

LOTTE PROPERTY & DEVELOPMENT
SUSTAINABILITY REPORT 2021

LANDMARK OF THE GREEN FUTURE





ABOUT THIS REPORT

LOTTE Property & Development(P&D) is actively pursuing an ESG management system based on its vision of 'Creating The Place of Joy and Happiness.' The present report is LOTTE P&D's first sustainable management report and it includes its ESG strategies, activities, results and goals. With plans to issue biennial reports in the future, the company promises to transparently communicate LOTTE P&D's ESG management to its stakeholders.

Reporting Standards	Core option of the GRI Standards
Reporting Scope	Head office and key business sites
Report Boundaries	LOTTE Property & Development
Reporting Period	Jan. 1 to Dec. 31, 2021 (including some of the results for 2022)
Reporting Cycle	Once every two years
Report Assurance	KPMG Samjong Accounting Corp.
Issuer	LOTTE Property & Development
Date of Issue	September 2022

LOTTE P&D

LOTTE WORLD TOWER, 300, Olympic-ro, Songpa-gu, Seoul

Tel. +82-2-3213-5100

Web. www.lottepnd.com

E-mail. lwtsg@lotte.net

COVER STORY

The cover for LOTTE P&D's first sustainable management report directly expresses the future that the company pursues. Once you enter LOTTE WORLD TOWER after flipping past the first page with its silhouette, you find people enjoying a leisurely and happy everyday life within a clean environment. An everyday life of such abundance is none other than the sustainable future that the 'people creating the place of joy and happiness'-LOTTE P&D-are in the process of creating.



CONTENTS

INTRODUCTION

CEO Message	02
LOTTE P&D Outline	04
Businesses	07
Improving Brand Value	16

ESG FUNDAMENTALS

System and Strategy for ESG Promotion	19	Management Approach to Material Issues	26
UN SDGs	21	2021 ESG Highlights	30
Stakeholder Engagement	23		
Materiality Assessment	24		

ESG SPECIAL TOPIC

Special Topic 1. Sustainable Building	32
Special Topic 2. Workplace Culture	39

ESG PERFORMANCE

ENVIRONMENT

Strengthening the Environmental Management	48
Water Management	50
Waste Management	52
Reducing the Environmental Impact	54

SOCIAL

Human Resource Recruitment and Development	57
Safety+Health of Employees and Customers	64
Community Development	71
Human Rights and Diversity	82
Sustainable Supply Chains	84
Information and Data Security	86
Improving Customer Satisfaction	89

GOVERNANCE

Sound Governance	96
Risk Management	98
Ethics and Compliance Management	100

APPENDIX

ESG DATA	104
Third-Party Assurance Statement	120
GRI Content Index	122
SASB Index	126
List of Awards and Group Memberships	127

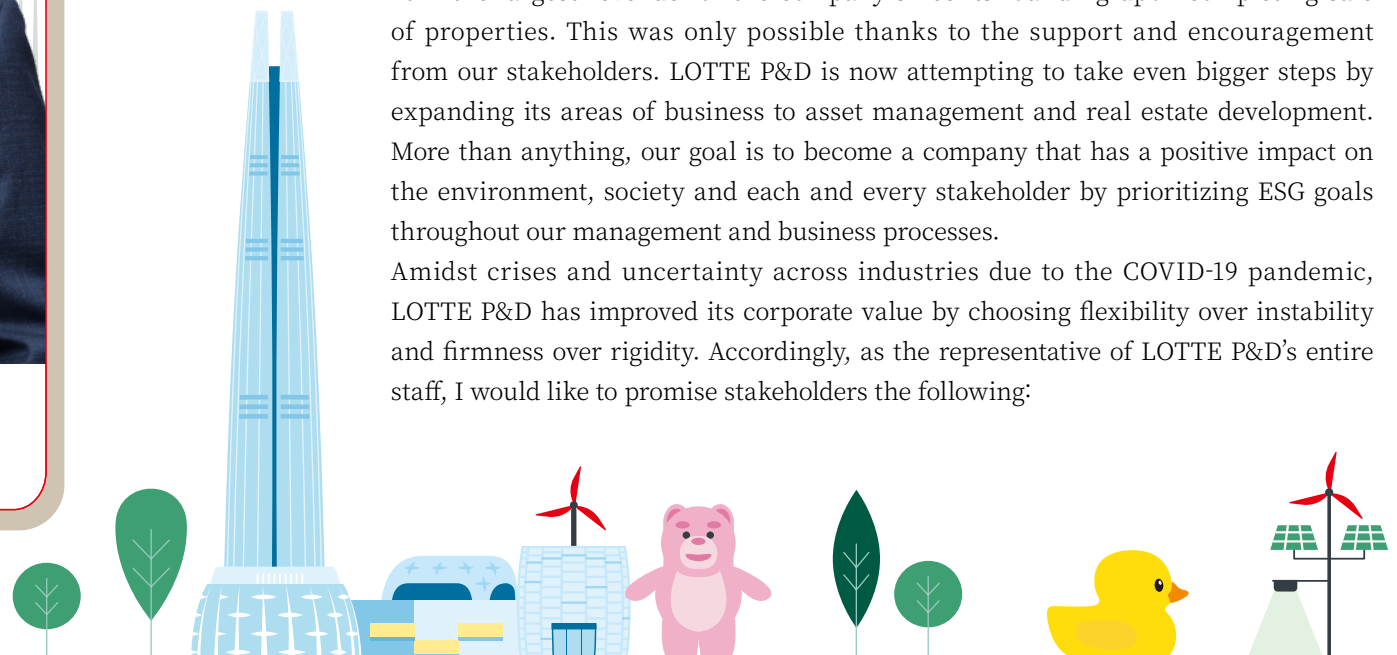
CEO Message



“ **To our stakeholders, who share in LOTTE P&D’s future I am deeply moved to showcase LOTTE P&D’s first sustainable management report, expressing our sincere efforts toward a better future.** ”

LOTTE P&D is now marking the 40th anniversary of its founding, having been in business continuously since 1982 under the goal of ‘developing global landmarks beyond Korea.’ LOTTE P&D has built the tallest building in Korea-LOTTE WORLD TOWER, at a height of 555m-thus creating domestic architectural history. Not only does the tower boast an office occupancy rate of 100%, it has also generated in 2021 the largest revenue for the company since its founding upon completing sale of properties. This was only possible thanks to the support and encouragement from our stakeholders. LOTTE P&D is now attempting to take even bigger steps by expanding its areas of business to asset management and real estate development. More than anything, our goal is to become a company that has a positive impact on the environment, society and each and every stakeholder by prioritizing ESG goals throughout our management and business processes.

Amidst crises and uncertainty across industries due to the COVID-19 pandemic, LOTTE P&D has improved its corporate value by choosing flexibility over instability and firmness over rigidity. Accordingly, as the representative of LOTTE P&D’s entire staff, I would like to promise stakeholders the following:



First, we will become a ‘company that takes into account the environment at all costs,’ by playing a leading role in the management of green buildings.

In 2021, LOTTE Group committed to net-zero carbon by 2040. Since then, we’ve been hard at work to reduce carbon not only at the business sites of each of the group’s companies but also across business and supply chains. In our case, as the company that operates and manages the sustainable infrastructure of LOTTE WORLD TOWER-MALL, LOTTE P&D is putting forth every effort into managing green buildings by generating renewable energy and improving energy efficiency. LOTTE WORLD TOWER is an ‘urban green power plant’ that independently produces roughly 12% of its gross energy usage as of 2021 with the help of its water and geothermal heating and cooling system, in addition to its wind and solar power facilities.

LOTTE P&D received the grand prize at the ‘Seoul Environment Awards 2022’ for its continuing efforts of improving energy efficiency and producing renewable energy. Designed with the aim of renewable energy generation and efficient energy management, LOTTE WORLD TOWER received a gold certification from the Leadership in Energy and Environmental Design (LEED) program in the New Construction (NC) category. LOTTE P&D will become a leader in solving climate issues by working hard to create new spaces.

Second, we will become an ‘equitable company that grows together’ with its stakeholders.

LOTTE P&D is working hard in many different fields to achieve social synergy with its stakeholders. LOTTE WORLD TOWER contributes to the community and consumers and at the same time contributes to the lives of local residents and small businesses by serving as an example of the ‘net positive’ mindset, which entails growth for the company as well. The company has made a contribution toward relieving local traffic congestion by building the Jamsil Intercity Bus Transfer Center—an underground terminal—thereby absorbing intercity bus traffic underground. The company is also developing a vision for a vertical city by offering new culture- and art-enriched lifestyles by dint of its public art projects—such as Rubber Duck and Bellygom, as well as the Tower Fireworks Festival. Besides, LOTTE P&D is

actively recruiting female employees in an effort to create a discrimination-free, equitable workplace and operates a variety of work programs, including full-time remote working for expectant mothers. By placing workers coming back from leave in positions that they desire after individual consultations and by eliminating disadvantages in the promotion process, the company has achieved an employment retention rate of 86%. Recognizing how a discrimination-free, equitable workplace and work-life balance are important stepping stones for the growth of each party, the company is continuing to refine its future action plans.

Third, we will become a ‘fully trustworthy company’ through a transparent governance system.

LOTTE P&D is building an effective decision-making system that allows for a strong ESG management environment. In September 2022, the company founded its ESG committee with the goal of achieving sustainable growth by discussing ESG-related items during its management decision-making process. Additionally, the company promises to maximize the ESG capabilities of each and every one of its employees by detailing its ESG performance and compensation system for executives and employees after taking into account the characteristics of each job and by establishing KPIs by department. Above all, the company aims at creating a company-wide consensus regarding ESG management beyond the level of formalities. By clarifying goals and uniting hearts, the company promises to create a firm foundation for sustainable growth not just for the company but also for society. Life is time and time is contained within space. Just as our vision of ‘Creating The Place of Joy and Happiness,’ LOTTE P&D will continue creating spaces for greater happiness in the lives of those who inhabit them. By expanding the concept of space to society as a whole, we will continue making every effort so that our every member of society can dream of a better future. In this aim, we ask for your continuing interest, support and encouragement.

Thank you.

September 2022
LOTTE Property & Development
CEO **Ryu Je-don**



LOTTE P&D Outline

Company Introduction

Founded in 1982, LOTTE P&D has focused on the Jamsil Complex Development project. Even amidst many difficulties, the company was able to successfully open LOTTE WORLD MALL (2014) and LOTTE WORLD TOWER (2017) at the end of much hard work on the part of all employees on the basis of late president Shin Kyuk-ho's vision of 'making a contribution to the Korean tourism industry by building the greatest building in the world.'

In June 2021, LOTTE P&D secured the entire stake in LOTTE WORLD TOWER·MALL owned by LOTTE Shopping (15%) and Hotel LOTTE (10%) and currently the

firm is earning stable revenue by operating LOTTE WORLD TOWER·MALL. As a global landmark with over 30 million annual tourists visiting, LOTTE WORLD TOWER·MALL boasts over 300 million accumulated visitors.

Additionally, through asset management, alternative investment and logistics center development, LOTTE P&D is expanding its real estate project portfolio. Recently, the company acquired shares of Coralis S.A., which owns LOTTE Center Hanoi, a high-rise tower in Vietnam, in an effort to actively engage in new business overseas and in building management. LOTTE P&D will grow into a global real-estate services firm with its accumulated expertise in high-rise office building and mixed-use real estate development.

Company Background and 2021 Financial Performance (As of December 2021)

Company Name	LOTTE P&D
Date of Founding	June. 15, 1982
CEO	Ryu Je-don
Head Office Location	300, Olympic-ro, Songpa-gu, Seoul
Industries	Real estate development, leasing and operations management
Key Businesses	Developing and operating high-rise buildings and shopping complex, real estate asset management
Number of Employees	226

Total Assets

8.6 trillion KRW

Operating Profit

80.4 billion KRW

Total Equity

4.3 trillion KRW

Net Income

97.2 billion KRW

Revenue

754.3 billion KRW

Credit Rating

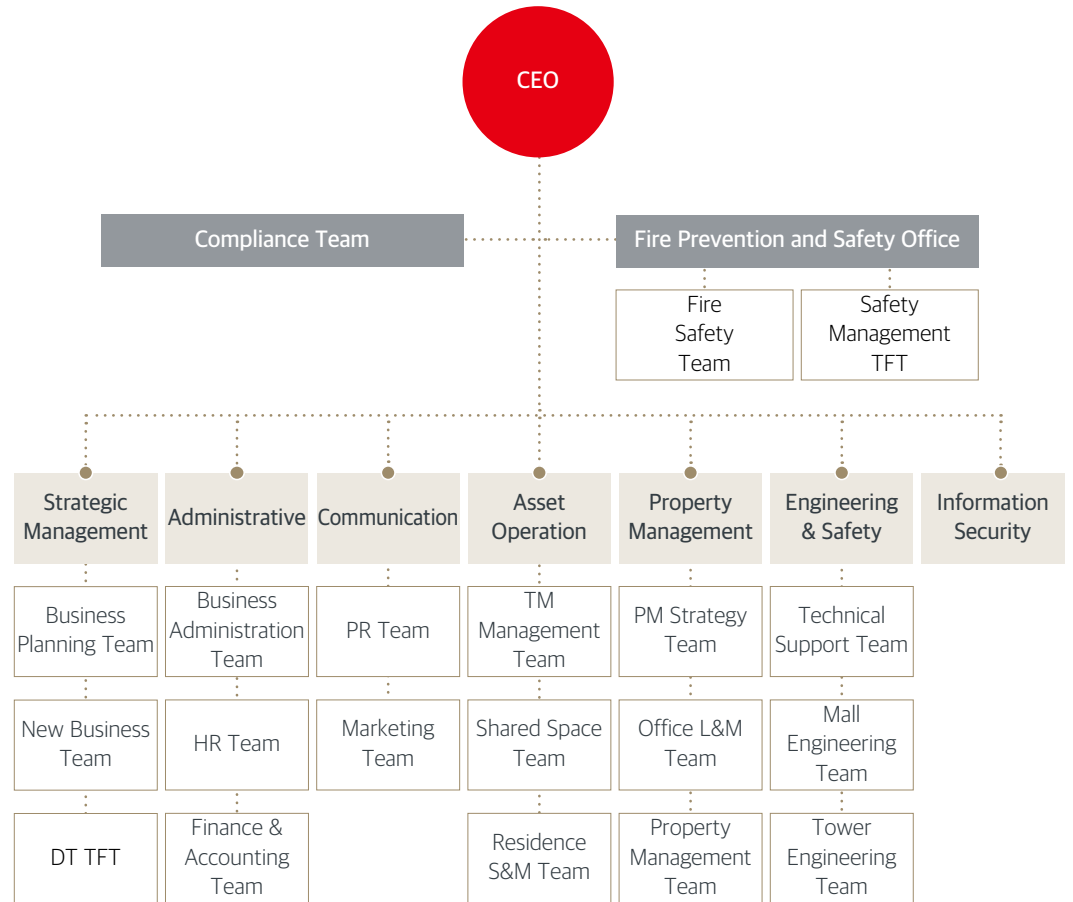
AA- (Korea Ratings)

Core Value and Vision



Organizational Chart

(As of June 2022)



History



1982

Jun. 15
Founding of
LOTTE P&D Co., Ltd.

1987

Dec. 14
Land acquisition
in Jamsil

1998

May. 19
Construction permission and
commencement works of
LOTTE WORLD TOWER-MALL
(36 ground floors)

2010

Nov. 11
Acquisition of construction
permission for
LOTTE WORLD TOWER
(123 ground floors)

2011

Jun. 4
Laying of the concrete
foundation (MAT) for
LOTTE WORLD TOWER

Acquired 100% stake of
LOTTE WORLD TOWER-MALL

Jun. 16
2021

LOTTE WORLD TOWER
Grand Opening

Apr. 3
2017

Construction of
LOTTE WORLD TOWER
completed

Feb. 9
2017

LOTTE WORLD TOWER
Ridgepole-Raising
Ceremony

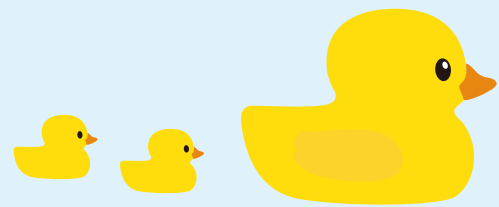
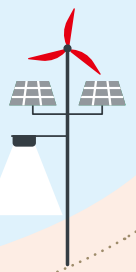
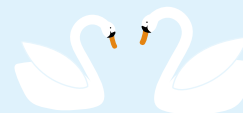
Dec. 22
2015

LOTTE WORLD MALL
Grand Opening

Oct. 30
2014



LANDMARK OF KOREA
LOTTE WORLD TOWER



Businesses

Developing and Operating High-Rise Buildings and Shopping Mall Complex

LOTTE P&D is operating LOTTE WORLD TOWER, a 123 floor high-rise building and LOTTE WORLD MALL, a shopping complex in Songpa-gu, Seoul. The company provides the highest level of services, befitting the tallest building in Korea by operating general facilities management, including buildings, facilities and emergency management by sales of SIGNIEL Residence properties and by operating the office and Podium district. In addition to assisting the launching of brands at LOTTE WORLD MALL, the company offers pleasant experiences to visitors and residents by organizing diverse events in the complex.



LOTTE WORLD TOWER

- A High-Rise Landmark and Cutting-Edge Global Business Complex

With 123 floors at a total height of 555m, LOTTE WORLD TOWER is the 5th tallest building in the world and the highest building in Korea. Its design resembles the shape of a calligraphy brush, as the 42,000 silver-colored windows on the exterior walls reinterpret the soft lines of the building and the reflection of light with reference to a modern sensibility. The tower is a future vertical city that simultaneously contains symbols of a global presence, the traditional Korean aesthetic of curves, nature and cutting-edge human technology.

LOTTE WORLD TOWER was built using firm foundation work and new construction techniques for high-rise buildings. Thanks to its wind-resistant and earthquake-resistant design, the building can withstand magnitude 9 and greater earthquakes. In 2017, it became the first building with over 100 floors to receive the LEED* gold certification thanks to its excellent, energy-efficient design.

A variety of facilities are located inside LOTTE WORLD TOWER: the Podium, which provides financial and medical services; offices that serve as global office space; residences for high-class housing; LOTTE Hotel SIGNIEL Seoul, equipped with luxurious facilities; the Premier 7, private office spaces and the Seoul Sky observatory, overlooking a day in Seoul from 500m. In particular, the office spaces at LOTTE WORLD TOWER are desired by prominent domestic and overseas companies based on the excellent location and facilities. Thus, as of 2021, the tower boasts an occupancy rate of 100% for its office spaces. The Residences also realize the highest value in terms of housing based on luxurious facilities and services, boasting a sale rate of 100% as of 2022.

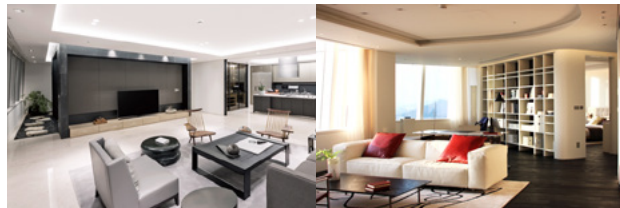
*LEED (Leadership in Energy and Environmental Design): An environmental building certification system recognized worldwide and accredited by the U.S. Green Building Council (USGBC)



Premier7 108~114F

High-Rise Private Offices

Private offices that provide a free choice of interior decoration and a distinguished level of security



SIGNIEL Residences 42~71F

The Finest Housing Facilities (223 units)

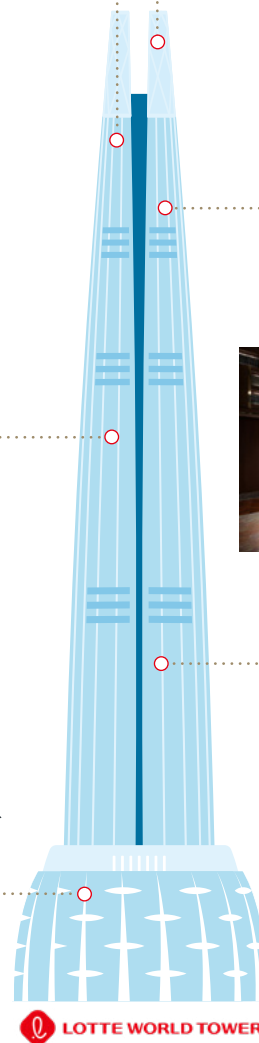
A newly conceptualized housing culture in the form of residential studio apartments that fulfill a first class lifestyle for residents



Podium B1~12F

A lifestyle solution center including a financial center, medical park and museum

Convenience facilities that let residents enjoy one-stop services including financial, medical, fitness and cultural facilities



117~123F SEOUL SKY

World's 4th and Korea's Highest Observatory

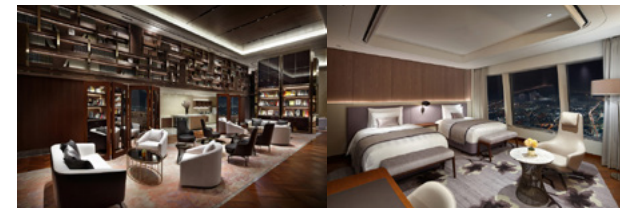
A complex culture space that offers an open panorama of Seoul, exhibits that embody Korean traditional culture and media art



76~101F SIGNIEL Seoul

A 6-Star Hotel (235 suites)

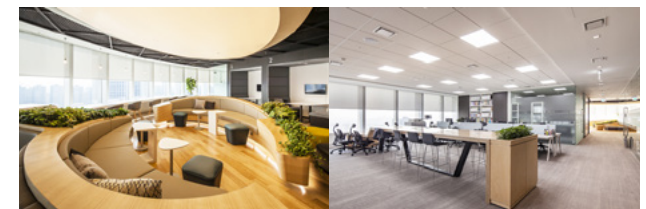
A hotel that provides the finest experiences, including comfortable rest, high-quality dining and a luxury spa



14~38F Prime Office

Global Business Hub

A cutting-edge office space with optimal working conditions provides a lounge that lets workers spend their break time meaningfully



LOTTE WORLD MALL

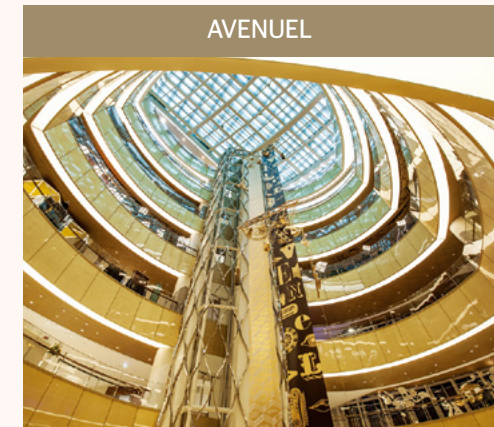
- A Premium Mall Aiming at Being the Best in the World

A shopping complex where play and culture coexist beyond shopping, LOTTE WORLD MALL has established itself as a 4th generation shopping mall for ‘smart and play shoppers’ who place value on the experience itself. LOTTE P&D is working hard to provide the best shopping experience by housing the best, premium brands in step with the latest trends with the aim of providing a multifaceted shopping experience. Moreover, LOTTE P&D makes every effort to prevent any inconveniences by carrying out comprehensive management and regular maintenance activities throughout LOTTE WORLD MALL.

LOTTE WORLD MALL is largely divided into the AVENUEL store and the World Mall. AVENUEL is a premium department store with major luxury brands, including deluxe boutiques, as well as top-level jewelry, watches and fashion brands. Thus, it establishes itself as a luxury shopping landmark throughout Asia. The World Mall offers visitors relaxation and the chance to enjoy 200 brands in multiple fields, together with fashion and F&B. Every floor includes variously themed food courts, including the 3355 zone, Basilur Sunset Avenue and Seoul 3080, along with the first vineyard type concert hall in Korea, the biggest multiplex movie theater in Korea and an aquarium.



A fancy shopping complex that offers copious amusements, including fashion and F&B trends



A high-end shopping place with major global luxury brands



With 21 screens and 4,609 seats, the biggest multiplex movie theater in Korea that features the 628 seat scale Super Plex G, which made it onto the Guinness Book of World Records in 2014 as the biggest screen in the world.



A brand by UK celebrity chef Gordon Ramsay, this premium burger was a sensation even before its opening.



LOTTE DUTY FREE

Duty Free Store 8~9F

World's 2nd and Korea's biggest downtown duty-free store



LOTTE WORLD MALL

Shopping Mall B1~6F

A complex shopping mall with shopping, culture and entertainment



LOTTE CONCERT HALL

Concert Hall 7~11F

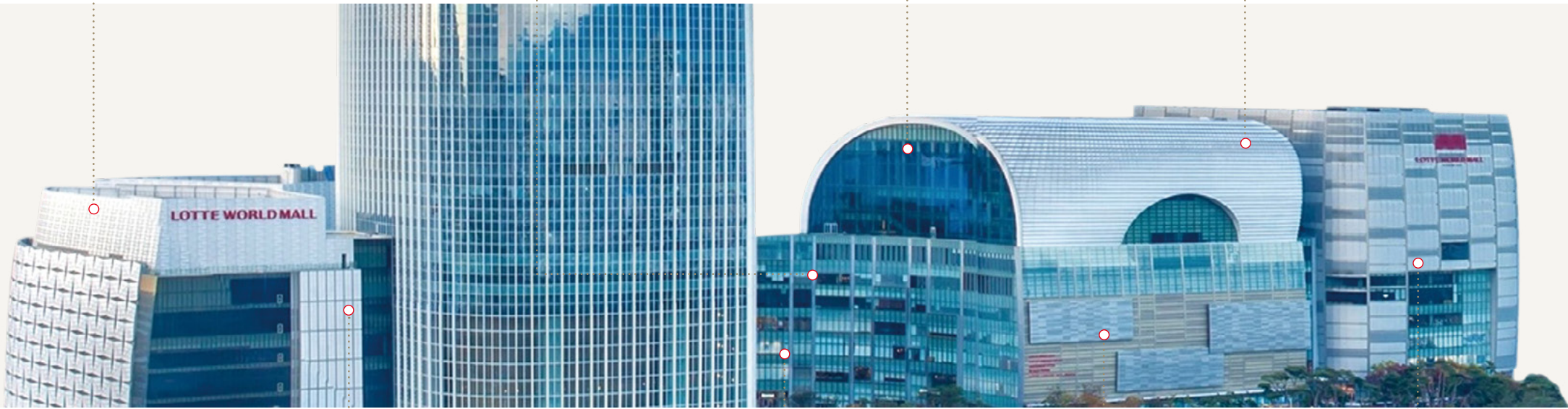
The first vineyard-style concert hall for classical music in Korea



LOTTE CINEMA

Cinema 5~11F

The biggest multiplex movie theatre in Korea



One of the best magnificence department stores in Korea

B1~6F

AVENUEL

AVENUEL



The biggest urban aquarium in Korea

B2~B1F

Aquarium

LOTTE WORLD AQUARIUM



Leading the way to new lifestyles through new products and services

B2F

LOTTE Mart

LOTTE Mart



A premium electronics store

3F

LOTTE HIMART

LOTTE HIMART



Real Estate Asset Management

LOTTE P&D provides prime-level building management and real estate asset management services for key business districts. Through business partnerships with clients, the company aims at maximizing investment asset values.

Clients can enjoy the company’s optimum asset management solutions in the form of leasing, marketing and operating mixed-use real estate; managing the tenants of offices, R&D centers, hotels and shopping malls; managing customers; administering venue rentals; conducting administrative duties including legal affairs; managing the four major outsourcing services, namely, those for facilities, security, cleaning and parking; and asset valuation, accounting and tax services per each business site.

The company currently manages the assets of 9 business sites. Company employees are located at each business site and key places of busienss in Seoul include the Euljiro Signature Tower and Gangnam N Tower.

Areas of Business

Lease

- Managing lease-rental contracts, maintaining and managing tenants
- Reducing vacancies and attracting promising tenants

Financial Management

- Setting annual operation plans, managing earnings and expenses
- Claiming rent and maintenance fees and managing outstanding and overdue payments

Administration

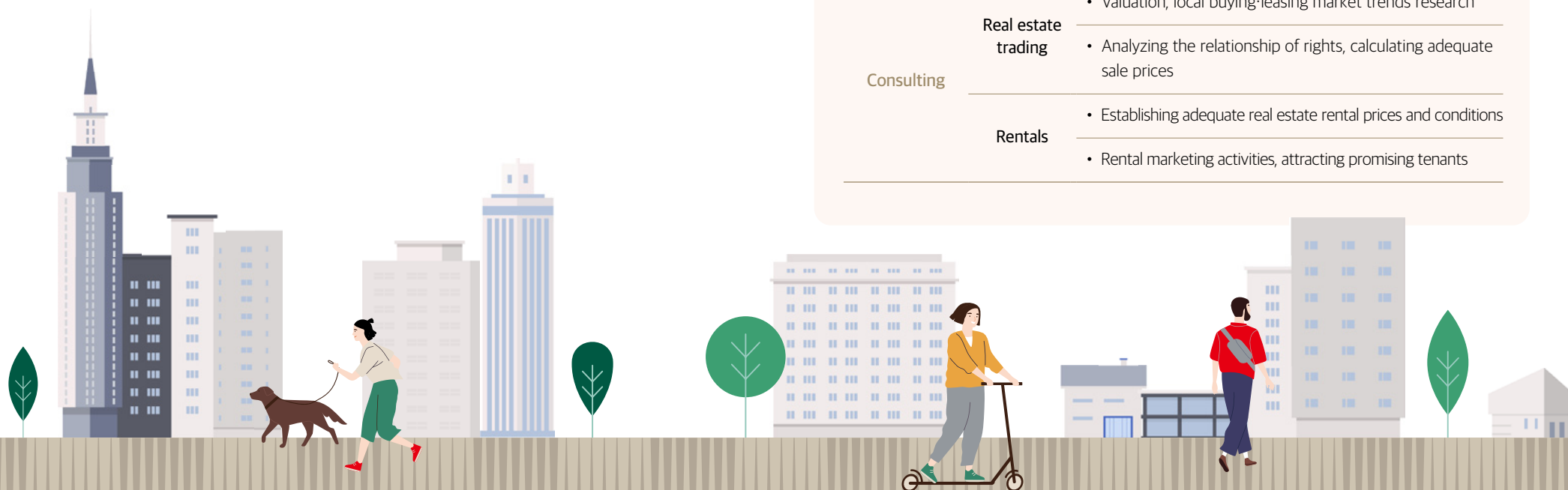
- Venue rental (licensing and changing the purpose of use)
- Legal advice and miscellaneous risk management

Maintenance

- Selecting and managing facilities management companies, multiple construction work and receiverships
- Adequate energy management, repairs and supplies management

Consulting

- Real estate trading**
 - Valuation, local buying-leasing market trends research
 - Analyzing the relationship of rights, calculating adequate sale prices
- Rentals**
 - Establishing adequate real estate rental prices and conditions
 - Rental marketing activities, attracting promising tenants

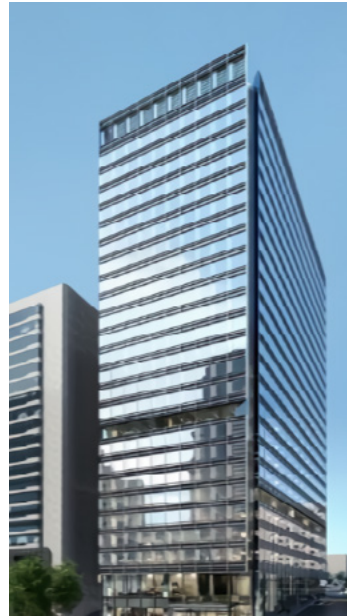


Key Business Sites of LOTTE P&D Asset Management



Euljiro Signature Tower

Period	Since 2017 to present
Total floor area	99,997m ²
Building size	B6F ~ 17F
Major Tenants	Kumho Petrochemical, Korea Seven, Hanwha Engineering & Construction, etc.
Main Usage	Business, residential, culture



Gangnam N Tower

Period	Since 2018 to present
Total floor area	51,127m ²
Building size	B6F ~ 25F
Major Tenants	Naver, Samsung Securities, EA Sports, WorkFlex, etc.
Main Usage	Business, residential



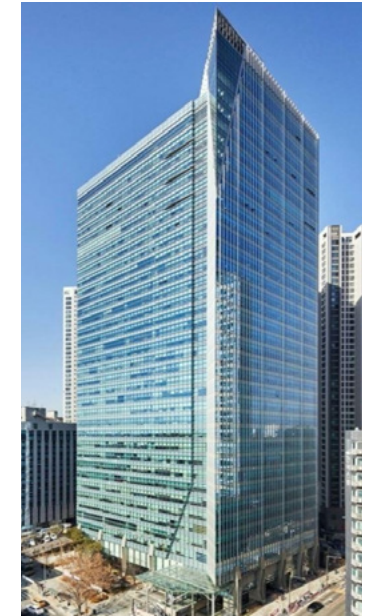
Gwanghwamun Center Point

Period	Since 2016 to present
Total floor area	38,946m ²
Building size	B7F ~ 20F
Major Tenants	Kim&Chang(law firm), Hyundai Marine & Fire Insurance, etc.
Main Usage	Business, residential, culture



Pangyo H Square

Period	Since 2021 to present
Total floor area	85,153m ²
Building size	B4F ~ 10F
Major Tenants	Kakao, Synopsys Korea, etc.
Main Usage	Business, residential, sales



Gangdong ECT

Period	Since 2021 to present
Total floor area	100,423m ²
Building size	B6F ~ 36F
Major Tenants	Samsung Electronics/ Medison, Fila Korea, Mom's Touch, etc.
Main Usage	Business, residential, research

Real Estate Investment

LOTTE P&D is engaged in real estate development and investment. The company is currently developing two logistics centers, has undertaken a project for developing a data center and is involved in value-added projects of dilapidated buildings and new small-to-medium sized buildings. Additionally, the company is planning on actively taking part in additional real estate development projects.

Development Project Outcome

LOTTE P&D continues to expand its real estate operations, including asset management and office leasing management (LM) businesses, with the aim of growing into a comprehensive real estate company equipped with property development, ownership and operations competencies. The company is generating profit through the active development of commercial real estate (offices, logistics centers and urban commercial facilities).



○ Distribution center at 579 Daedae-ri, Daewol-myeon, Icheon, Gyeonggi-do

Main Usage	Storage (Ambient, low temperatures)
Start/End of Construction	April 2022 August 2023 (expected)
Total Floor Area	27,909m ²
Building size	B2F ~ 4F



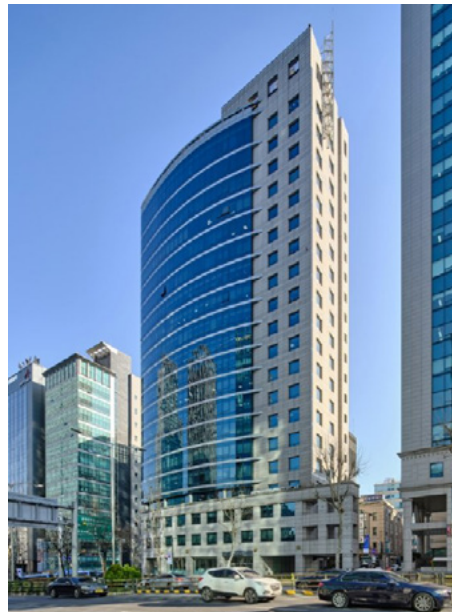
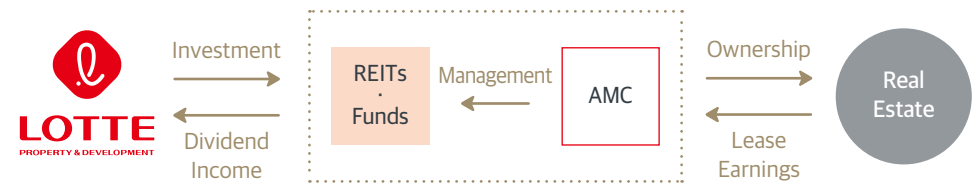
○ Distribution center at 229-3 Hyeonmae-ri, Seoun-myeon, Anseong, Gyeonggi-do

Main Usage	Storage (Ambient, low temperatures)
Start/End of Construction	October 2022 (expected) May 2024 (expected)
Total Floor Area	46,440m ²
Building size	B1F ~ 4F

Main Alternative Investment Results

LOTTE P&D is expanding new asset management contracts by investing in the equity of blue-chip assets located in key districts in the metropolitan area. In particular, the company is realizing dividend earnings from sales via highly profitable alternative investments in real estate, such as REITs and funds, in addition to providing asset management services.

LOTTE P&D Alternative Investment Structure



Yeoksam Multicampus Building

Location	Gangnam Business District(GBD)
Time of investment	May 2022
Total Floor Area	20,975m ²
Building size	B8F ~ 20F



D-Cube City Office Building

Location	Yeouido Business District(YBD)
Time of investment	December 2020
Total Floor Area	42,390m ²
Building size	9F ~ 25F



Pangyo H-Square

Location	Bundang Business District(BBD)
Time of investment	June 2021
Total Floor Area	85,153m ²
Building size	B4F ~ 10F



Icheon Daedae-ri Logistics Center

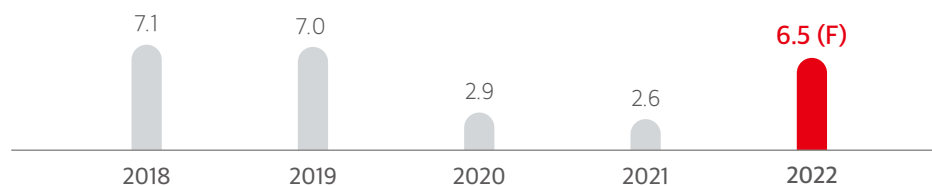
Location	Other
Time of investment	June 2021
Total Floor Area	27,909m ²
Building size	B2F ~ 4F

Global Business

Business in Vietnam

Vietnam is rapidly rising as an emerging market on the back of increasing foreign direct investment and an increase in overseas trade, with a swiftly changing industrial structure to boot. Promising industries such as real estate and finance are being intensively developed by the central government in Vietnam. Global corporations are making moves into the Vietnamese market. Likewise, LOTTE P&D is entering the Vietnamese real estate market with the goal of expanding its overseas businesses. The company will continue to expand its new businesses in Vietnam by relying on the foundation of its domestic experience in operating and managing high-rise buildings, along with its know-how of asset management. As a start, LOTTE P&D acquired a 77.5% stake in the LOTTE Center Hanoi in July 2022. At a height of 267m extending from 5 underground floors to 65 above-ground floors, along with a total floor area of 253,402m², LOTTE Center Hanoi is a high-rise building and landmark of Vietnam. Built using the double outrigger system, which can innovatively relieve outside impacts, the building can withstand a 7.0 magnitude earthquake. It was also built using low-carbon concrete, having an environmentally-sound focus. The LOTTE Center Hanoi has a department store, residences, a hotel and an observatory, fulfilling the varied needs of its users. In the second half of 2022, the company has plans to find an asset management firm in Vietnam. This will increase the influence and status of LOTTE P&D in Vietnam and allow the company to develop into a global comprehensive property services company as it carries out real estate management projects with increasing pace.

Vietnam's Economic Growth Rate expected to be V-curved rebound in 2022 (Unit: %)



*Source: World Bank

65F Top of Hanoi Observation Deck

33~64F Residences, Hotel

8~31F Offices

7F Amenities

B1F Supermarket

1~6F Department Store

South Korea

Vietnam

Improving Brand Value



LOTTE P&D is improving the brand value of LOTTE WORLD TOWER thanks to a variety of activities.

The tallest building in Korea, LOTTE WORLD TOWER showcases a one-of-a-kind high-rise fireworks festival and hosts 'Sky Run' a vertical marathon that involves attendees walking up 123 floors using the building's stairs. Discrete signature events based on new concepts are staged to attract customers every year, such as 'Summerest', 'Mystery Halloween' and Christmas lighting as a winter attraction.



Christmas lighting as a winter attraction

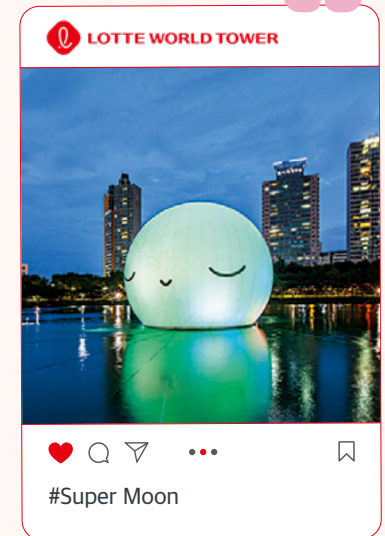
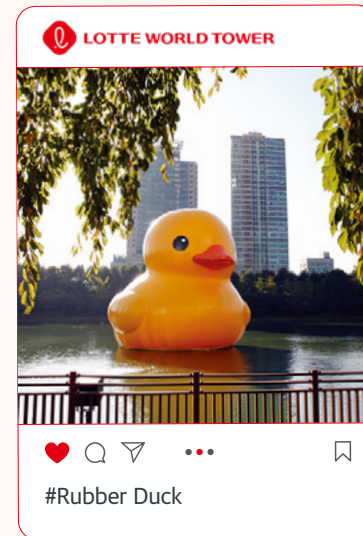


LOTTE WORLD TOWER Fireworks Festival



'Sky Run', the biggest stair-climbing vertical marathon in Korea

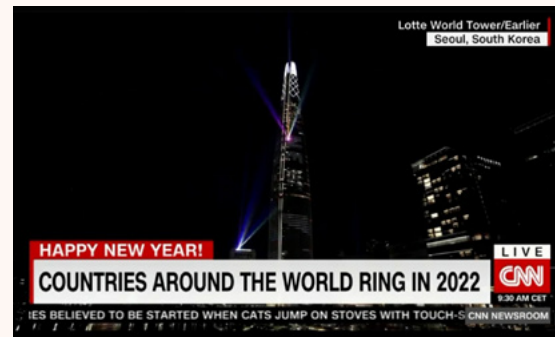
As well, divergent public exhibition projects, beginning with 'Rubber Duck' in 2014 to '1600 Pandas+', 'Super Moon' and 'Bellygom' have been held at LOTTE WORLD TOWER's outdoor World Park Plaza and Seokchon Lake, establishing a positive brand image.





Major media organizations domestic and abroad are making LOTTE WORLD TOWER known all over the world. In particular, ‘the Rainbow of Hope Lighting Show’, a New Year’s countdown to January 1, 2022, was covered by over 60 foreign media organizations including CNN, AP, AFP and Reuters, solidifying LOTTE WORLD TOWER’s status as a worldwide landmark well beyond Korea.

LOTTE WORLD TOWER again shared the spotlight when the 20th South Korean president was elected on March 9, 2022. The violin performance at LOTTE WORLD TOWER’s uppermost outdoor area announced the beginning of the KBS vote counting broadcast, creating a powerful impression in the minds of the public.



Foreign Media Coverage

Source: CNN



Vote Counting Broadcast for the 20th Presidential Election

Source: KBS



Extended reality (ER)-a cutting-edge broadcasting technology-was used to vividly express the vote count with LOTTE WORLD TOWER serving as a canvas. This image recorded the highest ratings of 8.3% during the vote-counting broadcast, revealing the tower’s status as the highest building in Korea.

Additionally, TV programs, such as KBS’s ‘2 Days & 1 Night’, SBS’s ‘My Little Old Boy’ and JTBC’s web different show ‘Workman’, along with the webzine ‘GEEP’ and different SNS channels including YouTube and Instagram, help increase the brand value of LOTTE WORLD TOWER by increasing awareness among the public.

ESG FUNDAMENTALS

System and Strategy for ESG Promotion	19
UN SDGs	21
Stakeholder Engagement	23
Materiality Assessment	24
Management Approach to Material Issues	26
2021 ESG Highlights	30



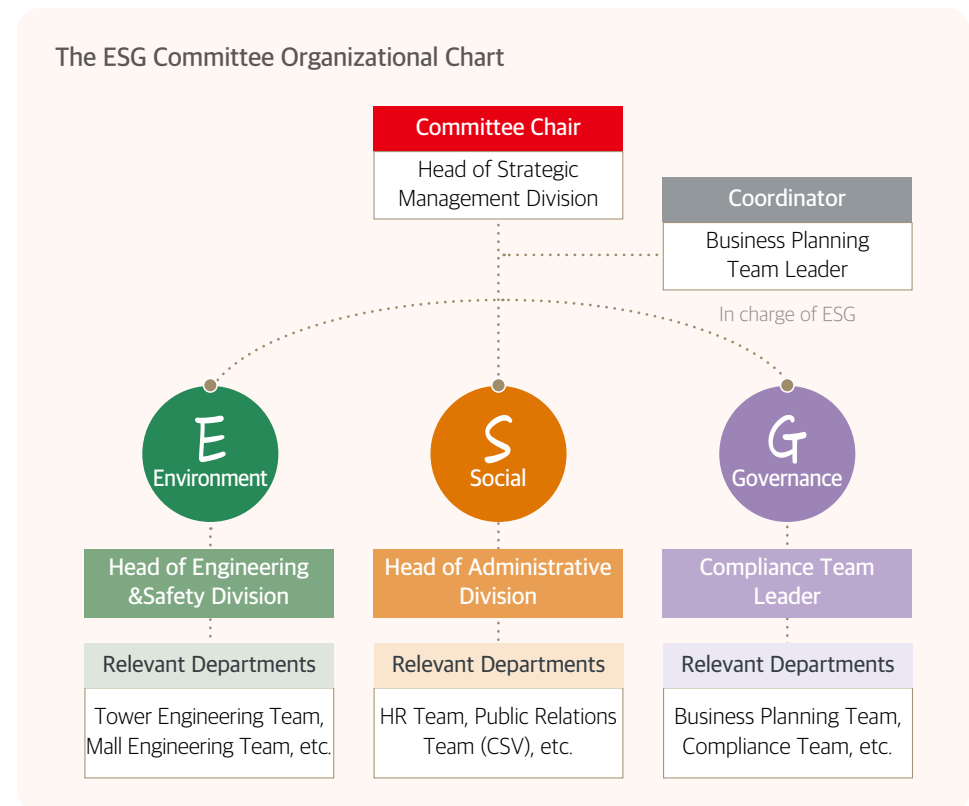
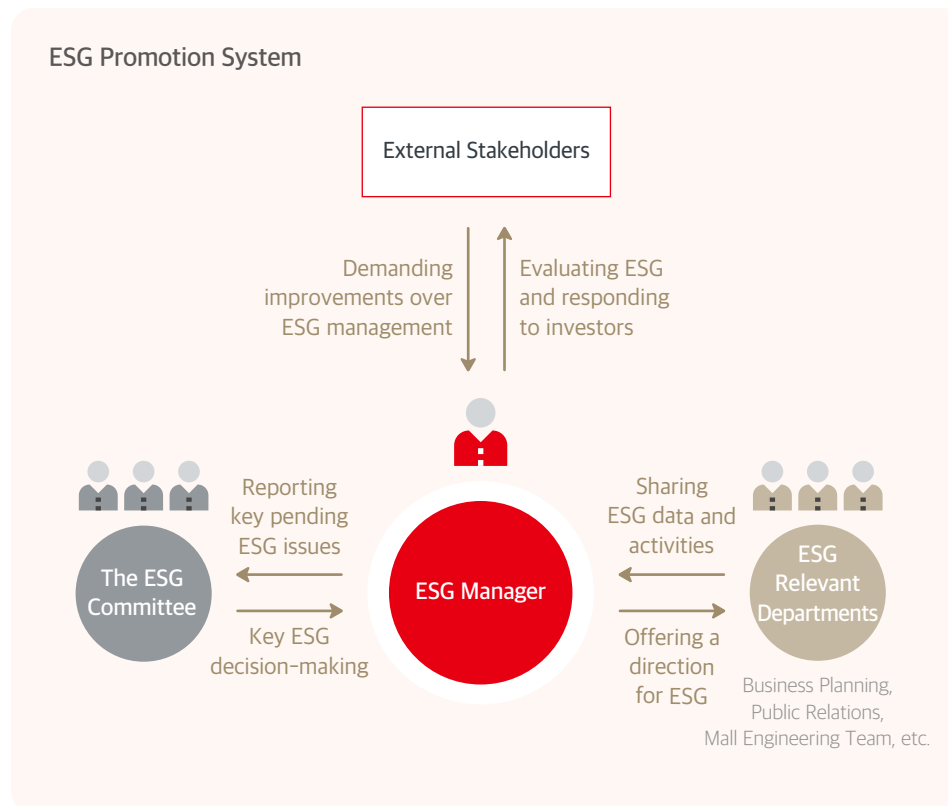
System and Strategy for ESG Promotion

LOTTE P&D's ESG Promotion System

LOTTE P&D has set up an ESG committee and built a company-wide ESG promotion system with the goal of achieving its ESG management goals. By integrating an ESG perspective into decision-making, the committee is carrying out its social responsibilities and establishing a transparent governance environment and the committee votes on and reviews relevant issues with the goal of achieving

sustainable growth.

The Head of Strategic Management Division was appointed to the committee chair to put into practice a responsible management system, with those in positions highly relevant to each field of ESG appointed as committee members. The ESG committee agenda includes setting ESG policy and strategy, selecting and assessing key ESG tasks and projects, issuing ESG bonds, managing raised funds and Publishing sustainability report.



ESG Strategy

Under the vision of 'Creating The Place of Joy and Happiness,' LOTTE P&D has established an ESG strategy along with three major strategic goals and assignments with the aim of promoting an authentic brand of ESG management. By conducting strategic assignments in a quest for a version of ESG management unique to LOTTE P&D, the company aims at achieving its global sustainable development goals and forming a future city that merges economic, environmental and social values.

LOTTE PROPERTY & DEVELOPMENT

Vision

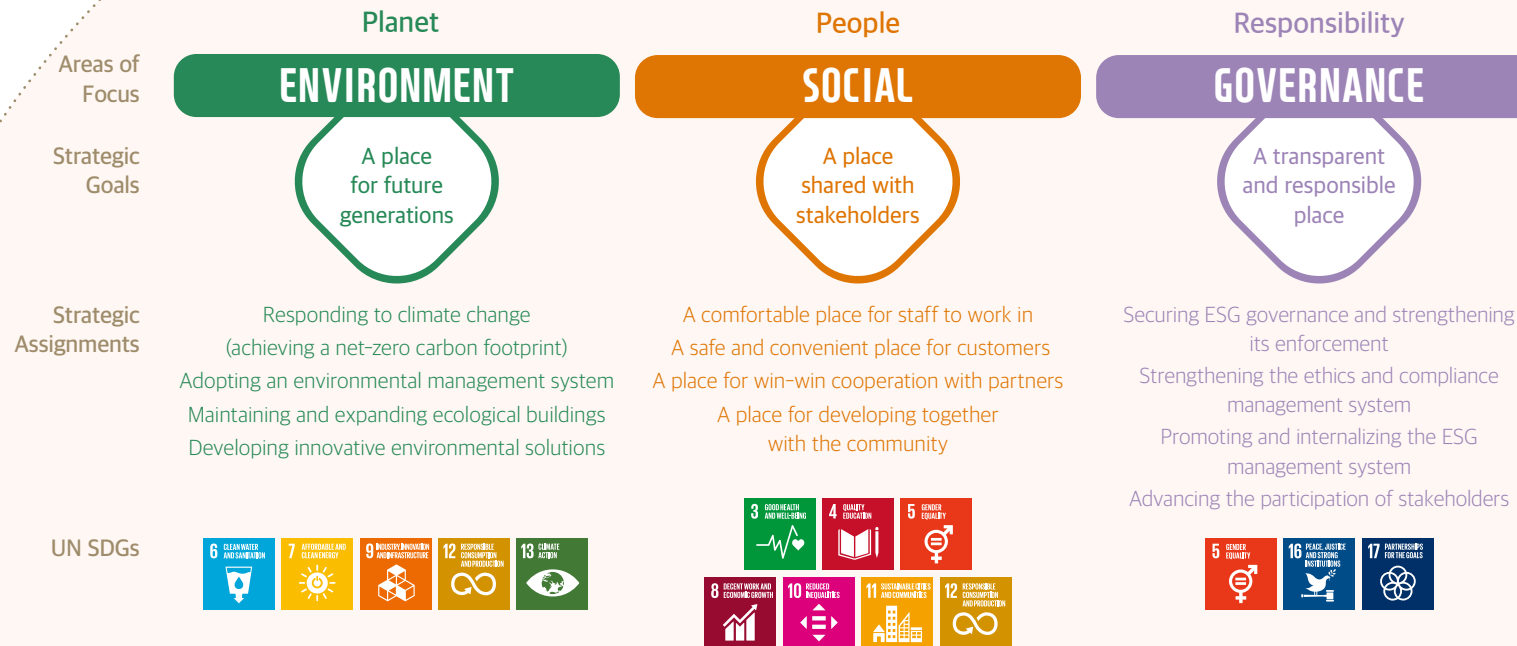
Creating The Place of Joy and Happiness

ESG Mission

A future city merging economic, environmental and social values

ESG Vision






A leading global ESG company that contributes to green cities and community development










UN SDGs

Goal and milestone per each UN SDGs

The UN sustainable development goals (SDGs) are common goals for the international community for the time frame spanning from 2016 to 2030. Out of these 17 goals, LOTTE P&D has selected 12 goals highly relevant to the company’s ESG strategy. In the process of advancing disparate activities related to these goals, the firm is hard at work to serve as a leading global ESG company that contributes to continuous cities and community development.

UN SDGs	Key Activities	Key Results
 <p>SDGs 3. Good Health and Well-Being 3.4 Promote mental health and well-being through prevention and treatment 3.8 Achieve universal health coverage for all</p>	<ul style="list-style-type: none"> • Manage mental health and improve work satisfaction through professional counseling services • Support health insurance coverage and health checkups for employees and immediate family • Sponsor wearable robotic gait treatment devices for children with incomplete paraplegia 	<p>Employee psychological counseling services used by over 10% of all employees 90 million KRW employee health and well-being fund 100 million KRW sponsorship fund for wearable robot gait treatment devices</p>
 <p>SDGs 4. Quality Education 4.4 Substantially increase the number of adults with technical and vocational skills necessary to their work</p>	<ul style="list-style-type: none"> • Provide education programs for developing human resources and strengthening job competence • Support self-directed learning for developing job competence • Operate ‘outplacement’-a program that supports job transitions for retired executives and advisors 	<p>320 million KRW in education spending enforced in 2021 2,270 accumulated cases of a self-directed learning 1 participant in the executive outplacement program</p>
 <p>SDGs 5. Gender Equality 5.4 Recognize and value unpaid care and domestic work through policies and the promotion of shared responsibility within the household and the family 5.5 Ensure women’s full and effective participation and equal opportunities for leadership at all levels of decision-making</p>	<ul style="list-style-type: none"> • Support family-friendly policies by period, from pregnancy preparation to childcare • Support male workers to participate in childcare with parental leave and daddy school • Appoint the first woman executive in the technology and safety sector 	<p>Family-friendly company certification Appointment of first woman executive</p>
 <p>SDGs 6. Clean Water and Sanitation 6.3 Improve water quality by reducing pollution 6.5 Implement integrated water resources management at all levels</p>	<ul style="list-style-type: none"> • Save and efficiently manage water supply by building a reclaimed water production system • Monitor the water quality of groundwater discharge and recycle water 	<p>Recycled water using a water reclamation system Operating a production facility on the scale of producing a maximum of 12,000 tons daily Using groundwater 400 tons of daily</p>
 <p>SDGs 7. Affordable and Clean Energy 7.2 Increase substantially the share of renewable energy in the global energy mix 7.3 Improve energy efficiency</p>	<ul style="list-style-type: none"> • Adopt energy-efficient systems, such as hydrothermal, geothermal, photovoltaic (PV), solar thermal and wind energy • Run energy systems that manage fuel-efficient energy facilities • Reduce energy use by recycling elevator energy 	<p>Received the Grand Prize at the Seoul Environment Awards 2022 for continuing efforts toward energy transition 18 GWh of annual new and renewable energy production Achieved energy reduction to the tune of saving 49 million KRW by recycling elevator energy</p>

UN SDGs	Key activities	Key Results
 <p>SDGs 8. Decent Work and Economic Growth 8.3 Promote development-oriented policies that encourage the growth of small business owners 8.5 Achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities and equal pay for work of equal value</p>	<ul style="list-style-type: none"> Established local F&B area for small business Pay equal wages regardless of gender Achieve equal employment for both genders 	<p>17 small business stores in the F&B 3355 zone Equal rate of base pay and bonuses for men and women Received the Order of Industrial Service Merit in the Iron Tower class at the 2022 Equal Employment Contribution Awards</p>
 <p>SDGs 9. Industry, Innovation and Infrastructure 9.4 Upgrade infrastructure to make them sustainable with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies</p>	<ul style="list-style-type: none"> Apply energy-saving facilities to LOTTE WORLD TOWER 	<p>Obtained the LEED gold certification sustainable building certification</p>
 <p>SDGs 10. Reduced Inequality 10.2 Empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion, or economic or other status</p>	<ul style="list-style-type: none"> Make efforts to improve the diversity of employees within the organization Build a system of promotion based on performance assessment 	<p>Women accounted for 58% of promotions</p>
 <p>SDGs 11. Sustainable Cities and Communities 11.2 Provide access to safe, accessible and sustainable transport systems for all, improving road safety 11.7 Provide universal access to safe, inclusive and accessible, green and public spaces</p>	<ul style="list-style-type: none"> Improve the water quality of Seokchon Lake through the cooperation between the Songpa-gu office and private companies and by suppressing the formation of algal bloom during the summer. Investment for the Jamsil Intercity Bus Transfer Center to reduce traffic congestion Tree planting event at Songpa Ogeum Park 	<p>650 billion KRW investment in traffic improvement projects 3,200 trees planted during the Ogeum Park tree planting event</p>
 <p>SDGs 12. Responsible Consumption and Production 12.3 Reduce global food waste 12.5 Substantially reduce waste generation through prevention, reduction, recycling and reuse</p>	<ul style="list-style-type: none"> Automatic measurement of food waste based on RFID and food waste fees in accordance with the amount disposed 'Nephron'-a PET bottle collection robot for creating a culture of recycling 'The Maru'-a project for the virtuous recycling of resources together with our tenants 	<p>4,200 donation items collected for 'The Maru' project</p>
 <p>SDGs 13. Climate Action 13.2 Integrate climate change measures into strategies and planning</p>	<ul style="list-style-type: none"> Building a collaborative network for greenhouse gas (GHG) research with the National Institute of Meteorological Sciences, Seoul Research Institute of Public Health and Environment and Yonsei University with the goal of achieving net-zero carbon emissions by 2050 	<p>First urban GHG measurement station in Korea A cost reduction of 4 billion KRW by installing the GHG measurement station</p>
 <p>SDGs 16. Peace, Justice and Strong Institutions 16.5 Substantially reduce corruption and bribery in all its forms 16.10 Ensure public access to information and protect fundamental freedoms</p>	<ul style="list-style-type: none"> Operating an internal and external whistleblowing system Ethics education for the entire staff Information security education every quarter for employees 	<p>2 reports received via the whistleblowing system (in 2021) 100% attendance rate for ethics education 100% attendance rate for information security education</p>

Stakeholder Engagement

Selecting and Categorizing LOTTE P&D Stakeholders

LOTTE P&D recognizes the importance of open communication with stakeholders. That’s why the company selects and communicates with key stakeholders that have an important impact on sustainable management. The company categorizes stakeholders into three groups: core stakeholders, strategic stakeholders and environmental stakeholders, according to their legal, financial and managerial responsibilities and level of influence-the standard for stakeholder classification in ISO 26000 (social responsibility management). The company defines employees, customers, shareholders and investors, government and relevant agencies and the community as key stakeholders. The company operates dissimilar channels of on- and offline communication by taking into account the characteristics of each group of stakeholders. This allows the company to listen to the opinions and key issues of interest of stakeholders and then incorporate them into its management activities. By continuing to authentically communicate with stakeholders, the company promises to maintain a healthy relationship of trust.



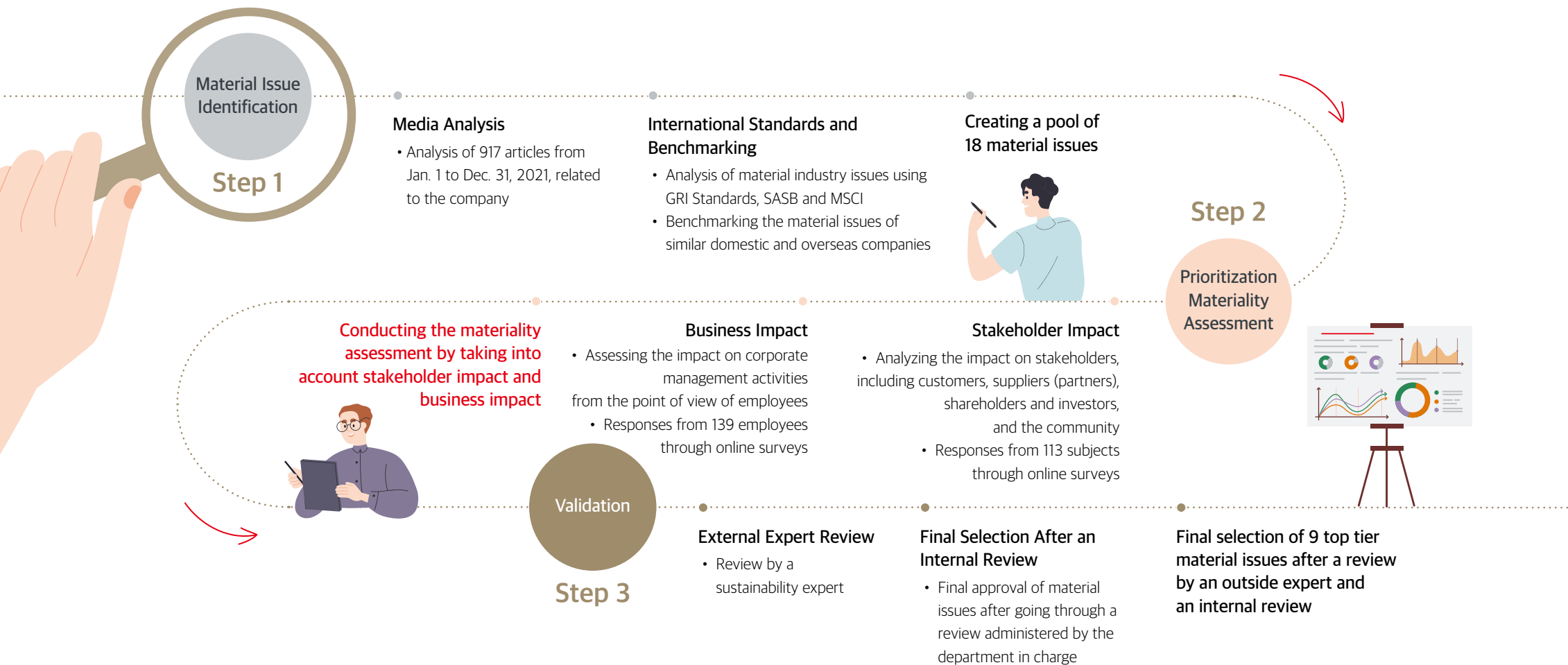
Stakeholder Groups and Communication Channels

Key Stakeholder Groups	Issue of Interest	Key Communication Channels
Employees 	<ul style="list-style-type: none"> • Lateral communication • Developing experts • Fair evaluation and compensation • Expanding welfare • Balance between work and life 	<ul style="list-style-type: none"> • Delightful Friday (monthly) • Empathy concert-meetings by job rank (frequently) • Junior board made up exclusively of MZ generation members (monthly) • Feedback app 'L-Listen' (frequently) • The Whitru Maturu Suggestion System (biennially) • MOIN Human Resource Welfare System bulletin board (frequently) • Labor-management council (quarterly)
Customers (Individual-Corporate) 	<ul style="list-style-type: none"> • Differentiated level of products and services • Complaint processing • Customer safety and health • Customer information security • Better communication 	<ul style="list-style-type: none"> • Homepage (frequently) • Office tenant surveys (half-yearly) • Residence customer satisfaction surveys (yearly) • Serious civil disaster prevention risk assessments (half-yearly) • 4 SNS channels-real-time customer response (frequently) • Publication of a culture curation webzine (frequently)
Shareholders and Investors 	<ul style="list-style-type: none"> • Financial soundness • Dividend policy • Share price improvement • Investor protection • Sharing management performance • Sound governance 	<ul style="list-style-type: none"> • Homepage (frequently) • Investor relations(IR) (when needed) • General meeting of shareholders (yearly) • Key periodic reports (quarterly-half-yearly, yearly) • Board meetings (quarterly-half-yearly)
Community 	<ul style="list-style-type: none"> • Community investment • Community job creation • Community contribution activities 	<ul style="list-style-type: none"> • Joint tenant project, 'The Maru' (frequently) • Day of Culture for the Disabled at LOTTE WORLD TOWER (monthly) • Community sharing event (frequently)
Government and Relevant Agencies 	<ul style="list-style-type: none"> • Ethical management • Tax payment • Legal and regulatory compliance • Government policy engagement 	<ul style="list-style-type: none"> • Press releases (frequently) • Meetings and conferences (when needed) • Policy proposals (when needed) • Briefing sessions (when needed)

Materiality Assessment

Materiality Assessment Outline and Process

LOTTE P&D conducted a materiality assessment based on the principles of sustainability context, materiality, completeness and stakeholder inclusiveness, as recommended by the GRI Standards and ISO 26000. As part of its materiality assessment, the company selected issues of great interest for stakeholders and issues highly relevant to the company's management strategy and business, as material issues. The company then formed the table of contents and the subject matter of the report by incorporating these issues.



Materiality Assessment Results

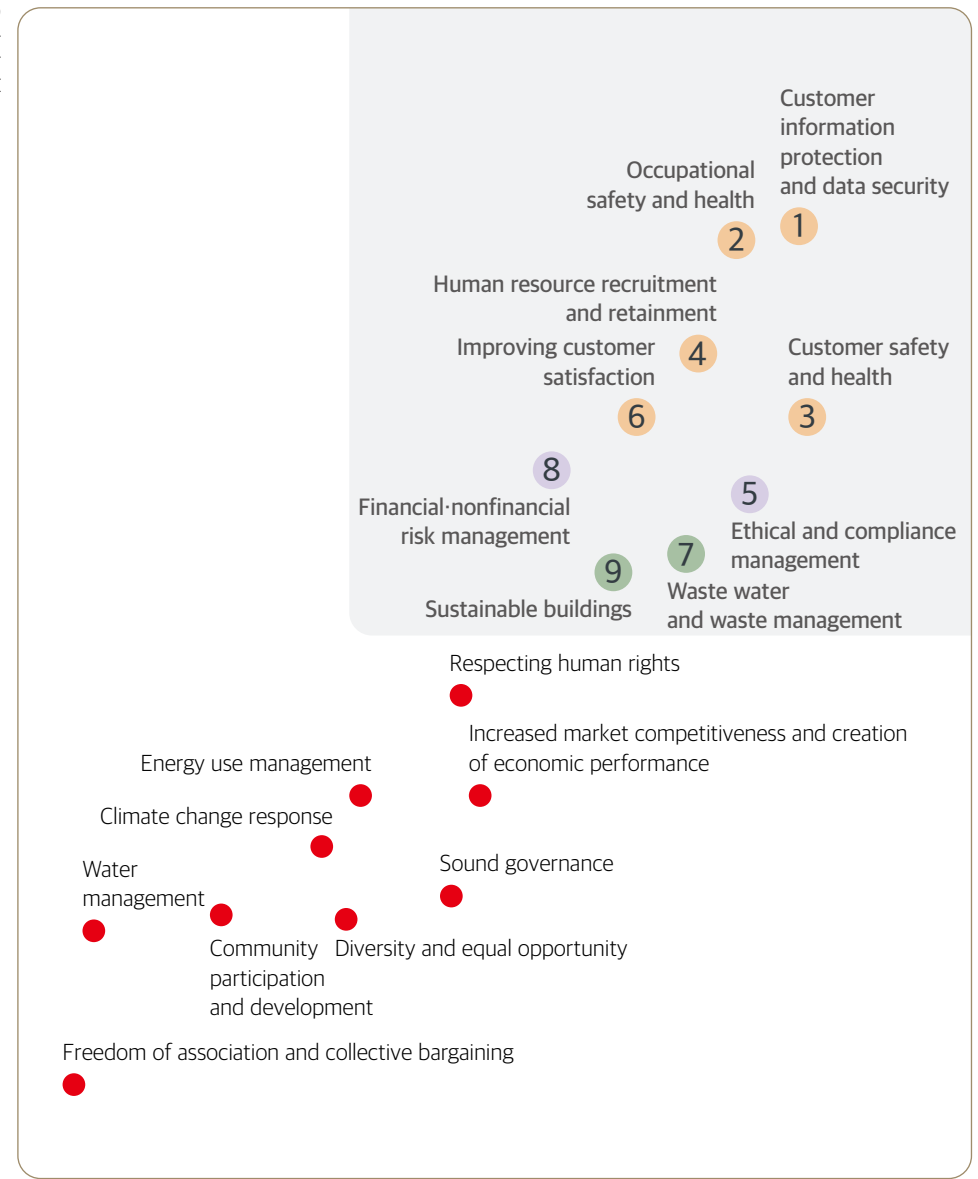
After comprehensively taking into account stakeholder and business impact and then going through a final validation process, 9 issues out of 18 were selected as top-tier material issues. LOTTE P&D’s sustainable management activities and performance, in regard to each issue, are transparently disclosed throughout the report.



NO.	Top Tier Material Issues	GRI Index	Reporting Boundaries
1	Customer information protection and data security	GRI 418	Internal/External
2	Occupational safety and health	GRI 403	Internal/External
3	Customer safety and health	GRI 416	Internal/External
4	Human resource recruitment and retainment	GRI 401	Internal
5	Ethical and compliance management	GRI 205	Internal/External
6	Improving customer satisfaction	-	Internal/External
7	Waste water and waste management	GRI 303, 306	Internal/External
8	Financial-nonfinancial risk management	-	Internal/External
9	Sustainable buildings (building certifications·green buildings, etc.)	GRI 302	Internal/External

Materiality Assessment Matrix



Stakeholder Impact



Business Impact

Management Approach to Material Issues





Category	Context & Our Approach	Key Performance	Next Plans	Page
<p>Waste Water and Waste Management</p> 	<p>The abundant activities occurring within buildings generate a considerable amount of water consumption and waste. Reducing water consumption and reusing water, as well as effectively processing waste, are extremely important issues for building management.</p> <p>LOTTE P&D minimizes the environmental impact, promotes the circulation of resources, continues to invest in the reuse of water and mulls over action plans. The company promotes the reduction of water use and the reuse of water by building water-saving centers within buildings and monitors in real time the amount of waste with the goal of reducing waste. Waste is thoroughly managed by tracing it from its generation to its collection-transport by disposal companies and its disposal in landfills.</p>	<ul style="list-style-type: none"> • Reuse of septic tank effluent by improving water reclamation systems • Air-conditioning parking lots using groundwater • Tracking management of waste • Building and operating an RFID-based food waste management system 	<ul style="list-style-type: none"> • Entering into an MOU for plastic waste (PE, PP) recycling • Recycling discarded paper towels 	<p>50~53p</p>
<p>Sustainable Buildings</p> 	<p>Throughout the entire lifecycle of a building, from its design and construction to its demolition, it is extremely important to minimize any negative impact it has on the environment. Energy efficiency is an important goal not just in terms of a building's overall lifespan but also in terms of sustainability.</p> <p>From its construction stage, LOTTE WORLD TOWER involved the use of materials that took into account high-efficiency energy, with energy management efficiently administered for the building in the form of reducing energy use and directly producing energy. LOTTE P&D mulls over and puts into practice an action plan by continuing to take into account the sustainability of a building.</p>	<ul style="list-style-type: none"> • Generating new and renewable energy • Operating a building energy management system • Applying an elevator power regeneration system 	<ul style="list-style-type: none"> • Expanding the rate of new and renewable energy generation • Updating energy management systems 	<p>32~38p</p>





Category	Context & Our Approach	Key Performance	Next Plans	Page
<p>Occupational safety and health</p>	<p>Following stronger occupational safety and health regulations, such as the enforcement of the Serious Accidents Punishment Act, there is increasing importance attached to creating a safe and healthy workplace for sustainable management.</p> <p>LOTTE P&D is establishing a culture of safety that involves every member of the workplace practicing the basic principles of safety and being in compliance with laws and regulations. Likewise, LOTTE P&D builds and operates safety and health management systems that include and apply to all workers, including those working for contractors and subcontractors. The company is focusing on strengthening a system of win-win cooperation for the safety and health of its business partners.</p>	<ul style="list-style-type: none"> Establishing and implementing an industrial accident prevention plan Providing and educating safety and health guidelines and procedures Enacting a manual for hearing worker safety and health opinions Identifying, removing and controlling risk factors Establishing a disaster emergency action plan 	<ul style="list-style-type: none"> Setting and spreading a culture of safety A safe and health workplace without serious industrial accidents (maintaining zero serious accidents and safety accidents) 	64~69p
<p>Customer safety and health</p>	<p>The safety and health of customers serve as the most basic element of maintaining customer satisfaction and trust. Hence, LOTTE P&D makes sure to secure the safety and health of its customers and community members.</p> <p>In particular, the Serious Civil Disaster Prevention Risk Assessment allows the company to predict potential risks and manage them in advance. The company has also established and operates the serious accident manual and the disaster prevention and damage reduction planning manual with the goal of minimizing damage during disasters.</p>	<ul style="list-style-type: none"> Establishing and implementing safety inspection plans by issue Enforcing risk assessments, uncovering and removing risk factors in advance Establishing and operating the serious accident manual and the disaster prevention and damage reduction planning manual 	<ul style="list-style-type: none"> A safe cultural space without serious civil disasters Increased transparency by disclosing safety information 	70p
<p>Human resource recruitment and retainment</p>	<p>Recruiting and developing human resources who actively innovate the future is key to strengthening corporate competitiveness amidst a rapidly changing management environment. Youth that takes charge of innovation and change, youth that takes charge of the future and youth that takes on the challenge of becoming the world's best serve as the model of recruitment for LOTTE P&D.</p> <p>Based on the principle that every talented individual can produce the best results in jobs that fit their skill sets and aptitude, the company takes into account individuality and aptitude to place staff with the right talent in the right position. Applicants can choose the occupational group they desire by considering their own aptitude, skills and specializations. In addition, in order to develop human resources who faithfully follow LOTTE Group's management policy and take the initiative to lead us into the future, the company administers education in the form of job training and cyber school education at the LOTTE Academy.</p>	<ul style="list-style-type: none"> Operating human resource recruitment and development systems that value diversity Increasing the scale of female employees, producing the first female executive Reorganizing performance assessment systems Strengthening family-friendly and leisure-friendly programs- Mandatory parental leave for men, full remote work for pregnant women, staggered office hours, compensatory time Stronger job training, support for self-directed learning programs 	<ul style="list-style-type: none"> Establishing a flexible model of recruitment befitting the business direction More sophisticated human resource recruitment systems Mediation between employee needs for career path design and corporate human resource development strategies 	57~60p



Category	Context & Our Approach	Key Performance	Next Plans	Page
<p>Customer information protection and data security</p> 	<p>An increasing level of importance is attached to system security in digital societies. Above all, it is important to protect customer information from data leaks and cyber attacks and counter potential security threats.</p> <p>LOTTE P&D establishes yearly information security plans, inspects vulnerabilities in its information security infrastructure, manages an integrated security control site and adopts essential security solutions—this way, it establishes and operates its data security management system. The company also carries out quarterly information security education, model virus email training and internal information leakage prevention training, with the aim of strengthening the security awareness of its members.</p>	<ul style="list-style-type: none"> • Adopting essential security solutions • Diagnosing group information security levels and improving vulnerabilities • Quarterly information security education 	<ul style="list-style-type: none"> • Stronger information security management systems • Building advanced security infrastructure • Stronger cybersecurity capabilities 	<p>86~88p</p>
<p>Improving customer satisfaction</p> 	<p>Functioning as a sustainable company requires the repurchase of products and services. Increasing customer satisfaction is extremely important to this end. With the recent decline in the Covid-19 pandemic, customers have an increasing need to go outside. At the same time, it is important to communicate with customers via non-face-to-face SNS channels such as YouTube, Instagram and TikTok due to protracted social distancing.</p> <p>LOTTE P&D works hard to provide customers with the highest level of services while satisfying both 'contact' and 'untact' needs.</p>	<ul style="list-style-type: none"> • On-offline customer events (Untact Marathon, Sky Run, etc.) • Revitalizing online real-time communication broadcasts • Collaboration with high-end brands (Cartier, CHANEL, Swarovski, etc.) • Arranging F&B Markets in step with trends 	<ul style="list-style-type: none"> • Operating and diversifying real-time communication channels with customers • Continuing on-offline linked events • Collaborative marketing activities with assorted brands • Planning an experience-type event using natural environments, such as Seokchon Lake 	<p>89~94p</p>



Category	Context & Our Approach	Key Performance	Next Plans	Page
<p>Ethical and Compliance Management</p> 	<p>Ethics and compliance management, which are socially regulated sectors in accordance with systems and laws, are factors that directly affect a company's sustainability. Ethical business management and internalizing a culture of ethics and compliance are essential for a company to be trusted by its stakeholders, such as customers, shareholders and regulatory agencies.</p> <p>LOTTE P&D is working hard to establish an ethical organizational culture and improve the ethical consciousness of its employees by providing ethics education and monitoring compliance based on a code of ethics and standards of ethical conduct.</p>	<ul style="list-style-type: none"> • Ethics and compliance education (collective and online education) • Compliance monitoring • Running a whistleblowing system • Distributing the CEO's message on ethics and compliance management 	<ul style="list-style-type: none"> • Continuing ethics and compliance education • Continuing the monitoring of relevant laws and regulations • Building and improving transparent and efficient work processes 	<p>100~102p</p>
<p>Financial and Nonfinancial Risk Management</p> 	<p>Financial/nonfinancial risk management is increasing in importance for the real estate industry. A prompt response to risks in a rapidly changing management environment requires company-wide monitoring and management. Above all, it is important for companies to identify potential risks in advance and find solutions by advancing both quantitative and qualitative indicators if their aim is to manage sustainable businesses.</p> <p>LOTTE P&D monitors at all times distinct risks that can occur in the course of corporate management. The company regularly updates its financial and ESG indicators and shares them with its board of directors. It takes swift action by identifying areas that require improvement. Again, its management committee and investment review board allow the company to review financial/non-financial risks prior to the enforcement of investments or new business developments.</p>	<ul style="list-style-type: none"> • Founding a company-wide risk deliberation agency (investment review board) • Monitoring financial/non-financial risk at all times • Developing integrated ESG indicators and managing them at all times 	<ul style="list-style-type: none"> • Building an integrated enterprise risk management (ERM) system • Building risk management procedures(identification, evaluation, response, execution and feedback) and a virtuous cycle system of risk management 	<p>98~99p</p>



ESG SPECIAL TOPIC

Special Topic 1. Sustainable Building	32
Special Topic 2. Workplace Culture	39



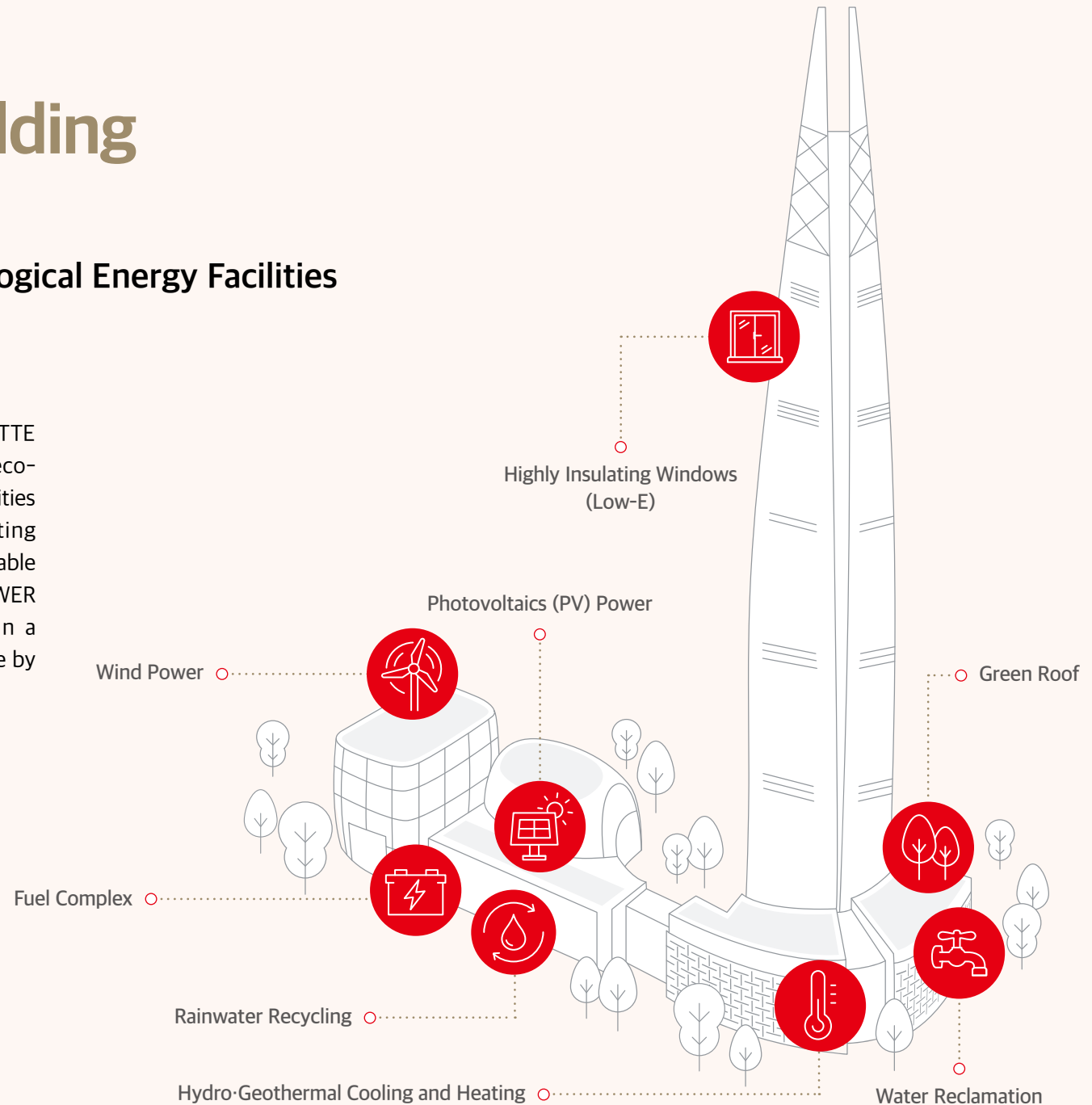
ESG Special Topic 1

Sustainable Building

LOTTE WORLD TOWER's Ecological Energy Facilities

**LOTTE WORLD TOWER,
an Eco-efficient Building for Our Earth**

The tallest building in Korea, LOTTE P&D's LOTTE WORLD TOWER is the most representative eco-friendly landmark that applies environment facilities starting at the design stage. Actively adopting high-efficiency equipment and new and renewable energy generation systems, LOTTE WORLD TOWER achieves a natural scenery complex within a downtown area in harmony with Seokchon Lake by securing an ecological area spanning over 30%.



The Energy Center

The 20,000m² Energy Center, which serves as the heart of the building, is located on the 6th basement floor of LOTTE WORLD TOWER·MALL. Equipped with environment energy facilities including a hydro and geothermal cooling and heating system, high-efficiency transformers and fuel cells, the center gathers new and renewable energy produced from photovoltaics and wind power and supplies electricity and heat to the complex. This corresponds to roughly 12% of the total energy usage and equivalent to electricity production, equates to 18GWh a year. In addition, this green energy is monitored using a system in the form of hourly electric energy usage, fluctuations relative to the previous year and energy goal-achievement rates.



Energy Center



Comprehensive Status Board for Energy Monitoring



Highly-insulating double-glazed windows at LOTTE WORLD TOWER

Energy Management

In addition to producing new and renewable energy, the company also continues to invest in efficient energy management systems. The cooling and heating load on the building is minimized on account of high-efficiency tools and materials, reduced load on the ventilation system thanks to a heat exchanger, high-efficiency LED lighting and highly-insulating windows. The temperature difference between summer and winter causes the issue of declining energy efficiency for the building. To tackle this issue, LOTTE WORLD TOWER uses highly-insulating double-glazed glass instead of regular glass. Going above and beyond, LOTTE P&D practices energy saving by expanding energy and improving performance.

New and Renewable Energy Production Systems

Disparate energy facilities for new and renewable energy production are installed at LOTTE WORLD TOWER·MALL. In order to lower the reliance on fossil fuels and reduce energy usage, new and renewable energy production systems were actively adopted, with hydrothermal, geothermal, wind, solar PV and solar thermal energy facilities in operation



Geothermal Energy

A geothermal heat pump cooling and heating system uses new and renewable energy for heating and cooling by making use of geothermal energy produced from seasonal temperature differences in the groundwater and ground heat. LOTTE P&D's geothermal system is the biggest in Korea, with 723 heat exchangers installed underground at a depth of 150m to 250m in order to cool and heat the building. By using new and renewable energy to replace fossil fuels, LOTTE P&D leads the way in reducing GHG emissions.



Hydrothermal Energy

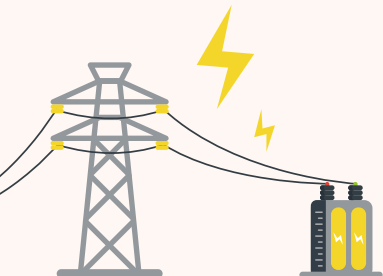
Hydrothermal energy is an energy system that utilizes how the physical characteristics of temperature of surface water is lower than the atmosphere in the summer and warmer in winter. Because hydrothermal energy provides heating and cooling directly through the heat source of water or heat pumps without a process of burning fuel, it is an green capable of energy and GHG reduction. LOTTE WORLD TOWER supplies 10% of its cooling and heating from hydrothermal energy by receiving 50,000t of raw water a day. This is the largest amount of hydrothermal energy used for heating and cooling in Korea and reduces annual energy use by 35.8% over an absorption chiller-heater with a similar capacity.



Hybrid streetlights at the World Park Plaza

Wind Energy

Two large wind power generators are installed on the LOTTE WORLD MALL rooftop. 12 hybrid streetlights that use electricity generated from wind and solar PV are installed along the World Park Plaza. This allows for the flexible production of electricity, with wind energy produced on cloudy and windy days and solar PV energy on sunny days.



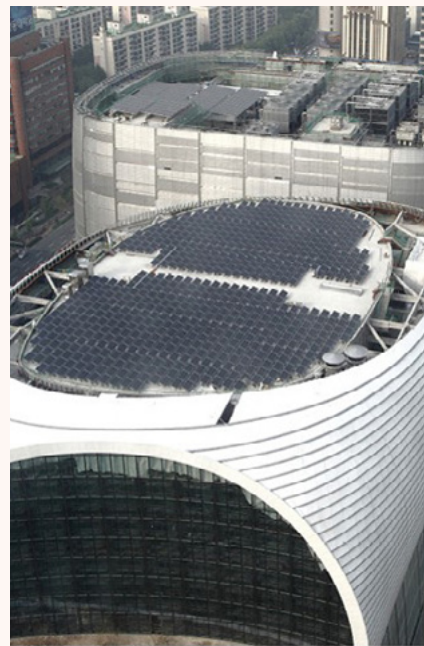
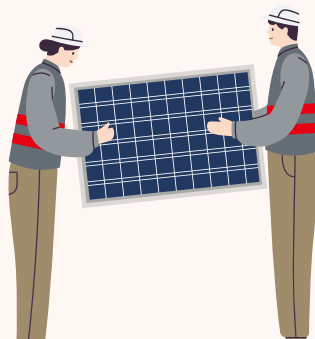


A pergola at the World Park Plaza



Photovoltaics(PV) and Solar Thermal Energy

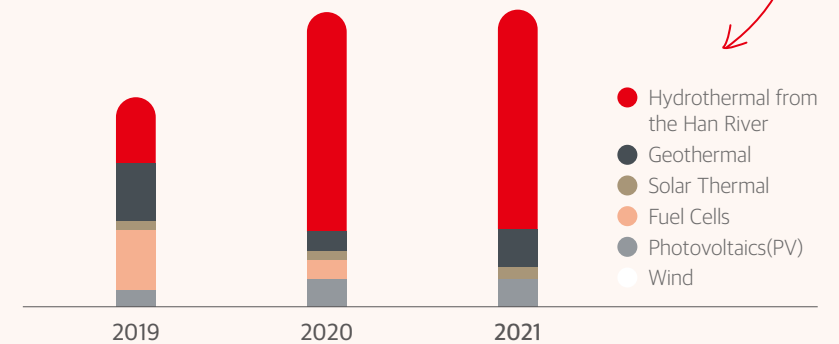
Placed in sundry areas of the LOTTE WORLD TOWER complex, solar PV power systems and solar thermal water heating systems are used to convert solar energy into clean energy. A total of 1,355 solar PV panels are installed in the rooftop area of AVENUUEL and LOTTE WORLD MALL and the World Park Plaza, producing 357MWh of electricity in 2021 alone. In addition, solar thermal modules are installed on 300 square meters of the rooftop area of the AVENUUEL for heating and hot water for LOTTE WORLD TOWER·MALL. This reduced energy usage by 149MWh in 2021.



Photovoltaics(PV) Panels on the LOTTE WORLD MALL Rooftop

Amount and Ratio of New and Renewable Energy Generation (Unit: MWh)

Category	2019	2020	2021
Electricity	141,447	237,969	128,125
Natural Gas	35,848	27,396	27,679
Energy	177,294	155,365	155,804
New and Renewable Energy	11,746	17,919	18,222
%	6.6%	11.5%	11.7%



Improving Energy Efficiency and Reducing Energy Usage

Improving and Monitoring Energy Efficiency

LOTTE WORLD TOWER·MALL were designed as low energy consumption, non-polluting buildings that use 56% of the energy that other buildings on a similar scale use. As part of its efforts toward improving energy efficiency and operating every year, the company invested 3 billion KRW or about 5% of the total energy cost in the past 3 years. As a result, the company was able to reduce energy costs to the tune of roughly 750 million KRW.

Energy reduction investments and performance in the past 3 years

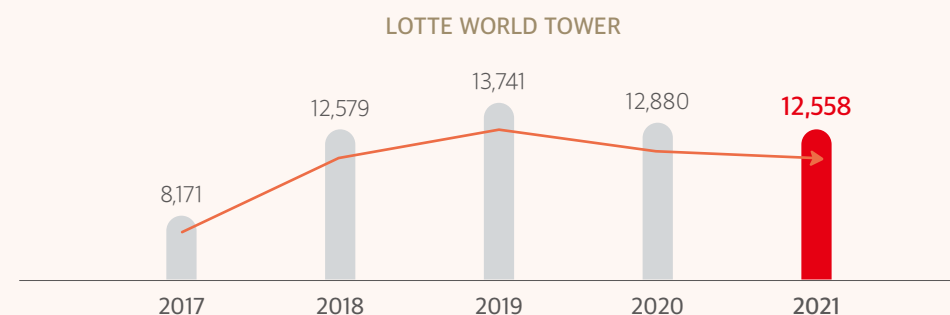
Category		Unit	2019	2020	2021	Total
Investment		One Million KRW	1,035	610	1,357	3,021
Amount saved	Natural Gas	kNm ³	96	-	4	100
	Natural Gas	TOE	99	-	4	103
	Electricity	MWh	1,945	1,743	2,107	5,799
	Electricity	TOE	446	399	482	1,328
	Total	TOE	545	399	486	1,431
Value saved	Natural Gas	One Million KRW	57	-	2	59
	Electricity	One Million KRW	234	209	243	689
	Total	One Million KRW	291	209	245	745

Moreover, the overall energy usage for the buildings is monitored using the Building Energy Management System (BEMS). The air volume of each air conditioner is controlled by analyzing the indoor temperature data of each floor.

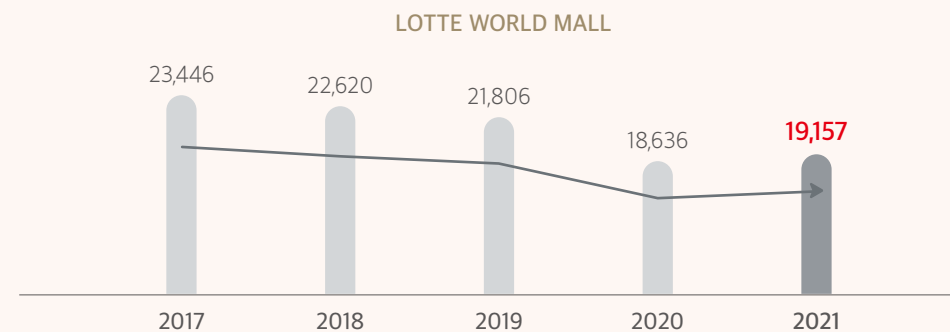
This data also determines the priority for the use of the heat source when using air conditioning. After monitoring the energy usage of LOTTE WORLD TOWER·MALL, which were opened at different periods, the company found that LOTTE WORLD TOWER reduced energy use by 8.6% and LOTTE WORLD MALL by 12.1% over the same period in 2019, achieving a reduction rate of 10.8% in total.

BEMS Analysis Results

(Unit: TOE)



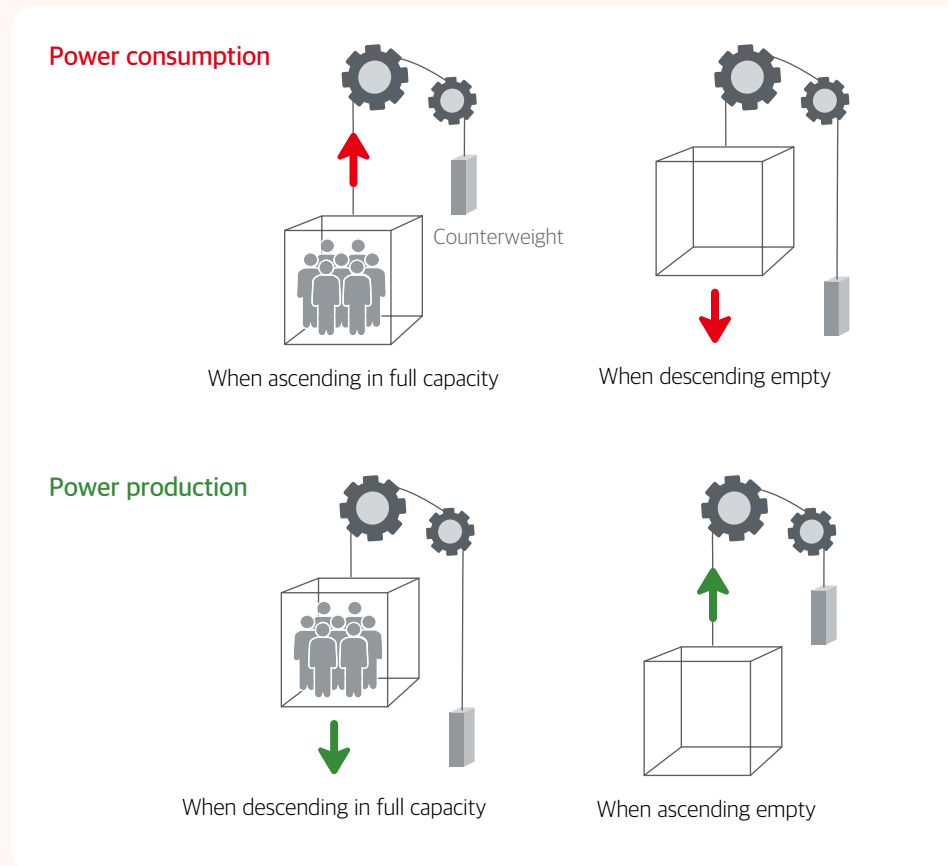
- 8.6% reduction over the previous 3 years
- A downward transition based on energy usage thanks to continuing reduction activities since 2019



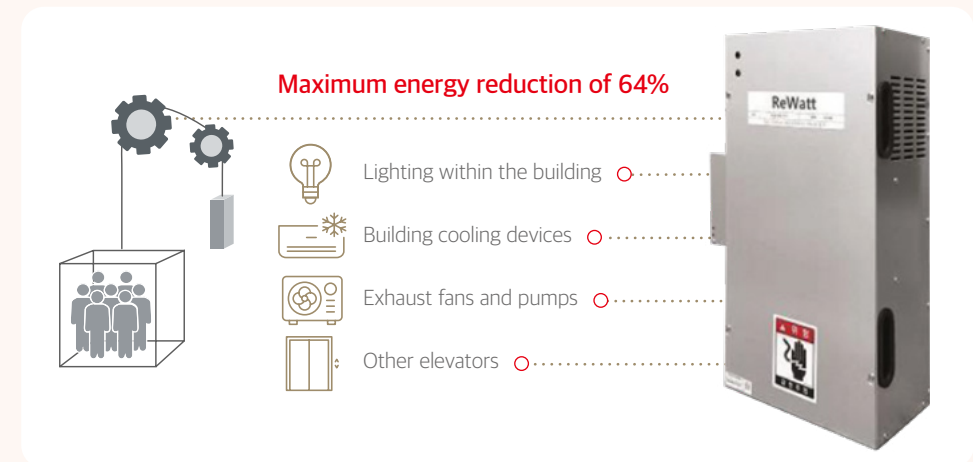
- 12.1% reduction over the previous 3 years
- Small increase in 2021 over 2020, continuing downward based on trends

Recycling and Reduction of Elevator Energy

A total of 121 elevators are installed in LOTTE WORLD TOWER·MALL. When an elevator goes up or down, electricity is produced in the motor, but it is difficult to use this energy and the heat produced during this phenomenon reduces the lifespan of electronic substrate components. Moreover, the additional use of cooling equipment increases maintenance costs and incurs energy consumption. To rectify this issue, LOTTE P&D applied a power regenerating system* to recycle the energy wasted.



When an elevator with a power regenerating system* goes up or down, it can use the power produced, reducing energy use by a maximum of 64%. The regenerated energy can be supplied to other usages. The decrease in heat extends the lifespan of the elevator by reducing component damage and can also reduce additional energy consumption resulting from the use of cooling equipment. Out of all elevators installed in LOTTE WORLD TOWER·MALL, 116 elevators (96%) have a power regenerating system, saving energy to the tune of 49 million KRW a year.



Elevator Destination Panel

Elevators at LOTTE WORLD TOWER have a destination dispatch system due to its many floors. The system is programmed by allocating elevators by passenger destination so that multiple elevators don't stop on the same floor. Such a system makes it possible to operate the elevators with greater speed and efficiency.

*Power regenerating system: A system that converts the kinetic energy that occurs in the motor when an elevator goes up or down into electrical energy

Best Practice

Obtaining 'LEED Gold-Level' from the Green Building Certification System

In 2017, LOTTE WORLD TOWER became the first building with over 100 floors to receive a gold-level certification plaque from LEED, an ECO building certification system administered by the US Green Building Council (USGBC). Divided into 9 different assessment items, including location, traffic, sustainable land, water resource efficiency, energy and atmospheric environment, the LEED certification strictly evaluates how the entire process of materials, production, design, construction, maintenance and disposal of a building impacts the environment. Depending on the score, one of the four levels (certified, silver, gold, platinum) is awarded. Equipped with ecological power generation facilities and energy efficiency starting at the design stage, the entire LOTTE WORLD TOWER complex was awarded the gold-level certification, highlighting its distinguished presence as a global building. As a consequence of this opportunity, LOTTE P&D continues to work hard to mull over how to develop sustainable buildings by means of efficient energy management, energy reduction and resource circulation.



LOTTE WORLD TOWER LEED Gold Level Certification and Certification Plaque

Grand Prize at the Seoul Environment Awards 2022



The Grand Prize at the Seoul Environment Awards 2022

LOTTE P&D received the Grand Prize in the energy transition field at the Seoul Environment Awards 2022 in June 2022 for its contribution toward adopting new and renewable energy, such as geothermal and hydrothermal energy and for reducing energy consumption. LOTTE P&D invested roughly 3 billion KRW in the past 3 years in environmentally-responsible facilities and in increasing the efficiency of other equipment with the goal of achieving energy transition. The firm upgraded the automated control system of its air conditioner handlers and replaced the fluorescent light to high efficient LED in LOTTE WORLD TOWER·MALL parking lots and rear facilities, demonstrating its focus to improve energy facilities. Equally important, it adopted the BEMS to monitor energy use in real-time. Thanks to these efforts, the company has reduced energy usage to the tune of 750 million KRW.

The company continues to implement investment and management by expanding new and renewable energy production and by improving energy efficiency. To this end, the company will erect LOTTE WORLD TOWER·MALL as a global landmark.

ESG Special Topic 2

Workplace Culture

Support for Employees in Pregnancy, Childbirth and Parenting period

Believing in the idea that happiness in employees' families can lead to increased competitiveness for the company, LOTTE P&D is actively engaging in family-friendly management practices with the goal of instilling a balance between the work and life of its employees. To this end, the company offers a variety of employee benefits throughout the entire process of pregnancy, childbirth and childcare with the goal of preventing career disruptions, reducing the childcare burden for families and improving employee satisfaction. The company runs support programs, such as three days of paid leave for infertility, support for infertility treatment costs and full remote working for pregnant employees during the COVID-19 pandemic, surpassing the level of maternity protection programs mandated by law. The company also encourages employees to use leave in succession with parental leave by using the company's automatic childcare leave program. LOTTE P&D's family-friendly programs support the work-life balance of its employees and for having contributed to the increase in national competitiveness, the company was refurbished as a family-friendly company by the Ministry of Gender Equality and Family in December 2021.

*Initial certification: Dec. 2016

Supporting Male Workers to Participate in Childcare

The LOTTE Group is leading the way in supporting male workers to actively take part in childcare by being the first major company in Korea to mandate one month of childcare leave for male workers throughout its subsidiaries. Thanks to this program, male workers at LOTTE P&D can wholly dedicate themselves to taking care of their children for one month or longer without having to be self-conscious around their bosses or colleagues. Additionally, because many workers are reluctant to use their childcare leave for financial reasons, the program preserves pay 100% for the first month in an effort to rectify this issue. Additionally, the company runs Daddy School for male workers ahead of their childcare leave, providing miscellaneous types of training and practice sessions, including know-how in terms of how to allot childcare labor.



Family-Friendly Support Programs by Period



Preparing for Pregnancy · Pregnancy

3 days of paid infertility leave
 (one day of paid leave out of the three days mandated by law)

3 months of unpaid infertility leave

Support for infertility treatments
 (childless women 35 years old and over,
 upper limit of 5 million KRW)

**Full remote work for pregnant women during
 Covid-19 pandemic (2021-operational)**



Childbirth

Childbirth gifts for both genders
 Gift: 6 cans of Pasteur infant formula,
 baby products (worth 100,000 KRW)

Expenditure for congratulations and condolences:
 200,000 KRW for the first child,
 2 million KRW starting with the second child



Childcare

Automatic childcare leave following the end of parental leave

**The company encourages the use of family care leave for the
 purposes of family care as mandated by law**

Mandatory 1-month childcare leave for male employees

**100% of normal wages are preserved for the first month of
 childcare leave for both genders**

Daddy School

**Additional unpaid childcare leave apart from the legally
 mandated childcare leave (1 year) during pregnancy
 or for childcare**

**Mentoring for employees of parents(both genders)
 who are returning from childcare leave (3 months)**

Two Comfortable Mom Daycare Centers in the Jamsil area

Support for child educational expenses

The Comfortable Mom Room, a lactation room and lounge for mothers, the Vitamin Room, a lounge for both genders

Balance Between Work and Life

LOTTE P&D improves employee satisfaction by securing spatial and temporal flexibility for work through a variety of flexible work arrangements, including work from home and office working hours.

Staggered Office Hours

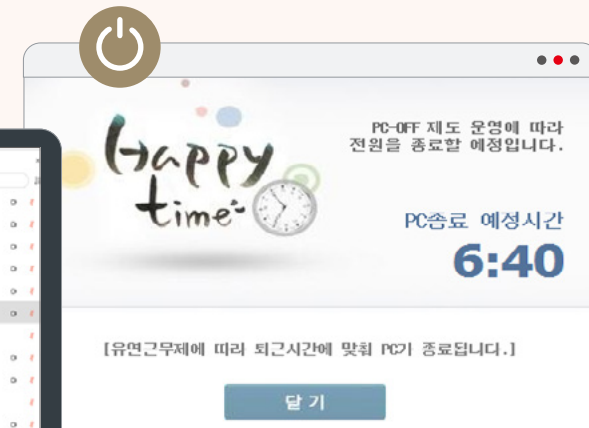
The free choice of when employees come to and leave work allows them to secure time to take their children to and from preschool. Staggered office hours are divided into A to E types, with employees arriving at work any time between 8 and 10 a.m. and working for 8 hours. In 2021, excluding special positions such as shift work, 152 employees were able to work on the basis of staggered office hours.

Full Expansion of Remote Work

As part of an effort toward achieving flexible work arrangements rather than reacting to the COVID-19 pandemic, the company has been fully expanding remote work since 2020. LOTTE P&D has distributed common guidelines on remote work after setting up remote work procedures and systems. As of 2021, a total of 154 workers have worked remotely, thereby increasing work efficiency.

PC ON/OFF System

In order to comply with the fixed work hours of 40 hours per week, PCs can be turned on 10 minutes before the beginning of each type of staggered office hours and will be automatically turned off 10 minutes after the end of the workday.



Balance Between Work and Life

Work Hours Savings System (Compensatory Leave)

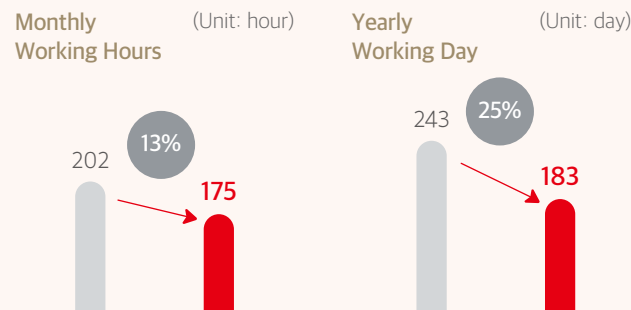
The company is running a work hours savings system that allows employees to save work hours if they unavoidably have put in overtime work hours. They can then use these hours as compensatory leave within three months. Encouraging employees to have timely breaks prevents them from accumulating fatigue and promotes improving the balance between work and life.

Improving Work-Life Balance for Shift Workers

The company has expanded the work shift pattern for shift workers from the existing three team/two shift system to a four team/two shift system with the goal of relieving fatigue, improving morale and expanding rest for shift workers. After making this change, monthly work hours were reduced from 202 monthly hours to 175 monthly hours (▽13%), while yearly work days decreased from 243 days to 183 days (▽25%).

Family Leave

The company operates a family leave program that gives four days of paid leave in addition to annual leave to workers who've worked six months or more. Family leave can be used at any time throughout the year and employees can seek a better work-life balance by spending time with family.



Employee Benefits

Helping Mental Health Management Through Professional Counseling Services

LOTTE P&D provides professional counseling services to employees and their immediate family members with the goal of relieving imbalances between life and work and increasing work satisfaction. In order to provide help with regard to heterogeneous hardships in the lives of employees (work stress, interpersonal relationships, emotional problems, parent-child relationships, financial and legal advice), the company is providing counseling services five times a year per person. Anonymity is thoroughly guaranteed because outside professional counseling service agencies are used. The program thoroughly guarantees anonymity by employing outside professional counseling service agencies. Currently, 10% of all employees are using the counseling service. In particular, younger employees in their 20s and 30s show a high degree of participation.



롯데물산

행복찾기

롯데물산 직원 여러분의 행복을 응원합니다.
행복찾기는 직원의 다양한 고민에 도움을 줌으로써
일과 삶의 불균형을 해소하고 업무만족도를 높일 수 있도록
지원하는 전문상담서비스입니다.

직원 1인 5회 (비용 회사 지원)

상담주제
업무스트레스, 대인관계, 감정, 부모/자녀, 재무/법률상담 등

이용대상
롯데물산 임직원 및 직계가족

상담시간
평일 오전 9시 ~ 오후 9시 / 토요일 오전 9시 ~ 오후 4시

상담절차

상담 신청	상담 예약	전문 상담	만족도 확인
-------	-------	-------	--------

- 전국 600여 개 상담기관 2,886여 명 이상의 상담가와 상담 가능합니다.
- 상담신청 시 거주지와 상담내용에 최적화된 상담기관으로 연계해드립니다.

개인의 상담내용은 본인의 동의없이 회사에 알려지지 않으며,
관련법률에 의거하여 철저하게 비밀보장됩니다.
(근로복지기본법 제83조)

상담신청 및 문의

080-080-5988 (수신자 부담)
이메일 dain@daincm.co.kr 홈페이지 www.eapkorea.co.kr
KakaoTalk 플러스친구 '다인leap' 친구등록 후 상담신청

EAP 전문기관 (주) 다인

Supporting Medical Expenses and Preventive Health Check-ups

The company supports health insurance coverage and health checkups for employees and their immediate family members. The company adopted group indemnity medical coverage for employees, their spouses and their children. In 2021, a total of 283 people were able to benefit from health insurance coverage. Health checkup costs are supported for employees personally, while a health checkup discount program is implemented for the family members of employees.

Employee Benefits Guidebook

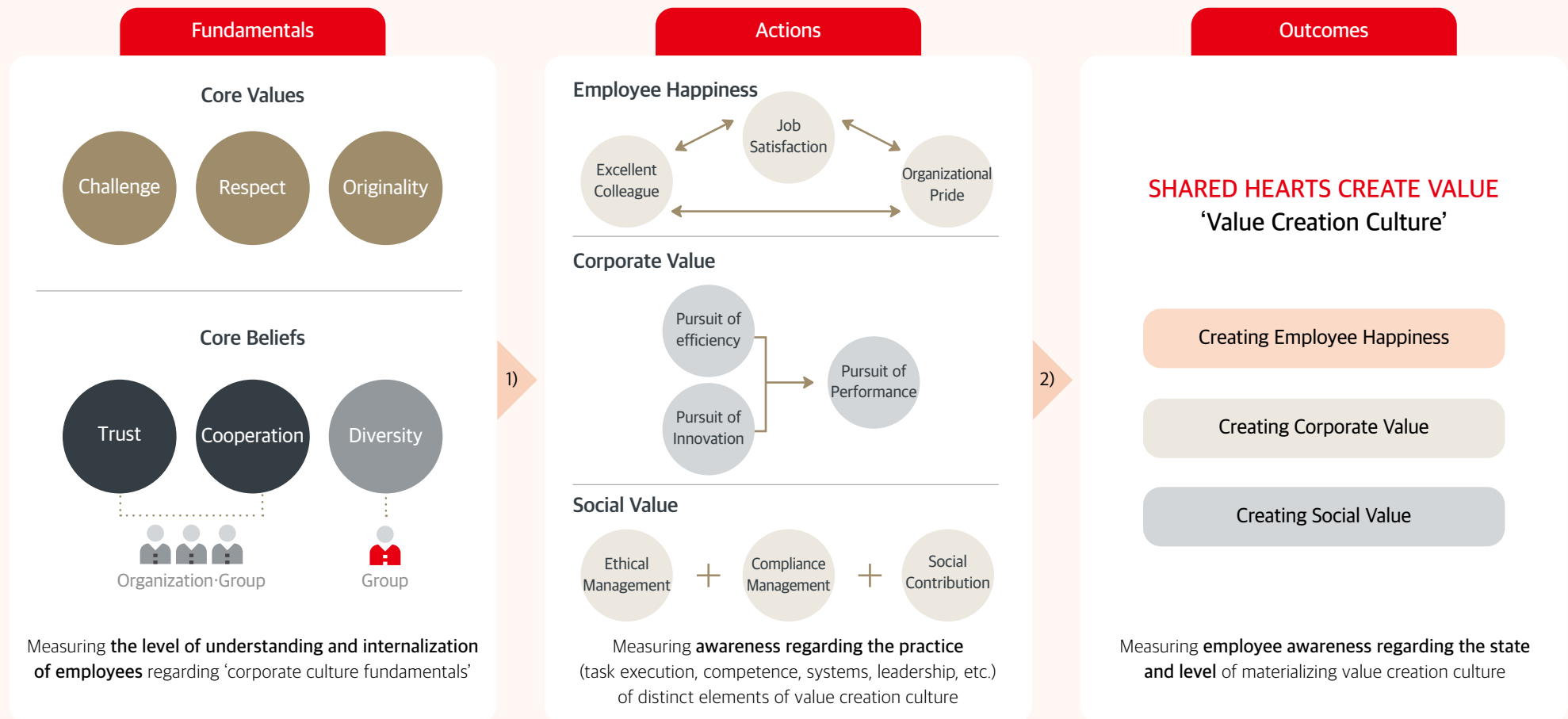
LOTTE P&D provides an employee benefits guidebook so that employees can identify benefits such as congratulations and condolence benefits, leave, children's education, health management and other benefits. What's more employees can easily check different benefits provided by the company by item on the Human Resource Welfare System bulletin board on the company intranet portal.

Aiding Family Vacation Facilities

LOTTE P&D employees can stay two nights per employee at LOTTE resorts (Sokcho·Buyeo) and Jeju Art Villas. Annually, there are roughly 150 to 200 uses of family vacation facilities thanks to simple reservation procedures within the human resource system.

Value Creation Culture Diagnosis

Every year, LOTTE P&D carries out the Value Creation Culture Diagnosis, an employee awareness survey which aims at identifying the current status of corporate culture and deriving tasks for improvement. The Value Creation Culture Diagnosis consists of surveys on the creation of ‘employee happiness,’ ‘corporate value,’ and ‘social value,’ which serve as the core of LOTTE Group’s corporate culture. The surveys measure the level of understanding and internalization of employees regarding corporate culture fundamentals, awareness regarding action and employee awareness regarding the status and level of materializing value creation culture. The diagnosis is conducted every September, with around 90% of employees participating.



1) Promotes taking action for fundamental value creation by internalizing core values and beliefs—the fundamentals of the corporate culture system
 2) Inspired by the ‘Shared Hearts Create Value’ credo while continuing to develop a value-creation culture within the group by taking fundamental value actions

Best Practice

Variegated Certifications and Awards for Employee Welfare

LOTTE P&D was successively certified as a family-friendly company in 2016, a leisure-friendly company in 2018 and best labor-management culture enterprise in 2019 after being recognized for its efforts to improve employee welfare. In 2021, the company was re-certified as a family-friendly company. The company also extended its leisure-friendly company certification and received the grand prize from the Minister of Employment and Labor in recognition of the company's contributions out of all best labor-management culture enterprise candidates. In May 2022, the company was awarded the Order of Industrial Service Merit in the Iron Tower class at the 2022 Equal Employment Contribution Awards for its contributions toward achieving equal employment opportunities. LOTTE P&D will continue to create an organizational culture that allows employees to enjoy their work by continuing to implement family/leisure-friendly programs and welfare programs.



Refurbished as a family-friendly company (Dec. 1, 2021)

Certification given after a review to public agencies and companies that operate exemplary family-friendly programs (childbirth, childcare support, flexible working arrangements, family-friendly workplace culture creation)

Certification body-review agency Minister of Gender Equality and Family-Korea Management Certification (Family-Friendly Certification Bureau)

Term of Validity New certification (3 years) → Extension (2 years) → Re-certification (3 years), Reviewed every 3 years after re-certification
 ※ LOTTE P&D was first certified in Dec. 2016.

Certification Benefits Additional points awarded during government administered support projects, authority to use the certification mark, prime rates from banks

Order of Industrial Service Merit in the Iron Tower class at the 2022 Equal Employment Contribution Awards (May. 27, 2022)

Uncovering and awarding individuals and companies that took the lead in achieving equal employment

Application Candidates Individuals(Users, workers, labor union members, civilians), groups (companies, civic groups, education institutions)

Results Individual(Person of Merit) Order of Merit for CEO Ryu Je-don

Extension of Leisure-Friendly Company Certification (Nov. 22, 2021)

Certification given to companies that support workers so that they can harmoniously balance work and leisure

Administered-Supervised by Ministry of Culture, Sports and Tourism-Regional Culture & Development Agency

Term of Validity New certification (3 years) → Extension (2 years)
 ※ LOTTE P&D was first certified in Oct. 2018.

Certification Benefits Government awards, PR for certified companies, opportunity to enjoy culture and art performances

Labor-Management Culture Grand Prize, Minister's Award from the Minister of Employment and Labor (Oct. 26, 2021)

Awarded the grand prize among best labor-management culture enterprises after being selected as a company that practices labor-management cooperation and fulfills its social responsibilities in exemplary fashion on the basis of labor-management partnership (best labor-management culture enterprise).

Application Candidates workplaces selected as a best labor-management culture enterprise from 2019 to 2021

※ LOTTE P&D was selected as a best labor-management culture enterprise in July 2019 (term of validity: 3 years).

Award Benefits administrative and financial benefits including being exempt from regular workplace inspections

ESG PERFORMANCE

ENVIRONMENT	47
SOCIAL	56
GOVERNANCE	95



ENVIRONMENT



Strengthening the Environmental Management
48

Water Management
50

Waste Management
52

Reducing the Environmental Impact
54

Strengthening the Environmental Management

Energy Management System

Certificate the ISO 50001 System

LOTTE P&D built a pro-energy management system across its corporate activities and acquired the ISO 50001 certification, an energy management international standards specification, in July 2019.

In this regard, the company formed a separate energy management organization, established its task procedures and specified its responsibilities and authorities. Again, it set up an energy baseline and established an energy reduction plan and continues to monitor performance and results. The company also continues to perform more effective energy management tasks by internally auditing energy management system operations and by controlling relevant risks. In the future, LOTTE P&D plans on receiving certification renewals and post-inspections administered by certification agencies.



Energy Management System Certification (Korean-English)

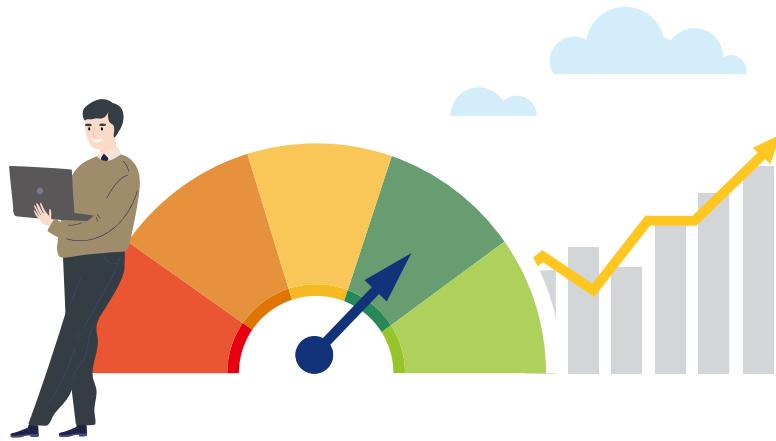
Air Quality Management

Indoor Air Quality Management

On account of its large floating number of customers, it is extremely important to effectively manage LOTTE WORLD MALL's indoor air quality. The indoor air quality of the mall is accurately measured in real time and communicated to customers. To this end, indoor air quality monitors were installed in an attempt to manage fine dust. All sections of the mall are maintained under pleasant conditions by controlling outdoor air volume based on collected data. Strict management is undertaken in the form of cleaning filters 10 times a year and replacing them twice a year. To provide customers with peace of mind, the data collected from the measuring instrument is disclosed in real time.



Indoor Air Quality Notice Board and Monitor



Reducing Air Pollution Emissions (Low NOx)

Eleven low NOx boilers controlling oxygen concentration and flame temperatures during combustion are installed at LOTTE WORLD TOWER·MALL. Low NOx boilers emit less nitrogen oxide (NOx)-the main cause behind fine dust-than regular boilers and absorb and recycle heat from high temperatures from fumes, reducing the amount of fuel used.

Taking Part in Voluntary Air Pollution Reduction Projects

LOTTE P&D voluntarily takes part in the Seoul city government’s fine-dust seasonal management system with the goal of reducing highly concentrated fine dust and air pollutants. The company minimizes the generation of air pollutants by optimizing operation rates through the integrated operation of low load boilers in an effort to reduce emissions in the air. It monitors the amount of actually generated NOx and air pollutants in real time. The company actively considers setting the goals of reducing 5% of emissions and increasing the use of clean energy for a sustainable global environment.

Best Practice

Monitoring GHG in Seoul and Research MOU

LOTTE P&D entered an MOU for the joint monitoring and research of GHGs in Seoul with the National Institute of Meteorological Sciences, the Seoul Research Institute of Public Health and Environment and Yonsei University, building a collaborative system for GHG research. The company has installed equipment for monitoring GHG concentrations at the rooftop lantern area of LOTTE WORLD TOWER and carried out analysis research in an effort to contribute to achieving net-zero carbon status by 2050. The GHG Measurement Center at LOTTE WORLD TOWER was able to save about 4 billion KRW in construction costs over installations on a similar scale. The facility also administered data analysis and monitoring over GHGs in the downtown area for the first time in Korea. It is also significant how the Center is the highest measurement center in Asia. LOTTE P&D will actively support the building of GHG monitoring networks in the future.



GHG Monitoring Equipment

Water Management

Water Management Strategy

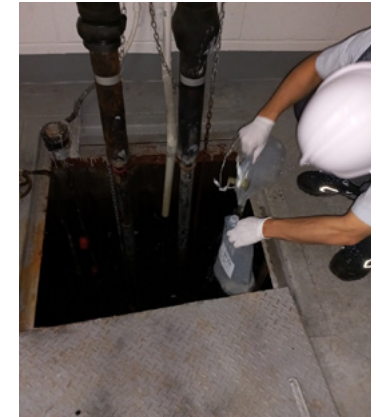
Water and Water Quality Management

Water shortages are gradually intensifying amidst a worldwide climate crisis. The future of Korea isn't free from such circumstances considering its small land area and high population density. LOTTE P&D recognizes water sources as precious assets that are to be shared with future generations and runs a variety of activities with the aim to maintain clean water quality and reuse water resources.

LOTTE P&D operates a water saving center equipped with water reclamation facilities and rainwater storage facilities at LOTTE WORLD TOWER·MALL. Sink water and septic tanker effluent are used as bathroom toilet water by means of physical/chemical processing and groundwater discharge and rainwater are recycled for HVAC systems and water for landscaping. The company also installed water-saving washbowls and toilets in restrooms in complex facilities in an effort to save water. Some of the groundwater flowing into the complex is sent to Seokchon Lake as in-stream flow. The company maintains clean water quality by measuring water quality half-yearly and by regularly cleaning the water tanks. LOTTE P&D is taking the lead in restoring a sustainable aquatic ecosystem for Seokchon Lake.



Water Saving Center

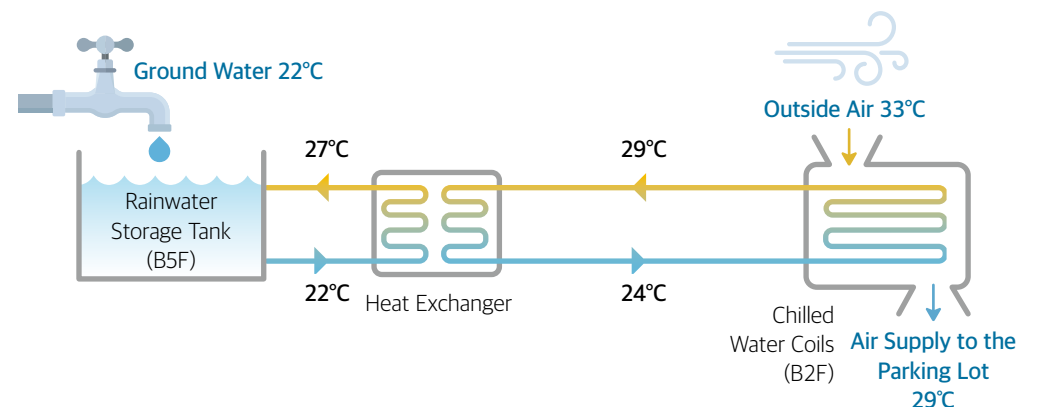


Water sampling for measuring water quality

Water Management Activities

Parking Lot Cooling by Utilizing Groundwater

Around 140,000 tons of groundwater flows into the 4th to 6th basement floors at LOTTE WORLD TOWER·MALL. This water is stored in a 1,900-ton storage tank. Because this inflow of groundwater maintains a constant temperature of 22°C at all times, it is a source of unused, fuel-efficient energy with high value for practical use. LOTTE P&D therefore sends this energy to 7 air inlets in the 2nd basement floor parking lot, reducing the temperature of the air inflow in the basement parking lots by about 4°C, thereby playing a part in saving energy during the summer.

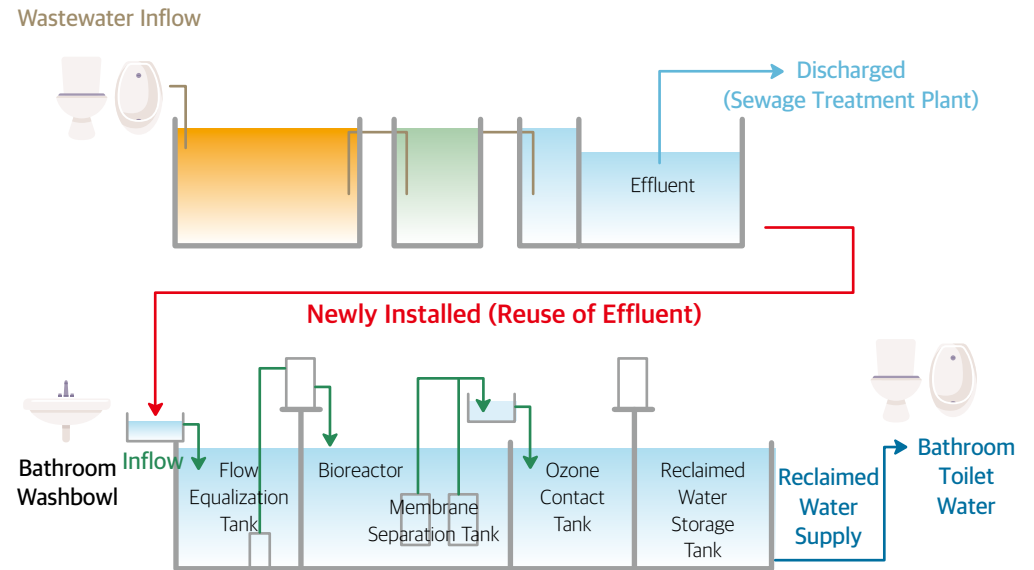


Water Reclamation System Improvements

LOTTE WORLD MALL uses recycled water through its water reclamation facility, which can produce a daily maximum of 1,200t of water. When there is a lack of raw water for recycling, raw water needs to be supplemented. In the past, LOTTE WORLD MALL replenished raw water shortages with inflow of groundwater. However, by building a reclaimed water production system using septic tank effluent in February 2021, the mall is now able to reuse reclaimed water as raw water. This allows the mall to save water replenishments by 33,000t a year.



Activated Charcoal Filtering Device



Stakeholder Interview - Partnership Company

“LOTTE WORLD TOWER is the first high-rise building in Korea with robust biodegradable facilities”

Since LOTTE WORLD TOWER's opening in 2017, LOTTE P&D's partner Hucorp has been in charge of the high-rise building's cooling and heating supply, water supply and the management of common area facilities. LOTTE WORLD TOWER is the first high-rise building in Korea with green energy facilities, including hydrothermal, geothermal, solar thermal, solar PV and wind energy facilities. It has robust facilities that use groundwater to cool parking lots and recycled water through an improved water reclamation system. We expect the amount of energy saved through clean energy facilities, as well as the reduction of CO2 emissions, will be considerable. If the know-how regarding clean energy facilities for high-rise buildings is applied to other buildings, it will lead to global sustainable management. We hope LOTTE P&D serves as a virtuous company that spreads its positive impact on partners, the community and customers.

Hucorp Site Manager
Lim Chul-gyu



Waste Management

Waste Management Strategy

Waste Management Plan

Dissimilar stakeholders gather at LOTTE WORLD TOWER·MALL to engage in a variety of activities. The waste generated from these activities can impact the environment, so the company implements recycling and tries to reduce waste. LOTTE P&D monitors in real time all waste disposed, including regular waste, food waste and recyclable waste with the goal of efficiently managing waste disposal. The company tracks and manages the waste disposal process, starting from collection and transport companies to the final disposal company in an effort to fulfill its waste management responsibilities.

Reducing Waste Generation

LOTTE P&D continues to work hard to reduce the waste generated at LOTTE WORLD TOWER·MALL. Reducing waste requires effort from varied stakeholders, including tenants and visiting customers. LOTTE P&D continues to mull over action plans aimed at drawing in voluntary participation from stakeholders and internally performing efficient waste management operations.



Tracking and managing waste

Waste Management Activities

Radio Frequency Identification(RFID)-Based Food Waste Management

In an effort to effectively manage food waste and reduce waste, LOTTE P&D installed three RFID system-based food waste volume-rating systems at LOTTE WORLD TOWER·MALL. The amount of food waste disposed is automatically measured on an electronic scale and each person pays a fee corresponding to the weight of the waste disposed. This system also has the advantage of being able to manage the entire amount of food waste because it can monitor the amount of waste in real time.

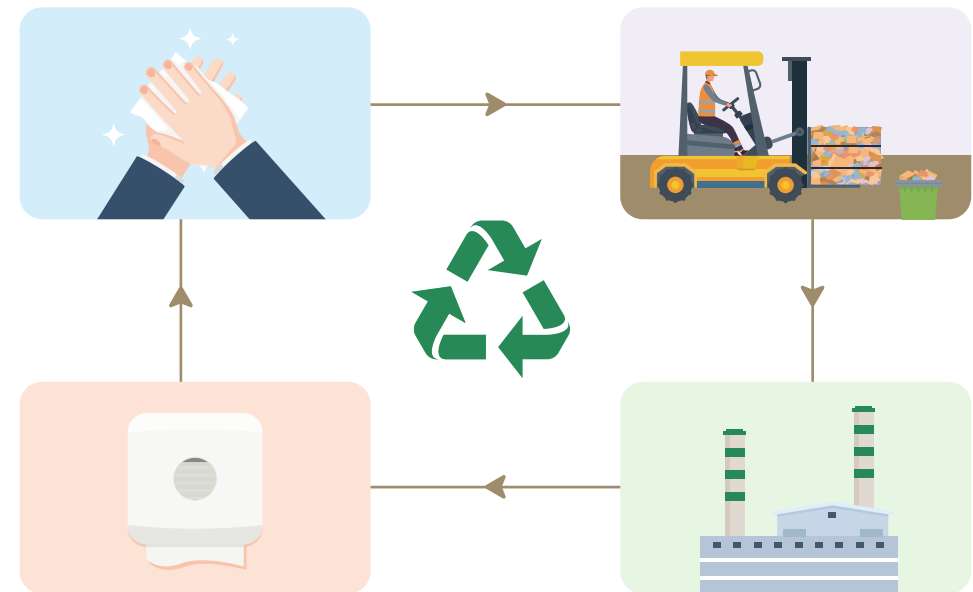


The RFID Food Waste Volume-Rating System



Paper Towel Recycling

LOTTE P&D is working with Yuhan Kimberly to reduce waste by recycling discarded paper towels accrued at LOTTE WORLD TOWER·MALL. Discarded paper towels undergo a process of being turned into resources after being sorted and transported. As a method of reproducing paper towels, this is significant in terms of achieving resource circulation. Currently, 32.4t of recycled paper towels are being used a year. After a one-year trial run limited to offices capable of easy sorting, paper towel recycling will be expanded across the entire complex with the goal of reducing waste and promoting resource circulation.



Reducing the Environmental Impact

Activities Promoting Resource Circulation

Tankless Water Purifiers

The plastic tank water purifiers used at LOTTE WORLD TOWER·MALL and partnership company offices were equipped with tankless water purifiers, reducing the amount of plastic use. This reduced the waste of roughly 200 water containers a year as well as the 2t of carbon required to supply the water tanks by operating vehicles. In an effort to reduce the use of unnecessary plastic and thereby contribute to the reduction of carbon, LOTTE P&D is planning on expanding the replacement of plastic tank water purifiers with tankless water purifiers.

Adopting Mobile Employee Cards

In an environment of digital transition, physical cards are rapidly being replaced with mobile services. In an effort to counter the inconvenience of card necklaces and reduce the use of plastic, mobile employee cards were adopted to replace physical wallets. Employees can enter the company building and easily make purchases at company welfare facilities through a mobile app. The adoption of a mobile employee card allows LOTTE P&D employees to reduce plastic use and take the lead in taking action against climate change.



LOTTE P&D's Mobile Employee Card



PET Bottle Collecting Robot Nephron



Nephron-the PET Bottle Collection Robot

Two units of each Nephron-an unmanned recyclables collector-are in operation on the 1st basement floor of LOTTE WORLD MALL and the 2nd basement floor of LOTTE Mart. This recyclables collector that applies AI and IoT technology sorts out and processes PET bottles and cans using a sensor. The collected recyclables are processed into yarn or fabric and reborn as recycled clothing, shoes, etc. by social startups.

Protecting Biodiversity

Creating Green Spaces

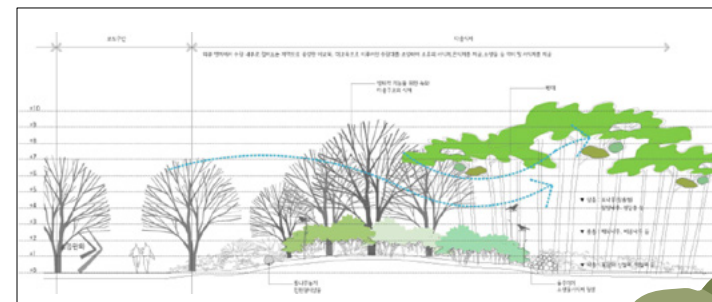
Rich green spaces, including the World Park Lawn Plaza, were created within LOTTE WORLD TOWER·MALL with the goal of preserving a natural environment in the downtown area and preventing air pollution. Out of the entire plottage of 80,000m², 30% or 26,000m² were formed into a lawn plaza, creating a place of healing within the downtown area in combination with Seokchon Lake.



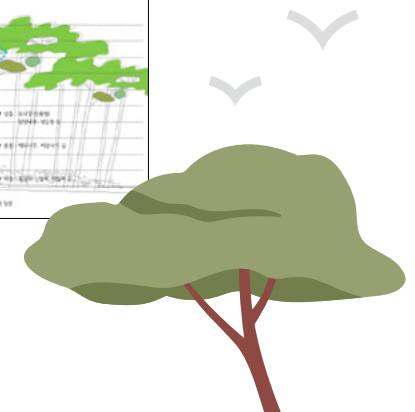
The World Park Plaza during daytime and nighttime

Securing a Terrestrial Biotope and Waterfront

A terrestrial biotope, green landscaping and waterfronts were formed inside the LOTTE WORLD TOWER complex to provide a habitat for mixed organisms. Shrubs like boxwood trees, Korean azaleas and winged spindles, as well as pines and Katsura trees, were placed to serve as a gathering area for birds. Landscape planning with a multilayered structure that includes ground cover plants and aquatic plants completed a terrestrial biotope (a common habitat for diverse species, such as humans, animals and plants). While taking into account biodiversity, LOTTE P&D is hard at work to create an ecological complex where people and nature coexist.



A planting configuration for biodiversity



SOCIAL



Human Resource
Recruitment and
Development

57

Safety+Health
of Employees
and Customers

64

Community
Development

71

Human Rights
and Diversity

82

Sustainable
Supply Chains

84

Information and
Data Security

86

Improving Customer
Satisfaction

89

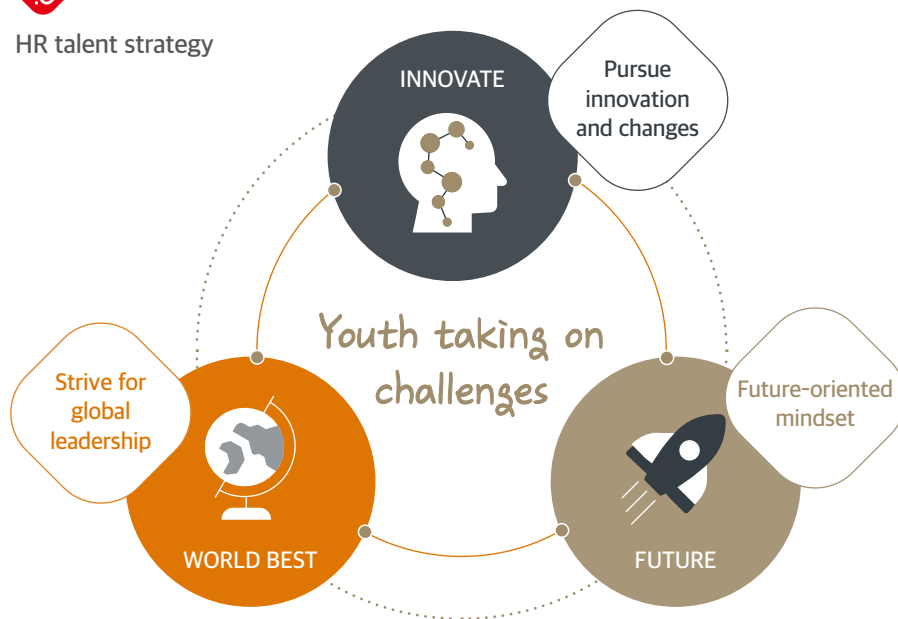
Human Resource Recruitment and Development

Fair and Transparent Human Resource Recruitment

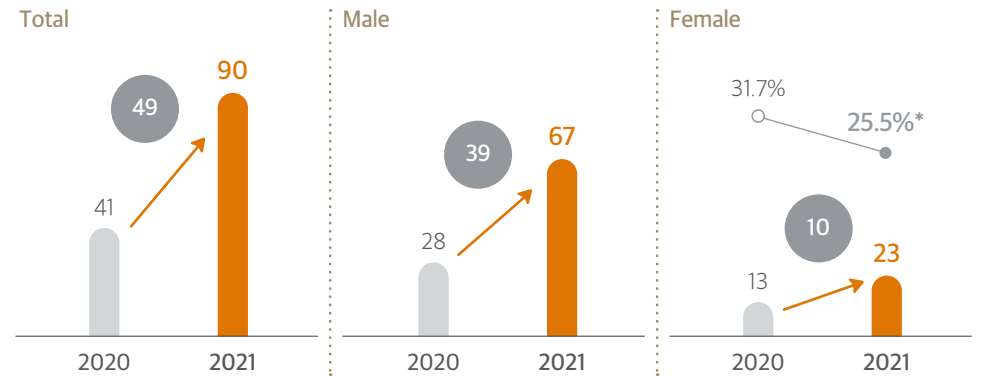
LOTTE P&D hires talented individuals according to ability in accordance with the company's recruitment model, using a fair and transparent recruitment process. The company is strengthening objectivity and fairness for human resource recruitment by selecting talented individuals with brilliant capabilities based on LOTTE Group's compliance management system. In addition, the company is working hard to operate a professional and unprejudiced interview process by developing LOTTE Group-certified interviewers. In particular, by maintaining a growing ratio of female interviewers, the company also prevents gender discrimination that could occur during interviews.

LOTTE PROPERTY & DEVELOPMENT

HR talent strategy

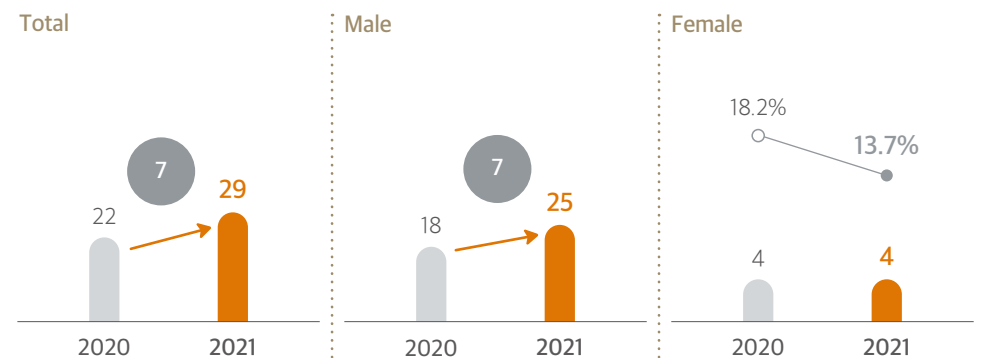


Scale of New Recruitment



*10 out of the 90 recruits in 2021 were 24-hour male shift workers working security jobs in fire prevention and safety. If these security jobs are excluded, then the ratio of female recruits is 29%.

Number of Certified Interviewers



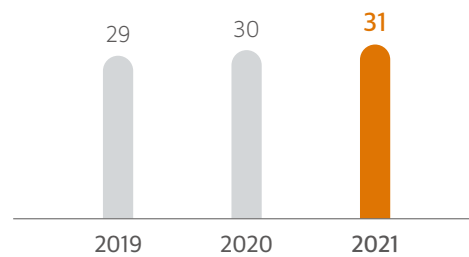
Employee Diversity

The company is investing in efforts to achieve equal gender employment in the process of recruitment and assessment and is working hard to create a good corporate culture for women to work in, with the goal of retaining and expanding the employment of female members within the organization. As a result, the number of full-time female workers and managers gradually increased and in 2021, LOTTE P&D appointed its first female executive.

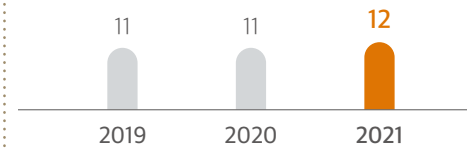
Ratio of female by job position

(Unit: %)

Ratio of female out of all employee



Ratio of female out of all managers*

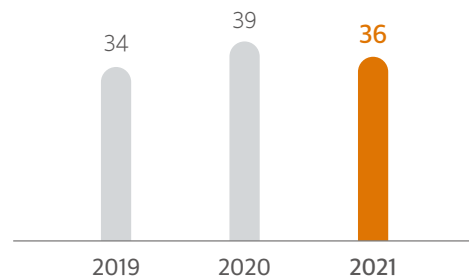


*M Grade and above

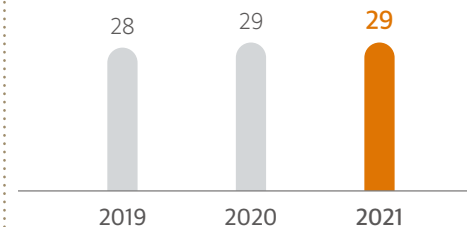
Ratio of female by form of employment

(Unit: %)

Ratio of female out of contract workers



Ratio of female out of full-time workers



CASE STUDY

LOTTE Group's Diversity Forum Citation

LOTTE P&D received a presidential citation at the '2021 LOTTE Diversity Forum' in the gender category by serving as an excellent example of turning female talent into role models and for appointing a female executive for the first time in the 'technology and safety division where there is a low level of female entry.



First female executive,
managing director
Son You-kyung

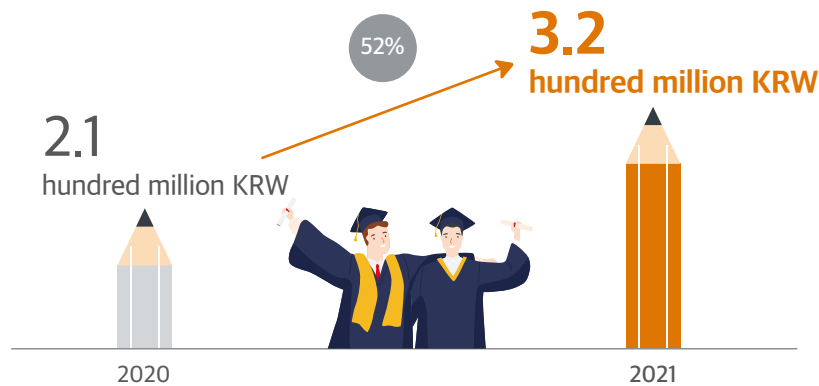


Human Resource Development

Job Training

LOTTE P&D supports job development expenses, develops job experts, supports offsite MBA programs, trains real estate development specialists and operates certification courses (purchasing, finance, digital transformation) with the purpose of strengthening employee competencies. Employees are offered expertise improvement training in a way that lets employees personally set up career development and learning plans and thus fulfill these plans.

Training expenses executed in 2021



LOTTE Group education

The company develops human resources based on systematic human resource development programs. The company offers multileveled training, including common training across the LOTTE Group, training by job grade, legally mandated training, basic training and online training and thus provides the chance for career development according to skill and performance, regardless of gender.

The Human Resource Development System

- LOTTE Group Mandatory Training
- Overseen by LOTTE Group
- Overseen by Subsidiary

Position	Those joining the company · those promoted	Key Talents · Duties			Self-Development · Diversity								
Executives	Newly appointed executives (CEO, Managing Director, Associate Executive Director)	(S)EMBA (Alumni)	Breakfast meeting (Jamsil forum)	CEO Course	Business English · Vietnamese								
Senior Manager(S)	Beginner's training for experienced workers (Group/Subsidiaries)	S Grade Training	Outside MBA	Leadership diagnosis follow-up course	Learning facilitator	Interview certification system	Coaching leadership	Outside job training support	Training for those on childcare leave	E-learning, reading education	Legally mandated training	Basic training, empathy concert	
Manager(M)		S Grade course for promotion qualification											M Grade training
Senior Associate(SA)		M grade course for promotion qualification											SA Grade training
Associate(A)	Beginner's training for new employees (Group/Subsidiaries)	Job certification system											
Junior Associate(JA) (and below)	Beginner's training for new employees (Subsidiaries)												

Self-Assessment, Career and Professional Development

LOTTE P&D runs self-directed learning programs, such as Knowledge in Academy, Discovery Lab (a study club) etc., with the goal of encouraging employees to engage in job-related study by forming learning groups. The company supports activity expenses and platforms so that employees can develop independent education content and share knowledge through these learning groups. Currently, learning groups have produced and distributed training videos about fire-prevention and disaster safety.

Discovery LAB
학습동아리 모집

발견하고 성장하는 학습 공동체

모집대상 물산직원 누구나 (최소2인~최대4인 구성)	학습분야 직무역량 개발 분야
모집기간 상시모집 (기본 3개월 활동)	지원혜택 학습활동비 (인당 3만원/월) 세미나, 외부강의 지원 가능
신청방법 학습계획서 다운받아 작성 후 메일접수 (rira.kim@lotte.net)	문의 HR팀 김리라(3-5004)



Support Program for Retirement and Turnover

The company provides training that supports retirees who are changing jobs in an effort to support a second successful career for executives who are about to retire.

Life Rebuilding through Outplacement

Executive outplacement is a program that provides support for changing jobs to executives retiring in the present year, or advisors transitioning from full-time in the previous year to part-time in the present year and who voluntarily wish to participate in the program. The program provides exclusive one-on-one consulting in accordance with career goals and training for reemployment, entrepreneurship, investment techniques, art and the humanities, as well as support for facilities use, such as office space. In 2022, the program will be operated from May to October, with consistent post-management offered even after the end of the program.



Outplacement Training

Creating a Corporate Culture of Communication

LOTTE P&D runs a variety of communication programs with the goal of promoting a horizontal corporate culture in which everyone, from new employees to management, participate and communicate.

Delightful Fridays

Since 2017, the company has been hosting Delightful Fridays, an event where all employees get together to share news such as birthdays, weddings and congratulations for childbirths, as well as key corporate management affairs, major policy and systems. Delightful Fridays have taken root as LOTTE P&D's unique company-wide communication event, serving a huge role in revitalizing information sharing and strengthening a horizontal labor-management culture.



Every Friday, LOTTE P&D's own delightful communication!

A symbol with the meaning 'Delightful Friday'

通(tong) **쾌한** **Friday**

The Middle-Aged Generation The Young Generation The New Generation

An event where employees from different generations can 'communicate'



Windows of Communication by Job Grade, Task and Department

In contrast to the past when only designated communication channels were used, the company now works hard to create a corporate culture that encourages frequent communication. By attentively listening to employee suggestions, the company creates peace between labor and management as well as a future-oriented collaborative relationship.

Diverse communication programs

Empathy Concert

- The CEO and a group of 10 to 20 workers have tea together and frankly share conversation.
- Topics have no limits and include both public and personal questions.

Meetings by Job Grade

- Because problems often differ by job grade, these meetings allow people in the same job grade to share their problems and find solutions.

Lunch Day

- As chances to communicate by team decrease with the implementation of the smart office (discretionary seating), the company aims at revitalizing communication between teams with the aid of lunch days.

Field TalkTalk with the CEO

- A window of communication between the CEO and field service workers, shift workers



Smart Office Lounge

Communication Channel Collecting MZ Generation Opinions At All Times

To aid the smooth adjustment of new employees and help create an open and lateral environment of communication, the company runs communication channels targeting the MZ generation. In operation since 2020 by LOTTE GROUP, the ‘junior board(a board of young adults)’ discusses corporate culture innovations and improvements plans as a window of communication between the CEO and the MZ generation. Additionally, the ‘executive inverse mentoring program’ and the ‘employee mentoring program’ supports understanding and communication between generations.



An occasion of unfettered conversation with a delicious meal

#Lunch with the CEO



The CEO's first time doing life's four cuts Insider's V pose~!

#Four cuts with a precious memory



Junior Board Activities (May 2022)

Boost employee suggestion program

A suggestion system created from the idea of a new employee hired in 2020, Whitru Maturu allows any employee to forward their opinion regarding future food items, uncovering new business and the future direction of the company. A pure Korean word referring to the “state of doing all sorts of things while stopping at nothing,” whitru maturu has been recently in much use by the MZ generation. The suggestion system was named whitru maturu so that all employees could put forward their creative ideas. The Whitru Maturu Suggestion System is held quarterly and selected ideas that contribute to improved sales and business profits are awarded prizes. It’s also significant in terms of management participation in that the ideas of employees are linked to the actual establishment of policy and projects. In 2021, employees actively took part in forwarding their suggestions, which include shopping mall leasing, the ethical spending campaign and plans for using idle spaces.

Results of the Whitru Maturu System in 2021

1st quarter results

suggestions **80** prizes **10**

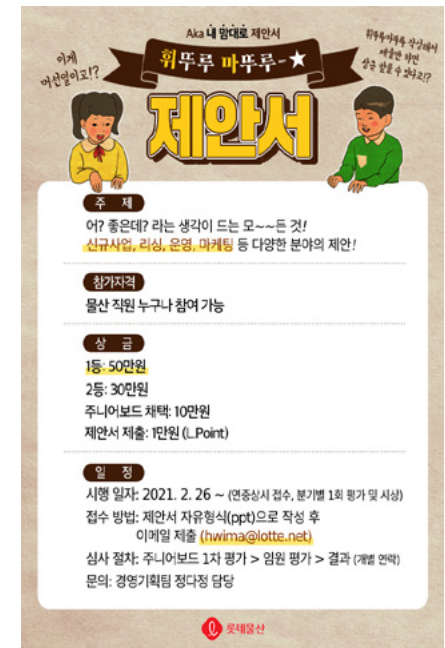
2nd quarter results

suggestions **67** prizes **10**

2nd half (combined 3rd and 4th quarter) results

suggestions **34** prizes **6**

*All suggestions were awarded 10,000 L.Points (Max 3 suggestions per person)



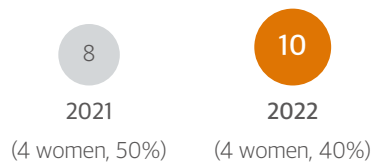
Fair Evaluation and Compensation

LOTTE P&D fully revised its evaluation system toward a fair performance evaluation in January 2021. The evaluation system revision introduced a multi-rater evaluation system including performance, competency, peer and supervisor evaluations, expanded regular evaluations from once a year to twice a year and adopted a rolling evaluation system and an occasional feedback app (L-Listen). The evaluation results of an employee are linked to compensation, strengthening distributive justice depending on performance.

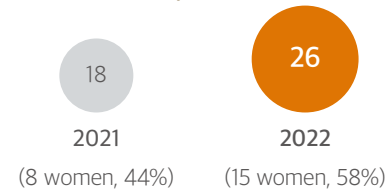
As the evaluation system becomes diversified, female employees are given greater motivation and promotion opportunities, with the number of women promoted hugely increasing from 8 in 2021 to 15 in 2022.

Promotions following evaluations

Number of manager promotions



Number of total promotions



*Number of total promotions excluding shift jobs

(Unit: person)



Occasional Feedback App (L-Listen)



Stakeholder Interview - Employee

I've been in charge of HR tasks since working at LOTTE P&D in 2016. LOTTE P&D has made contributions toward advancing the tourism industry on the basis of the greatest landmark in Korea. The company also contributes toward improving the national brand value of Korea. As an employee, I'm extremely proud of these accomplishments. LOTTE P&D provides sundry benefits surpassing legally mandated levels in the form of an unfettered and flexible leave system, as well as mandatory childcare leave for both genders, with the goal of promoting the work-life balance of employees. In recognition of such efforts by outside organizations, the company was extended as a certified leisure-friendly company in 2021 and also re-certified as a family-friendly company. Likewise, with the increasing importance of hearing opinions from the MZ generation, the company formed a junior board organization consisting of solely younger employees in their 20s and 30s. In the future, I look forward to the continuing expansion of such employee communication channels and hope the discussions going on in these communication channels can be developed into actual sophisticated systems.

“LOTTE P&D values lateral communication and a balance between work and life for employees.”

LOTTE P&D HR Team Assistant Manager
Kwon Hyo-rim



Safety+Health of Employees and Customers

The Safety and Health Promotion System

The Safety and Health Management System

LOTTE P&D builds and operates a safety and health management system based on the Occupational Safety and Health Act and international standards with the purpose of creating a safe and pleasant work environment. The present safety and health management system is applied to not just LOTTE P&D employees but also to workers including those working for contractors and subcontractors.

Scope of the Safety and Health Management System

- All LOTTE P&D employees
- All contractor and subcontractor workers
- LOTTE WORLD TOWER·MALL, 9 outside business sites (including the asset management business site)

Safety and Health Management Policy

With the lives and safety of citizens and employees taken as the top priority of corporate management, the company is making every effort to build a sustainable safety and health infrastructure by thoroughly taking responsibility and by actively fulfilling its duties. The following is LOTTE P&D's safety and health management policy for achieving an accident-free workplace:

Safety and Health Management Policy

- 1 The company will create a safe and healthy workplace by establishing a culture of safety wherein all members, including workers, practice the basic principles of safety and are compliant with laws and regulations.
- 2 The company will build a safety and health management system, implement and inspect it and continue to develop it with the goal of securing the health and safety of customers and workers.
- 3 The company will set up safety and health goals and performs systematic safety and health education and training in order to achieve these goals.
- 4 The company will continue to promote safety and health incident and accident prevention activities with the goal of predicting and managing plausible dangers in advance.
- 5 The company will strengthen a system of win-win cooperation in contracting, service and commissioning relationships and fulfill its responsibilities and roles toward improving labor environments and reducing industrial accidents.
- 6 The company guarantees the participation of and consultation with workers with regard to safety accident prevention and establishing improvement measures. The company discloses the present policy to fulfill a transparent safety and health management.



Safety+Health Goals and Strategies

LOTTE P&D sets safety and health promotion strategies and key tasks and faithfully fulfills them with the goal of creating a safe and healthy workplace free of serious industrial accidents.



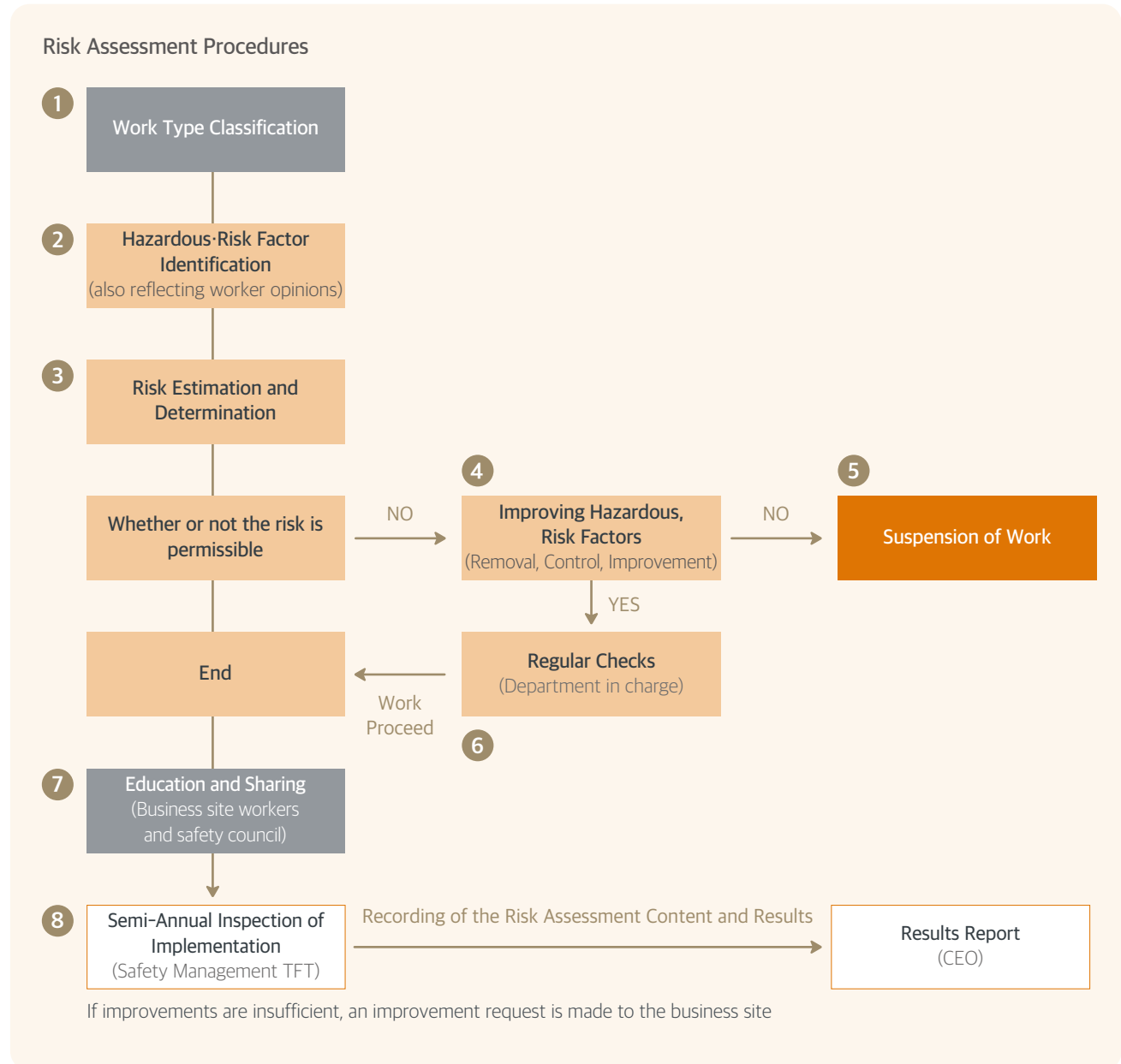
The Occupational Safety+Health Council and the Occupational Safety+Health Committee

LOTTE P&D forms and operates the occupational safety and health council and the occupational safety and health committee under the supervision of the safety management TFT for divers discussions on safety and health. The occupational safety and health council is formed and run by workers from LOTTE WORLD TOWER·MALL, along with 9 outside business sites with the goal of preventing accidents and discussing legal issues by reflecting worker opinions on safety and health. The council discusses, deliberates and votes on safety and health items

once a month, with monthly proceedings and key issues reported to the CEO and shared with all employees. The occupational safety and health committee consists of the same number of labor and management members who freely deliberate and vote on workplace safety and health items. The committee is held quarterly, with the proceedings and key issues reported to the CEO and announced via the occupational safety and health bulletin board on LOTTE P&D’s portal (MOIN). In January 2022, LOTTE P&D’s safety management TFT enacted a manual for hearing worker opinions. In this way, the TFT set up council and committee operation procedures in a more systematic way.

Risk Assessment

LOTTE P&D founded a safety management TFT, an organization exclusively in charge of safety management, for identifying and assessing risks associated with occupational safety and health. The risk assessment involves regular and nonscheduled assessments of hazardous-risk factors by work type, such as machine, electrical, hot and disaster work. Regular assessments are performed half-yearly and reported to the CEO, while nonscheduled assessments assess risks during all work, including construction and inspections. Nonscheduled assessments have a system in place that denies approval for work if a work application lacks risk assessment documentation. Risk is calculated on the basis of accident likelihood (frequency) and the seriousness (intensity) of the accident outcome. To manage confirmed hazardous-risk factors, onsite workers, supervisors and safety and health officers establish removal, control and improvement plans together according to hazardous-risk factor.



Serious Industrial Accident Risk Responses

LOTTE P&D observes standards and procedures in its serious accident response manual for the purposes of suspending work in the case of a serious industrial accident or an imminent danger. All workers, including business owners, workers and supervisors, have the authority to suspend work and evacuate the scene if there is imminent risk of a serious industrial accident. The safety and health manager

shall not unfavorably treat a worker if the worker has a reasonable reason for suspending work, with the relevant content stipulated within the serious accident response manual.

After the suspension of work, the company goes through a procedure of removing hazardous-risk factors and establishing recurrence prevention measures with the goal of preventing similar cases from occurring in the future. This is done by administering worker education and sharing across business sites.

Serious industrial accident risk response procedures

Imminent Risk(Occurrence)

- All workers (business owners, workers, supervisors, etc.) can request and use the authority to suspend work
- All workers and citizens evacuate



Suspension of Work

- Access to the location and scene is controlled
- Maintained until measures are completed to prevent additional harm



Removal of Hazardous, Risk Factor

- Safety managers and relevant persons in charge confirm the removal of the hazardous, risk factor
- Work resumes only if it doesn't cause additional harm



Education and Sharing

- Similar cases are prevented through employee education and sharing across all business sites besides the site in question
- Recurrence prevention measures (plans) are applied across business sites, if necessary



Cause Analysis and Recurrence Prevention Measures

- The supervising department works together with the safety management TFT, if necessary
 - Report to CEO after cause analysis and establishing recurrent prevention measures

Regular Checks(Department in Charge)

- Even when work resumes, safety issues are regularly checked

The Safety Whistleblowing System

LOTTE P&D operates an online safety reporting system 24 hours a day, 365 days a year and any stakeholder with concerns for the safety of LOTTE P&D, including business site workers and normal citizens, can log on to the safety reporting system and report issues related to safety. The safety reporting system concerns the following cases: ①when the suspension of work or inspection is necessary due to imminent danger, ②if you witnessed a state of danger involving facilities, equipment and work area, requiring improvement, ③if you were pressured to work in a way that hinders safety or witnessed such an incident. Registered cases are notified immediately to the person in charge of each business site and safety team so that the necessary measures and improvements can be undertaken and the status of the reported case is reported back to the whistleblower.

Guidelines on using the safety whistleblowing system

Purpose

- When the suspension of work or inspection is necessary due to imminent danger
- If you witnessed a state of danger involving facilities, equipment and work area, requiring improvement
- If you were pressured to work in a way that hinders safety or witnessed such an incident

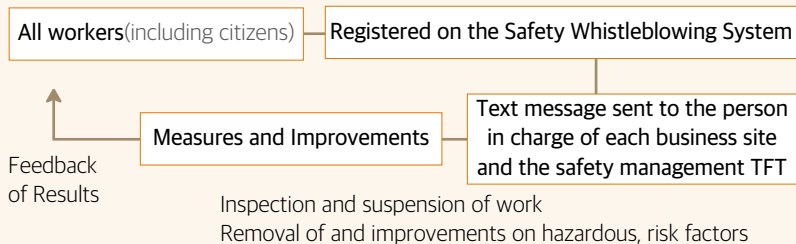


Safety Whistleblowing System Website

Whistleblowers

All workers at the tower and mall and the 9 outside business sites*, as well as citizens
 *Signature Tower, Gangnam N Tower, Gangdong ECT, LOTTE Mall-Suji, Pangyo H Square, Gwanghwamun Center Point, LOTTE Chemical (Uiwang R&D Center, Yeosu Plant of Advanced Materials), Gangnam Multicampus

Procedures

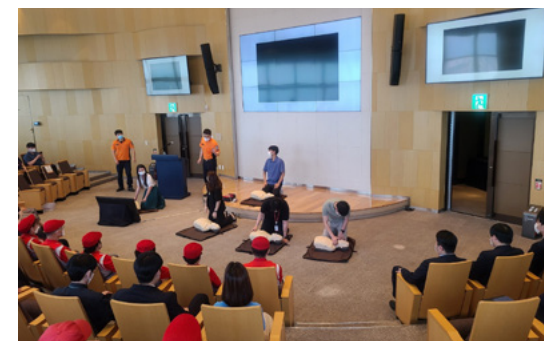


Health and safety training in the workplace

LOTTE P&D provides quarterly safety education and yearly disaster safety education to all employees. In addition to the legally mandated safety education, the company performs monthly-themed safety education, such as education about risk assessments during business site inspections by the safety management TFT, storm and flood damage response and occupational safety rules. Also, when workers are placed to do hazardous-risky work, they must take 16 hours or more of special mandatory safety and health education related to the work in advance. The company also performs monthly independent fire drills as well as joint special safety education with local fire stations involving fire suppression and emergency rescue. In this way, the company makes every effort to improve the safety competency of its employees.



Fire prevention and initial response education



Practicing CPR

The Employee Health Management System

LOTTE P&D holds activities such as health promotions and occupational environment improvements for the health management of employees. The company supports indemnity health insurance and health checkups for all employees, as well as psychological counseling if necessary. When workers have a musculoskeletal disorder diagnosis due to musculoskeletal overload resulting from repetitive work, awkward posture and immoderate use of force, efforts are made to prevent health hazards by administering adequate recuperation and treatment support. If multiple workers with musculoskeletal disorder diagnoses occur at the same time, the company will conduct an investigation, convene the occupational safety and health committee and take appropriate action and facilities improvements. All employees are guaranteed access to occupational healthcare services and health promotion programs and can use these services and programs during office hours if necessary.

The Employee Health Management Program

Category	Content
Health Checkup	<ul style="list-style-type: none"> Health checkups for all employees <ul style="list-style-type: none"> Yearly checkups for executives (a spouse's checkup fees may be added) Yearly checkups and 250,000 KRW for S Grade and those 40 and over (additional support for health checkups for S Grade spouses in every even number year, 250,000 KRW) Checkups every 2 years and 50,000 KRW for M Grade and those younger than 40
Group Insurance	<ul style="list-style-type: none"> Group insurance coverage for all employees <ul style="list-style-type: none"> Max 100 million KRW to 50 million KRW for accidental deaths Max 100 million KRW to 10 million KRW for general deaths and accidental disabilities Max 20 million KRW to 1 million KRW for cancer diagnoses Max 20 million KRW for acute myocardial infarctions Max 10 million KRW for strokes 250,000 KRW per case, 180 times per year for outpatient care Guarantees extended special options for pregnancies and childbirths
Psychological Counseling	<ul style="list-style-type: none"> Counseling services for all employees and their families (5 times a year)
Occupational Environment Improvements	<ul style="list-style-type: none"> Measuring occupational environment hazard, risk factors Investigating musculoskeletal hazard factors

Supplier Safety and Health Management

LOTTE P&D has built and operated a safety health management system in connection with the Serious Accidents Punishment Act for a total of 26 suppliers at LOTTE WORLD TOWER·MALL and outside business sites. The company also provides standards for managing 8 different safety and health support items for suppliers by drawing up a guide and procedures for the Serious Accidents Punishment Act.

Support for supplier safety and health

- A guide that establishes safety and health goals and management policy
- Risk assessment procedures
- Partnership company assessment procedures during subcontracting, commissioning and hiring services
- Providing serious accident manuals
- Standards for compiling and managing a safety and health budget
- Procedures for listening to workers' opinions
- Standards for guaranteeing the work performance of safety and health managers
- Standards for guaranteeing the work performance of safety managers

The company performs monthly safety inspections at all business sites and suppliers and confirms the state of establishing and implementing a safety and health system. Further, the company provides procedures and education on insufficiencies by inspecting compliance toward occupational safety rules related to the Occupational Safety and Health Act.

If a supplier has any suggestions in regard to occupational health and safety, the company sincerely listens to the content and then provides monthly feedback.

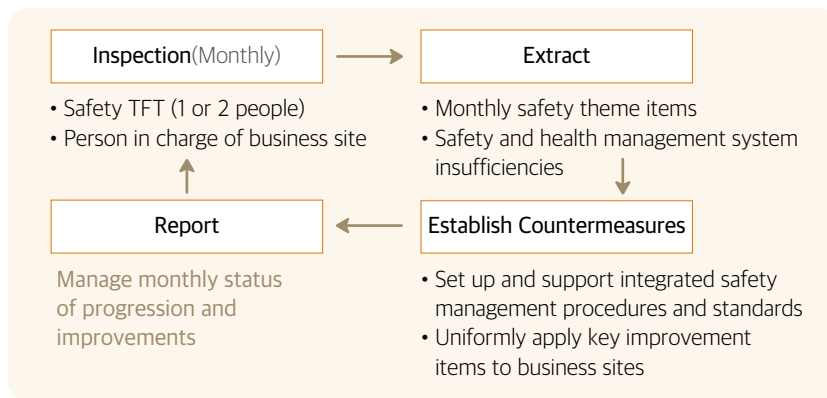
The Regular Safety Inspection Plan (draft) for Business Sites

Purpose

Building a streamlined business site safety management system and strengthening communication at the scene of safety management

Plan

Establish and inspect (improve) monthly safety themes for the Tower & Mall and the 9 outside business sites. Support swiftly building and establishing a safety and health management system



Schedule

March 15-18, March 28-April 5, 2022 (9:30-18:00)

*Scheduled to be carried out once a month

March Inspection Details

Safety Theme Inspection

23 items in occupational safety management and inspection, construction procedures

Inspection of Safety and Health Management System Implementation

8 items in addition to hazard, risk assessment

*Scheduled to organize personnel by section from late April to early May and implement inspection over integrated business site safety (construction, machine, electrical, fire prevention)

Customer Safety and Health Management

LOTTE P&D implements and manages a serious civil disaster prevention risk assessment with the goal of securing the safety and health of customers and citizens. To prevent civil disasters and minimize harm during accidents, the company has established and operates a serious accident response manual as well as a disaster prevention and harm reduction plan.

Nevertheless, when a serious civil disaster or serious industrial accident occurs, the company prevents similar accidents from occurring in the future by analyzing causes and setting up recurrence prevention measures.

Serious Accident Processing Procedures (Cause Analysis and Recurrence Prevention Measures)

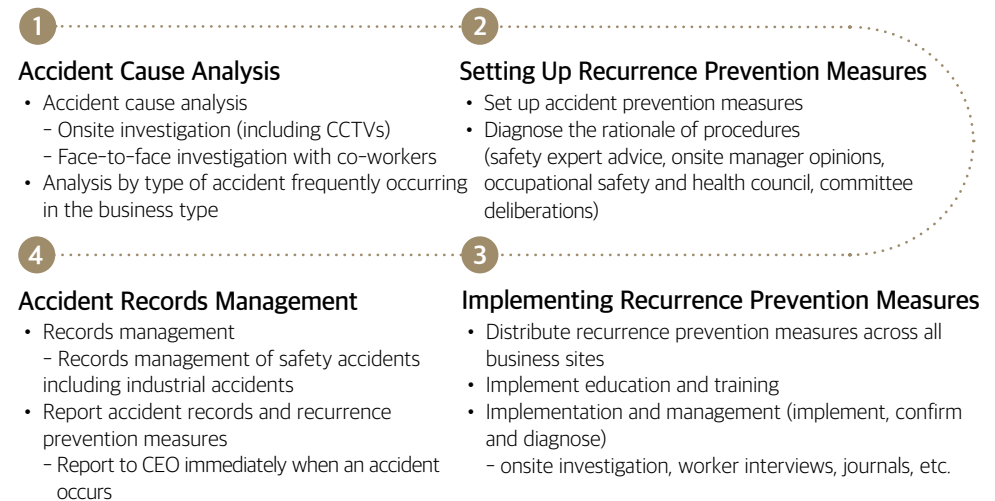
Purpose Prevent similar accidents from occurring in the future by analyzing cause and setting up recurrence prevention measures when serious accidents occur

Subjects Tower & Mall, outside business site workers

Supervising Organization Safety Management TFT

Procedures ① Disaster cause analysis ② Set up recurrence prevention measures ③ Implement recurrence prevention measures ④ Accident records management

Procedures



Community Development

Directions of Social Contribution

LOTTE P&D has defined LOTTE WORLD TOWER as ‘a strong supporter of citizens’ aiming to put into practice a core value into the service of philanthropy. The company serves as a community partner by engaging in social contribution activities that reflect the characteristics of real estate leasing services. As a general developer of global business real estate, the company will continue to actively carry out social contribution activities based on authenticity and trust.

LOTTE WORLD TOWER,
A strong supporter of citizens

Sectors of Social Contribution

In an effort to contribute to local community development, LOTTE P&D divided its core fields of social contribution into three areas-community volunteering, activities supporting vulnerable groups needing care and win-win growth-with the goal of operating social contribution activities in response to the needs of the community and keeping in mind the characteristics of businesses served. Beginning with the founding of the organization LOTTE P&D Charlotte Volunteer Group in 2017, the company has been making contributions to community development on the basis of social contribution activities. In order to create social value based on trust and authenticity, the company is closely working with heterogeneous partners, government and local agencies and social welfare groups.

Activities in 2021 by Core Field of Social Contribution

- ‘The Maru’ A social contribution project by tenant companies
- Support for the military by matching one military barracks with one company
- The Nonpolluting Earth Love Workshop, etc.
- Happy Box goods for single households
- Rice delivery to vulnerable groups during the holidays
- Donating Kimchi
- Culture day for people with disabilities, etc.



- Seokchon Lake Cherry Blossom Festival
- Songpa Hanseong Baekje Cultural Festival
- COVID-19 medical staff support
- Preventive measures against COVID-19 for traditional markets
- Tree planting on Arbor Day
- Seokchon Lake water quality improvement agreement, etc.



History of Social Contribution

LOTTE P&D has continued to make efforts to create spaces for the community and residents since acquiring the land for the LOTTE WORLD TOWER project in 1987. LOTTE WORLD TOWER embodies the aim of LOTTE Group founder, Shin Kyuk-ho, who dreamed of creating a space where families could spend a fun day at world-class tourist facilities.

Since its opening, LOTTE WORLD MALL has created 6,000 jobs and attracted many suppliers to Songpa-gu, thereby increasing the floating population in the area. In an effort to resolve the resulting traffic congestion around Jamsil Station, the company has invested 650 billion KRW in traffic improvement projects, including the expansion of the subway square and the construction of a connecting pathway. In particular, the Jamsil Intercity Bus Transfer Center, the first underground terminal-style transfer channel in Korea, was built using a project cost of 120 billion KRW from LOTTE P&D, LOTTE Shopping and Hotel LOTTE. It was donated to the Seoul city government after its construction and is now operated by Seoul Metro Environment. The Jamsil Intercity Bus Transfer Center absorbs intercity bus traffic

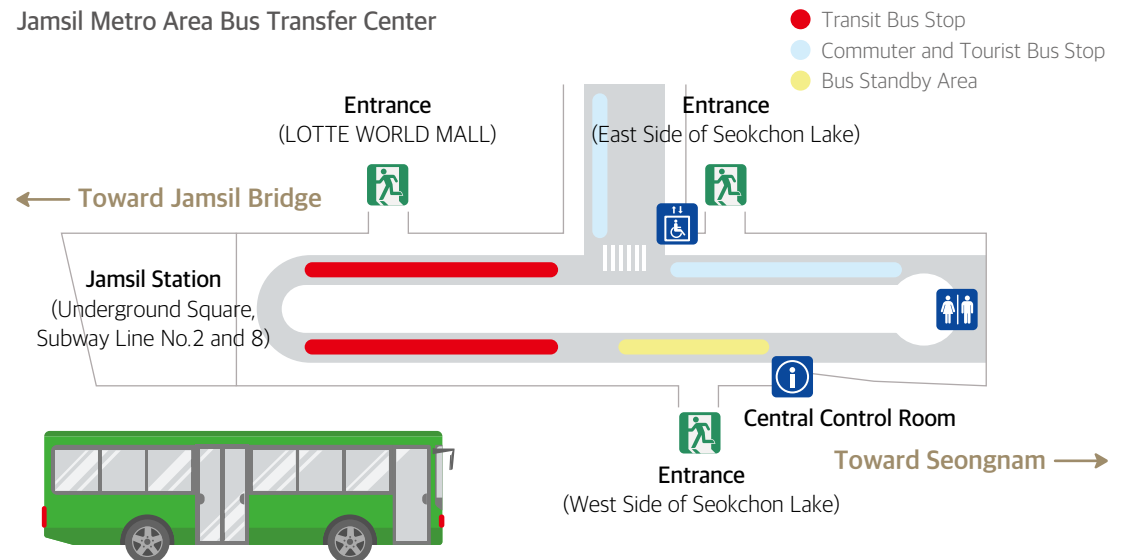
underground, thereby distributing the amount of traffic above ground and thus hugely improving traffic convenience for citizens.

Large-scale public art projects, starting from the high-rise fireworks festival decorating the Jamsil skies, to the Rubber Duck project in 2014, Supermoon in 2016 and Bellygom in 2022, have served as occasions that have elevated the Seokchon Lake area as a global landmark. This has revitalized the local economy and according to the Songpa-gu Office, monthly average visitors to nearby Bangi-dong Eatery Alley, Songridan-gil and Seokchono Lake has risen by roughly 20% since the opening of LOTTE WORLD TOWER in 2017, along with an increase in revenue by 15%.

Currently, LOTTE P&D is planning on enacting a new form of social contribution activity, as opposed to simply making donations, by advancing joint social contribution projects with tenant companies engaged in different types of businesses. The company will continue to work hard so that LOTTE WORLD TOWER can serve as a landmark of social contribution beyond just office space, putting into practice the value of coexistence together with all of its tenant companies.



Jamsil Metro Area Bus Transfer Center



Donations to the Songpa-gu Joint Council of Civil Petitions (2014~2022)

*What is the Songpa-gu Joint Council of Civil Petitions?

In 2014, a win-win council was formed in connection with the successful construction of LOTTE WORLD TOWER·MALL, taking a form of governance involving participation by LOTTE P&D, Songpa-gu civil servants and local residents. After gathering the wisdom of people from all walks of life through regular meetings, an agreement for the amount of 61.6 billion KRW over 10 years was reached, with the goal of resolving resident petitions and complaints and contributing to the local community.

Market development fund, support for small businesses, etc.

Environment Improvement Project for Traditional Markets and Shopping Districts

8.7 billion KRW

Blossom Festival, Hanseong Baekje Cultural Festival, etc.

Culture and Sports Event and Education Projects

15 billion KRW

Expansion of community convenience facilities

Bridge connecting the north and south of Seokchon Lake, artwork installation on the upper part of Jamsil Lake Bridge

3.5 billion KRW

Reduced admission to LOTTE World Adventure, Observatory and Aquarium for local residents

1 billion KRW

Heavy rain, flood damage prevention

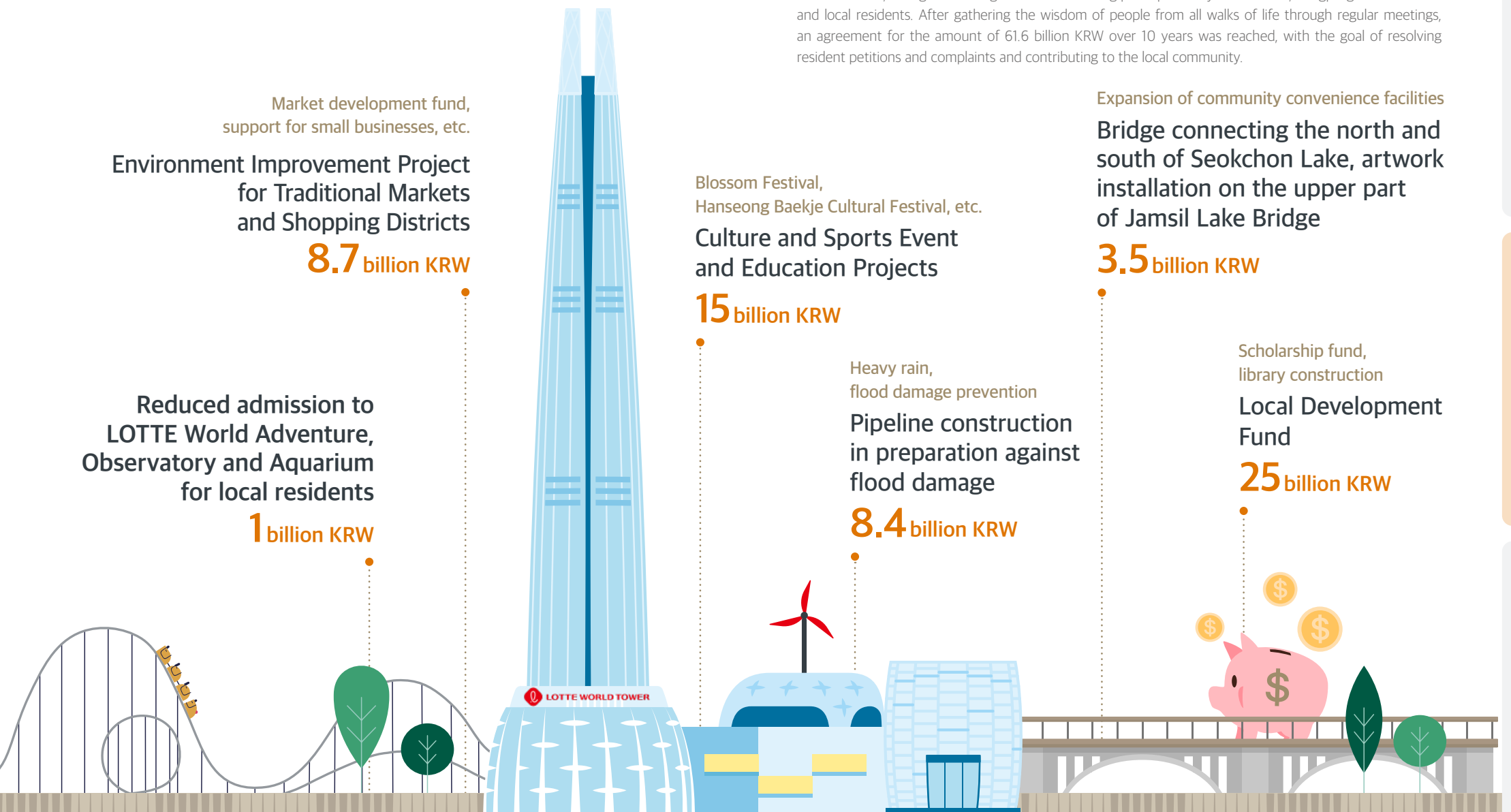
Pipeline construction in preparation against flood damage

8.4 billion KRW

Scholarship fund, library construction

Local Development Fund

25 billion KRW



CASE STUDY

Embark on ‘The Maru’, a Social Contribution Project with LOTTE P&D’s Tenant Companies

In 2021, LOTTE P&D founded The Maru, a non-face-to-face social contribution project, with the goal of revitalizing the stagnant local community and at the same time overcoming a situation wherein LOTTE WORLD TOWER tenant companies couldn’t do volunteer work due to Covid-19 pandemic. The Maru is a portmanteau that combines the pure Korean word “Maru,” meaning “Sky,” and “The” (to add), to express the concept ‘people working high in the sky gather together to create good work.’

The Maru, as the first joint social contribution project group formed in an office building in Korea, aims at meeting global challenges and tasks through partnerships with small-to-medium sized social contribution partners.



In June 2021, as The Maru first project’s first social contribution activity was a program for the generous donation of resources involving 2,000 employees at nine tenant companies, including LOTTE P&D. The donated personal items no longer in use included clothing, miscellaneous goods, home appliances, etc. and was done in collaboration with the NGO ‘Beautiful store’.

Tenant companies from assorted industries, including Yuhan Kimberly, Descente Korea, Takeda Pharmaceuticals Korea, D.Share (Education), EUKOR Car Carriers (shipping), E8IGHT (IT), APR (beauty), Wanted Lab (headhunting) and others, took part in the project. A Beautiful Store donation booth was installed at the east-side lobby on the first floor of LOTTE WORLD TOWER and received goods from tower residents, employees and citizens.

The event amassed 4,200 items which were then sold at a special sale, with all proceeds delivered to the Hope Share project.

Unlike existing social contribution programs, The Maru project involves copious tenant companies, which along with LOTTE P&D, get together to realize the values of synergic, drawing from a rich sense of empathy and greater participation. Going beyond the traditional way of helping those in need, the project has huge significance in that it forms a vision for a new way of social contribution by building strategic partnerships with tenant companies based on the philosophy of taking on challenges and to achieve win-win solutions.



Employees working in offices at LOTTE WORLD TOWER take part in the donation event.

Stakeholder Interview - The Community

“A company that stood out for its promotion of a donation campaign and the participation of its employees.”

Beautiful Store has conducted social contribution activities, such as donation campaigns, with LOTTE P&D, since entering into a partnership with the company last year. In 2021, we conducted a donation campaign with LOTTE P&D and LOTTE WORLD TOWER tenant company employees for a month and sold the donated goods at the Songpa Garak branch of Beautiful Store, with the proceeds handed over to a local philanthropy project in Songpa-gu. During the campaign, the entire front desk of the first floor at LOTTE WORLD TOWER was turned into a donation desk, encouraging the active participation of employees. Beautiful Store has carried out many donation campaigns with large corporations, but LOTTE P&D was the first one to extensively promote the campaign to this extent. Thanks to their efforts, we were able to attract a high rate of donor engagement from employees. In the future, we hope a variety of social contribution activities and collaborations continue in the community under the themes of the environment and resource circulation.

Beautiful Store Foundation, Outreach Team Leader
So Eun-sun



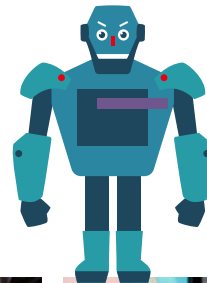
Best Practice

'2021 SKY WALKING' Donation Program

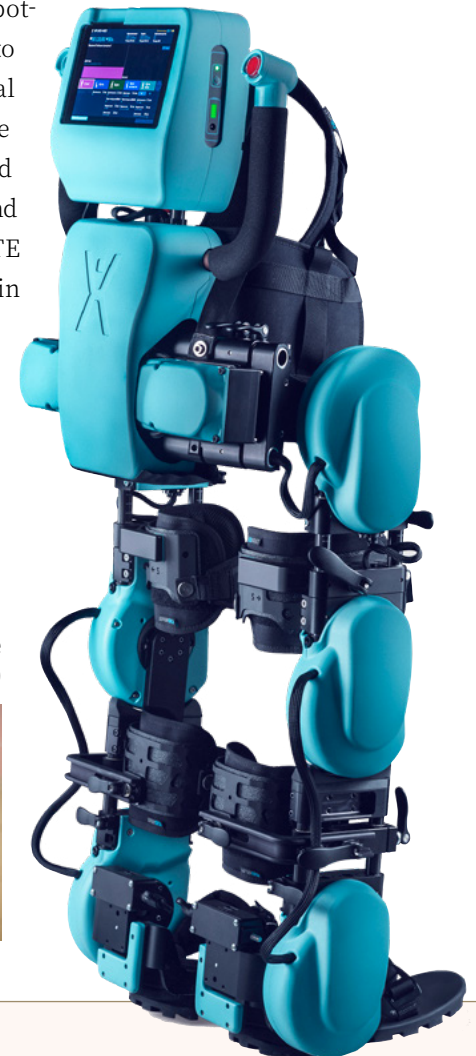
LOTTE P&D collected the entire participation fee from 2,850 participants of the 2021 Halloween Untact Run at LOTTE WORLD TOWER in October of 2021, along with an independent donation fund, to provide 100 million KRW worth of wearable walking robot devices to Bobath Children's Hospital as part of its Wearable Walking Robot Therapy Device sponsorship.

BM1, the wearable walking robot provided by LOTTE P&D, is a wearable medical robot that helps children with incomplete paraplegia due to disorders such as cerebral palsy, strokes, spinal cord injuries, spina bifida and muscle diseases carry out gait training. Patients will undergo rehabilitation therapy such as level walking with their feet on the ground and stair climbing while they shift their weight by themselves with the device worn on their lower limbs. Children with gait disturbances can increase their treatment effect by implementing such quality exercise programs.

The robot therapy program started in March 2022 carries out intensive rehabilitation therapy from 8 to 10 weeks with a resident dedicated therapist. The robot-assisted gait training project offered support to 21 child patients including children with cerebral palsy and achieved results such as gross muscle development and improved gait ability and endurance. For good measure, child patients and their families were invited to the 2022 LOTTE WORLD TOWER Sky Run Vertical Marathon in April 2022, getting the chance to experience a cultural and leisure event and cheering on the passion of the children who are undertaking on the challenge of assisted walking.



Wearable Walking Robot Therapy Device
(ExoAtlet Asia-BM21)



Caregiver Feedback



I'm delighted that my child is able to get robot gait therapy at Bobath Children's Hospital. My child is usually in pain or discomfort during physical therapy, but he isn't in pain during robot gait therapy and even has fun. That's why he actually actively wants to receive therapy. I'm just extremely glad because my child likes it so much and I would love for him to continue to get robot gait therapy. Thank you so much.

Child Feedback

It was fun and amazing to be able to walk using a robot. It's so good because it makes me walk well. I was worried the therapy might be painful and scary, but it's as much fun as music therapy, so I look forward to it whenever I get therapy. I'm going to continue to get robot therapy in the future.

Therapist Feedback

Robot gait training can be adjusted to the different body sizes of the children. It can also be applied to divers age groups. It provides stability at each joint, making it possible to administer safe therapy. In particular, it induces separate movement at the pelvis and ankles and the use of active muscles in active mode, thereby strengthening the muscles. The medium of robots also arouses interest in children, motivating them to actively take part in the therapy. For these reasons, it has been a tremendous help.



Participating in the 2022 Sky Run Vertical Marathon

Other Social Contribution Activities and Results

Overcoming the COVID-19 Pandemic

Preventive Measures against COVID-19 at Traditional Markets

In an effort to overcome the hardships resulting from the Covid-19 pandemic company carried out in February 2020 intensive disinfection activities at Macheon Market and Macheon Central Market-two traditional markets within Songpa-gu-in cooperation with the community. To produce the maximum disinfection effect, tower personnel specializing in disinfection measures, along with an employee volunteer group, visited 200 stores to carry out disinfection work for six hours as well as the distribution of 3,000 masks. In addition, employees in charge of firefighting and electrical facilities inspected fire prevention equipment facilities and engaged in safety education with small business owners.



Cheer up Campaign for the Medical Staff

Despite nearing a return to ordinary life, COVID-19 medical staff are still hard at work in the field. To express our gratitude, the company delivered 30,000 beverage bottles and 400 snack packs to COVID-19 screening clinics and five vaccination centers in Songpa-gu over two occasions, in August and December 2021. We delivered these goods to medical staff who are sweating all day in sealed protective clothing in order to control the infectious disease, with the messages “Thank you,” “Keep it up,” and “We’re cheering you on.”



Improving the Local Environment



Tree Planting at Ogeum Park

On Arbor Day in April 2022, the company held a tree planting event under the slogan ‘Let’s create a healthy urban forest at LOTTE WORLD TOWER.’ A total of 31 volunteers, including the CEO, LOTTE P&D employees and Songpa-gu civil servants planted 3,200 shrubs, including hydrangeas and winter jasmine. All participants wore a group uniform made from extracted thread from recycled PET bottles to ruminate on the meaning of ‘virtuous circulation of resources.’ As part of the Seoul city government’s Adopt-Greens project, the event served as a chance for employees to take interest in the Earth and the environment and also take a step forward toward a better future.



Improving the Water Quality of Seokchon Lake

Since 2021, LOTTE P&D has been carrying out activities to improve the water quality of Seokchon Lake in collaboration with the Songpa-gu Office and other private companies. The company is improving the turbidity and cleanliness of the lake by suppressing the formation of algae during the summer with the aid of a sustainable technique using photocatalysis. This is how the visibility depth of the lake was improved from 0.6 to 2m. In 2022, the LOTTE Group signed an MOU with private environmental groups. By ecologically monitoring four classes of biological life-birds, plants, fish and insects, the company is securing the biodiversity of the lake ecosystem. LOTTE P&D will work hard to create a sustainable citizen park for future generations by tending to the natural environment near the complex.



Win-Win Programs Within the Community

Volunteering on Culture Day for People with Disabilities at LOTTE WORLD TOWER

The company has been holding the Culture Day for People with Disabilities at LOTTE WORLD TOWER monthly since April 2022 by inviting people with disabilities living in Songpa-gu, in an effort to create a healthy society in which people with and without disabilities can share their lives. Employees take part in volunteering by guiding disabled guests through the observatory, aquarium and the Memorial Hall. By supporting people with disabilities, who have few chances to experience cultural events, the company hopes to improve their lives and welfare.



Kimchi Sharing Volunteer Activities

Every year since 2015, LOTTE P&D has held the Kimchi Sharing of Love event, which involves employees personally making kimchi and delivering it to socially vulnerable groups in Songpa-gu. In 2021, the CEO and new employees took part in the event together to share the values of win-win and sharing from the perspective of the MZ generation, making the event even more meaningful. They made 1,500 heads of cabbage kimchi and donated the kimchi to 500 households, including senior citizens living alone and single parent families in difficult and marginalized environments in Songpa-gu.



We're in it together! Pat-On-The-Back Happy Box

In December 2021, together with the Songpa-gu Office, the company held the ‘We're in it together! Pat-on-the-back Happy Box’ event for one-person households living in the Songpa region who were going through tough times due to the COVID-19 pandemic. Songpa-gu, which has the third highest number of one-person households among Seoul’s autonomous districts, selected 200 priority households for support from the relevant government department. Employees prepared Happy Boxes including 25 different daily necessities and convenience foods and delivered them along with a year’s end greeting card. The donation was expanded this time to include young adults, women and the middle-aged in addition to seniors living alone, making the donation even more meaningful.



The One Company-One Barracks Support Program

With the goal of strengthening the bond between corporations and military units by signing one-on-one sisterhood agreements and creating a synergy effect between national security and the economy, LOTTE P&D signed a One company-One barracks agreement with army unit 6501 in Gwacheon Gyeonggi-do in April 2022. Through an exchange between contributions to improve the welfare of soldiers living in the barracks and the administration of military camp experience programs and national security education programs for LOTTE P&D employees, the company promises to create a new model of civil-military cooperation.



Stakeholder Interview - Government and Local Self-Governing Bodies *“As the representative corporation within Songpa-gu, LOTTE P&D is an excellent company that makes various product donations to socially vulnerable groups”*

As the representative corporation in Songpa-gu, LOTTE P&D is an excellent company that continues to make large-scale product donations to socially vulnerable groups in Songpa-gu. The company has donated large sums and engaged in frequent social contribution activities in the form of delivering rice to vulnerable groups during Lunar New year and Chuseok as well as donating seasonal goods. In the future, we hope these disparate social contribution programs and sponsorships continue and look forward to their win-win growth together with customers, companies, suppliers and local self-governing bodies.

Songpa-gu Office Welfare Policy Department Assistant Deputy Director
Son Yeon-kyung



Human Rights and Diversity

Human Rights Policy

By implementing a human rights management based on LOTTE Group’s Statement on Human Rights, LOTTE P&D puts forth every effort to respect and protect the human rights of diverse stakeholders surrounding LOTTE P&D, such as employees, customers and business partners. As disclosed in its Statement on Human Rights, LOTTE P&D abides by the approach of global human rights initiatives, such as the United Nations Universal Declaration of Human Rights and the United Nations Guiding Principles on Business and Human Rights and thoroughly prohibits forced labor and child labor.

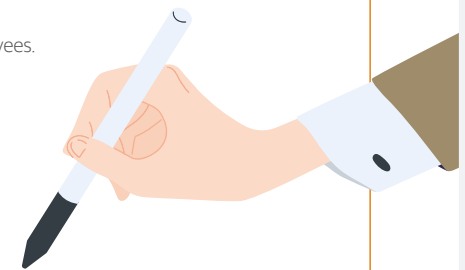
LOTTE Group Statement on Human Rights

We pursue a “human rights-centered management” which can have a positive impact on not only our customers but also our society as a whole and aim to contribute to the enrichment of individuals and communities. In this regard, we set forth this LOTTE Group Statement on Human Rights declaration as a standard of conduct, performance and ethics that all of our officers and employees must comply within the course of business operation and management in order for LOTTE Group to become a corporation advancing human wellbeing. This Statement is based on international human rights principles and standards, including the UN Universal Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises and the UN Convention on the Rights of the Child. We commit to comply with this Charter and to put our commitments into actions.

- One,** We respect all human dignity and value and prioritize human rights management in managing our business.
- One,** We respect international human rights principles and covenants, including the UN Universal Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises and the UN Convention on the Rights of the Child.
- One,** We establish and implement systems and policies, including a human rights management system, to embed a respect for human dignity and value across our corporate culture and across the spectrum of business management activities.
- One,** We strive to protect and advance the human rights of marginalized communities and respect the human rights of everyone whose lives we touch, including our employees, customers, government authorities, partners and local communities.
- One,** We do not discriminate based on race, gender, education, age, disability, religion, place of birth, political stance, or any other grounds when hiring or in the workplace and pursue an organizational culture of mutual respect and understanding.
- One,** We do not condone forced labor or child labor in any shape or form and comply with the minimum working age established by international standards and local laws of the jurisdictions in which we conduct business.
- One,** We comply with the working-hour and minimum wage regulations of the jurisdictions in which we conduct business.
- One,** We foster working conditions which put the health and safety of our officers and employees first.
- One,** We uphold the constitutional right to freedom of assembly and association and the right to collective bargaining to protect and advance the human rights of our officers and employees.
- One,** We endeavor to prevent human rights violations in the workplace, such as workplace harassment or sexual harassment and to provide remedial measures.
- One,** We aim to nurture strong partnerships with our business partners on an equal footing for mutual growth and development and support and cooperate with their implementation of human rights management.
- One,** We do not use raw materials, products, etc. produced in an illegal and unethical manner or in a manner involving possible human rights violations.
- One,** We protect personal information acquired in the course of business.
- One,** We comply with domestic and international environmental regulations and strive to achieve net-zero carbon emissions, environmental preservation, biological diversity, resource circulation and other environmental goals.
- One,** We prevent human rights violations in the course of business and provide timely adequate remedial measures.

We pledge to do our utmost in implementing and advancing human rights management as set forth above.

All officers and employees of LOTTE Group



Human Rights Education

Education for Reducing the Stigma against People with Disabilities

In an effort to increase the level of understanding toward people with disabilities and dispel biases against them, the company performs an online education program for employees once a year to improve the perception of people with disabilities.

Education on Workplace Sexual Harassment Prevention

The company carries out education on workplace sexual harassment prevention once a year for all employees with the goal of maintaining a pleasant and healthy workplace by preventing workplace sexual harassment. The education involves concepts and types of workplace sexual harassment, sexual harassment statistics, causes and ways of handling sexual harassment and procedures.

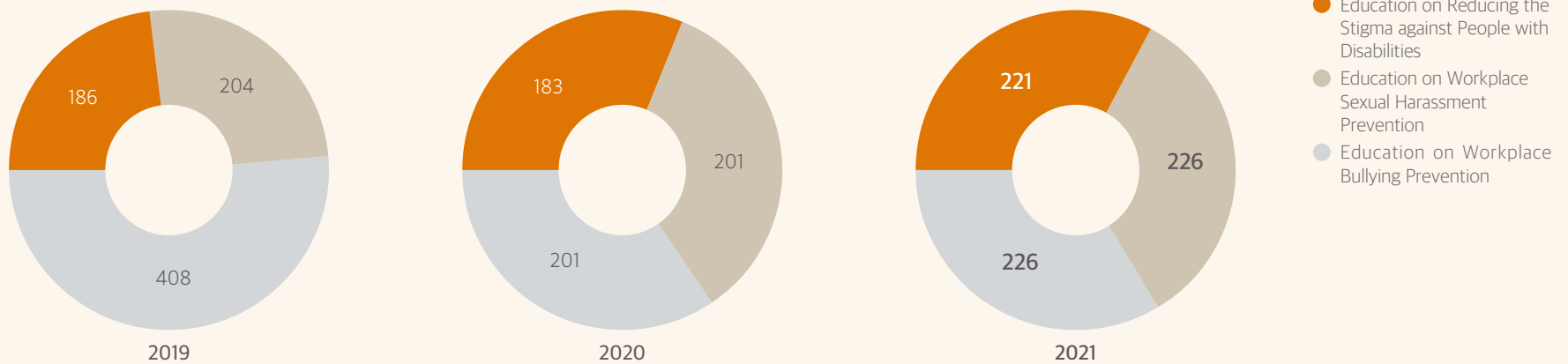
Education on Workplace Bullying Prevention

The company carries out non-face-to-face courses on workplace bullying prevention once a year for all employees with the goal of preventing workplace bullying and creating a happy workplace.



Number of People who Completed the Human Rights Education Programs

(Unit: person)



Sustainable Supply Chains

Selecting and Assessing Partners

Selecting Partners

LOTTE P&D operates a partner system for each manufacturing process including construction, services and materials in addition its 20 partners in the four major outsourcing services. The company has developed a supplier relationship management (SRM) system, enabling one-stop registration, bidding, completion, examination and payment for partners. Because this allows partners to precisely check at what stage their bid or contract is, it increases the efficiency and transparency of management. LOTTE P&D makes every effort to fairly manage and give its roughly 200 partners equal opportunities.

Fair Bidding Practices

The SRM(Supplier relationship management) system, independently developed by the company, administers an electronic bidding system based on the principles of fairness, objectivity and transparency. Bidders may not submit bids by document or email and the fairness of the system is increased by never allowing a purchasing agent or the manager of the department involved to know the bidding price from a company prior to disclosing the estimates. An onsite briefing session is held to disclose requirements and details prior to the bidding so that no contract problems arise with the partner after signing the contract. Moreover, the system prohibits dumping and collusion and this is disclosed in advance so that no harm may come upon partners.

Assessing Partners and Providing Incentives

LOTTE P&D performs monthly assessments in order to encourage the spread of sustainable management system building on the part of partners. To carry out fair assessments for partners, the company runs a multi-rater assessment system. Accordingly, if a company is selected as an excellent partner according to the annual assessment, they're given priority rights over contract renewal and bidding the following year. Assessment items include social matters, such as the environment and safety, in addition to the management status and contract quality of the partner.

Partner Assessment Items



Management status

In link with credit rating agencies, the company focuses on identifying trends in partners, such as rapid declines in credit rating and worsening cash flow ratings.



Environment

The company checks data concerning administrative punishments, illegal acts and the suspension of bidding by a government agency. If a partner is found to have an issue with the illegalities aforementioned, they are immediately informed that they are barred from bidding.



Safety

The company performs a document screening during biddings by using the 'qualified contractors' guideline in accordance with the Serious Accidents Punishment Act.

Strengthening and Supporting Partner Competencies

Labor Consulting

The company supports ‘labor consulting’ through a certified labor attorney once a year for partners without the ability to independently administer labor management. This is done for the purposes of developing win-win management strategies, with stable partners. Based on the Labor Standard Act and the Act On The Promotion Of Employees’ Participation And Cooperation, a certified labor attorney visits the field and guides partners through points of improvement while reviewing documents. The company is planning on continuing this program in an effort to get better treatment for partners and workers working for partners. It was first implemented for 16 partners in 2021 and will be expanded to 20 partners by July 2022.

Safety Level Improvements

LOTTE P&D has operated a qualified contractor assessment system since March 2022. It offers partners guidelines on safety documents with the goal of regularly inspecting laws and regulations connected with the Serious Accidents Punishment Act in an effort to improve the safety levels of partners. It is aimed not only at qualifying partners for participating in bidding but also at fundamentally improving the safety levels of partners, with its basis in the LOTTE P&D’s philosophy of win-win management and win-win growth.

Credit Rating Acquisition

In link with domestic credit rating agencies and SRM, the company allows partners to acquire credit ratings at 50% of the cost if they obtain a rating under the company’s name. The credit rating obtained by the partner can be used to make bids or conclude contracts with other companies besides LOTTE P&D and also as data with greater objectivity.

Material Safety Data Sheets(MSDS) Management Consulting

LOTTE P&D provides consulting related to the education and inspection of MSDS management for partners with a history of materials management.

MSDS Management Consulting in 2021

(Unit: company)

Category	Participating companies	Date	Content
MSDS Education	13	June 21, 2021	Online education: Handling materials safety and health items
MSDS Inspection	10	June 10-20, 2021 (10 days)	Document review: Occupational environment measurements, inspections for special examination items
		June 28, July 7 and 14, 2021 (3 days)	Onsite due diligence: Walkaround inspections

Fund Management

LOTTE P&D, in principle, makes all payments in cash. During holidays when expenses inevitably increase, the company aids the cashflow of partners by paying in advance before the time of payment. Also, since adopting electronic contracts, the company has born all costs involved with electronic contracts up to now. This allows greater speed and convenience for partners over paper contracts.

Information and Data Security

Information and Data Security Policy

Information Security Policy

LOTTE P&D has an information security policy and guidelines put in place to protect customer information and maintain information security within the company. By setting up an information security policy, the company defines basic tasks associated with information security that the company must perform. Using administrative, physical, technical and personal information security guidelines, the company provides the principles, standards and codes of conduct necessary for desired job performance so that tasks can be safely performed.

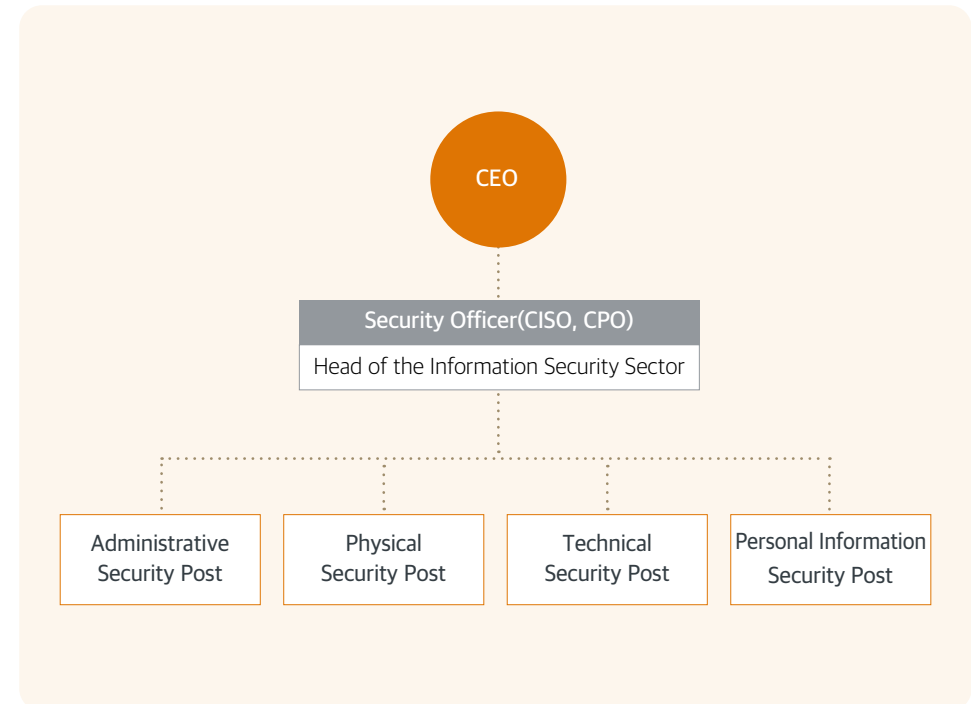
The Core Content of Information Security Policy

- ① The company must establish and implement a mid-to-long term information security plan.
- ② The company must establish and operate an education plan for increasing the information security awareness of employees.
- ③ The company must control the access of unauthorized persons to information systems and material information.
- ④ The company must build and operate essential security solutions for the security of information assets.
- ⑤ The company must establish a security incident response system with a focus on the chief information security officer.
- ⑥ The company must adequately manage-supervise personal information for the purposes of safe management.



Information Security Organization

The company is compliant with laws and regulations related to information security and secures material information of the company based on the information security strategy and policy. The company forms an organization fully in charge of security and designates security officers (CISO, CPO) for carrying out systematic activities.



Information and Data Security Activities

Information Security Education

The company conducts quarterly information security education for all employees with the goal of internalizing security competency and strengthening security awareness. In 2020, following the implementation of remote work due to the COVID-19 pandemic, the company conducted information security education to prevent security accidents that could occur in remote working environments. An education program for personal information security handlers is carried out every quarter with the goal of increasing the personal information security awareness of personal information security handlers. In addition, the company also collaborates with partners so that they can safely manage personal information in consignment.



Information Security Inspection and Training

Recently, security threats against dissimilar industries and companies have been increasing. Accordingly, LOTTE P&D diagnoses the level of information security every year, identifies vulnerabilities in administrative, physical, technical and personal information security and sets up execution plans for taking action in response to security threats.

Key Inspection and Training Items

- ① Information security level inspection (administrative, physical, personal information, technical security)
- ② Management and inspection of managing video information
- ③ Inspection of partners and restricted areas
- ④ Penetration test and inspection of infrastructure vulnerabilities
- ⑤ Mock virus email training
- ⑥ Security incident response training



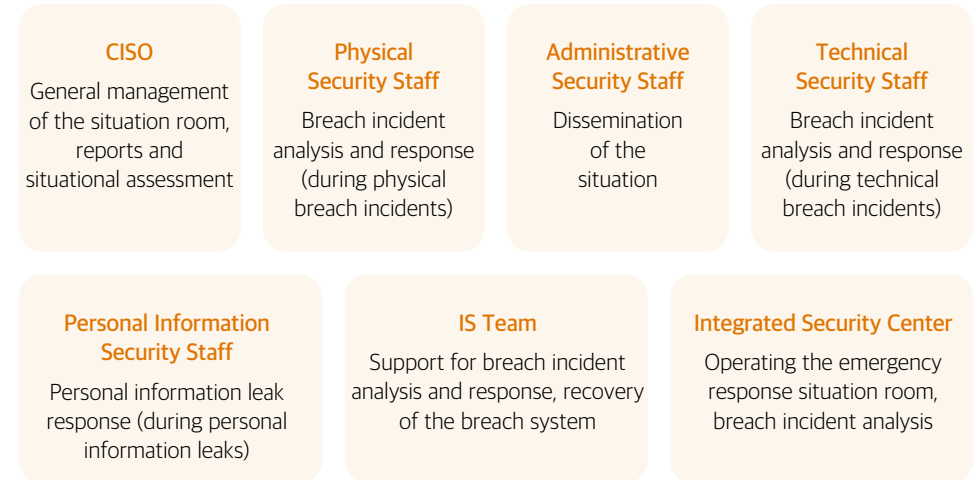
Security Breach Incident Response System

The company establishes and performs breach incident scope, declaration procedures, response procedures and personal information leak response by using a system for swiftly responding to security breach incidents.

Breach Incident Declaration Procedures



Breach Incident Response R&R (Roles and Responsibilities)



Adopting Essential Security Solutions

The company has adopted essential security solutions for preventing sundry security accidents, such as personal information and internal information leaks, as well as for responding to increasing security threats.

Essential Security Solution Functions

- ① Preventing material information leaks: Database(DB) encryption, solutions, etc.
- ② Security breach incident prevention: Advanced persistent threat(APT) response, anti-tampering solutions for apps, etc.
- ③ Response against advanced hacking: Anti-ransomware, additional certification solutions, etc.
- ④ Preemptive response against new security threats: Server access control, white vaccine solutions, etc.

Improving Customer Satisfaction

Customer Satisfaction Surveys

Office Tenant Company Surveys

LOTTE P&D has been surveying the General Affairs teams of tenant company employees twice a year since 2021—once in the first half and once in the second half—with the goal of accurately identifying and managing satisfaction with living conditions of tenants with the thinking that all tenant company employees residing in LOTTE WORLD TOWER are customers. The satisfaction survey investigates seven items, starting with location and accessibility and followed by security, hygiene and petition services experienced during occupancy. The results of the survey are shared with relevant departments with the goal of implementing improvement activities. In 2021, the average score was 4.0 in the first half and 4.2 in the second half out of a perfect score of 5, with increases in all survey items.

2021 Office Tenant Company Survey Results

(Unit: point)

No.	Item and Content	Satisfaction Level (5-point perfect score)	
		First Half	Second Half
1	Location and access in terms of commute	4.4	4.6
2	Security management, including outsider access control	4.4	4.5
3	Summer/winter indoor temperature management	2.9	3.4
4	Response to complaints, petitions/queries	4.2	4.3
5	Swift notification of inspection, construction and events	4.1	4.4
6	Hygiene management of common hallways, restrooms	4.1	4.3
7	Convenient use of LOTTE WORLD TOWER·MALL convenience facilities	4.0	4.2
Average		4.0	4.2

In particular, there was a huge increase in the office temperature management service item during summer and winter, from 2.9 in the first half to 3.4 in the second half, thanks to a close collaboration with the tower technology team.

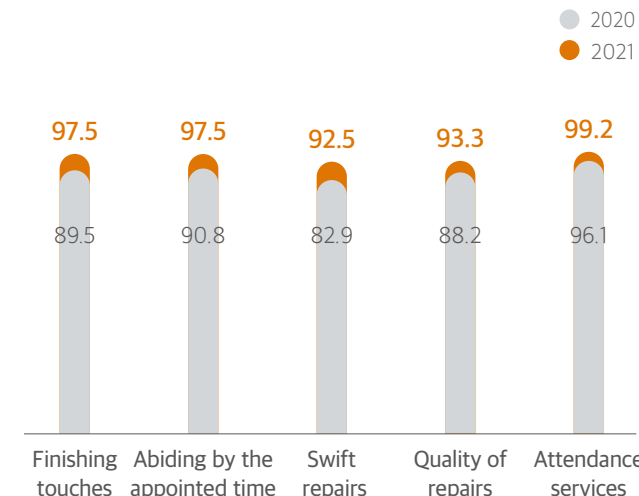
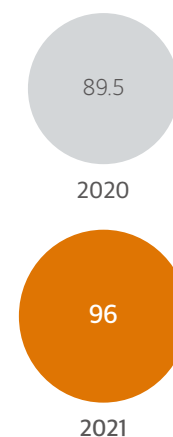
Improving Value for Residence Customers

LOTTE P&D is responsibly performing the management of all matters concerning residential life for tenant customers by providing the highest level of services, befitting the reputation of the best residence in Korea. The company provides residential conveniences by operating a tenant support center that expertly responds to queries related to facilities, while the dedicated customer service center makes quick repairs when a malfunction is reported in the course of its permanent operations and management. Likewise, a yearly customer service satisfaction survey is administered for the quality management and improvement of customer satisfaction services. In 2021, it registered a high score of 96.

2021 Customer Service Satisfaction Survey Results

(Unit: point)

Satisfaction Average



In 2021, residence tenants were surveyed on residential satisfaction and the results showed that 70% were ‘very satisfied,’ 23% were ‘satisfied,’ while 7% answered ‘normal.’ In particular, tenants expressed a high level of preference for specialized services, such as hotel-style services, amenities (convenience goods) and security/safety management. LOTTE P&D will continue to listen carefully to the opinions of customers and seek ways to improve customer service with the goal of improving customer value.

2021 Survey on Specialized Service Preferences According to Residence Tenants (Unit: number of responses)



Improving customer satisfaction through everyday piano performances

The 1st floor lobby space of LOTTE WORLD TOWER hosts piano concerts ‘Music Forest’. The beautiful melodies, played during the week at noon, have been established as the signature service of LOTTE WORLD TOWER, gifting visitors and employees a time of inspiration and thus earning their applause.



Stakeholder Interview - Customer

Descente entered into a relationship with LOTTE P&D as LOTTE WORLD TOWER's first outside office tenant in August 2017. Amidst a difficult environment, LOTTE P&D built a high-rise building, creating a Korean landmark and providing private and corporate customers with a satisfying space. Whenever I see awesome landscapes from the SKY31 lounge on the 31st floor of LOTTE WORLD TOWER or enjoy benefits and take part in countless events in the tower, I feel a huge sense of pride as a LOTTE WORLD TOWER tenant. I hope our good relationship with LOTTE WORLD TOWER continues into the future.

“I feel a huge sense of pride as a tenant of LOTTE WORLD TOWER”

Descente Ltd. (LOTTE WORLD TOWER tenant) General Affairs Team leader
Joo Joseph



Personalized Customer Services

Commercial Alley F&B Stores in Step with Trends

LOTTE WORLD MALL created Food & Beverage(F&B) stores in step with customer trends that prefer the unique stores in commercial alley ways.

In late 2020, '3355', 2,479m² sized space on 1st basement floor of LOTTE WORLD MALL, was created as a select zone of popular dessert cafes in commercial alleyways. Diversified cafes, such as the Euljiro dessert café Bunkasha, the Seongsu-dong matcha place Super Matcha and the Gyeongnidan-gil café C. Through, are attracting and enticing customers. In 2022, the trend of incorporating popular stores preferred by customers continues, with the must-go-to macaron place Rare Macarons and the popular financier place on Garosu-gil TONGTONG-E.

Assorted places in LOTTE WORLD MALL, besides the 3355 zone, host popular stores from commercial alley ways. The select coffee bean store in Yeonnam-dong From Heras and the popular Korean donut place Quafe are in poplar demand, as well as the famous Tongue Planet, a hipster café in Seongsu and Shinsa opened in May of 2022. The company is planning on continuing to actively discover newly emerging popular places and bringing them into LOTTE WORLD MALL, offering customers with a variety of new delights.



Mystery Halloween

When LOTTE WORLD TOWER's signature events were successively canceled due to the COVID-19 pandemic, LOTTE P&D brainstormed ideas for a different approach. At the time-renowned marathons were carried out on a non-face-to-face basis, but due to a lack of unique concepts, these marathons ended up similar, with no points of differentiation. Thus, LOTTE P&D formed a non-face-to-face marathon event using a Halloween concept, offering a new way of enjoying Halloween. The race kit sent to participants in advance included stickers, glow-in-the-dark patches and a medal, which were intended to create a Halloween ambiance. In compliance with the COVID-19 quarantine measures at the time, on- and off-line linked Halloween events were held, including a concept photo zone which visitors could freely enjoy at LOTTE WORLD TOWER.



Environmentally-safe Car/High-Density Polyethylene(HDPE) Vessel Exhibition

With the recent rising importance of ESG, LOTTE P&D takes into account the environment when renting out its venues. In 2021, ‘Hyundai Motor’s Clean Mobility’ exhibit showcased Hyundai’s green car lineup at one single location. By providing customers the chance to get into Hyundai’s electric and hydrogen cars, the exhibit revealed the future of automobiles. For good measure, in the first half of 2022, The resource-efficient vessel made from high-density plastic in collaboration with LOTTE Chemical was shown. These events demonstrate LOTTE P&D and LOTTE Group’s efforts toward ESG.

They brand the LOTTE WORLD TOWER·MALL complex as a place not just for shopping, but as a location for experiencing and healing products that consider the environment.



Communicating with Online Customers (SNS/Web Magazines)

LOTTE P&D is working hard to improve customer satisfaction through both offline marketing and online channels. The company runs four SNS channels to notify customers of news and promotions about LOTTE WORLD TOWER·MALL and to communicate with customers in real time. The company sends out integrated marketing event notifications, real-time customer DMs, information on newly launched stores and operator promotions by considering the characteristics of each SNS channel, namely, Instagram, YouTube, Facebook and blogs. The company also founded the webzine ‘GEEP’ which emphasizes Jamsil and Songpa content as its main content rather than highlighting LOTTE, with the aim of encouraging people to enjoy LOTTE WORLD TOWER from a new perspective. This webpage communicates unique and in-depth information about Jamsil and at the same times offers new information about LOTTE WORLD TOWER.



Webzine GEEP

Best Practice

Collaboration with CHANEL on Ice Rink

Every Winter, LOTTE P&D offers customers great attractions at year’s end and the beginning of the New Year. Noticeably, the company uses lighting effects for visual merchandising by using LOTTE WORLD TOWER as a Seoul landmark. For Christmas in 2021, the company made efforts to provide people with a time of healing and joy while appreciating scenes of nature amidst the winter city based on the theme ‘Winter Wonderland.’

In particular, the Ice Rink, created in collaboration with the luxury brand CHANEL, was a new attempt and challenge even for LOTTE P&D, with its numerous experiences of planning large scale events. Ice rinks that use regular ice require a



massive amount of electricity in order to create ice and maintain the quality of ice. In the course of reviewing operations for the ice rink, LOTTE P&D mulled over intensively about ways to minimize wasteful, environmentally unfriendly elements. At this end for the first time in Korea, the team provided a new experience to customers by installing an ice rink using artificial ice floor panels-The nonpolluting material-instead of freezing water.

Installed in the World Park Square at LOTTE WORLD TOWER in Jamsil, the CHANEL Ice Rink attracted visitor numbers that vastly surpassed estimates. What’s more, the device decorations and photo zone added to the winter ambiance, spreading widely on SNS the ice rink’s appeal as a great place for winter photographs.

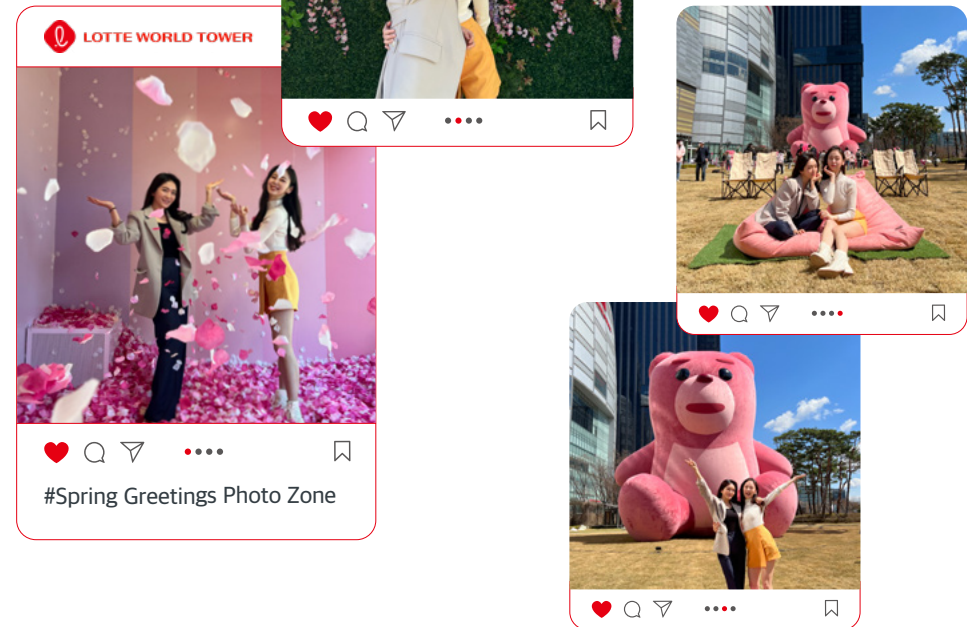
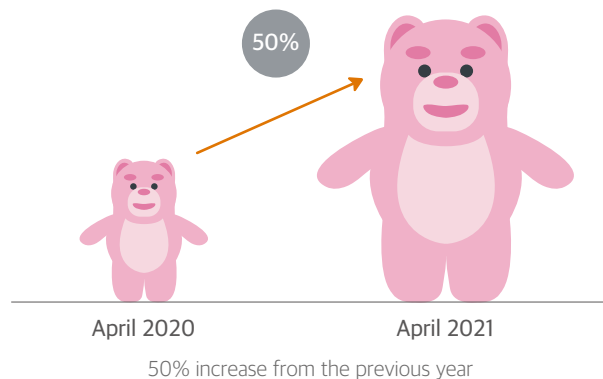
Five-Year Anniversary Festival of LOTTE WORLD TOWER's Grand Opening

The 'High Five Festival' was held to congratulate and celebrate the 5th anniversary of LOTTE WORLD TOWER's grand opening on April 3, 2017. Every tenant in LOTTE WORLD TOWER·MALL took part in the large-scale festival events for 24 days, from April 1 to 24, 2022, with a total of five event programs gifting customers with pleasant festival scenes.

Among these events, the most attention was a pop-up unit featuring K-character. Created in collaboration with Bellygom, LOTTE Home Shopping's own IP character, the event provided customers with a popular place for taking photos.

In the bargain, LOTTE WORLD TOWER's own signature event, Sky Run, was held for the first time in three years after being cancelled in the aftermath of the COVID-19 pandemic. A vertical marathon held every spring since 2017, Sky Run is the biggest stair climbing contest in Korea that involves going up 2,971 stairs, from the first floor square of LOTTE WORLD TOWER to the 123rd floor observatory. For the safety of participants, signing up for the event onsite was reduced and a non-face-to-face running style was added to the event.

Trend of Visitors to the Complex during the Festival Period



In addition, there was a prize draw event with LOTTE Members for customers who spent more than a certain sum at LOTTE WORLD TOWER·MALL. Other events included the BuskingXPicnic event, which provided both a picnic and busking space on the World Park lawn and the Spring Greetings Photo Zone, which was decorated under a cherry blossom theme.

For the month of the LOTTE WORLD TOWER Festival, a huge number of people visited LOTTE WORLD TOWER·MALL over 50% more visitors than the same period in the previous year.

GOVERNANCE



Sound
Governance
96

Risk
Management
98

Ethics and Compliance
Management
100

Sound Governance

Board of Directors Composition

LOTTE P&D's Board of Directors consists of three inside directors and one independent director with the goal of achieving efficient checks and balances and transparent decision-making. The independent director is a figure verified in terms of interests and qualifications as determined by relevant laws and company regulations. In the same way, the CEO concurrently serves as the Chair of the Board for swift decision-making and board members are appointed by approval of the general meeting of shareholders.

Diversity, Independence and Expertise of the Board

LOTTE P&D includes an independent director as a board member to ensure the independence of the board and the overall composition of the board consists of directors with experiences and expertise in differing fields.

Current Board Composition (As of June 2022)

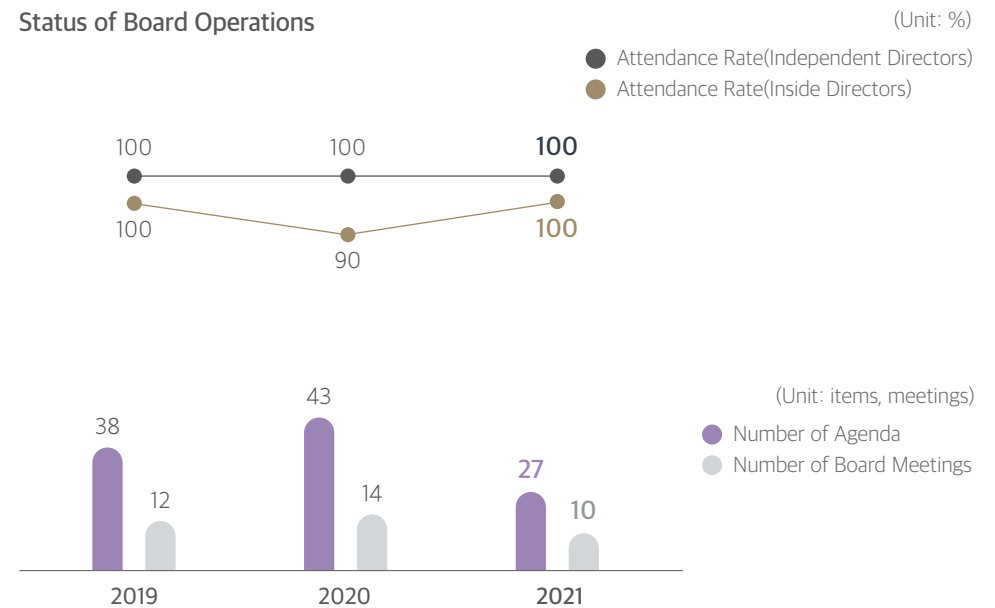
Category	Name	Age	Gender	Position
Inside Director (3)	Ryu Je-don	63	Male	CEO (inside director)
	Choi Young	51	Male	Inside director
	Lee Hyo-sup	54	Male	Non-executive director
Independent Director (1)	Lee Sung-han	67	Male	Independent director

Board of Directors Operations

Basically LOTTE P&D holds a monthly regular board meeting and irregular board meetings as needed. In the last 3 years, an average 12 board meetings were held yearly to deliberate and vote on items concerning the general meeting of shareholders, items on transactions with specially-related persons and key pending issues on management/finance.

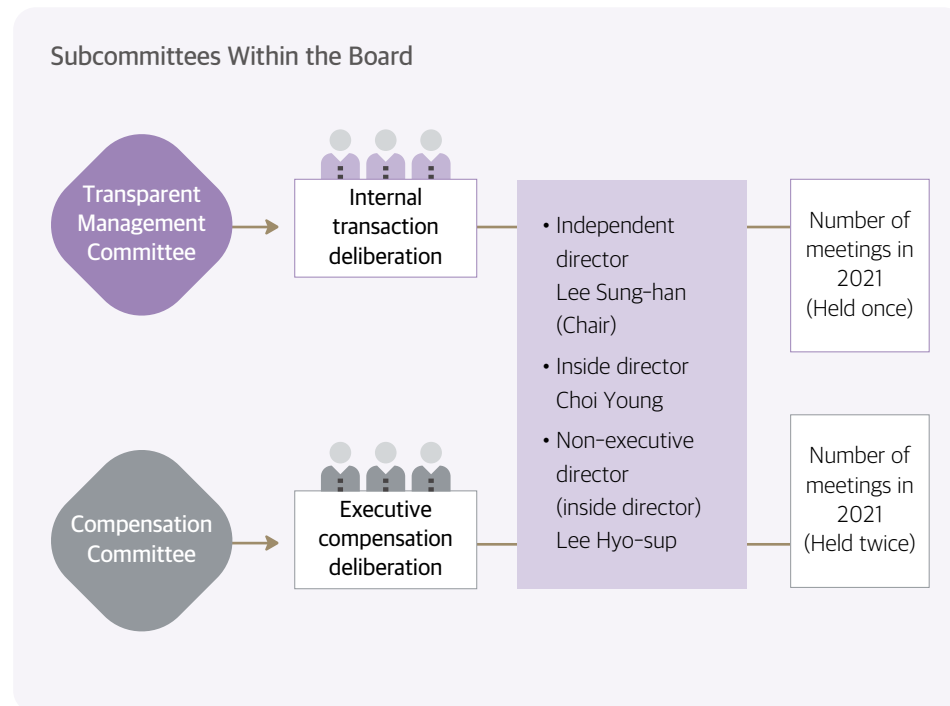
In addition, varied programs, such as item briefings, tours of domestic and international business sites and management status briefings by industry, are conducted so that independent directors can fully understand LOTTE P&D's business environment and sales status.

Status of Board Operations



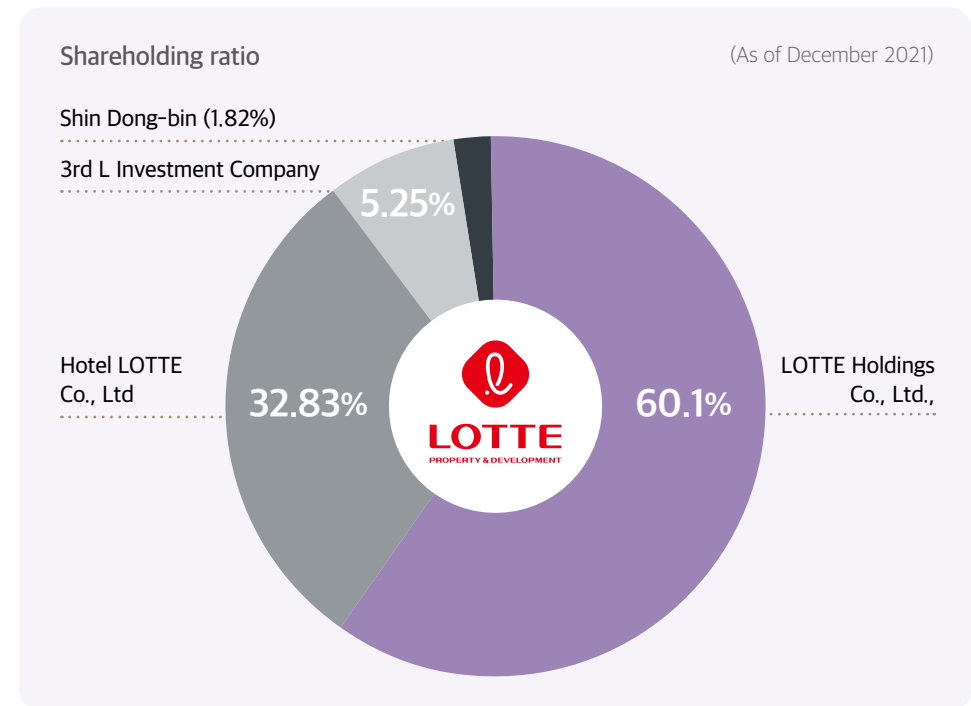
Committees within the Board

As committees within the board, LOTTE P&D operates a transparent management committee for deliberating internal transactions and improving transparency between subsidiaries as well as a compensation committee for deliberating executive compensation and strengthening management transparency. Members of the committees consist of three members—an independent director, an inside director and a non-executive director. To guarantee the transparency and independence of the committees within the board, the independent director concurrently serves as the committee chair.



Shareholders and Capital Structure

LOTTE P&D is a subsidiary of LOTTE Group, with LOTTE Holdings in Japan owning 60.1% of shares and Hotel LOTTE owning 32.83% of shares.



Risk Management

Definition of Risk and Management Plan by Risk Type

LOTTE P&D defines risk as the “possible uncertainty in the course of corporate management activities and anything that threatens the sustainability of an organization.” Risk is largely classified as financial risk and non-financial risk, with management performed according to the specific type of risk. Financial risk reflects items closely connected with the financial position of a company, such as finance, credit, capital, etc., with key financial indicators (debt ratio, current ratio, interest coverage ratio, etc.) established and managed at all times. Non-financial risk identifies possible uncertainties in business operations. In addition, ESG integration indicators (environment, human rights, compliance, etc.) are developed and managed.

Key Risk Management Indicators

Category	Risk Type	Content	Risk Management Plan
Financial Risk	Finance	<ul style="list-style-type: none"> The risk of being exposed to exchange rate fluctuations due to the borrowing of foreign currency loans 	<ul style="list-style-type: none"> Utilizing hedging methods, such as derivatives contracts Monitoring of the market environment at all times
	Credit	<ul style="list-style-type: none"> Risk of not being able to pay debts, such as principle and interest, on the appointed day due to unstable cashflow (default risk) 	<ul style="list-style-type: none"> Establishing and reviewing money balance plans Managing financial ratios
	Capital	<ul style="list-style-type: none"> Rise in cost of capital due to inefficient capital structure 	<ul style="list-style-type: none"> Maintaining optimum capital structure for reducing the cost of capital
Non-financial Risk (ESG integration indicators)	Environment	<ul style="list-style-type: none"> Environmental regulations associated risk (GHG, waste, energy, water resources, etc.) 	<ul style="list-style-type: none"> Quantitative environmental data management Emissions data related trend monitoring Setting environmental management policy
	Human Rights	<ul style="list-style-type: none"> Company and stakeholder human rights risks (discrimination, work, safety, etc.) 	<ul style="list-style-type: none"> Setting global human rights policy and public declaration of the will of management
	Human Resources	<ul style="list-style-type: none"> Human resource recruitment and retainment Employee health and workplace environment 	<ul style="list-style-type: none"> Implementing regular employee satisfaction surveys and improving employee satisfaction Expanding specialized education for employees Welfare and work environment improvements
	Information Security	<ul style="list-style-type: none"> Data and information security 	<ul style="list-style-type: none"> Information security education and campaign Security inspection of partners
	Customers	<ul style="list-style-type: none"> Reputational risk due to customer dissatisfaction experiences 	<ul style="list-style-type: none"> Standardizing and expanding customer satisfaction surveys Building two-way communication channels with consumers
	Compliance	<ul style="list-style-type: none"> Risks related to law violations, such as fair trade and anti-corruption 	<ul style="list-style-type: none"> Operating stakeholder reporting channels and responding to issues Education improving anti-corruption, ethical management awareness

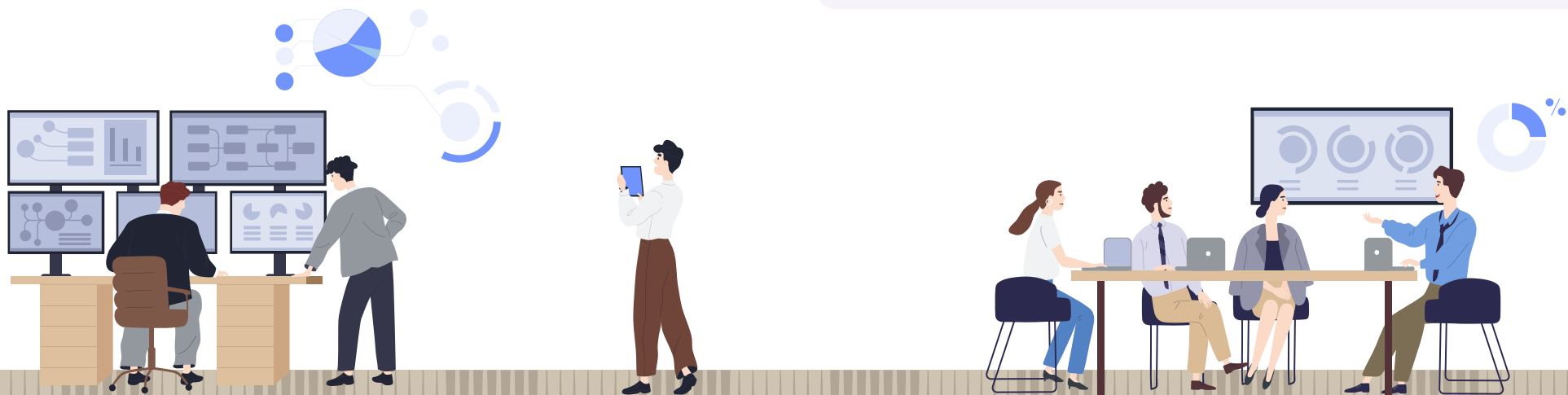
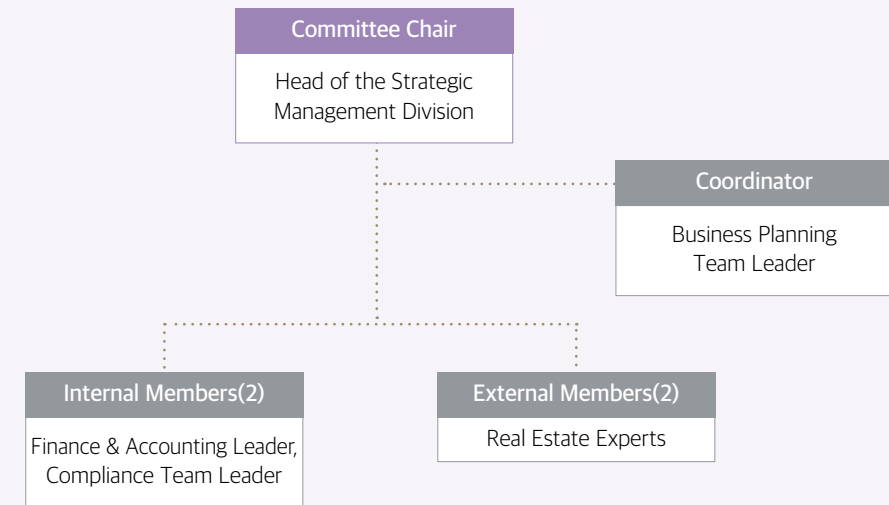
The Risk Management System

Company-Wide Risk Management Organization

The company manages company-wide risk by designating a person in charge of risk management within the Strategic Management Division. Risks that impact the business of the company are monitored at all times and pending issues are regularly identified and shared with top management.

Moreover, with the expansion of its real estate business, LOTTE P&D has Set up/ Built Real Estate Investment Committee, a company-wide deliberation apparatus with the purpose of managing risk. Prior to implementing a real estate investment or development project, inside and outside experts objectively review the risk. The company prevents potential risks by comprehensively reviewing issues, such as funds, legal affairs, approval and the environment.

Real Estate Investment Committee Organizational Chart



Ethics and Compliance Management

The Ethics and Compliance Management System

Code of Ethics and Standards of Conduct

LOTTE P&D enacts and implements a code of ethics and standards of ethical conduct that serve as the basis for proper decision-making and ethical judgement in corporate management. The company advances ethical management based on practical norms regarding responsibilities and obligations to customers, responsibilities and obligations to shareholders, responsibilities and obligations to suppliers, responsibilities and obligations to the nation and society and work attitude and posture of employees. The present code and standards of conduct are applied to all LOTTE P&D employees and LOTTE P&D actively recommends the understanding and respect of stakeholders, such as suppliers and partners with business relations with the present company.

Anti-Corruption Compliance Rules and Pledge

Since enacting anti-corruption compliance rules in July 2018, LOTTE P&D has revised its company rules to comprehensively reflect legislative enactments/revisions connected with anti-corruption issues uncovered in the process of conducting business. In addition, the company carries out compliance pledges for all employees every year so that every employee, without exception, is in compliance with laws related to anti-corruption and company regulations and every employee internalizes a consciousness of ethics and compliance management.

CEO's Message on Compliance Management

The CEO's message on compliance management is distributed to all employees twice on average yearly. The CEO's message encourages participation in the compliance pledge, reminds employees about the practical principles of the code of conduct and communicates fair trade inspection results. This is done in an effort to improve the compliance consciousness of employees and establish a fair and transparent corporate culture.

Ethics and Compliance related Tip-Offs

Employee Internal Ethics Hotline

LOTTE P&D has set up an ethics hotline for employees that receives reports through internal groupware. The system receives in real time tips linked to rules violations, sexual harassment, workplace bullying, etc. within the company and the confidentiality of the tipster's identity and the content of the tip is strictly assured following tipster protection rules.

External Ethics Hotline



LOTTE P&D Ethics Hotline



LOTTE Group Ethics Hotline

In addition to an internal ethics hotline for employees, there is a separate external ethics hotline (external stakeholders including external customers and partners) on the LOTTE P&D homepage and the LOTTE Group homepage. Likewise, the confidentiality of the tipster's identity and tip content is strictly guaranteed. The tip is immediately investigated as soon as the company compliance management team receives it. If unethical behavior is uncovered, procedures are in place to punish and sanction employees related to the party involved in the unethical behavior according to human resource regulations.

Voice of Partners(VOP), a Communication Channel to Partners

In June 2018, LOTTE P&D built VOP, a channel for taking in suggestions and collecting opinions from partners. A menu separate from the general customer complaint system on the company homepage was formed in pursuit of open management. The VOP system aims at immediately correcting and preventing unsavory incidents, such as possible abuse of power and sexual harassment that employees of partners may experience while working in the field.

Ethics Education

Ethics education is conducted yearly to improve the ethical consciousness of employees and minimize legal risks related to work. In the first half of 2022, all employees took group education on the main content and precautions involved with the Improper Solicitation and Graft Act. In 2021, departments exposed to high legal risk received in-depth education over two occasions. After the education, they were monitored for compliance regarding relevant laws and company regulations in an effort to build a culture of compliance and reinforce compliance and ethical management.

2021 Ethical Management Status

(Unit: sessions, persons, %)

Category	Number of Sessions	Number of Participants	Participation Rate
Education for strengthening compliance manager competency	2	4	100
Anti-corruption education for relevant department hands-on staff	2	26	100
Voluntary anti-corruption inspection of relevant department hands-on staff	2	20	100
Compliance Pledge	1	All Employees	100

Strengthening Fair Trade Compliance

Compliance Program (CP) Outline

Implemented as part of the effort toward compliance and transparent management, the CP refers to the compliance system and the behavioral norms that companies operate to voluntarily comply with fair trade related laws. Installing such a system and offering behavioral standards improve the voluntary fair trade awareness of employees, preventing rule violation risks and contributing to the establishment of a compliance culture across society.

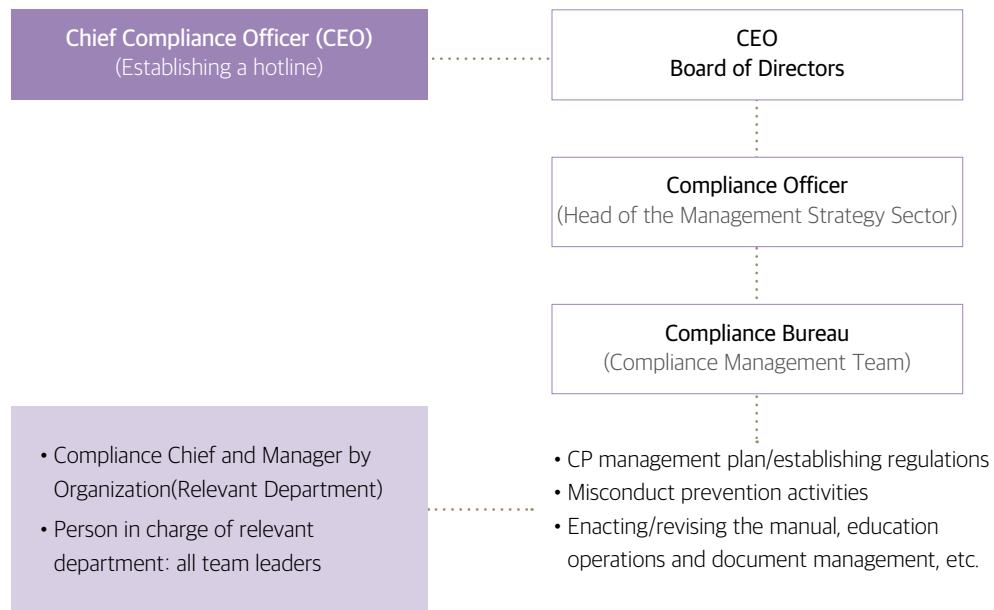
LOTTE P&D adopted the CP in October 2016 and continues to work hard to establish and embody an even higher level of compliance culture as the corporate culture of LOTTE P&D.

In 2020, managing director Choi Young, the head of the management strategy sector, was appointed as compliance officer after a resolution of the board of directors. A compliance manual was enacted and has been updated every year by incorporating fair trade related enactments and revisions. In addition, the company regularly conducts fair trade education for employees once or more every half-year and monitors compliance to relevant laws and regulations. In particular, every year the company anonymously surveys company partners on Subcontracting Act compliance and abuse of power practices in connection with subcontracting deals. In the future, LOTTE P&D will continue its efforts to strengthen compliance management.

7 Major Elements of CP

- ① Internally and externally demonstrating the CEO's commitment to fair trade compliance
- ② Designating and operating an executive-level compliance officer with actual responsibility and authority
- ③ Preparing case-based guidelines for compliance with fair trade laws and regulations
- ④ Differentiated levels of education for at least 2 hours or more every half-year by taking into account the characteristics of each department and level
- ⑤ Building a supervising system to prevent violations
- ⑥ Disciplinary measures against law violations
- ⑦ Establishing a document management system

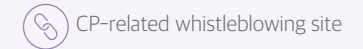
Organizational System of CP



CP-Related Whistleblowing System

Any stakeholder of LOTTE P&D, who witnesses an illegal act related to fair trade, can report the act to the whistleblowing system on the company homepage. Confidentiality for the whistleblower's identity and the content reported are thoroughly assured. Leaking or tracking down the identity of the whistleblower, discriminating against and unfavorably treating the whistleblower are strictly forbidden.

CP-related Subjects to Report



- The unfair collusive conduct of stakeholders, such as bid rigging, for the purpose of doing business with the company
- Acts in violation of the Fair Trade Code of Conduct of the company
- Other unfair trade practices, such as the abuse of superior bargaining power (refer to the behavioral guidelines in the compliance manual)
- Unfavorably treating or exposing the identity of legitimate whistleblowers
- Violation of laws, such as the Fair Trade Act, the Act on the Regulation of Terms and Conditions, the Act On Fair Labeling And Advertising, etc. (refer to the behavioral guidelines in the compliance manual)
- Corruption and unfair trade practices of suppliers
- Acts of giving/receiving unfair monies, goods, entertainment, or convenience to/from stakeholders
- Any person who has engaged in bribery, embezzlement, etc.
- Acts of obtaining unreasonable benefits or of damaging the company by leveraging one's position or duties
- Acts of interfering with the fair work of other employees for the benefit of oneself or others
- Acts of leaking corporate secrets and customer information without permission

APPENDIX

ESG DATA	104
Third-Party Assurance Statement	120
GRI Content Index	122
SASB Index	126
List of Awards and Group Memberships	127

ESG DATA

Environmental

GHG Emissions

Category	Unit	2019	2020	2021	Goal	Notes
Total GHG emissions	tCO ₂ eq	38,638	35,464	35,817	36,640	Based on statements
Direct GHG emissions Scope 1	tCO ₂ eq	6,114.07	4,840.85	5,164.29	5,373	Based on statements
Indirect GHG emissions Scope 2	tCO ₂ eq	32,524.21	30,623.58	30,653.98	31,267	Based on statements
GHG emission intensity	Scope 1 emission intensity	tCO ₂ eq/m ²	0.014	0.011	0.012	0.012
	Scope 2 emission intensity	tCO ₂ eq/m ²	0.076	0.071	0.071	0.073
GHG emissions reductions	tCO ₂ eq	909	813	982	655	

Air pollutant emissions

Category	Unit	2019	2020	2021	Goal	Notes
NOx emissions	ton	2.06	2.79	2.64	2.50	Entire complex scope basis

Energy consumption

Category	Unit	2019	2020	2021	Goal	Notes
Energy consumption inside the organization	Total internal energy	TJ	141	102	104	116 Fossil fuel energy + electric energy
	Total renewable energy	TJ	42	65	66	57 Entire complex scope basis
	Fossil fuel energy	TJ	102	91	101	98 Based on statements
	Electricity	TJ	39	10	3	7 Self generated/consumed
Energy consumption outside the organization	Electricity usage	TJ	697	631	637	655 Based on statements
Energy Intensity	GJ/total floor area	0.33	0.24	0.24	0.27	
Energy use savings	TJ	19	17	20	19	

Water and wastewater management

Category	Unit	2019	2020	2021	Goal	Notes
Water withdrawn	Total water withdrawn	ton	767,795	608,322	669,708	681,942
	Ground water withdrawn	ton	68,792	56,190	100,512	75,165
	Water reclaimed	ton	144,300	121,729	110,420	125,483
	Water withdrawn by a third party agency (local government, water resource company, etc.)	ton	699,003	552,132	569,196	606,777
Water withdrawal intensity	m ³ /total floor area	1.79	1.42	1.56	1.59	

Waste management

Category	Unit	2019	2020	2021	Notes	
Waste generation (Mall)	Total waste generation	ton	994	858	789	
	Total general waste generation	ton	989	848	786	
	Total designated waste generation	ton	5	10	3	
Waste generation (Tower)	Total waste generation	ton	4	161	196	
	Total general waste generation	ton	4	161	196	Only a small amount of waste generated in 2019 thanks to the recycling of general waste as waste synthetic resin
	Total designated waste generation	ton	0	0	0	
Waste discharge intensity	ton/total floor area	0.0023	0.0024	0.0023		

Compliance (environment)

Category	Unit	2019	2020	2021	Notes
Environmental regulation violations	Total fines	KRW	0	0	0
	Number of lawsuits filed	case	0	0	0
	Number of nonmonetary sanctions	case	0	0	0

Social

Employment

Category		Unit	2019	2020	2021	Notes
Total number of employees		person	184	182	226	
Number of employees by age group	Under 30	person	53	43	64	
	30~50	person	112	119	144	
	Over 50	person	19	20	18	
Ratio of employees by age group	Under 30	%	28.80	23.63	28.32	
	30~50	%	60.87	65.38	63.72	
	Over 50	%	10.33	10.99	7.96	
Number of employees by gender	Male	person	131	128	157	
	Female	person	53	54	69	
Ratio of employees by gender	Male	%	71.20	70.33	69.47	
	Female	%	28.80	29.67	30.53	
Number of employees by employment contract	Full-time workers(Total)	person	155	164	190	
	Full-time workers(Male)	person	112	117	134	Including executives
	Full-time workers(Female)	person	43	47	56	Including executives
	Fixed-term workers(Total)	person	29	18	36	Including part-time workers and dispatched workers
	Fixed-term workers(Male)	person	19	11	23	Including part-time workers and dispatched workers
	Fixed-term workers(Female)	person	10	7	13	
Ratio of employees by employment contract	Ratio of full-time workers	%	84.24	90.11	84.07	
	Ratio of fixed-term workers	%	15.76	9.89	15.93	

Turnover and retirement

Category		Unit	2019	2020	2021	Notes
Total number of displaced and retired employees		person	11	11	21	
Voluntary turnover		%	100	100	100	
Number of displaced and retired employees by age group	Under 30	person	3	3	2	
	30~50	person	8	8	17	
	Over 50	person	0	0	2	
Ratio of displaced and retired employees by age group	Under 30	%	27.27	27.27	9.52	
	30~50	%	72.73	72.73	80.95	
	Over 50	%	0	0	9.52	
Number of displaced and retired employees by gender	Male	person	6	10	19	
	Female	person	5	1	2	
Ratio of displaced and retired employees by gender	Male	%	54.55	90.91	90.48	
	Female	%	45.45	9.09	9.52	
Number of displaced and retired employees by job grade	Senior Manager	person	0	1	1	
	Manager	person	2	1	3	
	Senior Associate	person	3	5	6	
	Associate and below	person	6	4	11	
Ratio of displaced and retired employees by job position	Senior Manager	%	0	9.09	4.76	Excluding employees transferred to affiliates of LOTTE group
	Manager	%	18.18	9.09	14.29	
	Senior Associate	%	27.27	45.45	28.57	
	Associate and below	%	54.54	36.36	52.39	

Recruitment

Category	Unit	2019	2020	2021	Goal	Notes
Total number of newly hired employees	person	51	41	90	70	
Number of newly hired employees by age group	Under 30	35	18	48	50	
	30~50	12	16	37	15	
	Over 50	4	7	5	5	
Ratio of newly hired employees by age group	Under 30	68.63	35.29	94.12	98.04	
	30~50	23.53	31.37	72.55	29.41	
	Over 50	7.84	13.73	9.80	9.80	
Number of newly hired employees by gender	Male	33	28	67	35	
	Female	18	13	23	35	
Ratio of newly hired employees by gender	Male	64.71	54.90	131.37	68.63	
	Female	35.29	25.49	45.10	68.63	

Employee diversity

Category	Unit	2019	2020	2021	Goal	Notes
Ratio of minority group employees	Patriot/veteran workers	1	2	1	6	
	Disabled	5	4	5	6	
Basic salary and remuneration rate to men	Base pay rate of female workers relative to men by job type	100	100	100	100	No difference in pay depending on gender
	Bonus pay rate of female workers relative to men by job type	100	100	100	100	
Ratio of women by job grade	Ratio of female among all workers	28.80	29.67	30.53	-	
	Ratio of female among managers*	10.91	11.11	11.59	-	
Forms of employment for women	Female ratio of contract workers	34.48	38.89	36.11	-	
	Female ratio of full-time workers	27.74	28.66	29.47	35	

*Manager: M grade or above

Childcare leave use

Category		Unit	2019	2020	2021	Notes
Number of employees that were entitled to parental leave	Male	person	3	4	4	
	Female	person	2	2	3	
Number of employees that took parental leave	Male	person	3	4	4	
	Female	person	2	2	3	
Number of employees due to return to work after taking parental leave (A)	Male	person	3	4	4	
	Female	person	2	2	3	
Number of employees that did return to work after parental leave (B)	Male	person	3	4	4	
	Female	person	2	2	3	
Return to work rates of employees that took parental leave (=B/Ax100)	Male	%	100	100	100	
	Female	%	100	100	100	
Number of employees returned to work after parental leave ended that was still employed 12 months after their return to work (C)	Male	person	4	3	4	
	Female	person	2	2	2	
Number of employees retained 12 months after returning to work following a period of parental leave (D)	Male	person	4	3	4	
	Female	person	2	1	2	
Retention rate of employees that took parental leave (=D/Cx100)	Male	%	100	100	100	
	Female	%	100	50	100	

Employee and supplier safety and health status

Category	Unit	2019	2020	2021	Notes		
Employee occupational injuries (accident)	Number of occupational accidents	case	0	0	0		
	Ratio of occupational accidents	%	0	0	0		
	Number of deaths due to occupational accidents	case	0	0	0		
	Ratio of death due to occupational accidents	%	0	0	0		
	Number of serious occupational accidents (excluding deaths)	case	0	0	0		
	Ratio of serious occupational accidents (excluding deaths)	%	0	0	0		
	Work hours	hour	364,297 (166 people)	363,371 (167 people)	458,236 (209 people)	Based on normal number of workers (fixed work hours + actual extended work hours) Excluding executives, part-time workers In compliance with the statutory working hours of within 52 hours a week	
	Accident types		N/A	N/A	N/A		
	Supplier occupational injuries (accident)	Number of occupational accidents	case	0	0	0	
		Ratio of occupational accidents	%	0	0	0	
Number of deaths due to occupational accidents		case	0	0	0		
Ratio of death due to occupational accidents		%	0	0	0		
Number of serious occupational accidents (excluding deaths)		case	0	0	0		
Ratio of serious occupational accidents (excluding deaths)		%	0	0	0		
Work hours		hour	N/A	N/A	N/A		
Accident types			N/A	N/A	N/A		

Category		Unit	2019	2020	2021	Notes
Employee occupational diseases (disease)	Number of deaths	case	0	0	0	
	Number of occupational disease cases (including deaths)	case	0	0	0	
	Disease types		N/A	N/A	N/A	
Supplier occupational diseases (disease)	Number of deaths	case	0	0	0	
	Number of occupational disease cases (including deaths)	case	0	0	0	
	Disease types		N/A	N/A	N/A	

Employee education and training

Category		Unit	2019	2020	2021	Goal	Notes
Employee education and training	Total education hours	hour	23,549	5,062	6,042	6,646	
	Average education hours per employee	hour	157	32.7	32.4	33	
	Total education expenses	one million KRW	417	205	309	447	
	Education expenses per employee	one million KRW	2.77	1.32	1.66	1.97	
Ratio of workers who were regularly reviewed for job performance and career development	Total Ratio of workers who received regular performance assessments	%	85	82	81	-	
	Ratio of male workers who received regular performance assessments	%	69	69	70	-	Excluded: executives, dispatched workers, special duty workers (secretaries, drivers), wage peak system candidates, workers on leave, new employees who've worked less than 3 months
	Ratio of female workers who received regular performance assessments	%	31	31	30	-	
	Ratio of full-time workers who received regular performance assessments	%	87	92	89	-	
	Ratio of contract workers who received regular performance assessments	%	13	8	11	-	

Human rights education

Category	Unit	2019	2020	2021	Goal	Notes	
Improving the perception of people with disabilities	Total education sessions	session	1	1	1	Once a year	
	Total education hours	hour	2	2	2		
	Number of people who received the education	person	186	183	221	230	
	Ratio of people who received the education	%	100	100	100	100	
Workplace Sexual harassment prevention education	Total education sessions	session	1	1	1	Once a year	
	Total education hours	hour	1	1	1	1	
	Number of people who received the education	person	161	171	212	230	In 2019, 8 out of 170 workers did not complete the education. 1 dispatched worker had education and training duties at the dispatch destination
	Ratio of people who received the education	%	95	100	100	100	Sexual harassment and workplace harassment prevention education have been administered together since 2020
Workplace harassment prevention education	Total education sessions	session	0	1	1	Once a year	
	Total education hours	hour	0	1	1	1	Sexual harassment and workplace harassment prevention education have been administered together since 2020
	Number of people who received the education	person	0	171	212	230	
	Ratio of people who received the education	%	0	100	100	100	

Customer safety and health

Category	Unit	2019	2020	2021	Notes
Cases of not fulfilling the rules on the safety and health impact of products and services	Cases of fines or punishments for misconduct	case	0	0	0
	Cases of warnings for misconduct	case	0	0	0
	Cases of violating a voluntary regulation	case	0	0	0

Customer personal information security

Category	Unit	2019	2020	2021	Notes
Complaint cases where customer personal information security violations or loss of customer information were proven as fact	Number of complaints raised by an outside party and proven within the company	case	0	0	0
	Number of complaints raised by regulatory agencies	case	0	0	0
	Total number of confirmed leaks, thefts, losses of customer information	case	0	0	0

Compliance (social and economic)

Category	Unit	2019	2020	2021	Notes
Law and rule violations with a social and economic aspect	Total fines for law and rule violations	one hundred million KRW	0	0	1
	Total number of nonmonetary sanctions due to law and rule violations	case	0	0	0
	Cases raised through the conflict resolution mechanism	case	0	0	0

Governance

Board of Director operations

Category	Unit	2019	2020	2021	Notes
Number of agenda	case	35	43	27	
Number of board sessions	session	12	14	10	
Attendance rate*	Inside director**	%	96	90	100
	Independent director	%	100	100	100

*Attendance rate calculation: Average attendance rate of all directors serving during the period shown(However, if the independent director who resigned is excluded, the attendance rate of 6 independent directors serving in 2020 is 99%)

**Non-executive directors are included in the inside director attendance rate

Board composition

Category	Unit	2019	2020	2021	Notes
Board composition by gender	Male	person	4	4	4
	Female	person	0	0	0
Board composition by age group	Under 30	person	0	0	0
	30~50	person	0	0	0
	Over 50	person	4	4	4

Anti-corruption activities

Category	Unit	2019	2020	2021	Notes
Confirmed corruption cases and measures taken	Number of corruption cases	case	0	0	0
	Number of cases where the worker was fired or punished	case	0	0	0
	Number of cases where a contract with a partner was terminated or not renewed	case	0	0	0

Anti-competitive practices

Category	Unit	2019	2020	2021	Notes
Number of legal actions taken against unfair trade practices, such as anti-competitive practices and monopolies	case	0	0	0	

Others

Summary statement of financial position (individual)

Category	Unit	2019	2020	2021	Notes
Assets					
Current assets	one million KRW	1,499,184	1,427,488	855,722	
Cash and cash equivalents	one million KRW	266,951	448,177	311,158	
Trade receivables	one million KRW	10,039	12,771	16,351	
Current portion of financial lease	one million KRW	1,533	1,595	0	
Other receivables	one million KRW	16,280	8,258	9,077	
Other current financial assets	one million KRW	492,057	476,412	362,539	
Other current assets	one million KRW	69,675	14,222	43,821	
Inventories	one million KRW	642,649	466,053	112,776	
Non-current assets	one million KRW	6,537,785	6,414,767	7,703,764	
Long-term trade receivables	one million KRW	1,806	1,853	3,235	
Finance lease receivables	one million KRW	30,792	29,198	0	
Investments in Associates	one million KRW	2,715,250	2,586,792	2,890,135	
Other non-current financial assets	one million KRW	14,030	19,744	49,827	
Other non-current assets	one million KRW	2,077	4,327	6,191	
Net defined benefit assets	one million KRW	94	0	236	
Tangible assets	one million KRW	2,700,479	2,653,455	3,803,863	
Right-of-use assets	one million KRW	519,945	561,142	214,604	
Intangible assets	one million KRW	7,847	6,510	9,736	
Investment properties	one million KRW	545,465	551,746	725,937	
Total assets	one million KRW	8,036,969	7,842,255	8,559,486	

Summary statement of financial position (individual)

Category	Unit	2019	2020	2021	Notes
Liabilities					
Current liabilities	one million KRW	543,884	923,937	1,278,825	
Other payables	one million KRW	59,965	37,922	54,624	
Short term borrowings	one million KRW	0	140,000	350,000	
Current portion of long-term borrowings and debentures	one million KRW	404,931	622,309	525,229	
Other current financial liabilities	one million KRW	21,192	57,507	94,504	
Current portion of lease liabilities	one million KRW	19,613	23,940	13,397	
Other current liabilities	one million KRW	30,858	32,925	73,135	
Current tax liabilities	one million KRW	7,325	9,334	167,936	
Non-current liabilities	one million KRW	3,047,120	2,770,150	2,978,245	
Long-term borrowings and debentures	one million KRW	1,131,308	824,327	1,388,598	
Other non-current financial liabilities	one million KRW	198,110	229,972	190,097	
Non-current lease liabilities	one million KRW	539,795	583,401	207,401	
Other non-current liabilities	one million KRW	44,899	42,402	34,569	
Long-term employee benefits liabilities	one million KRW	421	506	610	
Net defined benefit liabilities	one million KRW	0	182	0	
Deferred tax liabilities	one million KRW	1,132,587	1,089,360	1,156,970	
Total liabilities	one million KRW	3,591,004	3,694,087	4,257,070	
Equity					
Capital stock	one million KRW	297,244	281,883	281,883	
Other paid-in capital	one million KRW	85,333	(73,018)	(73,758)	
Accumulated other comprehensive loss	one million KRW	(41,070)	(83,604)	(31,121)	
Retained earnings	one million KRW	4,104,458	4,022,907	4,125,412	
Total equity	one million KRW	4,445,965	4,148,168	4,302,416	
Total liabilities and equity	one million KRW	8,036,969	7,842,255	8,559,486	

Summary statement of comprehensive income (individual)

Category	Unit	2019	2020	2021	Notes
Revenue	one million KRW	419,980	482,918	754,335	
Costs of sales	one million KRW	(348,905)	(410,239)	(613,794)	
Gross Income	one million KRW	71,075	72,679	140,541	
Selling and administrative expenses	one million KRW	(55,361)	(49,386)	(60,150)	
Operating Income (loss)	one million KRW	15,714	23,293	80,391	
Financial income	one million KRW	26,863	51,269	86,504	
Financial expenses	one million KRW	(84,821)	(136,365)	(115,195)	
Gains (loss) on valuation using equity method	one million KRW	113,755	8,204	271,808	
Impairment Losses on Associates	one million KRW	0	(32,916)	(14,263)	
Other non-operating income	one million KRW	227	818	16,703	
Other non-operating expenses	one million KRW	(6,447)	(1,938)	(5,698)	
Net income (loss) before income tax expense	one million KRW	65,291	(87,635)	320,250	
Tax expense (profit)	one million KRW	(29,959)	7,866	(223,091)	
Net income (loss) from continuing operations for the current period	one million KRW	35,332	(79,769)	97,159	
Net income (loss) from discontinued operations for the current period	one million KRW	22,626	0	0	
Profit (loss)	one million KRW	57,958	(79,769)	97,159	
Items that will not be reclassified subsequently to profit or loss					
Remeasurement of the net defined benefit liability	one million KRW	232	(285)	(1,172)	
Gain on financial assets at fair value through other comprehensive income	one million KRW	1,272	0	0	

Category	Unit	2019	2020	2021	Notes	
Items that may be reclassified subsequently to profit or loss						
Gain (loss) on value of derivative financial instruments	one million KRW	(1,447)	(1,811)	6,377		
Changes in capital due to equity method	one million KRW	58	(45,007)	50,447		
Retained earnings due to equity method	one million KRW	9,398	(1,497)	2,178		
Total comprehensive income (loss)	one million KRW	67,471	(128,369)	154,989		
Net income (loss) attributable to	Owner of the holding company	one million KRW	58,489	(79,769)	97,159	
	Net income from continuing operations	one million KRW	35,332	(79,769)	97,159	
	Net income (loss) from discontinued operations	one million KRW	22,625	0	0	
	Non-controlling interests	one million KRW	(532)	0	0	
Total comprehensive income attributable to	Total comprehensive income, equity attributable to owners of parent entity	one million KRW	67,589	(128,369)	154,989	
	Total comprehensive income, non-controlling interests	one million KRW	(119)	0	0	
Earnings per share	Basic and diluted net earnings per share	one million KRW	984	(1,384)	1,723	
	Basic and diluted earnings per share from continuing operations	one million KRW	594	(1,384)	1,723	
	Basic and diluted earnings per share from discontinued operations	one million KRW	390	0	0	

Credit rating (corporate bond)

Category	Unit	2019	2020	2021	Notes
Korea Investors Service	grade	N/A	AA-	AA-	No corporate bonds were directly issued in 2019. 2018, 2019 and 2021 were all AA-
Korea Ratings Corporation	grade	N/A	AA-	AA-	

Distribution of economic value

Category	Unit	2019	2020	2021	Notes
Shareholders and creditors	Dividends	one million KRW	0	0	
	Interest cost	one million KRW	71,840	70,191	70,277
Government	Corporate tax	one million KRW	65,291	(87,635)	320,250
Employees	Salaries	one million KRW	11,038	12,309	16,073
	Retirement payments	one million KRW	984	1,046	1,432
	Benefits	one million KRW	2,138	2,317	2,903
Community and NGOs	Social contribution activity expenses	one hundred million KRW	81.4	35.7	21.3

Domestic and international business site revenue

Category	Unit	2019	2020	2021	Notes
Domestic business site revenue	one million KRW	419,980	482,918	753,095	
Overseas business site revenue	one million KRW	-	-	1,240	New consignment and services revenue for Coralis Vietnam following the business transfer of LOTTE Asset Development in 2021
Total	one million KRW	419,980	482,918	754,335	

Third-Party Assurance Statement

We were engaged by LOTTE Property&Development to provide limited assurance on the LOTTE Property&Development Sustainability Report 2021' for the fiscal year of 2021, which was completed on August 2022 (further 'the Report').

Context and Scope

Our engagement was designed to provide limited assurance on whether the Report is presented fairly, in all material respects, in accordance with the Sustainability Reporting Standards of the Global Reporting Initiative (GRI). We do not provide any assurance on the achievability of the objectives, targets, and expectations LOTTE Property&Development.

The scope of our engagement conforms to the KPMG Sustainability Assurance Manual™ (KSAM™), including the aspect of "materiality". With regards to financial data, our procedures were limited to verifying that they were correctly derived from audited financial statements. To obtain a thorough understanding of LOTTE Property&Development's financial results and position, the audited financial statements produced on March 16, 2021 should be referred to.

Responsibilities

As stated in the 'Reporting Principles and Standard,' LOTTE Property&Development is responsible for all content within the Report in respect of the GRI Sustainability Reporting Standards. It is the responsibility of LOTTE Property&Development's management to establish and maintain appropriate performance management and internal control systems from which the reported sustainability information is derived.

Our responsibility is to perform a limited assurance engagement and to express a conclusion based on the work performed.

Independence

In conducting our engagement, we have complied with the requirements of the International Federation of Accountants (IFAC) Code of Ethics for Professional Accountants, issued by the International Ethics Standards Board for Accountants. We do not engage in any and all activities that may influence our independence from LOTTE Property&Development. KPMG Samjong Accounting Corp. has systems and processes in place to monitor compliance with the Code, and to prevent conflicts regarding independence.

Assurance Standards

We conducted our engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the International Auditing and Assurance Standards Board. The standard requires that we comply with applicable ethical requirements, including independence requirements, and that we plan and perform the engagement to obtain limited assurance about whether the Report is free from material misstatement.

Limitations

A limited assurance engagement is substantially less in scope than a reasonable assurance engagement, and consequently does not enable us to obtain assurance on all significant matters that we may become aware of in a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance conclusion. This report has been prepared solely for LOTTE Property&Development in accordance with the terms of our engagement. We do not accept or assume responsibility to anyone other than LOTTE Property&Development for our work, or for the conclusions we have reached in the assurance report.

Main Assurance Procedures

Our engagement was designed to provide limited assurance on whether the Report is presented fairly, in all material respects, in accordance with the reporting criteria. Procedures performed to obtain a limited level of assurance on a sustainability report consists of making inquiries, primarily of persons responsible for the preparation of information presented in the Sustainability report, and applying analytical and other evidence gathering procedures, as appropriate. These procedures included the following.

- Confirmation on whether the financial information presented in the Report was correctly derived from LOTTE Property&Development’s audited financial statements
- Inquiries to gain an understanding of LOTTE Property&Development’s processes for determining the material issues for key stakeholder groups
- Interviews with corporate’s or each group company’s working-level staff responsible for providing the information in the Report
- Visits to the company’s headquarter office to understand the systems and processes in place for managing and reporting the sustainability data
- Comparing the information presented in the Report to determine whether it is in line with our overall knowledge of, and experience with, LOTTE Property&Development’s performance on non-financial value creation

Opinion

- **Stakeholder Inclusiveness**
 - LOTTE Property&Development focuses on interests of key stakeholders, such as shareholders & investors, employees, customers, partners, government, local communities, and operates proper online/off-line communication channels

- We are not aware of any key stakeholder group that has been excluded from dialogue in the Report.

• **Sustainability Context**

- LOTTE Property&Development has established a process to incorporate ESG in management’s decision-making and the business management plans of relevant teams, thereby securing continuity.
- We confirmed that LOTTE Property&Development recognizes general business management and social responsibility management comprehensively and applies such understanding within the Report.

• **Materiality**

- LOTTE Property&Development conducts a materiality test in determining key reporting issues.
- We are not aware of any material aspects concerning its sustainability performance which have been excluded from the Report.

• **Completeness**

- LOTTE Property&Development applies reporting scope, boundary, and temporal criteria.
- In terms of criteria mentioned above, we confirm that the Report is suitable for stakeholders to assess social responsibility performance.

Based on the procedures performed, as described above, nothing has come to our attention to indicate that the Report is not presented fairly, in all material respects, in accordance with the reporting criteria.



August 2022
 KPMG Samjong Accounting Corp.
 CEO Kim, Kyo Tai

GRI Content Index

GRI Standards	Disclosure	Page	
GRI 102: General Disclosures 2016			
Organizational profile	102-1	Name of the organization	4
	102-2	Activities, brands, products and services	6~15
	102-3	Location of headquarters	4
	102-4	Location of operations	4, 12, 15
	102-5	Ownership and legal form	97, Business Report p.138
	102-6	Markets served	4, 7~15
	102-7	Scale of the organization	4
	102-8	Information on employees and other workers	106, Business Report p.143
	102-9	Supply chain	84~85
	102-10	Significant changes to the organization and its supply chain	6, 13
	102-11	Precautionary Principle or approach	98~99
	102-12	External initiatives	21~22
	102-13	Membership of associations	127
Strategy	102-14	Statement from senior decision-maker	2~3
Ethics and integrity	102-16	Values, principles, standards and norms of behavior	100
	102-17	Mechanisms for advice and concerns about ethics	100~102
Governance	102-18	Governance structure	19, 96~97
	102-19	Delegating authority	19
	102-20	Executive-level responsibility for economic, environmental and social topics	19
	102-21	Consulting stakeholders on economic, environmental and social topics	19, 23
	102-22	Composition of the highest governance body and its committees	96~97, Business Report p.132
	102-23	Chair of the highest governance body	96~97

GRI Standards	Disclosure	Page	
Stakeholder engagement	102-40	List of stakeholder groups	23
	102-41	Collective bargaining agreements	N/A (No labor union or collective bargaining agreement)
	102-42	Identifying and selecting stakeholders	23
	102-43	Approach to stakeholder engagement	23
	102-44	Key topics and concerns raised	23
Reporting practice	102-45	Entities included in the consolidated financial statements	Business Report p.166
	102-46	Defining report content and topic Boundaries	24
	102-47	List of material topics	24~25
	102-48	Restatements of information	N/A as first report
	102-49	Changes in reporting	N/A as first report
	102-50	Reporting period	1
	102-51	Data of most recent report	1 (First report)
	102-52	Reporting cycle (annual, biennial, etc.)	1
	102-53	Contact point for questions regarding the report	1
	102-54	Claims of reporting in accordance with the GRI Standards	1
	102-55	GRI content index	104~119
102-56	External assurance	120~121	
GRI 200 Economic Standard Series			
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	119
GRI 203: Indirect Economic Impacts 2016	203-1	Infrastructure investments and services supported	72
GRI 103: Management Approach 2016	103-1~3	Management approach	29
GRI 205: Anti-corruption 2016	205-2	Communication and training about anti-corruption policies and procedures	100~102
	205-3	Confirmed incidents of corruption and actions taken	114
GRI 206: Anti-competitive Behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust and monopoly practices	114

GRI Standards	Disclosure	Page	
GRI 300 Environmental Standards Series			
GRI 103: Management Approach 2016	103-1~3	Management approach	26
	302-1	Energy consumption within the organization	104
GRI 302: Energy 2016	302-2	Energy consumption outside of the organization	104
	302-3	Energy intensity	104
	302-4	Reduction of energy consumption	104
	GRI 103: Management Approach 2016	103-1~3	Management approach
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	50~51
	303-2	Management of water discharge-related impacts	50~51
	303-3	Water withdrawal	105
GRI 304: Biodiversity 2016	304-3	Habitats protected or restored	55
	305-1	Direct (Scope 1) GHG emissions	104
GRI 305: Emissions 2016	305-2	Energy indirect (Scope 2) GHG emissions	104
	305-4	GHG emissions intensity	104
	305-5	Reduction of GHG emissions	104
	305-7	NOx, SOx and other significant air emissions	104
GRI 103: Management Approach 2016	103-1~3	Management approach	26
	306-1	Waste generation and significant waste-related impacts	52~53
GRI 306: Waste 2020	306-2	Management of significant waste-related impacts	52~53
	306-3	Waste generated	105
GRI 307: Environmental Compliance 2016	307-1	Non-compliance with environmental laws and regulations	105
GRI 400 Social Standards Series			
GRI 103: Management Approach 2016	103-1~3	Management approach	27
	401-1	New employee hires and employee turnover	107~108
GRI 401: Employment 2016	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	39~44
	401-3	Parental leave	109

GRI Standards	Disclosure	Page		
GRI 103: Management Approach 2016	103-1~3	Management approach	27	
	403-1	Occupational health and safety management system	64~65	
	403-2	Hazard identification, risk assessment and incident investigation	64~68	
	403-3	Occupational health services	69	
	403-4	Worker participation, consultation and communication on occupational health and safety	66~68	
	GRI 403: Occupational Health and Safety 2018	403-5	Worker training on occupational health and safety	68
		403-6	Promotion of worker health	69
		403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	69~70
		403-8	Workers covered by an occupational health and safety management system	64~65
		403-9	Work-related injuries	110
GRI 404: Training and Education 2016	403-10	Work-related ill health	111	
	404-1	Average hours of training per year per employee	111	
	404-2	Programs for upgrading employee skills and transition assistance programs	59~60	
GRI 405: Diversity and Equal Opportunity 2016	404-3	Percentage of employees receiving regular performance and career development reviews	111	
	405-1	Diversity of governance bodies and employees	106, 114	
GRI 408: Child Labor 2016	405-2	Ratio of basic salary and remuneration of women to men	108	
	408-1	Operations and suppliers at significant risk for incidents of child labor	82	
GRI 409: Forced or Compulsory Labor 2016	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	82	
GRI 412: Human Rights Assessment 2016	412-2	Employee training on human rights policies or procedures	112	
GRI 103: Management Approach 2016	103-1~3	Management approach	27	
GRI 416: Customer Health and Safety 2016	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	113	
GRI 103: Management Approach 2016	103-1~3	Management approach	28	
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	113	
GRI 419: Socioeconomic Compliance 2016	419-1	Non-compliance with laws and regulations in the social and economic area	113	

SASB Index

TOPIC	ACCOUNTING METRIC	CODE	Page
Energy Management	Energy consumption data coverage as a percentage of total floor area, by property subsector	IF-RE-130a.1	104
	(1) Total energy consumed by portfolio area with data coverage, (2) percentage grid electricity and (3) percentage renewable, by property subsector	IF-RE-130a.2	104
	Like-for-like percentage change in energy consumption for the portfolio area with data coverage, by property subsector	IF-RE-130a.3	104
	Percentage of eligible portfolio that (1) has an energy rating and (2) is certified to ENERGY STAR, by property subsector	IF-RE-130a.4	N/A
	Description of how building energy management considerations are integrated into property investment analysis and operational strategy	IF-RE-130a.5	32~38
Water Management	Water withdrawal data coverage as a percentage of (1) total floor area and (2) floor area in regions with High or Extremely High Baseline Water Stress, by property subsector	IF-RE-140a.1	105
	(1) Total water withdrawn by portfolio area with data coverage and (2) percentage in regions with High or Extremely High Baseline Water Stress, by property subsector	IF-RE-140a.2	105
	Like-for-like percentage change in water withdrawn for portfolio area with data coverage, by property subsector	IF-RE-140a.3	105
	Description of water management risks and discussion of strategies and practices to mitigate those risks	IF-RE-140a.4	50~51

List of Awards and Group Memberships

Major Awards

Awarded Date	Awarding Agency	Details
Apr. 2021	Donga.com, iMBC, Hankyung.com	Grand Prize in the Shared Office Category at the Korea Master Brand Awards 2021
Sep. 2021	Seoul Metropolitan Police	Seoul Metropolitan Police Letter of Appreciation from the Commissioner of the Seoul Metropolitan Police Agency
Sep. 2021	Seoul Metropolitan Government	Mayor of Seoul Award at the 2021 NEWSIS K-EXPO
Oct. 2021	Ministry of Employment and Labor	Minister's Award from the Ministry of Employment and Labor at the Labor-Management Culture Awards
Nov. 2021	LOTTE Corporation	Grand Prize in the Sustainable Growth Assessment(Safety Field)
Dec. 2021	GOOD DESIGN®	Good Design Awards 2021(2020 Tower Media Facade) - Environment Category Winner
Jan. 2022	iF DESIGN AWARD	iF DESIGN AWARD 2022 (Korea's Greatest Holiday, Chuseok Banner) - Communications Category, Finalist
Jun. 2022	Seoul Metropolitan Government	Grand Prize at the Seoul Environment Awards (Energy Transition Category)

Group Memberships

- Federation of Korean Industries
- Fair Competition Federation
- Korea Proptech Forum
- Korea International Trade Association
- Korea Personal Improvement Association
- Korea MICE Association
- Seoul MICE Alliance
- CTBUH
- Korea Facility Management Association
- Korea Construction Engineers Association
- Korea Electric Engineers Association
- Korean Institute of Landscape Architecture
- Korea Mechanical Construction Contractors Association



LOTTE PROPERTY & DEVELOPMENT
SUSTAINABILITY REPORT 2021

LANDMARK OF THE GREEN FUTURE

LOTTE P&D

LOTTE WORLD TOWER, 300, Olympic-ro, Songpa-gu, Seoul

Tel. +82-2-3213-5100

Web. www.lottepnd.com

E-mail. lwtsg@lotte.net



To minimize the environmental pollution and the waste of resources generated from the printing process, this report was printed on 100% sugarcane paper for the cover page, and on FSC-certified eco-friendly paper for inner pages in soybean ink.

