polymerization technology, and liquid reaction process technology, our R&D center secured the anionic polymerization technology and latex technology through the acquisition of Cariflex. These technologies can be selectively used or combined for the development of specific materials. In order to further refine the development of new materials, we will continue to work on the catalyst/process/mix.

R&D Case Study

Development of BOCD[1)] Polyethylene

Although the existing metallocene catalyst-based polyethylene has very high mechanical properties, it has limitations in terms of process ability, whereas Ziegler-Natta catalyst-based polyethylene has better process ability despite its limitations in physical properties. Daelim Industrial developed BOCD polyethylene, which has the advantages of these two areas, for the first time in Korea, and successfully commercialized it in 2019. In particular, by raising the level of physical properties of existing metallocene products even more and creating the same level of properties, we can significantly reduce plastic consumption and make a contribution to our environment.

1) **BOCD** : Broad Orthogonal Composition Distribution

Lubricant for Viscosity Control

Daelim Industrial has successfully developed and commercialized a new type of lubricant by combining metallocene catalyst technology and liquid processing technology. It is synthetic oil that has a longer lifecycle and can be used as automobile gear oil, industrial lubricants, and viscosity modifier thanks to its superior stability compared to other materials.

Commitment to Competitive Advantages

Competency and Talent Development

Our competency development program is designed to improve our competitive advantages in technology. Individual research staff set and execute their own personalized development plans while focusing on the areas of improvement needed for their job. We also encourage group activities where staff from different areas can debate and learn to solve problems.

External Research Activities

Daelim Industrial is committed to enhancing its technological competitiveness through various types of programs that utilize external research capabilities as well as internal expertise development activities. The examples include consultation with domestic and foreign industry-academia-research experts, and national projects, commissions, and joint research projects.

1. Metallocene polyethylene sample 2. Liquid polybutene

3. Metallocene Lab 4. Polybutene Storage Tanks at the Yeosu Production Facilities

5. BOCD Polyethylene Resin 6. Synthetic Oil

7. Researchers at the Daelim Industrial R&D Center
8. A view of the Daelim Industrial Daedeok R&D Center

Shared Growth Management

Management Approach

In today's increasingly competitive global market, there is a growing awareness that subcontractors' competitiveness serves as a foundation for growth. As a result, cooperation for mutual growth has become an important aspect of corporate management.

Principle & Strategy

Based on our philosophy that Daelim's key competitiveness is driven from partner subcontractor's prosperity, we operate the top-level support program in the industry to strengthen the partner subcontractor's competitiveness and performance from the long-term perspective.

KEY Performance Indicators (KPIs)

Win-Win Cooperation Fund
Raised KRW **100** billion
(direct financing KRW 50B/win-win fund KRW 50B)

Support for 2nd/3rd-Tier Subcontractors
Introduced Nomubi.com and full subsidization for transfer fees

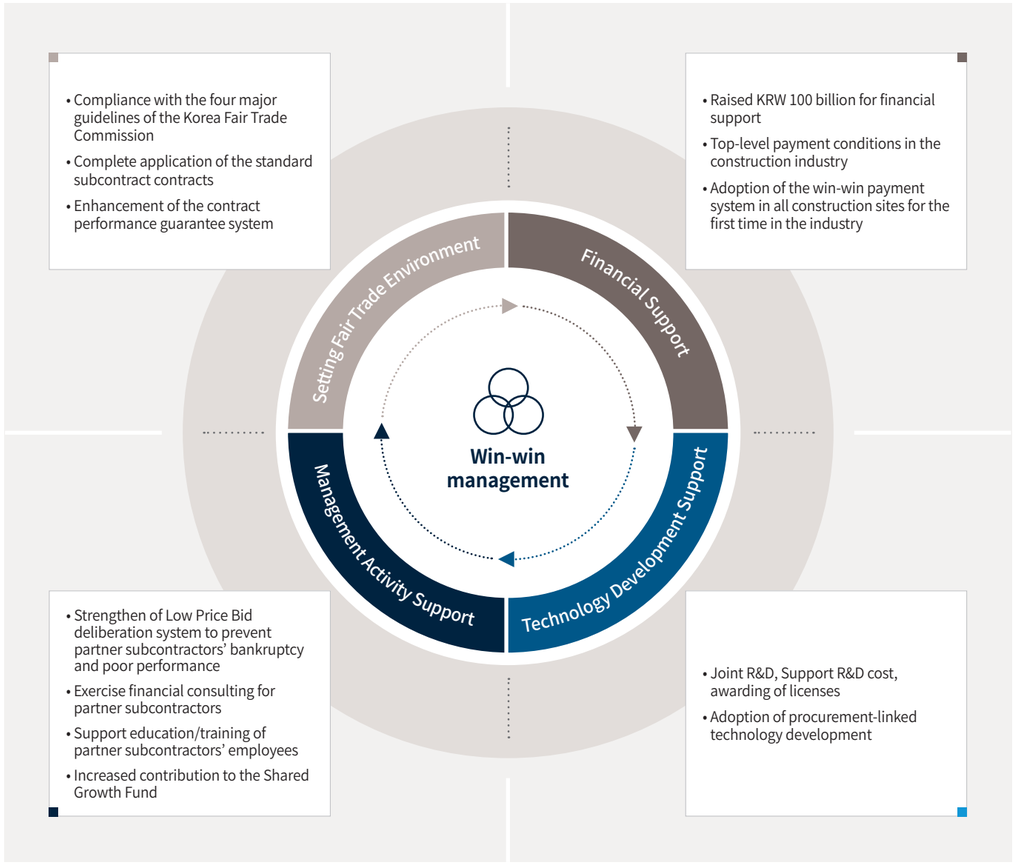
Introduced **the "contract first/guarantee later" program**

Performance Guarantee Rate
50% discount and **issue fees**
(For Best Partners)

Welfare Benefits Support
Welfare Points for Donbanmall

Mutual Growth Strategy

Based on our philosophy that Daelim's key competitiveness is driven from partner subcontractor's prosperity, we operate the top-level support program in the industry to strengthen the partner subcontractor's competitiveness and performance from the long-term perspective. With the goal of promoting fair practice, mutual growth, and win-win cooperation, we focus on four areas : Setting Fair Trade Environment, Financial Support, Management Activity Support, and Technology Development Support. In recognition of these efforts, we received a commendation from the Minister of SMEs and Startups at the "2018 Construction Cooperation Promotion Award" and from the Minister of Land, Infrastructure, and Transport at the "2019 Asia Construction Comprehensive Award"



Selection and Evaluation of Subcontractors

Selection and Operation of Subcontractors

We are committed to securing excellent subcontractors, creating a solid business foundation for mutual growth, and supporting operation and selection of subcontractors with a focus on cost reduction, thorough safety/environment, and quality management.

Registration

Subcontractors that are qualified in terms of credit rating and licenses are registered to our system. Unlike other construction companies with the annual registration process, we use an ongoing open subcontractor registration system to make it easier for subcontractors to register for selection.

Evaluation

We carry out quarterly subcontractor evaluations in the areas of work performance management, process management, cost management, cooperation/communication, environmental management, safety management, and quality management. When it comes to civil engineering and construction materials, a comprehensive evaluation is conducted on five items, including management stability (credit rating), delivery time, quality, safety, and environment, at least once a year*, and for technology materials, managers in charge of engineering, procurement, and construction are evaluated for each project.

*Annual : depends on the scale of orders placed

Restriction

In the case of downgraded credit rating and poor evaluation results, our team reviews the results and applies restrictions on tender participation if there is any problem with the company.

Improvement Measures

In order to improve companies with poor evaluation results, we provide employee training and financial consultation support for better credit rating management.

Improving Sustainability in Supply Chain

Daelim Industrial is committed to promoting responsible and sustainable practices to improve sustainability in its supply chain. In order to enhance the overall competitiveness of our supply chain and minimize risks, we include requirements for safety, health, and environment in the contract and encourage their participation.

Safety Management

By introducing D-SEP to strengthen the safety management of our subcontractors, we will classify them into five tiers according to their safety performance and conduct training and evaluation to strengthen their safety management. In 2019, we introduced Performance Sharing Program to promote voluntary safety activities, raise awareness, and encourage them to prevent accidents, and provide incentives based on the evaluation. In 2020, we plan to offer support for those with a high level of accidents and those recommended by the business division through health and safety consultation from third-party firms. We expect this will improve their level of health and safety, and ultimately prevent industrial disasters and financial loss.

Environmental Management

When evaluating subcontractors, the bottom 10% ranked based on the evaluation results, including the environment as an area of evaluation (5%), are reconsidered for their eligibility. Every year, environment training is provided to all site supervisors of subcontractors while planning to help one subcontractor selected for the best performance to acquire the ISO 14001 certification.

Ethical Management

In 2020, we plan to establish a code of ethics to support the subcontractors' commitment towards human rights and ethical practice. We are also looking into due diligence on some subcontractors on a regular basis.

Mutual Growth Program

Technology Support

Joint R&D Performance Sharing Program

In order to help improve the quality and drive technical innovation, our R&D Center leads the joint R&D projects and provides financial support.

Technology Development with Purchase Support

If a new technology is developed jointly with a subcontractor with technical expertise as part of procurement-linked technology development, the subcontractor can build a foundation for growth while we secure competitive advantages through a virtuous cycle. As a result of this effort, we applied for a joint patent with Dongseo PCC Co., Ltd., for the 'Drying method of underground parking lots for apartment buildings'.

Support for Technical Information Escrow

In order to help protect confidential business data and intellectual property rights of our subcontractors, we support the technical information escrow system of Korea Foundation for Cooperation of Large & Small Business, Rural Affairs.

Contract Signing for Procurement-Linked Technology Development

Financial Support

Improving Payment Conditions for Subcontractors

Since October 2017, we have offered industry-leading payment conditions for subcontractors as we make payment on the 10th of every month. We also maintain 100% cash and cash equivalents (B2B+[1]) payment and 98.6% in cash payment for outsourcing in 2019, which is the highest level in the industry.

1) B2B+ : secured loan of credit sales without recourse

Direct Fund Loans for Mutual Growth

In order to relieve the financial pressure of our subcontractors, we significantly increased the volume of direct fund loans to KRW 50 billion in 2018 as part of our efforts to improve their liquidity.

Win-Win Cooperation Loan for Subcontractors

We operate a win-win fund to support subcontractors with financial constraints. The win-win fund is a system that provides a certain portion of the interest accrued from the bank deposits of large corporations as a loan interest for subcontractors. We increased the fund to KRW 50 billion in cash to offer a 1.3% point on the loan interest rate.

Payment System and Zero Fees

We monitor payments made to our 1st-tier (Primary) subcontractors to ensure that 2nd- and 3rd-tier (Secondary) subcontractors are paid. In 2014, we introduced the payment system, "nomubi.com" for all working sites, and in January 2018, we became the first construction company to offer zero transfer fees to encourage the use of the payment system.

CASE Hansup Partners' Day 2020

In November 2019, in celebration of the 80th anniversary of Daelim Industrial, we held the Hansup Partners' Day attended by our CEO and employees, and those of our subcontractors to create an opportunity to share and communicate the results of the efforts we made to support mutual growth and win-win cooperation. As part of our commitment to welfare benefits, all subcontractors invited to the event were given KRW 1 million Welfare Points that they can spend on the Dongban Mall, and awards were presented to 19 subcontractors selected as the Best Partners. As an incentive, they will get a 50% discount on performance guarantee rates. In addition, a preliminary survey was conducted to collect input and ideas from subcontractors, which were shared on the day of the event.

Hansup Partners' Day

Management Support

Low Price Bid Deliberation Committee

In order to prevent excessive competition between subcontractors which can result in bankruptcy and insolvency, the Low Price Bid Deliberation Committee has been organized. To focus on quality and performance overpricing, we increased the amount for review from 82% to 86% of the existing budget.

Support for Subcontractor Settlement Appraisal Fees

Daelim Industrial has introduced a swift consultation procedure through publicly trusted external appraisals to improve negotiations with subcontractors. By doing so, we will support the financial stability of our subcontractors, and provide full appraisal fees for small and medium-sized companies.

Contribution to the Win-Win Cooperation Fund

As part of our efforts to support management, research, talent development, and productivity of small- and medium-sized subcontractors since 2013, we have been contributing to Korea Foundation for Cooperation of Large & Small Business, Rural Affairs the win-win cooperation fund for small-, medium- and large-sized companies, to implement various policies for mutual growth. In 2018, we significantly increased the amount of our contribution to strengthen win-win cooperation in our supply chain.

Financial Consulting for Subcontractors

In order to ensure financial stability and prevent issues, we analyzed the financial condition of our subcontractors and identify risks in advance. We also provide varied support, including annual financial consulting through credit rating agencies to improve their financial position.

Employee Training Support for Subcontractors

We provide support through employee training on management innovation, cost reduction, labor, quality, and safety for our subcontractors to help them develop talents and stay competitive. With the goal of improving the business operation of subcontractors and contract management, we will focus on cooperation with academic institutes rather than one-time training.

Dongban Mall and Welfare Points

For the first time in the industry, we introduced the Dongban Mall operated by the Small and Medium Business Distribution Center under the Ministry of SMEs and Startups to promote market development and provide welfare points for the mall to support our subcontractors as part of our contribution to mutual growth.

Subcontractor Training

Communication with Subcontractors

Regular Invitational Events

Since 2019, we have held invitational events for subcontractors through policy briefing sessions and the biannual Hansup Partners' Day while improving our policies to meet their needs through open communication.

Direct Communication Channel

Through a direct communication channel, we collect the input from all our subcontractors on a quarterly basis. This also serves as a window to resolve disputes over transactions.

Cyber Whistleblowing Center

We created an online channel on our website to collect and reflect complaints of unethical requests or practices, suggestions for improvement, and grievances from subcontractors in the event of a transaction or contact with our company.

Shoulder-to-Shoulder

Through our subcontractor portal, "Shoulder-to-Shoulder", we collect suggestions and complaints from our subcontractors on an on-going basis.

Win-Win Council

By organizing the Win-Win Council Meeting on a regular basis, which is a communication channel for our subcontractors, we share complaints and ideas for improvement while forming a consensus for mutual growth to minimize disputes associated with subcontract works.

Visits to Subcontractors

In order to build trust and teamwork, we conduct interviews with our subcontractors on an on-going basis while building a partnership for mutual growth through regular communication channels.

Setting Fair Trade Environment

Standard Subcontract Agreement

In order to strengthen the partnerships with our subcontractors and promote fair practice, we introduced a standard subcontract agreement form to lay the foundation for win-win cooperation. The content includes prohibition of unfair or fake contracts, guidelines against retaliation, and obligations for confidentiality.

Performance Guarantee System

We changed the method of accepting a contract performance guarantee to ensure a sufficient period of guarantee issue and fulfill the obligations of written issuance. We also implemented a system to reduce the contract performance guarantee rate to 5% for subcontractors that meet certain standards, and for small and medium-sized businesses, we provide additional benefits for guarantee fees and limits in order to reduce financial pressure and secure additional guarantees and sales capabilities.

Environmental Management

Management Approach

With growing global interest and commitment in response to global warming under the Paris Agreement, the Korean government set a target of 37% reduction to the BAU(Business As Usual) by 2030 and is implementing various policies to achieve this target.

Principle & Strategy

In response to these domestic and overseas trends, Daelim Industrial is establishing and implementing response strategies by analyzing the impact of GHG emissions in advance. GHG emissions and energy consumption at our worksites are monitored and analyzed in real-time to support our reduction activities and join our efforts for international initiatives including TCFD (Taskforce on Climate-related Financial Disclosures) and CDP (Carbon Disclosure Project).

KEY Performance Indicators (KPIs)

GHG Emissions Reduction Compared to the Base Year

41%

Recycling of Construction Wastes

95%

Industrial Water Recycling

20%

Environmental Management Strategy and System

Recognizing the seriousness of environmental issues including global warming, fine dust, water shortage and depletion of resources, and marine and soil pollution, and their impact on our sustainability, we have continuously driven innovation in all areas of our operation such as design, R&D, construction, and purchase since 2017 in order to fulfill our corporate social responsibility, and achieve our targets. Focusing on our response to climate change and maximizing the eco-friendly performance of all our products and services, we are committed to reducing GHG emissions through intensity management by process type while saving resources through smart construction and design, and production using eco-friendly technologies. Going forward, we will continue to develop Green Biz models, secure Green Tech, strengthen the environmental protection in our supply chain, and increase the ratio of green products to support sustainable and smart construction by promoting green living space.

Vision	Sustainable Green Construction		
Strategic Direction	Create a green living environment		
Actions	• Strengthening GHG emissions reduction of the company and subcontractors • Promoting the Green Habit	• Supporting Green Smart Construction through BIM, IoT, and AI • Exploring the Green Biz models e.g. renewable energy	• Implementing programs to strengthen environmental management in supply chain • Securing key Green Tech
Goals	Reduction of GHG emissions intensity	Increasing in recycling rate of wastes and effluent for saving resources	Growth in green product purchase and production rate

Environmental Management Performance and Goals

Indicators	2019 Plan	2019 Target	2019 Performance	2020 Target	Medium and Long-term Goal (~2030)
Reduction of GHG emissions basic unit	• Establish a process of analyzing GHG types of construction with high GHG emissions/ facilities basic unit • Strengthen Green Habit activities for energy saving • Develop renewable energy projects	• Reduce GHG emissions by 30% compared to the base year	• Reduced GHG emissions by 41% compared to the base year	Reduce GHG emissions by 32% compared to the base year	Reduce GHG emissions by 50% compared to the base year
Increase in Waste Recycling Rate	• Operate a waste discharge management system in connection with the Allbaro system • Optimize design using BIM[1] (Building Information Modeling) • Minimize construction error through Machine Control	• Achieve over 95% of the construction waste recycling rate (construction waste recycling rate in 2018 : 94%)	• 1.078 million tons of construction waste generated • Achieved 95% of construction waste recycling rate (1% increase from the previous year)	Achieve 96% waste recycling rate	Achieve 99% waste recycling rate
Increase in Water Recyling Rate	• Operate a water management system • Reflect the reuse of rainwater/groundwater in design • Promote best practices for water recycling	• Achieve 20% water recycling rate • Achieve water consumption intensity of 32 tons/KRW 100 million	• Water consumption : 1.234 million tons • Achieved 249,592 tons of recycling and 20% recycling rate • Water consumption basic unit : 30.9 tons/KRW 100 million	Achieve 20% water recycling rate	Achieve 40% water recycling rate
Increase in Green Product Purchase Rate	• Establish an eco-friendly product management system • Increase green MRO[2] products e.g., saving plastic packaging materials • Promote Zero Energy building design	• Achieve 12.5% of green product purchases compared to purchases of raw and subsidiary materials (green product purchases in 2018 : 12%)	• Green product purchase amount : KRW 120.7 billion • Purchase rate of green products compared to purchases of raw and subsidiary materials : 12.3% (2.5% increase from the previous year)	Achieve 13.3% of green product purchase rate	Achieve 20% of green product purchase rate

1) **BIM(Building Information Modeling)** : Digital technology that contains 3D images of buildings such as design, materials, and building structures
2) **MRO(Maintenance Repair and Operation)** : corporate consumable materials

Integrated Environmental Information System

Understanding that eco-friendly management starts with compliance with environmental laws and regulations, we introduced an integrated environmental information system to deliver information and service more efficiently. The system organizes and providers the summary of laws and regulations, related guidelines, forms, FAQs, and best practices for 25 environmental laws and regulations at a glance while improving the user accessibility and convenience for environmental information and work process. Going forward, we will continue to improve the system through on-going updates and mobile support.

Response to Climate Change

Climate Change and Environmental Management Response Strategy

We recognize climate change caused by global warming as an impending threat that we need to deal with now in order to survive rather than in the distant future. Property damage and human casualties are increasing due to climate change such as heat and cold wave, heavy snow, heavy rain, and typhoons around the world, and their negative impacts are spreading much faster than we think. After the Paris Agreement in 2015, the world has decided to limit the global temperature rise below 2°C on average while each country has adopted the “2050 LEDS(Long-term low greenhouse gas Emission Development Strategies)” to take initiative in dealing with climate change after 2020.

In response to these trends, our Construction Division has declared Green Management since 2009 and organized the Green Committee with the CEO as its chairman. Each business unit analyzes risks and opportunities on a quarterly basis and establishes response strategies based on the level of their impact. Climate change and environmental issues are considered the top priority and analyzed in terms of risk and opportunity factors, and any issues with a high level of impact are reported to the Green Committee to establish the direction for implementation. While decisions are reflected and implemented as part of our business strategy, we manage the performance on a regular basis.

Our current strategies for responding to climate change include investment in renewable energy, CDM projects, zero energy building projects through research and development focusing on high-efficiency energy performance. They have helped us to achieve the zero energy certification of e-Pyeonhansesang Chuncheon Hansup City as well as CDM project development through investment in Pakistan Gulpur hydropower and Jeju Hallym Offshore Wind Power Construction Project.

Climate Change Risk Management

As the impact of climate change spans the entire aspects of business that includes the price and supply of raw materials, product design, production and sales, and services, it is important to analyze risks and opportunities and establish effective response strategies across all business activities. Since the construction work takes place outside and is exposed to climate change, there are vulnerabilities that can lead to various risks due to abnormal weather conditions. It is also subject to policies such as strengthening the government’s building energy licensing standards and support for renewable energy sectors, it is essential to analyze and improve the risk factors expected from climate change and to use it as an opportunity to create new growth engines for the future.

Climate Change Risk and Opportunity Management Process

1 Risk and Opportunity Analysis

- Major risk factors
  1) Growing regulatory demands in relation to energy and GHG emissions, GHG emissions trading scheme in the construction industry, and mandatory zero energy building
  2) Increase in construction cost of high-efficiency energy buildings
  3) Decline in brand value due to poor response to climate change
  4) Financial loss due to delay and damage caused by abnormal weather such as heat/cold wave, typhoon, and flood
- Key opportunity factors
  1) Growth of the green remodeling and renewable energy market
  2) Acquisition and sales of emissions credits through CDM
  3) Increase in purchasing power through the development of green products such as high-efficiency energy buildings

2 Business Strategy and Environmental Goals

- Analysis of impact of major risk and opportunity factors
- Identification of high-risk issues and setting environmental goals
- Reflection of business strategy and implementation planning

3 Response to Climate Change

- Semiannual performance and achievement check
- GHG emissions monitoring and reduction activities
- Review of climate change policies and regulations

4 Management Performance

- Analysis and reporting of environmental management performance e.g., GHG emissions and energy consumption
- Report on sales performance of eco-friendly products

GHG Emissions Control

As the Petrochemical Division and the Construction Division come under the same company, worksites subject to GHG emissions trading are separated from those with voluntary management. Worksites subject to the GHG emissions trading are included in the 1st and 2nd allocation plans from the Ministry of Environment and are granted GHG emissions credits. They establish a monitoring plan, conduct third-party assurance, and submit emissions credits. When it comes to the sites that are not subject to the trading scheme, we estimate their annual emissions and conduct third-party assurance under the GHG Emissions & Energy Target Management Guidelines. In line with the decisions of the Ministry of Environment on the inclusion of the construction industry in the 3rd GHG Emissions Credit Allocation Plan, worksites will also receive emissions permits and manage them in the future.

Daelim Industrial Four-Year GHG Emissions by Scope

Classification		2016				2017				2018				2019				Subject to Trading Scheme	Voluntary Management
		Subtotal	Scope1	Scope2	Scope3	Subtotal	Scope1	Scope2	Scope3	Subtotal	Scope1	Scope2	Scope3	Subtotal	Scope1	Scope2	Scope3		
Total		503,680	32,725	246,341	224,614	513,827	36,419	284,805	192,602	467,318	30,540	281,821	154,957	427,218	28,368	256,231	142,619		
Intensity (ton CO_2-eq/KRW 100M)		5.1				4.2				4.3				4.6					
E&C	Subtotal	299,355	25,187	49,554	224,614	282,626	28,936	61,088	192,602	249,730	23,706	71,067	154,957	198,450	16,969	38,862	142,619		
	Headquarters Building, etc.	10,675	2,628	8,047		10,977	2,716	8,261		11,045	3,227	7,818		8,984	2,934	6,050		○	
	Construction Worksites	288,680	22,559	41,507	224,614	271,649	26,220	52,827	192,602	238,685	20,479	63,249	154,957	189,466	14,035	32,812	142,619		○
Petro-chemical	Subtotal	204,325	7,538	196,787	-	231,201	7,483	223,718	-	217,588	6,834	210,754	-	228,768	11,399	217,369	-		
	Headquarters Building, etc.	2,246	437	1,809	-	1,981	458	1,523		1,989	469	1,520		1,421	459	962		○	
	Production Facilities	202,079	7,101	194,978	-	229,220	7,025	222,195		215,599	6,365	209,234		227,347	10,940	216,407		○	

※ The construction worksites will be included in Scopes 1 and 2 emissions from the 3rd GHG Emissions Credit Allocation Plan.
Scope of Estimation : headquarters office building, production facilities, condominium, training center, R&D center, construction site, etc.
Scope1(direct emissions) : LNG, LPG, vehicle/boiler oil, etc. **Scope2(indirect emissions)** : production facilities/office/temporary accommodation/electricity, steam
Scope3(other indirect emissions) : machine/equipment (subcontractors, etc.)

※ The GHG emissions from LPG, external power, and subcontractors’ equipment and have been updated according to the changes in emission factors, and they have been verified by a third-party agency and the change in the GHG statements.

Response to GHG Emissions Trading Scheme

Daelim Industrial is committed to minimizing the risks associated with the GHG Emissions Trading Scheme implemented in 2015. By analyzing GHG emissions compared to allocated emissions credits, we are set to achieve a 6.1% reduction within the planned period (2018-2020) as a short-term target. By reflecting the estimated costs required for GHG emissions reduction in advance, we are minimizing the financial risks associated with transactions. We also established a strategy to improve energy efficiency through the replacement of outdated facilities and the purchase of offset credits in response to the volatile emissions trading market.

GHG Emissions of Worksites Subject to Emissions Trading Scheme

Unit : ton CO_2-eq

E&C Division

Classification	2019
Jeongseon Condominium	3,798
Gwanghwamun D-Tower	2,434
Susongdong Office Building	1,533
Daejeon Branch Office	518
Daelim Training Center	701

Petrochemical Division

Classification	2019
Petrochemical Division Headquarters Office Building	265
Daedeok R&D Center	1,157
Yeosu Plant	66,138
Yeosu LHDPE Plant	51,189

Classification	2019
Yeosu PB Plant	16,381
Yeosu C4 Plant	64,674
Jeonju Plant	28,964
Film Sales Office	1

2019 Total Emissions **237,753**

Petrochemical Division's GHG Emissions Reduction in Response to Emissions Trading Scheme

Unit : ton CO_2-eq

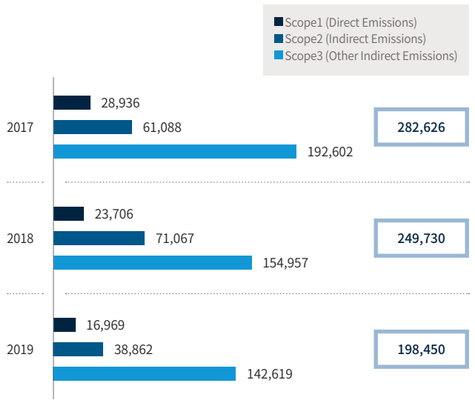
NO.	Item	Classification	2018	2019	2020	Total
01	Extension of Treater Regeneration Cycle	Electricity	10.6	10.6	10.6	31.8
02	Blower Type Change (1 Unit)	Electricity	0.0	65.4	65.4	130.8
03	Installation of Activator Fuel Saver	Fuel	30.0	30.0	30.0	90.0
04	Optimization of Chromium Catalyst Activation Conditions	Fuel	46.0	46.0	46.0	138.0
05	Operation of T2310 Steam Cut	MLS(Hanhwa)	504.1	504.1	504.1	1,512.3
06	Operation for T2311 Steam Reduction	MLS(Hanhwa)	99.1	99.1	99.1	297.3
07	Improvement of Pellet Transfer Air Compressor Operation Process	Electricity	0.0	33.2	66.4	99.6
08	Insulation of Extruder	Electricity	0.0	117.1	234.1	351.2
09	Reduction of Mixer Operation Time	Electricity	74.7	132.5	132.5	339.7
10	Replacement of GA711A Impeller	Electricity	14.7	122.6	100.5	237.8
11	Replacement of GA711B Impeller	Electricity	36.8	306.4	251.3	594.5
12	Installation of GB701C Inverter	Electricity	31.2	172.6	221.9	425.7
13	Installation/Operation of GA113A/B Min' Control Valve	Electricity	0.9	7.5	6.1	14.5
14	Reduction of Energy Consumption by Downsizing Y-GA901A Impeller	Electricity	7.5	20.2	18.5	46.2
			855.6	**1,667.3**	**1,786.5**	**4,309.4**

GHG Emissions Status

In 2019, our GHG emissions in the E&C sector amounted to 198,450 ton CO_2-eq, which was 51,147 ton CO_2-eq less than the previous year. By monitoring GHG emissions trends on a regular basis and engaging in various reduction activities, we managed to minimize the GHG emissions. In order to reduce GHG emissions at each worksite, we are implementing various campaigns such as efficient equipment input, the prohibition of equipment idling, management of energy use at the office, and use of bicycles as a means of transportation on the sites. By running the Green Habit Campaign at our head office and domestic and overseas worksites, we are reducing GHG emissions in our daily operations while expanding it to the entire organization to support various activities in line with the characteristics of each site.

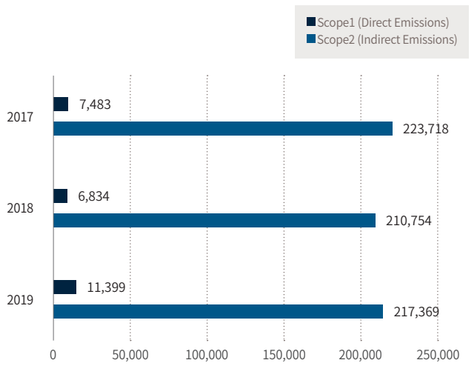
GHG Emissions of E&C Division

Unit : ton CO_2-eq



GHG Emissions of Petrochemical Division

Unit : ton CO_2-eq



GHG Inventory System

In response to climate change and global regulatory requirements, Daelim Industrial has established a GHG inventory system to manage its GHG emissions to join our efforts in global movements. The system allows us to keep track of carbon emissions in real-time at all our domestic worksites and head office and the aggregated GHG inventory is verified by a third party to ensure the reliability of data. We are also taking initiatives in reducing GHG emissions by sharing energy conservation campaigns and best practices in order to raise awareness and promote implementation as an companies subject to Emission Trading Scheme.

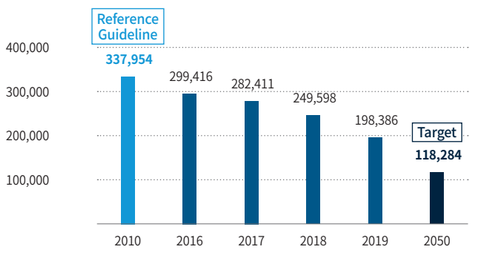
GHG Emissions Reduction Target

Our E&C Division sets and manages medium and long-term reduction targets in order to achieve a 37% reduction compared to the 2030 emissions BAU, and take a proactive approach in response to the 2050 LEDS(Long-term low greenhouse gas Emission Development Strategies). We are working towards the goal of reducing GHG emissions from 337,954 ton CO_2-eq in 2010 to 118,284 ton CO_2-eq by 2050 by 65% when it comes to the domestic sites of the E&C Division including head office building, resorts, and construction sites. To achieve this goal, we will strengthen our Green Habit programs such as renewable power generation and expansion of low-carbon air-conditioning and heating facilities in temporary offices, installation of timers to minimize standby power, maintenance of office temperatures, and operation of high-efficiency energy facilities while focusing on the use of electric vehicles and construction machinery, and improving work efficiency through heavy machinery automation technology.

Furthermore, since 2019, we have also managed GHG emissions at our overseas projects in Pakistan, Algeria, and Indonesia to join our efforts in response to global climate change in addition to GHG reduction initiatives taken by the Korean government. The emissions have been verified through third-party assurance and we will continue to analyze the trends and set reduction targets to promote various activities.

Scope1+2 Emissions of Domestic Sites

Unit : ton CO_2-eq



Eco-friendly Design & Renewable Energy in Response to Climate Change

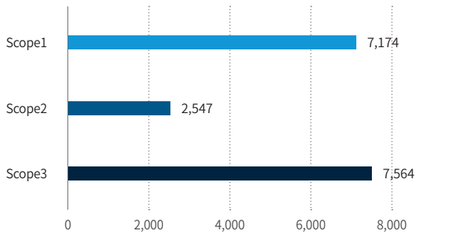
Eco-Friendly Temporary Office Facilities with Solar Power Generation

Due to the nature of the work, some projects are carried out on a worksite without proper infrastructure. The Saemangeum North-South Road Zone 3 construction site had no infrastructure such as electricity and water supply as it was located in land reclaimed after the seawall was completed. As a result, generators using fossil fuels had to be used to supply the power necessary for the operation. However, in order to prevent air pollution such as GHG emissions and nitrogen oxides, we considered eco-friendly alternatives and installed solar power generators instead. 20kW of power is generated a day to power the offices, safety training facilities, workers' lounges, and cafeterias without GHG emissions, which is the same as reducing a 173 ton CO_2eq of GHG emissions when using a diesel generator. It is also expected to reduce raw materials with zero consumption of fossil fuel and durability that lasts up to 20 years. By minimizing air pollution, it contributes to the ecological conservation of the area, where endangered species and various wild animals and plants can be found.

View of Solar Power Facilities of the Saemangeum North-South Road Zone 3

Emissions of Overseas Sites

Unit : ton CO_2-eq



Solar Power Facilities at Gwanghwamun D-Tower

Gwanghwamun D-Tower, built by Daelim Industrial, is drawing attention for its design that breaks away from the concept of a conventional office building. Three windows are installed on four sides of the building on each floor, providing even lighting and reducing the cost of air conditioning. The building has been awarded the best eco-friendly grade thanks to its solar power generation facilities which produce up to 200 kW of power and generates electricity while the sun is up to power the building. In 2019, a total of 219,458 kWh of power was generated reducing GHG emissions of 102 ton CO_2-eq.

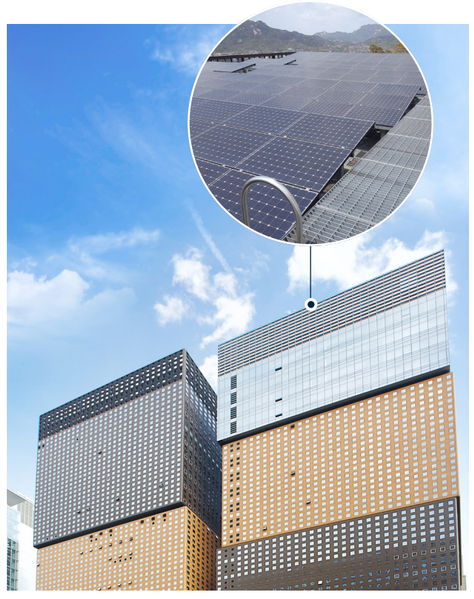
Zero Energy & Smart Housing Complex

As climate change caused by global warming is increasing energy consumption for air conditioning/heating, it is important to improve energy efficiency and reduce dependence on fossil fuels while increasing the energy independence of buildings. To take a proactive approach to this change and develop zero energy buildings, Daelim Industrial has developed high insulation windows and doors, HRV (Heat Recovery Ventilator), BEMS (Building Energy Management System), air conditioning system optimization through BIM, and application of solar and geothermal heat to improve energy efficiency in all areas of the residential environment.

GHG Emissions Reduction through CDM Projects

Daelim Industrial is carrying out CDM (Clean Development Mechanism)[1] projects that use renewable energy in response to global warming. For example, we are building a 105 MW solar power plant in Chile, which is scheduled to be completed in the third quarter of 2020, and emissions trading is expected to begin in the second quarter of 2021. The PMGD[2] project in Chile is expected to operate commercially for the next 25 years and reduce GHG emissions by approximately 140,000 ton CO_2-eq per year, and a total of 3.5 million ton CO_2-eq with the goal of contributing to the economic growth but also GHG emissions reduction. In addition, we are also working on the project of building a 102MW hydroelectric power plant on the Pouch River in northeastern Pakistan. Its commercial operation is scheduled to begin in February 2021. Over the next 30 years, it is expected to reduce the GHG emissions by 5.04 million tons, which accounts for 18% of our share of the emissions contributing not only to our economic performance but also Korea's obligations towards reducing GHG emissions.

1) **CDM(Clean Development Mechanism)** : a GHG emissions reduction initiative joined by developed and developing countries in response to global warming under Article 12 of the Kyoto Protocol (IPCC, 2007) adopted by the UNFCCC (United Nations Framework Convention on Climate Change)
2) **PMGD(Pequeños Medios de Generación Distribuidos)** : small power distributors



View of Solar Panels on the D-Tower

1. PMGD Solar Power Facilities in Chile 2. Aerial View of Gulpur Hydro Power Plant in Pakistan

Improving Construction Work Efficiency and Reducing Environmental Burden through AWP (Advanced Work Package)

Daelim Industrial is committed to reducing the construction time through efficient process management and eliminate the source of environmental burden. As part of this effort, we introduced and promoted AWP (Advanced Work Package) to optimize our process management throughout the life cycles during plant construction projects. The AWP adjusts all elements necessary for construction before the project starts and creates optimal workflow by removing the gap between design and actual work while promoting efficient collaboration between parties through 3D modeling and visualization of each process. This allows us to manage the transportation of materials in the section and equipment work section, which leads to shortening the vehicle travel distance and reducing the amount of time used for equipment operation, and the emissions of air pollutants including GHG and fine dust. It can also minimize various types of environmental burden while improving productivity and cost-efficiency by preventing additional input of materials and waste generated from failure.

Optimization of Eco-friendly Design

In order to meet consumers' needs for a pleasant residential environment and the requirements for a zero-energy building mandatory roadmap of the Ministry of Land, Infrastructure, and Transport, we are developing various eco-friendly technologies and expanding high-efficiency design to create zero-energy houses.

Classification		Design Elements	Key Technologies
Energy saving	Efficiency	High-performance insulation, exterior insulation system, high-performance windows, high-efficiency facilities, LEDs	High-performance envelope design
	Renewable energy	Photovoltaic, solar heat, geothermal, fuel cells	
Pleasant residential environment	Indoor air quality	materials, integrated sensor and air cleaning ventilation system	Smart clean care solution Anti-thermal bridge design Floor vibration and noise reduction technology
	Insulation/ condensation	Seamless insulation line, composite insulation materials, anti-thermal bridge design	
	Noise	Noise control, windows, sound-proof prediction technology	

Environmental Certifications

Since 1997, Daelim Industrial has maintained ISO 14001 certification, an international environmental management system. In 2017, we carried out environmental management activities to meet the latest revision requirements under ISO 14001 : 2015. Going forward, we will establish an energy management system by reviewing and applying the requirements of ISO 50001 in order to reduce the energy supply and demand based on fossil fuels and to effectively reduce GHG emissions.

ISO 14001

E&C Division, Petrochemical Division (Yeosu Plant, Daedeok R&D Center)

Radon-Free Apartment Building Process

Daelim Industrial takes initiatives in resolving various social issues. Lately, it has been reported that "radon", a Class 1 carcinogen classified by WHO, is released from marble materials installed in apartment bathrooms which require prompt solutions due to the lack of legal management standards or systems. By working on this situation quickly, eliminating external sources of radon from the planning/development stage, and minimizing the effect of radon in all activities, including internal factors in the design/construction stage, we developed the radon-free apartment building process for the first time in Korea. First, in the design stage, the use of stone produced in areas with a high level of radon is prohibited to prevent any use of non-conforming construction materials while replacing them with radon-free materials and creating a database on radon content in each type of material. In the case of materials such as concrete, which is difficult to replace, an indoor radon level estimation program has been developed to provide customized ventilation system for each site. By operating the ventilation system, we ensure that the radon level before the move-in date is within the standard limit (148 Bq/m3). As a result of these efforts, we won the Minister of Environment's Award at the "15th Construction Environment Management Best Practices Competition" hosted by the Ministry of Environment and Ministry of Land, Infrastructure, and Transport in 2019, leading to the creation of an eco-friendly and healthy residential environment for customers.

Radon-Free Apartment Process

Stage	Planning & Development Stage	Pre-Construction/Sales Stage	Execution Stage (Main Construction/Pre-Completion)			Completion/Move-in
Radon-Free Apartment Process	Localize designs	Remove the indoor radon factors	Forecast indoor radon intensity	Remove indoor radon		Encourage operating ventilation systems
Improvement	Remove the entry of radon	Remove the causes of indoor radon	Forecast indoor radon intensity on-site	Remove through ventilation (20-80%)	Stabilize indoor radon intensity (less than 148Bq/m^3)	Manage complaints after completion

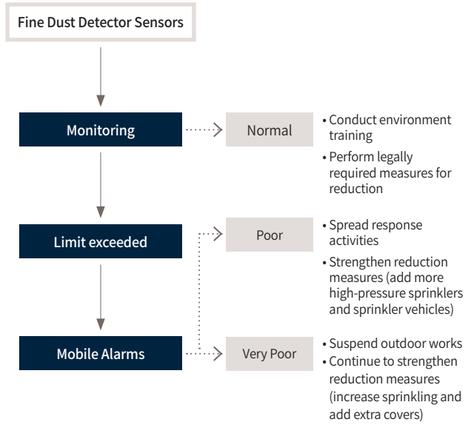
Air Environment Management

In response to a growing social demand for clean air free of pollutants such as fine dust, Daelim Industrial is carrying out various air environment management activities. In order to build a dust-free construction site, we are implementing measures to identify processes that generate fine dust and establishing internal policies on IoT-based fine dust measurement management, use of dust suppressants, and the low pollution construction equipment, which is more strength than legal requirements.
Meanwhile, our Petrochemical Division has strengthened its air pollution control in response to regulatory demands and civil complaints. Through the self-measurement of air pollutants at each worksite, we maintain the pollution level at 30% of the legal limit while building a monitoring system for on-going control. As a result of this commitment, we were designated as a voluntary compliance company.

IoT-based Fine Dust Management Process

Through real-time monitoring of fine dust levels at our worksite, we are implementing a step-by-step response process in line with the fine dust level. At the Seoshin I-Park e-Pyeonhansesang site, the fine dust level is measured in real-time, and actions are taken in three different stages. In the Normal level, we conduct reduction activities and training on fine dust whereas, in the Poor level, we send text messages to on-site managers, disseminate evacuation guidelines, and strengthen the fine dust reduction activities. In the Very Poor level, we carry out systematic fine dust control management that includes a suspension of work, continuous reduction activities, and waiting in indoor areas.

IoT-based Fine Dust Management Process



Voluntary Fine Dust Reduction Agreement

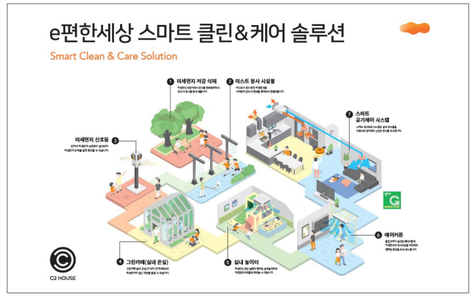
In December 2019, we signed an agreement to take initiatives in reducing a high level of fine dust with the Ministry of Environment to contribute to improving air quality. In accordance with the agreement, we included voluntary actions in addition to legal obligations such as measuring and disclosing the level of fine dust, restricting the use of old construction equipment with a high level of pollution, and working on the method of generating less fine dust when curing concrete as the fine dust reduction management plan.

Emergency Reduction Measures Against a High Level of Fine Dust

With the Special Act on the Reduction and Management of Fine Dust in place, we have established and implemented internal response guidelines such as reduction of construction time and adjustment of construction sites where a large amount of fine dust is generated, and refraining from outdoor work if the emergency reduction measures are triggered. As part of the activities, we create cards for the management of each site and put on banners, and placards to support our public relations and raise awareness.

Smart Clean & Care Solution (C2 House)

Daelim Industrial has developed C2 House, an eco-friendly residential platform that supports customers' new lifestyles by analyzing 12 million cases of big data. In particular, the platform uses "Smart Clean & Care Solution" that manages air quality with an automatic sensor in order to relieve customers from their worries and discomfort caused by fine dust. It also features active services that automatically measures and cleans carbon dioxide and volatile organic compounds 24 hours a day. The air purifier has an H13 grade HEPA filter that can remove up to 99.95% of ultra-fine dust of 0.3㎛ or more inside, and minimizes the risk of new house syndrome. The system is applied not only inside each household, but also in community areas such as indoor playgrounds and fitness centers while the entire area of the e-Pyunhansesang Complex is equipped with mist sprayers, air curtains, plants for reducing fine dust, and fine dust detectors. With these facilities, we will establish the e-Pyunhansesang Complex as a fine dust-free area.



Water Resource Management

Efforts to Conserve Water Resources

At Daelim Industrial, we recognize the importance of building a sound and sustainable water circulation system in response to the shortage of water resources. Through hydraulic and hydrological investigation, and analysis around the project site, we minimize the environmental impact of nearby rivers and reservoirs while incorporating the use of rainwater infiltration blocks and installation of initial rainwater treatment facilities in our designs. During construction, the usage of water is monitored on a monthly basis to conserve resources while the use of tap water and groundwater is measured and managed. In 2019, we managed to recycle 249,592 tons of water for sprinklers and actively utilized the greywater treated at the sewage treatment facility at the Jeongseon Condominium Management Office, the effluent water at the on-site wastewater treatment facility, the pretreatment rainwater and groundwater pretreated at the sedimentation pond and collection well as we recognize rainwater and wastewater treatment water as a source of water circulation. The effluent produced at the site during construction is treated in a wastewater treatment facility in accordance with water quality standards so that it does not affect the rivers. In addition, water used to wash pump cars during concrete pouring is also collected separately to prevent contamination of the surrounding environment. The case was recognized as the best practice by the Korea Environment Corporation Presidential Award at the 15th Construction Environment Management Best Practices Competition hosted by the Ministry of Environment and Ministry of Land, Infrastructure, and Transport. Going forward, we will continue to increase the use of recycled water in order to take a more proactive approach to the global issue of water shortage, targeting to achieve a 40% recycling rate by 2030.

Preserving Biodiversity

Temporary Sediment Control

We are dedicated to dealing with serious social and environmental issues caused by damage to our ecosystem and the depletion of biodiversity. For example, we considered the characteristics of the area where migratory birds are located within the construction site and changed to an eco-friendly construction method based on the opinions of several environmental experts in the Eco-delta City 2-1 Site. This was our initiative to preserve biodiversity and When installing the sedimentation pond, slope of the pond was applied as an eco-friendly method by mixing the vegetation mat and seed spray from the general method of building tents and sandbags. In addition, various facilities were provided for the stable settlement of migratory birds by creating a section of low section and installing a temporary bird stand. We are also dedicating our efforts to preserving migratory birds as well as terrestrial and aquatic ecosystems by supporting the protection of migratory birds and preventing species that disturb the ecosystem.

CASE 2020 Development of Iron Oxide Dynamic Membrane Filtration and Desalination Technology in Response to Red Tide

In order to preserve water resources in response to the global water shortage crisis, we are working on the development of desalination technology. The Sea Water Reverse Osmosis (SWRO) applied to desalination can cause serious problems that can lead to plant shutdown due to membrane contamination when red tide occurs. Therefore, it is important to minimize the effect of red tide and we are developing a pretreatment technology that removes organic substances generated from algae, the main cause of membrane contamination for the stable production of freshwater. This technology utilizes the natural organic material adsorption of iron oxide that adsorb polymer organic materials, which are major membrane contaminants, and thus reduces pretreatment membrane contamination. Furthermore, it is possible to achieve 4.4 times more productivity compared to conventional processes as we can secure the operating time up to 14.9 days from the time when membrane contamination occurs in about 3.4 days. Unlike activated carbon and Advanced Oxidation Process (AOP) processes where the efficiency declines under the influence of various ions contained in seawater, it improves as a result and thus makes it more applicable. The red tide is expected to gradually increase due to global warming, and the iron oxide dynamic membrane filtration desalination technology is expected to be an integral part of the eco-friendly operation that stabilizes the supply of water resources in response to a high frequency of red tide.

Mobile Desalination Pilot Facilities in Response to Red Tide

Waste Management

Increased Recycling Rate Through Smart Waste Management

With the goal of achieving a 99% recycling rate by 2030, we are enhancing our waste sorting process from the discharge stage. We have implemented a smart waste management system that includes providing information on local recycling companies by checking in real-time through the waste e-delivery management system. To further improve the waste recycling rate, we dry sludge and use it for embankment material and crush waste concrete to recycle as road layers.

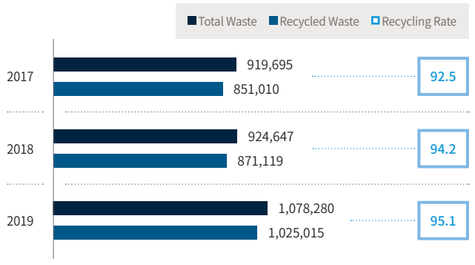
Waste Reduction

In March 2019, Daelim Industrial introduced a BIM-based drawing review system to reduce waste and prevented reconstruction due to inconsistency between construction drawings and structural drawings at our 34 sites including e-Pyunhansesang Gwangjin Grand Park. We also organize an annual internal environmental management competition to share best practices in waste reduction and raise our employees' environmental awareness.

Meanwhile, the Petrochemical Division manages the amount of waste generated in real-time through the active sorting process, storage, and treatment to reduce the amount of waste generated by each worksite. Thanks to these efforts, we were designated as a self-inspection site by the Youngsan River Environmental Authority.

E&C Division Waste Generation

Unit : Ton/Year, %



Management of Waste Disposal Companies

We outsource the disposal of our waste generated during business operation to a total of 73 companies (as of December 2019) and manage their operation while monitoring the risk of regulatory violations. Since July 2018, we have reviewed all disposal companies in advance to prevent any business dealing with unqualified service providers.

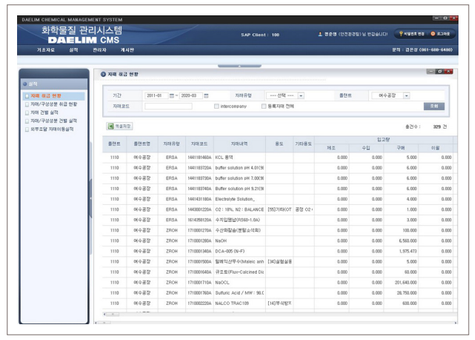
Minimizing the Use of Plastic

When it comes to MRO (Maintenance, Repair, and Operation) purchase, we provide information on the content of plastic to buyers to promote the use of products with less plastic materials. We also suggest replacement products based on analysis conducted on the annual MRO purchase volume and manage the MRO purchase containing plastic per employee as part of our efforts to deal with the threats posed to the humankind by plastic usage.

Hazardous Chemical Management

Our Petrochemical Division manages chemicals in the value chain from its entry to use, release, and disposal in order to prevent accidents and create a safe working environment while responding to the domestic and overseas regulatory requirements on hazardous substances. The DCMS[1)] in particular has been implemented to increase work efficiency through systematic management of chemical information, and we are making further improvements by rebuilding the system in 2015. Additionally, the amount of chemical substance discharged by our worksites is reported to the Ministry of Environment annually in accordance with the Chemical Substances Management Act.

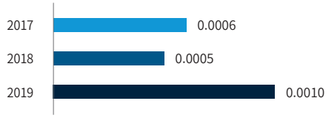
1) **DCMS :** Daelim Chemical Management System



Daelim Chemical Management System (DCMS)

Hazardous Chemical Wastes at Petrochemical Division's 4 Sites in Yeosu (Intensity)

Unit : Ton/Year (Ton/KRW 100M)



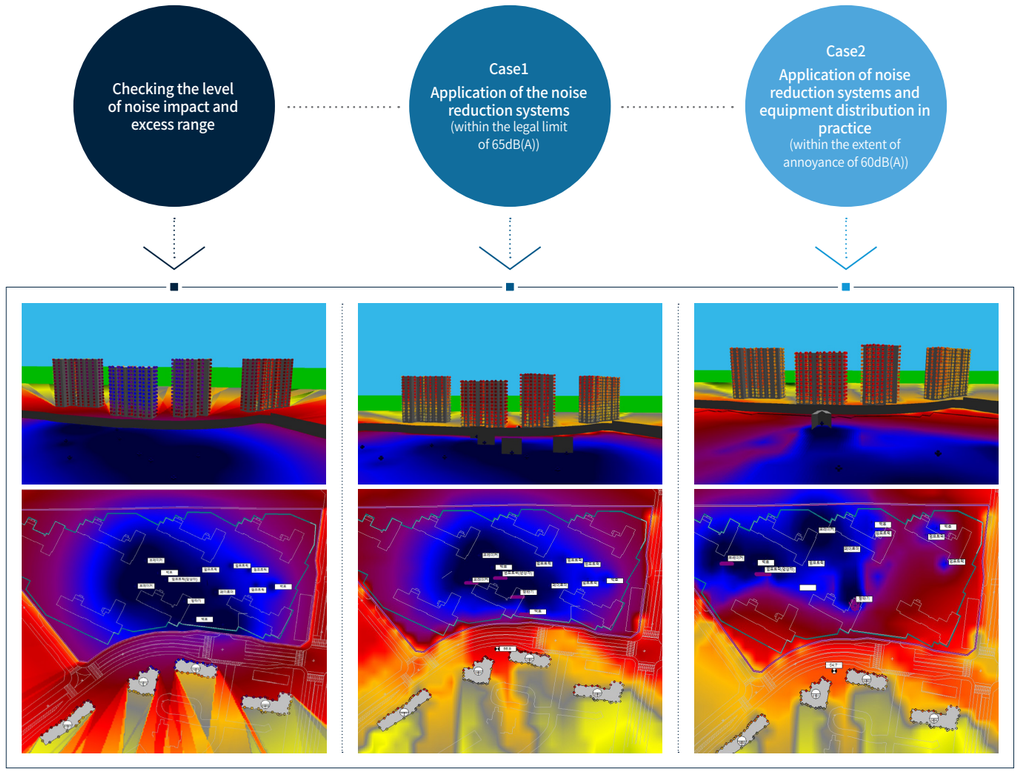
Hazardous Chemical Wastes
(Toluene, subject to 1-3BD)

Noise & Vibration Control

In order to minimize the impact of noise, a major cause of civil complaints in relation to the environment, we established an optimal noise prevention solution by analyzing the level of noise at each stage before undertaking the construction. First, a simple noise prediction program was developed to calculate the noise prediction value for each type of work and the location of civil complaints based on the data collected from the previous works and information regarding complaints. Based on the data, areas exposed to noise are identified and the noise reduction plan for the construction is developed. In the case of worksites that have a serious concern, a virtual noise information system is built based on equipment status and work location, complaints, and noise measurement through a 3D noise simulation program.

This way, we analyze the multilateral impact of noise in an environment that closely emulates reality. Through this, we analyze the multilateral noise impact level in an environment that closely matches reality. Using the visual color temperature of noise, it is possible to estimate its range and intensity from an objective point of view and minimize the impact of noise with the optimized solution creased based on the location and range of noise reduction systems. Going forward, we will develop a step-by-step noise management process, identify sites subject to intensive noise management through risk assessment, and establish noise response measures according to the risk levels. We will also continue to improve our noise management in terms of accuracy by using GPS information and 3D model screens created by the images captured by drones.

Noise Control based on 3D Simulation



Environmental Training

Employee Training

Under the annual environmental training plan, Daelim Industrial provides training programs to improve the environmental management capabilities of our employees and develop expertise. In 2019, we conducted training on the basic requirements of the environmental management system, on-site environmental laws and regulations, environmental issues, resource conservation, recycling, energy consumption, and GHG emissions reduction with the focus on new construction site KOM (Kick-Off Meeting) training, site, and head office manager training. Meanwhile, the Petrochemical Division organizes training on hazardous chemicals for all workers on the site as well as on the subjects of new or revised environmental laws and regulations.

88times / 2,430employees / 1.46hr per person

2019 Environmental Training Performance at Head Office

Worksite KOM Training

Within 3 months of opening a new site, we conduct training based on its conditions to minimize the environmental risks associated with landfill waste, soil pollution, and civil complaints. Through this, we support the establishment of a systematic environmental management plan from the beginning of each project by sharing the areas of focus for each subcontractor on the site conditions and the expected environmental burden in the future.

Worksite Environmental Manager Training

In order to improve the expertise of environmental managers, we offer annual training programs tailored to their individual needs and level of expertise. The program is divided into individual subjects from basic to in-depth level, taking their experience, area of expertise, and conditions of the site into account. In addition, various initiatives are taken to promote active participation, sharing of experience, and motivation through discussion to seek solutions in response to major environmental issues, as well as lectures on the government policy trends and legal improvements.

Head Office Environmental Manager Training

With the focus on the environmental management performance in the value chain, we appoint environmental managers for each team and provide training on the requirements for ISO 14001 and DEMS. With the training, we identify the expected environmental impact when performing each team's work, set environmental targets and implementation plans, and manage the results, thus enhancing the competency of our environmental managers.

Supervisor Training in Winter

Daelim Industrial visits all our sites on an annual basis to provide training on the latest regulatory requirements on fine dust and water resource, GHG emissions reduction, energy saving, best environmental practice, and Lessons&Learn, in order to enhance our environmental management standards and raise awareness of all our on-site employees. We also organize special training for field supervisors, such as directors and general managers, so that the training can be applied in practice.

New Employee Training (Entry/Each Division)

Recognizing the importance of environmental management and awareness, we conduct basic training to enhance understanding of our overall environmental management during the entry training, followed by advanced training at each level designed to develop professional environmental management capabilities based on the needs of each division.

Environmental Training in Line with Job Responsibilities/Areas

We conduct environmental training for managerial positions who are assigned to a worksite and those in the areas of construction, project control, and design of each division. Training programs are designed to recognize necessary environmental management information according to job R&R, through which we encourage all our employees to participate in environmental management.

Environmental Training for Subcontractors

Recognizing the subcontractors' competency and interest in environmental protection as an integral part of our environmental management, our E&C Division conducts training for their managers and supervisors. As part of the KOM training, we provide on-site training on environmental management for each company taking account of the conditions of their sites and support the establishment of an environmental management system. We are also committed to raising environmental awareness and providing training on resource conservation, recycling, energy, and GHG emissions reduction while sharing the latest environmental policy trends and social issues.
Furthermore, the Petrochemical Division offers training on chemical safety management and wearing protective gear for all workers, including subcontractors working at the sites handling hazardous chemicals.

Training for Subcontractors' Supervisors

In order to improve the level of environmental practice with the focus on the regulatory requirements on fine dust, GHG emission, energy-saving, best practices and Lessons&Learned, we conduct annual training at all our worksites. Through these activities, we raise their awareness and improve expertise in dealing with environmental issues while making improvements on these training programs through follow-up surveys.

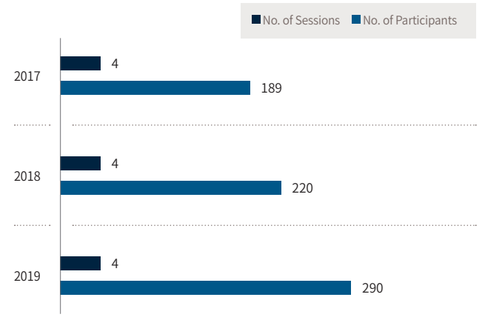
Internal Site Environmental Training

Under annual training plans, we organize monthly environmental training and emergency evacuation training at least once a year through the supervision of on-site environmental managers. In addition to our employees, we also provide training programs for employees of our subcontractors in the areas of air pollution, noise, vibration, waste, and water quality, in consideration of season and type of work to promote its application in practice.

Environmental Training Performance (E&C Division)

Category		Site Kick-Off Meeting Training	Training for Subcontractors' Supervisors
2017	No. of Sessions	38	130
	No. of Participants	38 (sites)	732
2018	No. of Sessions	21	61
	No. of Participants	21 (sites)	487
2019	No. of Sessions	25	50
	No. of Participants	25 (sites)	345

Hazardous Chemical Training for Subcontractors (Petrochemical Division)



Social Contribution

Management Approach

In response to a growing awareness that CSR is not only limited to economic performance but also includes contributions to local communities, many companies commit to creating social values through close relationships with the communities.

Principle & Strategy

As a responsible corporate citizen, Daelim Industrial has a firm philosophy when it comes to social contribution. Under the Hansup vision of “creating a comfortable and rich environment for people”, we are committed to engaging in various CSR programs and promoting sustainable growth with local communities.

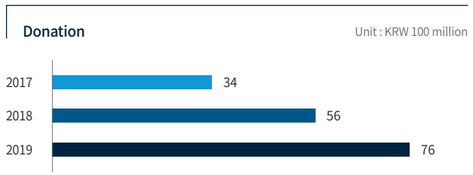
KEY Performance Indicators (KPIs)

Annual Employee Volunteer Hours	Annual No. of Employees Participating in Volunteer Activities	Annual No. of Visitors to Daelim Museum (most among private museums)	No. of PCs and Printers Donated to Disability Organizations	No. of Years in Implementing Love House Repairing (2005-Present)
37,645	**4,216**	**1** million	**1,440**	**15**

*As of 2019

Social Contribution System and Strategy

In order to help our neighbors in need and improve the quality of their lives, Daelim Industrial established the Five Activities of Sharing : Sharing Happiness, Sharing Love, Sharing Culture, Sharing Cleanliness, and Sharing Wish as a foundation for its CSR practice. Our social contribution focuses on aligning the nature of E&C operations with the competency of the group affiliates and consists of on-site programs that can support our neighbors in need.



Daelim Industrial Social Contribution Strategies

Hansup Spirit

Creating a comfortable and rich environment for people

CSR Vision

Mutual growth with local communities

Areas of Focus

Sharing Happiness	Sharing Culture	Sharing Love	Sharing Cleanliness	Sharing Wish
Housing Environment Improvement	Cultural Support	Employee Volunteering with Local Community	Environmental Protection	Disability Support & Scholarship
• Habitat • House repair/ improvement • Replacement/repair of outdated facilities	• Cultural support for vulnerable population • Mecenat activities • Local community projects • Cultural sponsorship	• Employee volunteering • Talent donation of employee clubs • Others (blood donation, bazaar)	• 1-MOUNTAIN 1-RIVER 1-STREET	• Donation of PCs • Scholarship project

Sustainable and voluntary employee engagement

Social Contribution Activities

In order to help our neighbors in need lead a happy and rich life, we focus on five areas of CSR activities : Sharing Happiness, Sharing Love, Sharing Culture, Sharing Cleanliness, and Sharing Wish.

We take full advantage of our business expertise and internal competency to help those in need through close communications and cooperation with local communities nationwide.

Five Activities for Sharing

Sharing Happiness

Home improvement activities for the underprivileged

Since 2005, Daelim Industrial's E&C Division and the employees have improved homes for the underprivileged as part of the "Sharing Happiness" campaign. In 2019, together with Habitat Seoul, we organized the "Repairing Houses for Love" project where we improve outdated housing facilities in Seoul and the Metropolitan areas as well as welfare facilities. The project focuses on improving energy efficiency by utilizing our employees' talents and expertise in the industry as we replaced walls and flooring and installed insulation systems and LED lighting. For welfare facilities, we built a barrier-free space so that people on wheelchairs can move freely.

Sharing Love

Employee volunteer activities for local communities

As part of the "Sharing Love" campaign, the E&C Division seeks out and helps people in need by working with local daycare centers, nursing homes, and welfare groups nationwide to offer support and assistance. At our head office, we organized such programs as making bread for the underprivileged and donating solar lanterns and leather pencil cases for children from underdeveloped countries in Southeast Asia. At our construction sites across the country, we organized Hansup Volunteer Groups to engage in various volunteer activities to help local welfare centers.

Sharing Culture

Creating art and cultural content for the public

The E&C Division also operates an art gallery to organize contemporary art and design exhibitions and support young artists. Founded in 2002, Daelim Museum provides easy access to artworks for the public under the vision of "where our life becomes art". In 2015, we opened the D MUSEUM to further expand our vision and points of contact with the public. We also established D PROJECT SPACE Collecting Beads to Create Pools in 2012 with the goal of supporting a unique and experimental creation.

Sharing Cleanliness

Environmental initiatives for the preservation of mountains and rivers across the country

To protect and preserve our environment for future generations, we organized the "Sharing Cleanliness" project. As part of the project, our employees from head office and nationwide worksites formed "Sharing Cleanliness Volunteer Groups" and joined the "One Mountain, One River, One Street" campaign in collaboration with local governments in 10 districts. Since 2005, employees of the head office, their families, and employees of group affiliates have participated in a quarterly environmental clean-up activity at the Namsan Botanical Garden to remove plants that disturb the ecosystem, such as Ageratina altissima, Humulus, and arrowroot vines.

Sharing Wish

Support for people with disabilities and students through scholarship foundation

As part of the "Sharing Wish" project, The E&C Division donates money and goods for the disabled and the socially underprivileged in need of self-support, and scholarships for college students who are the future of our society. Since 2004, we have donated our PCs and computer devices in collaboration with self-support organizations. Celebrating our 50th anniversary in 1989, the Daelim Suam Scholarship and Cultural Foundation, a non-profit public interest foundation for scholarship and academic support, was founded to provide financial support for college students.

Hansup Volunteer Group

Our Petrochemical Division has organized the Hansup Volunteer Group that consists of Facility Repair, Sharing Love, Family Volunteer, and Scholarship Support Group to focus on specific areas of volunteer activities.

Facility Repair Group

The Facility Repair Group focuses on repairing homes for youth who support their families and the elderly living alone. Mainly, the group repairs and replaces electricity, gas, boiler, wallpaper, and flooring. We also carry out projects where we replace and repair outdated facilities in elderly welfare centers.

Sharing Love Group

The Sharing Love Group makes social contributions to local communities through free meal service, bathing support, support for welfare centers, and delivery of lunch boxes for the elderly living alone.

Family Volunteer Group

The Family Volunteer Group is organized to help underprivileged children and senior citizens through food trucks, year-end kimchi making and donation, helping children supporting their families, and supporting welfare facilities.

Scholarship Support Group

The Small Heart Community donates money and supplies to the Yeosu Ssangbong Welfare Center on a quarterly basis to fulfill its social responsibilities to the local community. The Hansarang Community provides scholarships to children supporting their families at local schools to help realize their dreams.

Governance

- Governance
- Ethical Management
- Compliance Management
- Risk Management

03

Governance

Governance Principles

Daelim Industrial strives to build sound governance with a firm belief that it enables a level of transparency and efficiency and eventually maximizes the shareholder values. To this end, we established the “Daelim Industrial Governance Charter” in 2005 and officially announced our principles and procedures in relation to our governance of shareholders’ rights, directors’ role and responsibilities, and the composition and operation of the board of directors and Audit Committee. We also disclose all information for stakeholders including shareholders on a regular basis on the Corporate Governance Report, which contains the principles and status of our governance structure. Going forward, we will continue to do our best to strengthen our governance for sustainable growth.

Board of Directors

Roles of the Board of Directors

As the highest-level decision-making body of the company, Daelim Industrial Board of Directors makes resolutions on matters specified in law and articles of incorporation and implements supervisory for job performance of directors and executive officers. The board also holds strategic workshops to discuss medium- and long-term business strategies and to drive measures for maximizing shareholders’ value in order to achieve sustainable growth.

Status of the Board of Directors

The board of directors is composed of three inside directors and five outside directors to ensure efficient practice and transparent decision-making. The separation of the CEO and the chairman roles enables the board’s independence and thus leads to better monitoring and oversight. Directors are appointed at the general shareholders’ meeting based on the nomination in accordance with the Commercial Act and articles of incorporation. The qualification and expertise of outside directors are, in particular, verified by the Outside Director Candidate Recommendation Committee.

Operation of the Board of Directors

The board of directors is subject to regulations on the board of directors to ensure its efficient operation and posts them on the company website. The meetings of the Board of Directors consist of ordinary meetings to take place once every year and extraordinary ones to be held if necessary. The details of the meeting including agendas and resolutions are disclosed on the company website and electronic disclosure. In 2019, the meetings were held 11 times where they made resolutions on a total of 21 agenda items. The board of directors passes a resolution with a majority of the affirmative votes cast by a majority of directors attended at the meeting. In order to support the board, we have a dedicated support team that provides reporting materials on time and information needed for the directors to perform their jobs such as questions and answers and other additional requests.

Composition of the Board of Directors

*As of March 31, 2020

Classification	Name	Gender	Job Title	Date of Appointment[1)]	Areas of Expertise	Career Highlights
Inside Directors	Kim Sang Woo	Male	• CEO • Finance Committee Chair • Remuneration Committee Chair	Mar. 22, 2018	Business Management	Present) Vice Chairman, Daelim Industrial
	Bae Weon Bog	Male	• CEO • Outside Director Candidate Recommendation Committee Chair • Finance Committee Member	Oct. 16, 2019		Present) Chief Executive of Corporate Management Division, Daelim Industrial
	Nam Yong	Male	• Board Chair	Mar. 22, 2018		Present) General Advisor, Daelim Industrial
Outside Directors	Han Joon Ho	Male	• Outside Director Candidate Recommendation Committee Member • Remuneration Committee Member	Mar. 20, 2015	Management Strategy	Present) Chairman, Samchully
	Lee Choong Hoon	Male	• Audit Committee Chair • Finance Committee Member	Mar. 24, 2017	Law	Present) Partner, CM Law & IP
	Park Chan Hi	Male	• Internal Transactions Committee Chair • Audit Committee Member	Mar. 22, 2018	Management Strategy	Present) Professor, Chung-Ang University School of Business Administration
	Yi Han Sang	Male	• Audit Committee Member • Internal Transactions Committee Member	Mar. 22, 2018	Accounting	Present) Professor, Korea University Business School
	Kim Il Yoon	Male	• Internal Transactions Committee Member • Outside Director Candidate Recommendation Committee Member • Remuneration Committee Member	Mar. 21, 2019	Business Strategy	Present) CEO, PIA

1) Date of initial appoint in case of reappointment

Independence and Expertise of the Board of Directors

Daelim Industrial’s board of directors is composed of a total of 8 directors, including 3 inside directors and 5 outside directors in accordance with Article 542-8 of the Commercial Act on the independence of the board of directors. Outside directors are responsible for ensuring the fairness and transparency of corporate management, providing advice and expertise on major decisions of the company, and overseeing its business practice as advisors and collaborators. To ensure the independence of outside directors, we appoint candidates without any business relationship or conflict of interest for serving as an outside director and who can bring expertise in the field to represent the shareholders and their interests in a balanced way and to pursue sustainable growth. We also organized the Outside Director Candidate Recommendation Committee through which we verify the qualification of the candidates in terms of independence and expertise prior to submitting the agenda to the board meeting and general meeting of shareholders.

Board Committees

Daelim Industrial has organized five committees within the Board of Directors, including the Finance Committee, Audit Committee, Outside Director Candidate Recommendation Committee, Remuneration Committee, and Internal Transactions Committee in accordance with the articles of incorporation and the regulations on the Board of Directors. All committees within the board are subject to their own regulations which are posted on the company website. These rules include the purpose of the committee’s establishment, authorities and responsibilities, activities, composition, qualifications, and appointments. All resolutions of each committee are reported to the board of directors, and the details of their activities are disclosed on the company website and electronic disclosure.

Finance Committee

The Finance Committee is composed of two inside directors and one outside director to manage the company’s financial risks through reviewing and resolving major financial matters assigned in accordance with the board regulations.

Audit Committee

The Audit Committee is made up of all three outside directors with expertise in accounting, finance, and law to ensure its independence. It oversees the execution of duties of directors and management audits the accounting and makes decisions on the appointment of external auditors. In order to support an efficient audit process, the committee discuss audit plans and results of financial statements and the operation status of the indside accounting management system with external auditors.

Outside Director Candidate Recommendation Committee

Composed of one indside director and two outside directors, the Outside Director Candidate Recommendation Committee is responsible for reviewing the eligibility and expertise of candidates and recommending those who can contribute to the values of shareholders.

Remuneration Committee

The Remuneration Committee is made up of one inside director and two outside ones and is responsible for determining the limit of remuneration for registered directors and reviewing the company’s performance evaluation and remuneration system.

Internal Transactions Committee

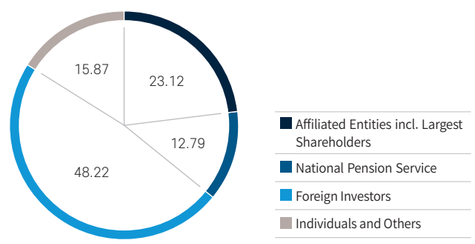
Under the Fair Trade Act, the Internal Trade Committee reviews and makes decisions on the compliance of internal trades with special interest parties. The committee is composed of all three outside directors to ensure its transparency and independence in its roles in oversight.

Shareholding Structure

The largest shareholder of Daelim Industrial is Daelim Corporation (21.67% of common stock), and its related parties including the largest shareholders’ common stock ownership of 23.12%. As of the end of 2019, the National Pension Service owns the second-largest shares of 12.79%, following the largest shareholders and its related parties. Foreign investors account for 48.22% of the total shares. Daelim Industrial makes decisions at the general meeting of shareholders based on the principle of supporting shareholders’ interests in the event of significant changes in the company’s existence and shareholders’ rights, including changes in the articles of incorporation, merger, spinoff, and capital. In addition, we ensure accurate and timely disclosure of our business information using various communication channels such as business reports, corporate disclosure system, and the company website, etc.

Shareholding Structure

Unit : %

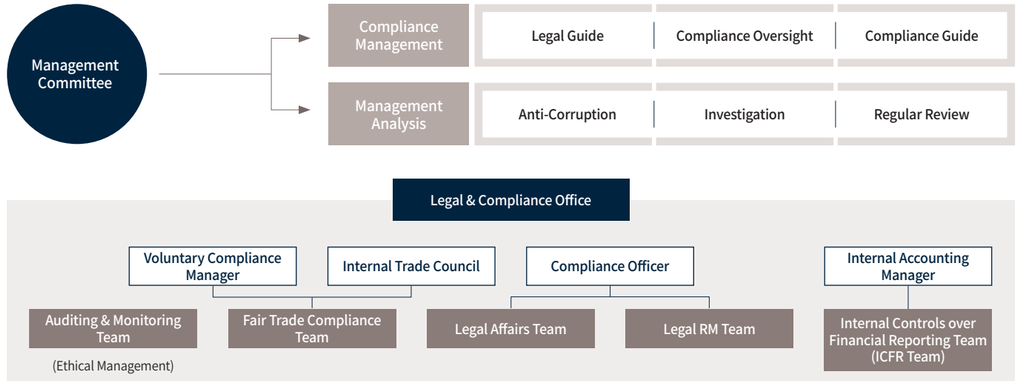


Ethical Management

Ethical Management Organization

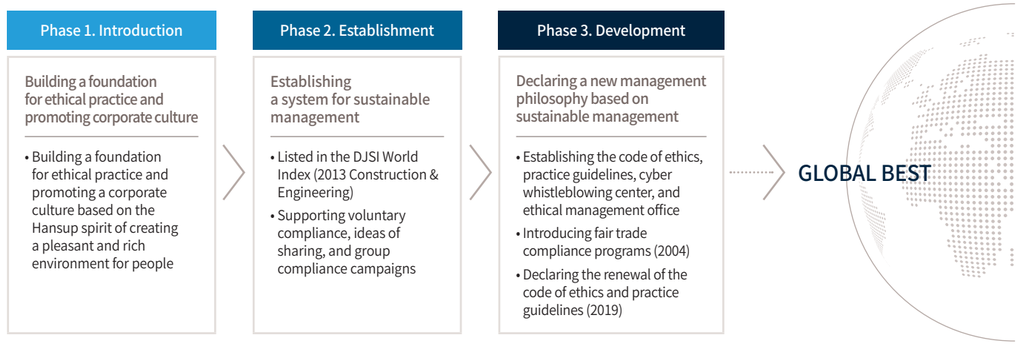
Daelim Industrial takes an organic approach in its ethical management as it operates the Compliance Management Office, which ensures compliance with legal requirements and fair practice in order to fulfill its social responsibilities, and open and ethical management. We organized dedicated teams that are responsible for preventing unethical practice and investigating reported cases while raising awareness and creating an environment to support ethical management.

Organization



Ethical Management System

Since its foundation, Daelim Industrial has been committed to ethical management based on its founding principles of honesty and trust. In 2000, we declared the Ethical Management as our new corporate philosophy and renewed our Code of Ethics to meet the global standards. While complying with the Charter of Ethics, Code of Ethics, and Practice Guidelines, we operate a cyber whistleblowing center and voluntary compliance programs with the goal of promoting "Global Best" and corporate sustainability management.



Establishment and Declaration of the Code of Ethics

After establishing and declaring the Code of Ethics in 2000, we updated its practice guidelines in 2019. The purpose of this is to lay the foundation for continuous growth in which each employee can compete in the global market by internalizing ethical management in response to a growing demand for ethical management. We also share guidelines and code of conduct that can be applied to various situations in the course of job performance and relationships with various stakeholders including customers and subcontractors.

Structure of Ethical Compliance

Expansion of Ethics Training

Our employees become familiar with the roles and duties of individuals and learn how to respond to ethical dilemmas in their jobs through ethics training. The training is divided into online training sessions and group sessions through the Hansup Broadcasting. In order to reflect on the meaning of ethical management, and encourage their participation, our employees reaffirm their commitment by signing the pledge for compliance with the code of ethics.

Ethics Training (2019)

Training Target	No. of Sessions	No. of Participants
New Employees	1	95
New Executive Officers	1	11
Newly Promoted (project based contract ▶ permanent contract)	1	29
Employees (participants other than new employees/executive officers, newly promoted)	10	856
Total	**13**	**991**

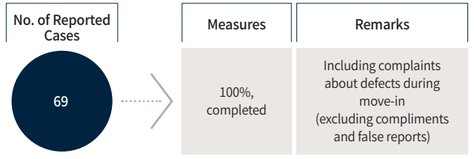
Ethics Training of subcontractors

Our ethical management system is designed to prevent unfair practices when dealing with our subcontractors. The Charter of Ethics, Code of Ethics, and Practice Guidelines require our employees to fill out and submit a "Money/Gift Receipt Form" to the Compliance Office when receiving gifts from subcontractors. We also have the Cyber Whistleblowing Center on our website through which people can report unfair or corruptive practices.

Cyber Whistleblowing Center

Daelim Industrial operates the Cyber Whistleblowing Center to receive reports on fraud and unfair conducts and practices of its employees from stakeholders including employees, subcontractors' employees, customers, and shareholders under the ethical management policies. We have also established a variety of reporting channels to facilitate the reporting process through dedicated e-mail and phone calls. Through this, we identify violations of the code of ethics in advance and take necessary measures to improve and prevent them.

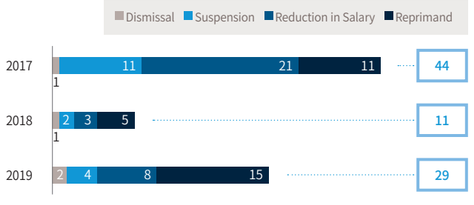
Operation of Cyber Whistleblowing Center (2019)



Ethical Management Audit and Measures

Daelim Industrial takes disciplinary actions against employees' unethical conduct under the rules. In 2019, employees who have committed violations such as verbal harassment, violence, and abuse of one's position and their manager were subject to disciplinary actions according to their severity.

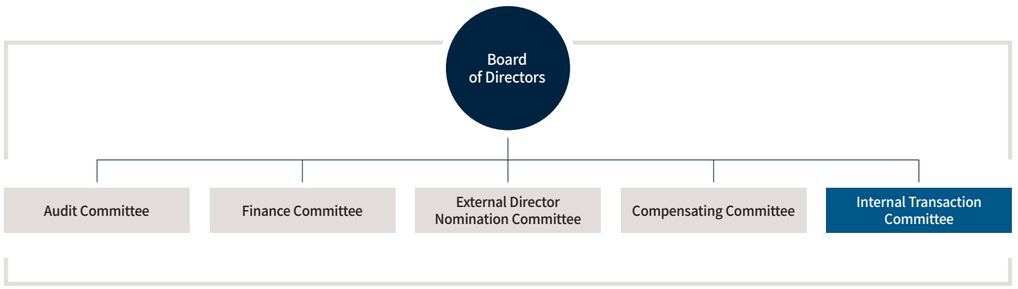
Cases of Unethical Conduct Unit : Case



Compliance Management

Improvement Independence of Fair Trade Promoting Organization

In 2018, Daelim Industrial has established the Internal Transaction Committee as part of the board of directors to ensure transparency and fairness when it comes to internal transaction with affiliates under article 11-2 of Monopoly Regulation and Fair Trade Act (“Fair Trade Act” hereafter). In March 2020, in order to support the independence and role of the Internal Transaction Committee, the committee rules were revised so it was only composed of external directors. And in accordance with the change in rules, the Internal Transaction Committee has secured the authority to approve large-scale internal transactions of more than KRW 5 billion in accordance with the Fair Trade Act and review those transactions with less than KRW 5 billion with affiliates. The department of the Internal Transaction Committee monitors internal transaction with affiliates, such as funds, assets, and securities, and reports major internal transactions to the Committee, such as transactions with related parties, and presents matters that require review at the decision of the Committee. Thus, we are strengthening the monitoring and oversight of internal transactions as we improve the independence of the committee and increase the scope of review.



Change in Internal Transaction Committee Rules

Classification	Before	After	Purpose
Composition	3 or more external directors, 2/3 or more of the total no. of directors	3 or more external directors, all external directors	Improving independence
Matters Requiring Resolution	1. Large-scale internal trade under Article 11-2 of the Fair Trade Act	1. Large-scale internal trade under Article 11-2 of the Fair Trade Act 2. Any trade deemed important even if they are smaller in terms of trade volume as defined in the previous item	Strengthening the review role

Fair Trade Compliance Program

Since the introduction of the “Fair Trade Compliance Program” in 2003, we have encouraged our employees to comply with fair practice in order to take the initiatives and proactive approaches in ensuring transparency. All executives and employees must understand and comply with the “Fair Trade Compliance Program Operation Rules” in relation to their jobs, and designate and comply with the rules related to customers, competitors, and subcontractors, in particular. Furthermore, the Compliance Officer, who is in charge of the Fair Trade Compliance Program, reports the progress (e.g. training, inspection, improvement) to the Audit Committee on a regular basis. Our Fair Trade Compliance Operation System consists of six items to support fair practices based on the “CP Regulations” of the Korea Fair Trade Commission and the “CP Rating Guidelines” of the Korea Fair Trade Mediation Agency.

Daelim Fair Trade Compliance Program Operation System

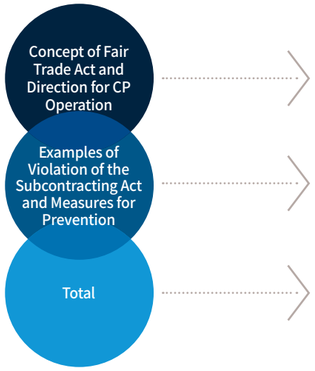
1 CP Establishment	2 CP Dissemination & Promotion	3 CP Operation	4 Evaluation, Feedback
CP Operation Organizational Improvement & Regulation Management	CP Operation Guidelines Establishment & Utilization	CP Training	Monitoring System Operation	Restriction & Incentive	CP Operation Evaluation/ Improvement/Report
1. Declaring CEO’s commitment to compliance 2. Appointing Compliance Officer and authorization at the board meeting 3. CP dedicated organization designation and support 4. CP regulation management and operation planning	1. Establishment/ revision 2. Distribution/ utilization	1. Planning 2. Implementation 3. Evaluation	1. Question/ consultation (preliminary discussion) 2. Inspection (voluntary inspection, CP inspection) 3. Operation of whistleblowing system	1. Implementing restrictions 2. Providing incentives	1. CP operation evaluation and improvement 2. Reporting CP operation

Fair Trade Training

In order to ensure compliance with the government fair trade guidelines and laws, Daelim Industrial has established a process to prevent violations and conducts annual employee training to raise awareness. Since 2019, we have carried out enhanced on-site training on the Fair transaction in Subcontracting Act once a year for all employees at our domestic sites, and from 2020, we have enhanced our training program on the Act on Fair Labeling and Advertising.

2019 Fair Trade Training Performance

Areas of Training



Participants	No. of Training Sessions	No. of Participants
Employees at worksites	13	914
Employees at head office	2	90
Subtotal	**15**	**1,004**
Employees at worksites	129	1,985
Employees at head office	13	403
Subtotal	**142**	**2,388**
Employees at worksites	142	2,899
Employees at head office	15	493
Subtotal	**157**	**3,392**

Promoting Fair Trade of Subcontractors

Quarterly Feedback of Subcontractors for Compliance with the Subcontracting Act

Daelim Industrial collects feedback from small and medium-sized subcontractors on a quarterly basis from the third quarter of 2019 in order to check compliance with ethical practice and identify the risk of violations of the Subcontracting Act. We find improvement regarding legal compliances by investigating the subcontractor's claims on the relevance of facts, and we are committed to creating an environment to promote mutual growth by actively reviewing their inputs.

Posting Subcontracting Act Compliance Rules on Site

Daelim Industrial has established compliance rules to help both worksites and subcontractors to understand and implement the Fair Transactions in Subcontracting Act("Subcontracting Act" hereafter) and to raise employees' awareness by posting the rules in a form of poster and signboard at the worksites. We expect that it will encourage them to report on violations and promote our commitment to compliance and our CP as a result.

Strengthening CP Related to the Act on Fair Labeling and Advertising

Preventing Unfair Labeling & Advertising Activities for Consumers

In response to growing risks in fair practice under the more stringent Act on Fair Labeling and Advertising, we have trained the related departments on the regulations and distributed a checklist for legal compliance. Going forward, we will implement the training at a corporate-wide level and establish a compliance process to manage risk factors in advance.

※ **Our principles on the fair practice for consumers**
: we do not engage in any labeling or advertising practice that may deceive or mislead consumers, and hinder fair practice as a result.

Fair Practice Issues and Improvement

Cases of Unfair Practices and Improvements (Strengthening Oversight on Internal Transaction)

In 2019, Daelim Industrial was subject to sanctions from the Fair Trade Commission for corrective orders, penalties (for Daelim Industrial : KRW 400 million), and prosecution on providing unfair profit to affiliated companies(2019 Fair Transaction Commission Resolution). As a result, we have established the Internal Transaction Committee under the board of directors to monitor trades with affiliates after the announcement of the management reform plan (January 2018) to fundamentally solve this problem. The Internal Transaction Committee is composed of all external directors to ensure its independence and prevents any unfair practice by approving large-scale internal deals and reviewing on major transactions such as funds, assets, and securities. We also review the matters through the Internal Transaction Council composed of heads of departments to ensure the conformity of dealing with products and services with affiliates and implemented a system to sign a contract for only the deals approved.

Cases of Unfair Subcontract Deals and Improvements (Voluntary Correction Process of Subcontract Practice for Win-Win Growth)

The Fair Trade Commission conducted an extensive investigation on all subcontract deals for Daelim Industrial over three years (April 2015 - April 2018) and imposed corrective orders and penalties (KRW 730 million) on unfair subcontract practices[1)] (administrative litigation in progress) (2019 Fair Trade Commission Resolution). Daelim Industrial has promptly corrected all issues pointed out by the Fair Trade Commission to prevent damage to our subcontractors. A substantial and extensive improvement was made, including the establishment of a compliance TFT and the introduction of "Self-assessment and Voluntary Correction Process" for the first time in the industry. As a result, we were introduced as setting an example on the Fair Trade Commission's website in March 2020.

1) **Unfair subcontract deal** : failure to pay subcontractors and fee for billing substitution, delay in issuance of subcontract contracts, etc.

Subcontract Management System Improvement Status (Publication on the website of the Korea Fair Trade Commission, March 5, 2020)

Classification	Areas of Improvement	Description	Date of Improvement
Strengthening internal competency for compliance with the Subcontracting Act	Introducing self-assessment and voluntary correction process	• Implemented the corporate-wide "Self-assessment and Voluntary Correction Process for Compliance with Subcontracting Act" - Implemented the obligations for self-checking in compliance with the Subcontracting Act on site every month - Conducted voluntary correction after reviewing with relevant teams of the head office	April 2019
	Establishing corporate-wide training and inspection process	• Distributed company-wide compliance training manuals • Implemented regular training/inspection on all sites	April 2019
	Organizing corporate-wide TFT for compliance with the Subcontracting Act	• Operated "Subcontracting Act Compliance TFT" - Established as a company-wide organization in January 2019	January 2019
	Implementing a notification system	• Strengthened subcontract management through the "Self Audit" - Operated a system with notification function in relation to document/payment	July 2019
Complying with issuance in writing for fair practice	Improving electronic contract system	• Changed the electronic contract process for "Contract First, Guarantee Later"	December 2018
	Introducing extensive standard subcontract form	• Introduced standard subcontracting form for plant equipment purchase contract - When signing a contract with a domestic SME among international bidding, apply standard construction material contract form at all times	July 2019
	Enhancing work order issuance management	• Distribution of standard work order form and guidelines (incl. samples)	May 2019
Improving payment date	Changing payment date for bill substitute payment date	• Changed the payment date for SMEs regarding construction material - Before) 60-days credit mortgage for entrustment with manufacturing / 90-days for the others - After) 60-days credit mortgage for all SMEs	April 2018
Improving the dispute settlement process	Introducing external assessment process for subcontract settlement	- Established internal procedures for objective dispute settlement to resolve claims before filing with outside agencies (mediators, Fair Trade Commission) - Secured objectivity/expertise through third party assessment	August 2019
	Creating a window for collecting feedback for dispute settlement	• Implemented "Subcontractor's Feedback Collecting for Mutual Growth" - Collect inputs from subcontractors subject to contract on a quarterly basis	August 2019

Risk Management

Risk Management System

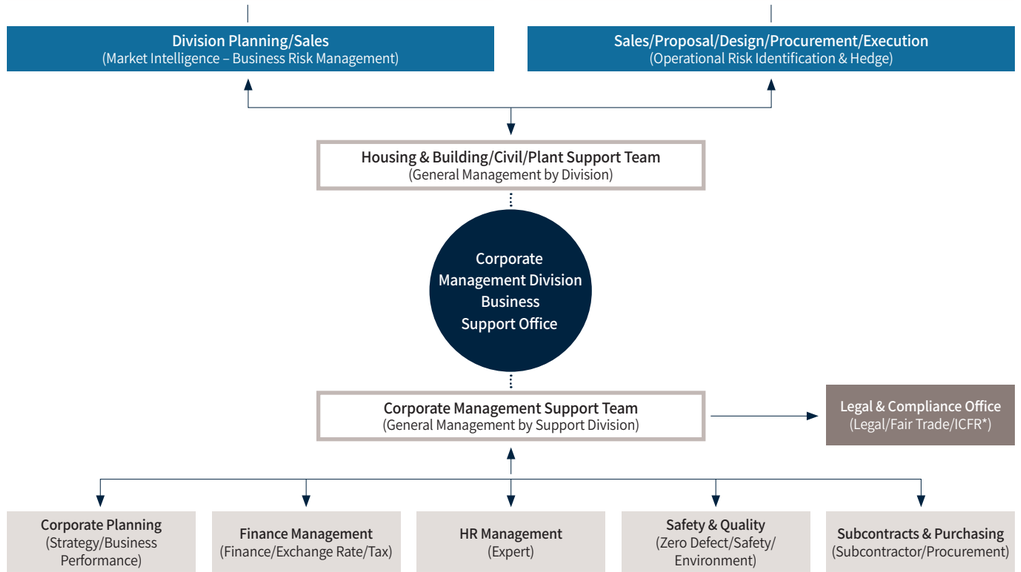
As a Global Developer, Daelim Industrial has established a corporate-wide risk management system to preemptively identify, assess, and respond to various types of risks associated with complex business environments. Risks are classified into Business Risk and Operation Risk for the integration and organic management of project order management and execution. Market intelligence associated with business risks, government policies, various systems, and regulations, external political/economic environment and other factors affecting the business are monitored on a regular basis, while impacts are analyzed with a focus on projects with a high level of risk management. We also manage risks throughout the life cycle of the project in which all operational risks of business performance are identified in advance through integrated risk profiling in the bidding preparation stage, and the hedge plan is reviewed and transferred to the contract/groundbreaking/completion stage.

Re-establishment of risk factors for high quality/volume orders

- Expanding and managing risk factors to improve competitiveness
  - Dividing risk factors into Business Risk and Operation Risk
  - Business risk management : market intelligence collection/analysis, government policy/institutional/legal changes, monitoring of external political and economic environment and analysis of the impact on business
  - Review of risk factors linked to each division

Proactive management of operation risk

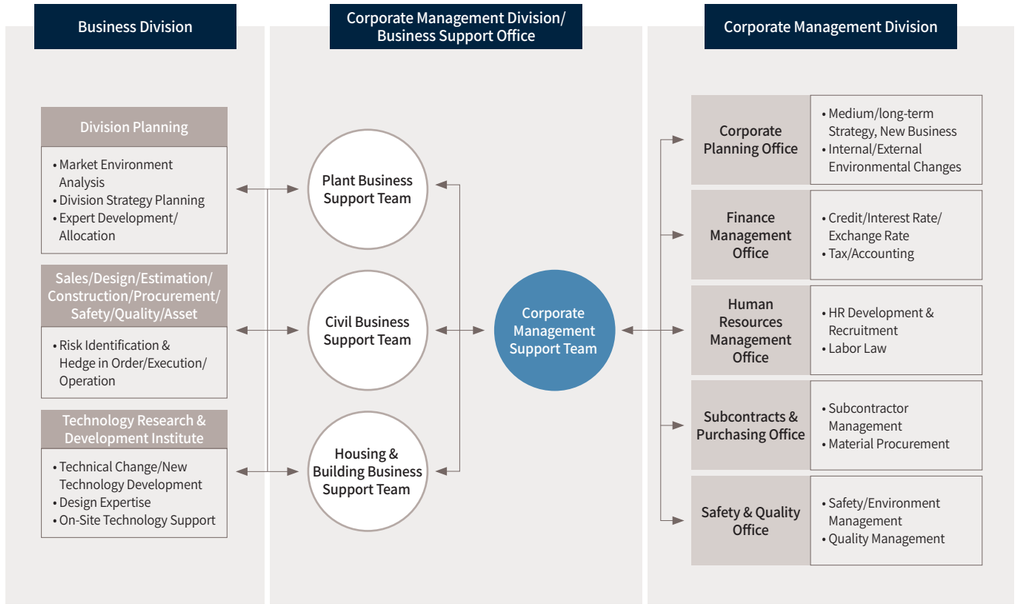
- Support executive decision-making by strengthening RM at each stage of the bidding process
  - Risk identification → assessment → response and hedge planning by stage
- NBO : project review in the order review stage
  - Review of ITB and legal requirements based on AI → AI-based review for risk removal in advance
  - Consideration of preliminary review of macro risks e.g., global trend, environmental change
- Strengthening RMC operation : increasing the participation of experts (adding of RMC members for outsourcing)



*ICFR : Internal Controls over Financial Reporting

Risk Management Organization

Daelim Industrial is implementing a preemptive and systematic risk management process with the Business Support Office of the Corporate Management Division as a risk control tower. The organizations in each sector identify, make decisions, and respond to risks, and the Business Support Office manages the identified areas of risk through integration and disseminates them to relevant organizations to establish response strategies and provide necessary support. We also submit executive reports to the management to facilitate the decision-making process in case of major issues.



Risk Management Activities

Operation of NBO (New Business Opportunity Review)

When selecting projects, we analyze the feasibility of potential project orders by identifying the risks (global/national trends, construction environment) and reviewing our competency (experience, human/technical expertise) to focus our resources.

Operation of RMC (Risk Management Committee)

Through integrated risk profiling management using a checklist, all risks of business operation are identified for review of hedge plans and any unresolved risks are transferred to the contract, commencement, and completion stage by reaching an agreement after collective discussion.

Response to COVID-19

In response to the outbreak of the COVID-19, we established the War-Room led by the CEO to monitor our worksites and create a prompt and efficient response system based on impact analysis and scenario-based strategy.

Appendix

Stakeholder Engagement

Definition of Stakeholder

Daelim Industrial categorizes its stakeholders into various groups - customers, shareholders/investors, subcontractors, employees, local communities, and public sectors - and incorporates their input and feedback into its business operations through communication channels dedicated to each group.

Daelim Industrial Stakeholder Communication Channels

Customers
- Daelim Industrial Website (Cyber Whistleblowing Center)
- e-Pyeonhansesang Customer Contact Center
- Customer Satisfaction Evaluation
- Online Community

Investors & Shareholders
- General Meeting of Shareholders
- Daelim Industrial Website (IR)
- Investor Relations
- DART (Data Analysis, Retrieval, and Transfer System)
- Business Report

Subcontractors
- Shoulder-to-Shoulder
- Excellent Subcontractor Award
- Subcontractor Seminar
- Mutual Growth Subcontractor Communication

Employees
- Hansup Broadcasting
- Hansup Talk Talk
- Hansup Speech Forum
- Hansup Council
- Hansup Clubs
- Grievance-Handling Forum

Local Communities
- Daelim Industrial Website
- CSR Programs (Sharing Happiness/Culture/Love/Hope/Nature)
- Charity Bazaar & Affiliation

Public Sectors
- Industry Conference
- Legal Hearing
- Construction Councils (Construction Association of Korea, Korea Federation of Construction Contractors, etc.)
- Government Projects/Conferences

Key Issues and Expectation by Stakeholder Group

Daelim Industrial conducts surveys to reflect the interests of stakeholders in management and has selected the following issues for the survey. The activities corresponding to each issue are incorporated into business operations.

	Economic Aspect	Environmental Aspect	Social Aspect
Customers	• Quality products/services • Customer satisfaction management	• Eco-friendly technology development and delivery of products	• Customer satisfaction activities • Quality management
Shareholders & Investors	• Capital & investment • Distribution of business performance	• Eco-friendly technology development • Operation of green business	• Ethical management • Technical innovation
Subcontractors	• Mutual growth	• Green purchase, green procurement	• Win-win management
Employees	• Wage and compensation • Increase in productivity	• Practice of Green Habit • New technology/patent registration and award	• HR development • Welfare and benefits • Zero disaster
Local Communities	• Donation	• Eco-friendly construction, biodiversity • Engagement in local environmental preservation	• CSR activities
Public Sectors	• Tax payment	• Compliance with environmental laws	• CP (Compliance Program) activities

Materiality Test

Materiality Test

Daelim Industrial conducted a materiality test to identify the factors that have a significant impact on its sustainability and focus on them. Based on the benchmarking of the industry's reporting issues, media analysis, international standard analysis, and stakeholder surveys, we created a pool of material issues in 2020. We also assessed their materiality in terms of impact on business and stakeholders' interests to be based on the key issues of sustainability management required by international standards and the topics reported in the media and industry.

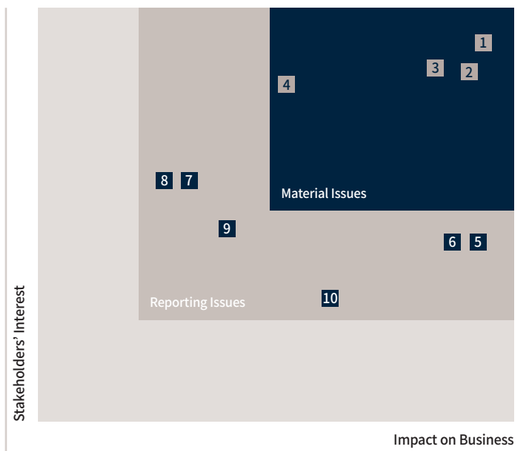
Materiality Test Process

Step 1 Creating a pool of issues	Step 2 Analysis of internal/ external environment	Step 3 Materiality test	Step 4 Identifying core issues	Step 5 Reflection in the report
• Identifying issues through analysis of international and industrial standards e.g., GRI Standards, SDGs, DJSI, ISO26000 • Creating a pool of 46 issues based on the nature of the industry	• External environment analysis based on media research, international standards, external stakeholder surveys, and industry reporting issues • Internal environment analysis based on employee surveys and internal reviews	• Materiality test of each issue based on data analysis of external environments • Materiality assessment based on business impact and stakeholder interest	• Selecting 10 core issues based on the relevance with material issues of internal and external stakeholders, or that are considered to be of high importance among the key growth strategies and status of the company, and important issues in the construction industry	• Table of contents and story layout • Feasibility of core issues

Results of Materiality Test

Based on the sustainability analysis of the internal/external environment, we created a pool of 46 sustainability issues. The materiality test is conducted according to two criteria : relevance to business and stakeholders' interest. In consideration of the test results, we selected four core issues and six reporting issues.

Reporting Issues	GRI	Page
1 New Growth Engines	-	18~21
2 Eco-friendly Products & Services	-	22~23
3 Customer Satisfaction	-	24~25
4 Employee Safety & Health Management	403-2	26~27
5 HR Development & Fair Performance Evaluation	404-2, 404-3	31~32
6 Systematic CSR Activities	413-1	66~71
7 Mutual Cooperation & Win-Win Cooperation	-	46~51
8 Ethical Management	205-2, 205-3	76~77
9 Response to Climate Change	305-1, 305-2, 305-3	22~23, 55~57
10 Social Assessment and Improvement in Selection and Audit of Subcontractors	414-2	48~49



ESG Data — Economic Performance

Consolidated Financial Statements (Unit : KRW)

Classification	2017	2018	2019
Assets			
I. Current Assets	6,727,694,114,720	6,366,648,560,495	6,739,682,949,664
Cash and cash equivalents	1,931,774,710,250	2,134,502,269,006	2,559,152,679,308
Short-term financial instruments	131,997,279,955	372,598,214,324	172,448,545,939
Trade receivables and other accounts receivable	2,524,232,519,010	1,808,822,122,734	1,333,415,713,904
Progress billing due from customers	1,101,262,958,529		
Contract assets		727,583,730,678	1,094,475,375,875
Income taxes receivable	4,899,389,879	10,825,012,049	15,695,664,192
Inventories	718,074,898,913	998,864,024,596	1,120,088,813,774
AFS financial assets	1,459,734,427		
Financial assets at FVTPL		12,508,592,544	74,226,352,632
Financial assets at FVTOCI		593,014,400	855,400,923
Derivative assets	2,326,712,666	950,719,032	23,689,679
Other current assets	267,665,911,091	272,506,117,779	364,825,799,356
Non-current assets held for sale	44,000,000,000	26,894,743,353	4,474,914,082
II. Non-current Assets	6,674,760,761,553	6,467,068,171,071	6,705,541,228,108
Long-term financial instruments	25,668,681,857	24,260,948,595	20,862,123,140
Long-term trade receivables and other accounts receivable	1,356,988,707,875	1,286,390,477,476	1,405,320,547,977
Investments in associates and joint ventures	1,284,957,880,118	1,147,359,508,746	1,337,574,105,369
Available-for-sale (AFS) financial assets	356,266,774,931		
Financial assets at FVTPL		214,977,212,844	195,336,936,414
Financial assets at FVTOCI		52,913,209,125	61,250,177,496
Tangible Assets	2,071,009,572,440	2,070,162,249,991	2,017,340,959,317
Investment property	1,037,729,466,983	1,149,537,069,277	969,633,011,331
Intangible Assets	70,180,924,399	51,707,208,330	66,257,904,353
Right-of-use assets			82,281,579,618
Derivative assets	185,481,539	31,661,745	315,880,135
Deferred tax assets	405,360,295,659	435,259,225,483	527,620,590,375
Other non-current assets	66,412,975,752	34,469,399,459	21,747,412,583
Total Assets	13,402,454,876,273	12,833,716,731,566	13,445,224,177,772

Classification	2017	2018	2019
Liabilities			
I. Current Liabilities	4,903,200,086,381	4,530,043,097,731	4,271,441,266,973
Trade payables and other accounts payable	2,033,344,769,922	1,650,573,484,350	1,700,601,474,919
Progress billing due to customers	1,124,837,920,361		
Contract liabilities		1,346,288,152,862	1,105,327,661,148
Short-term borrowings and current portion of long-term liabilities	957,949,530,037	813,782,755,661	637,522,226,299
Lease liabilities			57,486,367,551
Income taxes payable	151,198,771,853	126,971,727,233	172,182,031,878
Other current provisions	226,502,787,240	370,926,317,292	307,926,663,424
Financial guarantee contract liabilities		25,985,987,578	72,172,368,679
Provision for construction warranties		23,166,756,590	32,625,457,294
Derivative liabilities	12,778,038,690	1,287,407,087	4,789,341,475
Other current liabilities	396,588,268,278	171,060,509,078	180,807,674,306
II. Non-current Liabilities	2,804,948,330,873	2,253,429,532,203	2,437,076,101,329
Long-term trade payables and other accounts payable	118,885,166,665	54,168,947,318	30,343,181,812
Borrowings and debentures	2,196,555,022,912	1,845,592,988,246	1,949,060,039,606
Lease liabilities			72,560,105,554
Net defined benefit liabilities	24,265,876,101	31,200,200,521	47,102,130,677
Provision for construction warranties	146,162,859,543	151,482,988,194	176,595,360,398
Other non-current provisions	41,720,885,878	38,304,671,587	2,030,231,090
Financial guarantee contract liabilities	90,815,700,358	3,843,355,361	
Derivative liabilities	3,144,541,210		
Deferred tax liabilities	162,848,417,692	112,391,788,129	146,490,644,457
Other non-current liabilities	20,549,860,514	16,444,592,847	12,894,407,735
Total Liabilities	7,708,148,417,254	6,783,472,629,934	6,708,517,368,302
Shareholders' Equity			
I. Equity Attributable to Owners of the Company	5,064,252,258,173	5,390,033,587,387	5,937,264,399,032
Capital stock	218,500,000,000	218,500,000,000	218,500,000,000
Other paid-in capital	539,196,723,987	538,858,177,086	538,429,692,928
Retained earnings	4,398,668,907,223	4,792,991,457,618	5,329,942,337,341
Accumulated other comprehensive income	-92,113,373,037	-160,316,047,317	-149,607,631,237
II. Non-controlling Interests	630,054,200,846	660,210,514,245	799,442,410,438
Total Shareholders' Equity	5,694,306,459,019	6,050,244,101,632	6,736,706,809,470
Total Liabilities and Shareholders' Equity	13,402,454,876,273	12,833,716,731,566	13,445,224,177,772

ESG Data — Economic Performance

Consolidated Statements of Income (Unit : KRW)

Classification	2017	2018	2019
I. Sales	12,335,536,232,606	10,984,485,292,300	9,700,078,891,564
II. Cost of Sales	11,139,469,104,954	9,564,323,684,890	8,042,507,694,614
III. Gross Profit	1,196,067,127,652	1,420,161,607,410	1,657,571,196,950
Selling and administrative expenses	650,168,277,198	574,803,461,695	527,450,205,539
IV. Operating Income	545,898,850,454	845,358,145,715	1,130,120,991,411
Other income	301,517,459,718	103,239,470,253	143,841,974,520
Other expense	482,693,320,220	278,071,603,473	503,330,982,887
Financial income	62,348,629,251	112,355,688,538	89,432,917,159
Financial expense	188,526,674,803	148,668,542,454	116,444,778,710
Share of profits of associates and joint ventures	436,783,611,534	260,227,539,688	214,210,866,336
V. Income before Income Tax Expense	675,328,555,934	894,440,698,267	957,830,987,829
Income tax expense	167,329,759,474	216,351,924,323	247,523,326,056
VI. Net Income	507,998,796,460	678,088,773,944	710,307,661,773
VII. Net Income Attributable To:			
Owners of the Group	490,492,987,710	646,382,676,429	664,994,699,070
Non-controlling Interests	17,505,808,750	31,706,097,515	45,312,962,703
VIII. Net Earnings per Share			
Basic and diluted earnings per share of common stock	12,702	16,741	17,223
Basic and diluted earnings per share of preferred stock	12,752	16,791	17,273

Orders Received

		단위	2017	2018	2019
Orders	New Orders (Total)	KRW 100M	75,261	76,825	63,551
	Order Balance (Total)	KRW 100M	246,639	209,220	212,992
Orders_Housing	New Orders	KRW 100M	40,915	51,027	35,725
	Order Balance	KRW 100M	164,020	148,181	140,076
Orders_Civil	New Orders	KRW 100M	9,519	11,597	14,610
	Order Balance	KRW 100M	44,618	42,690	50,912
Orders_Plant	New Orders	KRW 100M	2,781	14,201	13,216
	Order Balance	KRW 100M	38,001	18,349	22,005

Sales

		단위	2017	2018	2019
Sales by Sector	Total Sales	KRW 1M	12,335,536	10,984,485	9,700,079
	Housing Sector	KRW 1M	6,854,483	6,394,884	5,381,292
	Civil Sector	KRW 1M	1,384,840	1,583,983	1,645,154
	Plant Sector	KRW 1M	2,489,469	1,275,596	965,026
	Petrochemical Sector	KRW 1M	1,161,956	1,203,315	1,115,058
	Other Sectors	KRW 1M	444,788	526,707	593,549

R&D Performance

		단위	2017	2018	2019
R&D Investment[1]		KRW 1M	714.3	347.5	343.2
No. of R&D Staffs[2]		Person	69	59	63
R&D Performance	R&D Projects	Project	42	40	39
	Industrial Properties[3]	Property	21	28	27
	Dissertations	Dissertation	31	17	20
	Awards	Award	0	0	0

1) R&D Center
2) As of the end of the year
3) Based on registration in the year

Contribution to Technical Support

Unit	2017	2018	2019
KRW 100M	15.1	20.2	14.8

External Awards Won by R&D Center

Unit	2017	2018	2019
No. of Awards	2	4	3

ESG Data – Environmental Performance*

* Scope of Data : Head Office Building (D-Tower, Susongdong Office Building), Daejeon Branch Office, Daelim Training Research Center, Jeongseon Condominium Site, 145 Organizer's Worksites

E&C Division

Eco-friendly Purchase

		Unit	2017	2018	2019
Green Purchase	Green Product Purchase[1)]	KRW 1M	116,184	176,242	120,726
	Raw Materials Purchase	KRW 1M	1,669,157	1,474,365	977,844
	Rate of Green Product Purchase	%	7.0	12.0	12.3

1) Eco-label Certification/Eco-friendly Building Materials Information/Good Recycled Mark, recycled aggregate, and renewable energy facilities

Sales in the Eco-friendly Sector

		Unit	2016	2017	2018	2019
Eco-friendly Design & Product Sales	Eco-friendly Design & Product Sales[1)]	KRW 1M	2,644,755	5,784,747	4,412,556	2,521,529
	Total Sales of Domestic E&C Projects	KRW 1M	5,480,265	11,382,247	9,703,248	4,842,060
	Rate of Eco-friendly Design & Product Sales	%	48.0	50.8	45.5	52.1

1) Eco-friendly transportation, environmental business, eco-friendly energy business, and eco-friendly certified buildings

Violations of Environmental Laws

	Unit	2017	2018	2019
Total Fine	KRW	0	0	0
No. of Claims	Claim	0	0	0
No. of Non-financial Sanctions	Sanction	0	0	0

GHG Emissions

		Unit	2016	2017	2018	2019
Total Emissions		ton CO_2-eq	299,355	282,627	249,729	198,450
Direct Emissions	Stationary Combustion	ton CO_2-eq	13,544	17,328	13,161	7,904
	Mobile Combustion	ton CO_2-eq	11,643	11,609	10,544	9,065
Indirect Emissions	External Electricity & Steam	ton CO_2-eq	49,554	61,088	71,068	38,862
Other Indirect Emissions	Equipment (Direct Operation, Subcontractors)	ton CO_2-eq	224,614	192,602	154,956	142,619
Scope 1		ton CO_2-eq	25,187	28,936	23,705	16,969
Scope 2		ton CO_2-eq	49,554	61,088	71,068	38,862
Total Worksite Emissions (Scopes 1+2)		ton CO_2-eq	10,675	79,047	83,728	46,782
Total Building Emissions (Scopes 1+2)		ton CO_2-eq	64,066	10,978	11,045	8,984

Energy Consumption

	Unit	2016	2017	2018	2019
Total Energy Consumption	TJ	4,558	4,374	3,977	3,149
Total Worksite Consumption	TJ	4,346	219	217	175
Total Building Consumption	TJ	212	4,156	3,759	2,974
Energy Intensity	TJ/KRW100M	0.046	0.035	0.036	0.032

Water Consumption

	Unit	2016	2017	2018	2019
Waterworks	ton	903,432	1,199,793	1,030,272	546,655
Underground Water	ton	270,998	293,094	256,075	171,813
River Water	ton	461,493	612,881	539,443	266,325
Recycled Water	ton	415,104	448,949	357,427	249,592
Total Consumption	ton	2,051,027	2,554,717	2,183,217	1,234,385
Intensity (against Sales)	ton/KRW100M	27.1	25.4	27.1	19.8
Rate of Recycled Water Consumption	%	20.2	17.6	16.4	20.2

Critical Hazardous Chemical Leaks

	Unit	2016	2017	2018	2019
No. of Incidents	Case	0	0	0	0
Amount of Leak	ton	0	0	0	0

Waste Production

	Unit	2016	2017	2018	2019
Waste Produced (Capacity, Domestic)	ton	796,635	919,695	924,647	1,078,280
Amount Recycled	ton	732,904	851,010	871,119	1,025,015
Landfill/Incineration	ton	63,731	68,685	53,528	53,265
Recycling Rate	%	92.0	92.5	94.2	95.1

Expense & Investment for Environmental Protection

		Unit	2017	2018	2019
Environmental Protection Expense/ Investment	Total Expense/Investment for Environmental Protection[1)]	KRW 1M	8.05	9.93	10.82
	Environmental Investment (Environmental R&D)[2)]	KRW 1M	2,319	2,430	2,403
	Environmental Expense[3)]	KRW 1M	18	18	24
	Total	KRW 1M	2,345	2,457	2,438
Environmental Training (Head Office)	Training Hours	Hour	6,126	3,567	3,554
	No. of Training Participants	Person	4,855	2,929	2,430
	Training Hours per Person	Hour/Person	1.26	1.22	1.46
Environmental Training (Worksite)	Training Hours	Hour	111,161	85,114	74,233
	No. of Training Participants	Person	7,963	6,881	6,177
	No. of Training Participants (Subcontractors)	Person	93,416	78,671	45,127
	Total	Person	101,379	85,552	51,304
	Training Hours per Person	Hour/Person	1.10	0.99	1.45

1) Sharing Cleanliness
2) Environmental R&D, Labor Cost
3) Certification Cost (ISO, GHG)

ESG Data – Environmental Performance*

* Scope of Data: Head Office Building and 5 Plants (LHDPE /HDPE/C4/PB/Jeonju Plant)

Petrochemical Division

Violations of Environmental Laws

	Unit	2017	2018	2019
Total Fine	KRW	0	0	0
No. of Claims	Claim	0	0	0
No. of Non-financial Sanctions	Sanction	0	0	0

GHG Emissions

		Unit	2016	2017	2018	2019
Total Emissions		ton CO_2-eq	204,325	231,196	217,587	228,769
Direct Emissions	Stationary Combustion	ton CO_2-eq	6,553	6,497	6,357	11,034
	Mobile Combustion	ton CO_2-eq	984	986	477	364
Indirect Emissions	External Electricity & Steam	ton CO_2-eq	196,788	223,713	210,753	217,371
Scope 1		ton CO_2-eq	7,537	7,483	6,834	11,398
Scope 2		ton CO_2-eq	196,788	223,713	210,753	217,371
Total Worksite Emissions (Scopes 1+2)		ton CO_2-eq	202,080	229,215	215,598	227,346
Total Building Emissions (Scopes 1+2)		ton CO_2-eq	2,245	1,981	1,989	1,423

Energy Consumption

	Unit	2016	2017	2018	2019
Total Energy Consumption	TJ	3,987	4,722	4,455	4,508
Total Worksite Consumption	TJ	3,942	4,467	4,200	4,309
Total Building Consumption	TJ	45	255	255	199
Energy Intensity	TJ/KRW100M	0.040	0.038	0.041	0.046

Water Consumption

	Unit	2016	2017	2018	2019
Total Annual Water Consumption	ton	1,261,612	1,015,065	980,390	1,164,350

Critical Hazardous Chemical Leaks

	Unit	2016	2017	2018	2019
No. of Incidents	Case	0	0	0	0
Amount of Leak	ton	0	0	0	0

Waste Production

	Unit	2016	2017	2018	2019
Waste Produced (Capacity, Domestic)	ton	4,840	6,344	7,374	6,463
Amount Recycled	ton	2,197	2,810	4,206	3,306
Recycling Rate	%	45	44	57	51

Expense & Investment for Environmental Protection

		Unit	2017	2018	2019
Total Expense/Investment for Environmental Protection		KRW 1M	189	800	135
Environmental Training	Training Hours	Hour	898	4,738	1,636
	Training Participants[1)]	Person	243	477	352

1) Personnel Training : 16 hours/2 years, Technical Training : 32 hours/3 years, Employee Training : 2 hours/1 year

Air Pollutant Emissions at 4 Worksites

Site	Class	Pollutant	Facilities	Legal Limit	Emission	Remarks
HDPE	Class 1 (Special)	Dust	Bag Filter, Cyclone	50 ㎎/Sm³	10 ㎎/Sm³ or less	No base charge if emissions is less than 30% of the legal limit
LHDPE	Class 3 (Special)	Dust	Bag Filter, Cyclone			
PB	Class 5	Hydrocarbon	Flare Stack (YNCC 1)	No pollutant emissions through flare stack		
C4	Class 5	Hydrocarbon	Flare Stack			

Water Pollutant Discharge at 4 Worksites

Water Pollutant	Yeosu National Industrial Complex Limit of Inflow from Wastewater Treatment Facilities	Unit	Result of Water Quality Inspection on Effluents from Wastewater Treatment Facilities (2019)	
			LHDPE/PB/C4	HDPE
BOD	Raw Wastewater	mg/L	31.9	7.70
COD	Raw Wastewater	mg/L	92.9	35.0
SS	Raw Wastewater	mg/L	48.0	8.60
T-N	120mg/L or less	mg/L	63.0	8.80
T-P	Raw Wastewater	mg/L	1.69	0.12
n-hexane	20mg/L or less	mg/L	0.70	0.56
Phenol	20mg/L or less	mg/L	0.04	0.03

ESG Data – Social Performance

Employee Data

			Unit	2017	2018	2019
New Recruitment	Gender	Male	Person	114	199	131
		Female	Person	19	16	26
Socially Vulnerable Population	Disabilities	No. of Persons	Person	42	61	45
		Percentage	%	0.59	0.94	0.76
	Female	No. of Persons	Person	986	893	803
		Percentage	%	13.84	13.74	13.50
	Veteran Employment	No. of Persons	Person	103	99	121
		Percentage	%	1.45	1.52	2.03
Region	Domestic		Person	6,789	6,175	5,647
	Overseas		Person	336	324	299

Diversity in Workplace

		Unit	2017	2018	2019
Male		Person	6,139	5,606	5,143
Female		Person	986	893	803
Elderly		Person	424	396	332
Veteran		Person			121
Foreigner		Person	40	45	41
Disabled		Person	42	61	45
Employment Status	Total	Person	7,125	6,499	5,946
	Executives	Person	109	112	88
	Permanent Position	Person	3,770	3,738	3,551
	Temporary Position	Person	3,246	2,649	2,307

Managerial Positions

		Unit	2017	2018	2019
Female Managers	Total No. of Female Managers (Manager or Higher Position)	Person	79	82	89
	Female Executives	Person	1	1	2
Total	Total No. of Positions (Manager or Higher Position)	Person	2,371	2,475	2,490
	Total No. of Executives	Person	107	109	84

Turnover (Retirement) Status

		Unit	2017	2018	2019
	Voluntary Turnover	%	17.60	7.13	7.27
	Turnover from Permanent Positions	%	5.00	5.46	8.27
Turnovers (Retirees)[1]	Total	Person	1,515	1,659	1,280
	Voluntary Retirement	Person	-	-	142
	Retirement by Age Limit	Person	-	956	686
	Involuntary Retirement (e.g. Dismissal, Disciplinary Action)	Person	-	702	2
	Others (Personal Reason, Parental Care, Education, Employed by Other Companies)	Person	-	1	450
Gender	Male	Person	1,183	1,270	926
	Female	Person	332	389	354
Age	Less than 30	Person	243	198	189
	30-50	Person	716	752	608
	Older than 50	Person	556	709	483

1) Permanent Positions

Maternity Leave

		Unit	2017	2018	2019
No. of Employees on Maternity Leave	Total	Person	156	158	190
	Male	Person	137	144	167
	Female	Person	19	14	23
No. of Employees Returning After Maternity Leave	Total	Person	156	158	190
	Male	Person	137	144	167
	Female	Person	19	14	23
Return Rate (No. of Employees Returning/on Leave)	Total	%	100	100	100
	Male	%	100	100	100
	Female	%	100	100	100

ESG Data — Social Performance

Parental Leave (Permanent Positions)

		Unit	2017	2018	2019
No. of Employees on Parental Leave	Total	Person	30	396	63
	Male	Person	15	382	43
	Female	Person	15	14	20
No. of Employees Returning After Parental Leave	Total	Person	30	389	60
	Male	Person	15	373	40
	Female	Person	15	14	20
Return Rate (No. of Employees Returning/on Leave)	Total	%	100	98	95
	Male	%	100	98	93
	Female	%	100	100	100
No. of Employees Working for More than 12 Months After Parental Leave	Total	Person	25	333	59
	Male	Person	12	320	39
	Female	Person	13	13	20
Return Rate (Worked More than 12 Months/ No. of Employees Returning)	Total	%	83	84	94
	Male	%	80	84	91
	Female	%	87	93	100

Ethical Management

		단위	2017	2018	2019
Offline Compliance Training[1]	No. of Offline Training Participants	Person	390	3,132	2,388
Violation of Fair Trade	No. of Violations	Case	-	1	2
	Penalty	KRW 1M	-	9	1,138

1) Enhanced subcontract training from 2018

Mutual Growth

			Unit	2017	2018	2019
Subcontractors	Total No. of Subcontractors		Company	4,404	3,785	3,321
	Total Purchase		KRW 100M	67,008	52,357	46,098
Major Subcontractors	No. of Major Subcontractors		Company	2,118	1,881	1,349
	Purchase from Major Subcontractors	Total	KRW 100M	57,970	42,034	37,547
		Percentage	%	86.5	80.3	81.5
Mutual Growth Fund & Loan (Loan/Fund Raised)			KRW 100M	166/500	248/500	257/500
Direct Fund Support and Executed (Executed/Fund)			KRW 100M	235/235	490/500	495/500
Subcontractor Training	Job Training		Person	207	188	97
	Safety Training		Person	88	84	617
No. of Subcontractors Invited to Mutual Growth Seminar			Company	30	45	300

E&C Division

Site Inspection for Risk Management

Unit	2017	2018	2019
No. of Inspections	3,021	2,847	3,693

Industrial Accidents

		Unit	2017	2018	2019
LTIR (Lost-time Injury Rate, Domestic)		%	0.19	0.55	Not Estimated[1]
No. of Deaths per 10,000 (Domestic)		%	0.82	0.55	0.87
No. of Full Time Employees		Person	53,444	41,413	27,749
No. of Victims	Domestic	Person	72	235	144
	Overseas	Person	5	5	4
LTIR (Lost Time Injury Rate) (Overseas)			0.349	0.029	0.038

1) Change in industrial accident indicators reflected in the preliminary review (PQ) for tender : (Before) LTIR → (After) No. of Deaths per 10,000

Safety Training

		Unit	2017	2018	2019
Domestic	No. of Participants	Person	8,431	1,619	3,711
	Training Hours	Hour	25,776	18,176	51,497
	Subcontractor Cooperation Safety Program	Company	18 (Subcontractor Safety Point System)	18 (Subcontractor Safety Point System)	142 (Subcontractor CEO Seminar) 16 (Subcontractor Safety Management Performance Sharing System)

Petrochemical Division

Site Inspection for Risk Management

Unit	2017	2018	2019
No. of Inspections	7	12	9

Industrial Accidents

		Unit	2017	2018	2019
No. of Deaths per 10,000 (Domestic)		%	0	0	0
Full-Time Employees		Person	364	368	392
Victims	Domestic	Person	0	1	1
	Overseas	Person	-	-	-
Intensity		%	0	0.07	0.04

Safety Training

		Unit	2017	2018	2019
Domestic	No. of Participants	Person	502	464	432
	Training Hours	Hour	25.5	18.5	15
	Subcontractor Cooperation Safety Program	Company	6	7	7

Awards & Memberships

Awards

Awards	Hosts/Organizers
The 13th Asia Business Daily Apartment Brand Awards (Design Category)	The Asia Business Daily
2019 The Korea Economic Daily Business Well-being Awards (Customer Satisfaction Category)	The Korea Economic Daily
2019 The Korea Economic Daily Housing Culture Awards (Eco-Friendly Grand Prize)	The Korea Economic Daily
2019 Eco-friendly Construction Industry Awards (Eco-friendly Complex Category)	JoongAng Ilbo
Ministry of Land, Infrastructure and Transport Award (Transparent and Fair Subcontract)	Ministry of Land, Infrastructure, and Transport
2019 Aju Economic Daily Construction Awards (Complex Category)	Aju Economic Daily
2019 Smart Construction Awards (Residential Innovation Category)	E-Today
The 10th Korea Green Construction Awards	Seoul Shinmun, Ministry of Land, Infrastructure, and Transport
2019 Korea Construction Industry Awards (Overseas Construction Category)	EDAILY
2019 Korea Construction Awards	Ministry of Land, Infrastructure, and Transport
The 15th Korea Civil Engineering and Construction Technology Awards : Sepoong Bridge	Ministry of Land, Infrastructure, and Transport
The 15th Construction Environment Management Best Practice Contest Minister of Environment Award	Ministry of Land, Infrastructure, and Transport/Ministry of Environment
2019 E-Daily Construction Industry Awards	EDAILY

Memberships

KOSHA 18001 Council	Korea Fire Facility Association	The Korean Structural Engineers Association	Korea Electrical Contractors Association
Korea Mechanical Construction Contractors Association	Korea Facilities Maintenance Association	The Korean Professional Engineers Association	Korea Electric Engineers Association
Construction Association of Korea	Korean Society of Steel Construction	Korean Society of Road Engineers	Korea Information and Communication Contractors Association
Korea Electric Association	Construction Management Association of Korea	Korea International Trade Association	Korea Housing Association
Korea Specialty Contractors Association	Korea Construction and Transport New-Technology Association	Korea Listed Companies Association	Korea Concrete Institute
Korean Society of Civil Engineers	Korea Construction Engineers Association	Korea Fire Safety Institute	Korea Plant Industries Association
Seoul Chamber of Commerce and Industry	Korea Environment Construction Association	Korea Engineering and Consulting Association	International Contractors Association of Korea

UN SDGs

UN SDGs

Daelim Industrial supports the SDGs (Sustainable Development Goals) proposed by the UN in 2015, and engages in activities to promote each goal. By aligning our strategies with the goals, we will contribute to the UN SDGs, a global framework to bring a sustainable future.

SDGs indicator			Activities	Page
Goal 1		End poverty in all its forms everywhere	Sharing Love Group	70
Goal 3		Ensure healthy lives and promote well-being for all at ages.	Safety & Health Management	34~39
Goal 4		Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.	Sharing Wish, Scholarship Support Group	69, 71
Goal 5		Achieve gender equality and empower all women and girls.	- Promoting diversity in workplace by offering equal opportunities - Family-friendly practice	32
Goal 6		Ensure availability and sustainable management of water and sanitation for all.	Water Resource Management	61
Goal 7		Ensure access to affordable, reliable, sustainable and modern energy for all.	Response to climate change through eco-friendly design and renewable energy	57~58
Goal 8		Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.	Talent Development and Recruitment	31
Goal 11		Make cities and human settlements inclusive, safe, resilient, and sustainable.	Facility Repair Group	70
Goal 12		Ensure sustainable consumption and production patterns.	Support for sustainability in supply chain	48
Goal 13		Take urgent action to combat climate change and its impacts by regulating emissions and promoting developments in renewable energy.	Eco-friendly Construction, Response to Climate Change	22~23, 54~58
Goal 15		Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desert-ification, and halt and reverse land degradation and halt biodiversity loss.	Preserving Biodiversity	61
Goal 16		Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.	Ethical Management	76~77

SASB

Sustainability Topics & Accounting Indicators

Topic	Accounting Indicators	Code	Daelim Industrial Status
Environmental impact due to project development	No. of violations of environmental permits, standards and regulations	IF-EN-160a.1	No violation
	Discussion of environmental risk assessment and management processes related to project design, layout, and construction	IF-EN-160a.2	Assess the environmental impact of the project to support eco-friendly design and construction.
Employee health and safety	(1) Total Recordable Incident Rate (TRIR) and (2) (a) permanent employee (b) temporary employee death rate	IF-EN-320a.1	The TRIR is 0.3099, and the death rate of employees with permanent and temporary jobs is 0.
Impact of building and infrastructure in value chain	(1) No. of third-party multipurpose sustainability standard certified projects, and (2) No. of active certification-driven projects	IF-EN-410a.1	14 Green Building Certifications
	Discussion of the process for incorporating energy and water efficiency into project planning and design	IF-EN-410a.2	To improve energy efficiency, we incorporate high-performance insulation, external insulation systems, high-performance windows, high-efficiency facilities, and LEDs into the design as well as solar, photovoltaic, geothermal, and fuel cells. The key technology includes high-performance shell design. To promote water saving and efficiency in use, we reflect the analysis of the hydraulic sluice gate around the project in the design, and apply rainwater infiltration blocks and the installation of early rainwater treatment facilities. The key technologies include iron oxide dynamic membrane filtration seawater desalination.
Impact on climate	Amount of backlog of (1) hydrocarbon projects, and (2) renewable energy projects[1]	IF-EN-410b.1	Backlog of hydrocarbon projects e.g. thermal power generation : KRW 282.3 billion Backlog of renewable energy projects e.g. water recycling, hydro/wind power generation : KRW 289.8 billion
	Amount of backlog cancellations related to hydrocarbon projects	IF-EN-410b.2	None
	Amount of backlog of non-energy projects related to climate change mitigation	IF-EN-410b.3	Backlog of arboretum and green space development projects : KRW 11.2 billion
Business ethics	For the Transparency International's lowest ranked countries in terms of Corruption Perceptions Index[2]: (1) no. of active projects, and (2) backlog	IF-EN-510a.1	There are no projects and backlogs in the bottom 20 countries in terms of the Corruption Perception Index.
	Total financial loss due to (1) Bribery or corruption, and (2) anti-competitive practice lawsuits[3]	IF-EN-510a.2	There is no financial loss due to bribery or corruption-related lawsuits and a fine of KRW 9 billion in two lawsuits was imposed.
	Description of policies and practices for (1) Bribery and corruption, and (2) prevention of anti-competitive practice in the bidding process	IF-EN-510a.3	We operate an ethical management organization and share ethics charter, code of ethics and practice guidelines. All employees sign a pledge for compliance with code of ethics as part of its internalization. We organized the Internal Trading Committee and conduct fair trade compliance programs and training.

1) Remaining orders (number or value of projects not completed during the reporting period)
2) Somalia, North Korea, Myanmar, Afghanistan, Uzbekistan, Turkmenistan, Sudan, Iraq, Haiti, Venezuela, Equatorial Guinea, Burundi, Libya, DR Congo, Chad, Angola, Yemen, Kyrgyzstan, Guinea, Cambodia
3) Brief description of the nature, circumstances and corrective actions taken as a result of financial loss

Action Indicators

Action Indicators		Code	Daelim Industrial's Response
No. of Active Projects[1]	Set Amount	IF-EN-000.A	158 projects undertaken
No. of Assigned Projects[2]	Set Amount	IF-EN-000.B	N/A
Total Backlog[3]	Set Amount	IF-EN-000.C	KRW 21.3 trillion

1) Active projects are buildings and infrastructure projects under development that provide services as of the end of the reporting period, including, but not limited to, design and construction stages. Projects assigned during the reporting period are excluded from the active projects.
2) Assigned projects are defined as projects that were deemed to be completed during the reporting period and ready for servicing. These projects only include those provided with construction services.
3) Backlog is defined as the value of the projects not completed as of the end of the reporting period (i.e., revenue expected in the future but not recognized under the contract), or in consistency with the existing backlog. It can also be referred to as incomplete performance obligation or log with deferred revenue. The scope of disclosure is limited to building and infrastructure projects for which the company provides engineering, construction, construction, design, installation, planning, consulting, repair and/or other similar services.

TCFD

In response to climate change, Daelim Industrial is committed to ensuring compliance with regulatory requirements, energy efficiency, and setting carbon reduction target. We monitor global and regional climate change trends and their impact on companies under the management of the Quality Environment Team, led by the Green Committee. The Quality and Environment Team reviews and reports on GHG emissions, progress made towards medium/long-term goals, and energy-saving activities. In consideration of the potential impact of climate change risks on our finance, we disclose the following risks and opportunities using the recommendations for TCFD :

TCFD Recommendation		Response	CDP Alignment
Governance	Disclosure of the board's management and supervision on the risks and opportunities related to climate change	2020 Sustainability Report p.52 (Response to Climate Change)	C1.1
	Disclosure of the management's roles in managing and assessing the risks and opportunities related to climate change	2020 Sustainability Report p.52 (Response to Climate Change)	C1.2
Strategy	Disclosure of the risks and opportunities related to climate change identified from a short/medium/long-term perspective	2020 Sustainability Report p.52 (Response to Climate Change)	C2.1, C2.2, C2.3, C2.4, C3.1
	Disclosure of impact of the risks and opportunities on business, strategy and financial plans	2020 Sustainability Report p.52 (Response to Climate Change)	C2.3, C2.4
	Disclosure of strategy's flexibility in consideration of climate change scenarios including those with 2°C or less	2020 Sustainability Report p.50~55 (Response to Climate Change)	C3.1
Risks & Opportunities	Disclosure of the organization's process to identify and assess climate change risks	2020 Sustainability Report p.52 (Response to Climate Change)	C1.2, C2.2
	Disclosure of the organization's processes to manage climate change risks	2020 Sustainability Report p.52 (Response to Climate Change)	C2.2
	Disclosure of how the processes for identifying, evaluating and managing climate change risks are integrated into the organization's overall risk management	2020 Sustainability Report p.52 (Response to Climate Change)	C2.2
Reduction Target	Disclosure of indicators used to assess climate change risks and opportunities in line with management strategies and risk management processes.	2020 Sustainability Report p.52 (Response to Climate Change)	C4.1
	Disclosure of Scopes 1, 2 and 3 GHG emissions and related risks	2020 Sustainability Report p.53~54 (Response to Climate Change)	C6.1, C6.3, C6.5
	Disclosure of the goals set to manage climate change risks and opportunities and their performance	2020 Sustainability Report p.51 (Response to Climate Change)	C4.1

GRI Standards Index

General Standards

Topic	Index	Indicator	Page	Remarks
Organizational Profile	102-1	Name of the organization.	6	
	102-2	Activities, brands, products, and services	6~15	
	102-3	Location of headquarters	2, 6	
	102-4	Location of operations	6~7	
	102-5	Ownership and legal form	75	
	102-6	Markets served	6~15	
	102-7	Scale of the organization	6~7, 88~91, 96	
	102-8	Information on employees and other workers	96	
	102-9	Supply chain	46~51	
	102-10	Significant changes to the organization and its supply chain	-	No significant incidents
	102-11	Precautionary Principle or approach	82~83	
	102-12	External initiatives	101~103	
	102-13	Membership of associations	100	
Strategy	102-14	Statement from senior decision-maker	4~5	
Ethics and Integrity	102-16	Values, principles, standards, and norms of behavior	7, 31, 35, 67, 74	
Governance	102-18	Governance structure	74~75	
Stakeholder Engagement	102-40	List of stakeholder groups	86	
	102-41	Collective bargaining agreements	33	100%
	102-42	Identifying and selecting stakeholders	86	
	102-43	Approach to stakeholder engagement	86~87	
	102-44	Key topics and concerns raised	86	
Reporting Practice	102-45	Entities included in the consolidated financial statements	Business Report	
	102-46	Defining report content and topic Boundaries	86~87	
	102-47	List of material topics	86~87	
	102-48	Restatements of information	2	
	102-49	Changes in reporting	2	
	102-50	Reporting period	2	
	102-51	Date of most recent report	2	
	102-52	Reporting cycle	2	
	102-53	Contact point for questions regarding the report	2	
	102-54	Claims of reporting in accordance with the GRI Standards	104~105	
	102-55	GRI content index	104~105	
	102-56	External assurance	106~107	

Topic-Specific Standards

Topic	Index	Indicator	Page	Remarks
Occupational Health and Safety	103-1~3	Management Approach	40	
	403-1	Occupational health and safety management system	35	

Other Standards

Topic	Index	Indicator	Page	Remarks
Economic Performance	201-1	Direct economic value generated and distributed	88, 89	
Indirect Economic Impacts	203-1	Infrastructure investments and services supported	66~71	
Anti-corruption	205-2	Communication and training about anti-corruption policies and procedures	76~77	
	205-3	Confirmed incidents of corruption and actions taken	76~77	
Anti-competitive Behavior	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Business Report	
Energy	302-1	Energy consumption within the organization	92, 94	
Water and Effluents	303-3	Water withdrawal	93	
Emissions	305-1	Direct (Scope 1) GHG emissions	55~57, 92, 94	
	305-2	Energy indirect (Scope 2) GHG emissions	55~57, 92, 94	
	305-3	Other indirect (Scope 3) GHG emissions	55~57, 92	
	305-5	Reduction of GHG emissions	55-57	
Effluents and Waste	306-1	Water discharge by quality and destination	95	
	306-2	Waste by type and disposal method	62, 91, 93, 95	
Environmental Compliance	307-1	Non-compliance with environmental laws and regulations	Business Report	
Employment	401-1	New employee hires and employee turnover	96, 97	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	31~33	
	401-3	Parental leave	98	
Training and Education	404-2	Programs for upgrading employee skills and transition assistance programs	32	
	404-3	Percentage of employees receiving regular performance and career development reviews	31	
Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	32, 96	
Non-discrimination	406-1	Incidents of discrimination and corrective actions taken		No significant incidents
Child Labor	408-1	Operations and subcontractors at significant risk for incidents of child labor		No significant incidents
Forced or Compulsory Labor	409-1	Operations and subcontractors at significant risk for incidents of forced or compulsory labor		No significant incidents
Rights of Indigenous Peoples	411-1	Incidents of violations involving rights of indigenous peoples		No significant incidents
Local Communities	413-1	Operations with local community engagement, impact assessments, and development programs	68~71	
Customer Health and Safety	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services		No significant incidents
Socioeconomic Compliance	419-1	Non-compliance with laws and regulations in the social and economic area	Business Report	

Third-party Assurance Statement

To Management and Stakeholders of Daelim Corporation,

Korea Sustainability Investing Forum (hereinafter "KoSIF") was commissioned by Daelim Group (hereinafter "Company") to provide an independent assurance statement for its 'Daelim Group Sustainability Report 2020' (hereinafter "the report"), and hereby presents the following third-party assurance statement.

Responsibility and Independence

Other than providing this independent assurance statement, KoSIF does not hold any interest in the Company that may affect the independence and fairness of the verification. Although this assurance statement is written for management and stakeholders of Daelim Group, KoSIF expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Assurance Statement.

Assurance Criteria and Principles

The verification procedure is in accordance with

- Type I, Moderate Level used in AA1000AS (2008),
- The three accountability principles (inclusivity, materiality, responsiveness) in AA1000APS (2008), and
- Core option of GRI Standard Guideline.

Assurance Process and Limitations

After KoSIF carried out an initial review based on publicly available IR materials and supporting data obtained directly from the Company, an on-site audit was implemented and the scope of it limited to the headquarter of the company. KoSIF verified the basis of claims related to the environmental, social, and economic data listed in the report by checking their consistency and conducting sampling inspection. KoSIF carried out a face-to-face interview with the personnel in charge of writing the report and inputing data. KoSIF confirmed that the financial data were appropriately drawn retrieved from financial statements verified in Data Analysis, Retrieval and Transfer System (DART)[1], and also that GHG data were consistent with verification opinion by certified professionals. Data and information stretching outside the reporting scope of the Company (e.g. subcontractors) were excluded from the audit. The result of the assurance may differ if additional assessment is made.

Assurance Results

Nothing has come to KoSIF's attention that causes KoSIF to believe the information and data provided were misplaced or misleading. KoSIF could also not find anything that may provide a basis that the report was not prepared in accordance with the Core Option of the GRI Standard Guidelines.

KoSIF's opinion regarding the principles of AA1000 (2008) is as follows :

1) A comprehensive information reporting system of Financial Services Commision, accessible at http://dart.fss.or.kr/

Inclusivity

The Company defines customers, shareholders/investors, business partners, employees, local communities and public sector as major stakeholders and through all the time or regularlycustomized communication channels, the company gathers stakeholders' key interest, expectations, opinions from each group. Also, the company reflects and reports stakeholders' main issues from financial, environmental and social aspects by conducting questionnaire surveys. However, as only employees, business partners and external experts are subject to the surveys, KoSIF recommends that the Company needs to establish a measure to collect the opinions from a wider group of stakeholders.

Materiality

The company selected 4 key issues (securement of next growth drivers, environment-friendly products and services, enhancement of customer satisfaction, reinforcement of executives and employees' safety and health) and 6 reporting topics (cultivation of human resources and fair performance, systematization of social responsibility activities, mutual growth and win-win cooperation, enhancement of ethical management, climate change mitigation, evaluation and recommendation of social values when selecting business partner). The topics were derived through a materiality assessment process in which 46 issue pools reflecting the characteristics of the construction industry were created, followed by external environment analysis (media research, international standard analysis, peer-reporting issues, and external stakeholders survey) and internal environment analysis (employee survey, internal data review), and finally, issues that match the core growth strategy and status of the company and important issues in the construction industry or issues that are considered to be of high importance to the internal and external stakeholders were selected. KoSIF identified from the interview that the materiality assessment for determining topics was made based on analyses on the survey conducted among internal and external stakeholders, business impact and stakeholders' points of interest. KoSIF could not find any material issue that has been omitted from the report.

Responsiveness

The Company executes and reports activities and performances related to issues impacting its stakeholders. Out of 46 issues, the activities and performance on 4 key topics and 6 reporting topics that are identified as important are described. KoSIF could not find any evidence that the company's countermeasures to critical stakeholder issues were omitted or inappropriately recorded in the report.

Recommendations

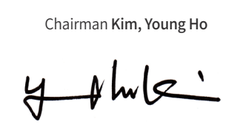
KoSIF recommends the following to enhance sustainability management at the company and improve stakeholders' sustainability :

- It is recommended to establish a sustainable management system that includes sustainable management visions, missions, strategies, and an organization that can implement such strategy at company-wide level and reflect in decision-making process.
- The company reports ESG (Environmental, Social and Governance) performance mainly from the construction business department. KoSIF suggests the company seek a solution to report ESG's activities and performance of petrochemical department as well.

August 11th, 2020

Korea Sustainability Investing Forum

Chairman **Kim, Young Ho**



GHG Verification Summary

Introduction

KSA Certification, Ltd.(“KSA”) was commissioned by DAELIM Industrial Corporation. (“DAELIM”) to verify DAELIM’s Direct emissions (Scope1) & Indirect emissions (Scope2) of Greenhouse Gas Inventory Report for the calender year 2019 (“the report”) based upon a reasonable level of assurance, to verify DAELIM’s Other indirect emissions (Scope3) of Greenhouse Gas Inventory Report for the calender year 2019 (“the report”) based upon a limited level of assurance. DAELIM is responsible for the preparation of the GHG emissions data on the basis set out within the WRI GHG protocol : 2004 and the principles set out in ISO 14064-1 : 2006. Our responsibility in performing this work is to the management of DAELIM only and in accordance with terms of reference agreed with them. KSA expressly disclaims any liability or responsibility for any decisions, whether investment or otherwise, based upon this assurance statement.

Scope of Assurance

The emissions data covered by our examination comprise Direct emissions (Scope 1 emissions), Indirect emissions (Scope 2 emissions) and Other indirect emissions (Scope 3) :

- Reporting period under verification : Calender Year 2019
- Organizational boundary for reporting :

Organizational Boundary	Number of Sites / Buildings	Verification activity
Building	Head Office (D tower, Susong-dong), DAELIM Training institute of education, Resort (Jeongseon), Daejeon branch	Desk Review, Activity data verification
Domestic constructions	145 sites (in dept. of Building&Housing, Civil Works, Plant)	Desk Review, Activity data verification

Verification Approach

The verification has been conducted by KSA from 05th June through 05th August 2020 and performed in accordance with the verification principles and tasks outlined in KS Q ISO 14064-1, 3 and IPCC Guideline : 1996/2006, Emission Target Management system : 2016-255. We planned and performed our work so as to obtain all the information and explanations deemed necessary to provide us with sufficient evidence to provide a limited verification opinion concerning the completeness of the emission inventory as well as the reported emission figures in ton CO_2 equivalent.
As part of the verification process :

- We have reviewed and verified the DAELIM ‘Green Information Management’
- We have reviewed the GHG inventory Report (For engineering&construction)
- We have reviewed and verified process to generate, aggregate and report the emissions data

Conclusions

As a result of the work described above, in our opinion nothing has come to our attention that would cause us to believe that the GHG Emissions data set out in DAELIM for the year of 2019 were confirmed as below;

unit : tonCO_2 equivalent

Division	Direct emissions (Scope 1)	Indirect emissions (Scope 2)	Other indirect emissions (Scope 3)	Total emissions
Domestic	16,969	38,862	142,618	198,450
Overseas	7,173	2,547	7,564	17,285
Total emissions	**24,143**	**41,409**	**150,183**	**215,735**

※ In order to report the GHG emissions as an integer, the rounded number on the statement might be different from the number on the system with ± 1.0 tCO_2
※ Total emissions = scope 1 + scope 2 + scope 3

August 06, 2020
KOREAN STANDARDS ASSOCIATION

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