

PEARL ABYSS

# PEARL ABYSS. ESG STORY

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2021 ESG REPORT

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## About This Report

### Report Overview

This is Pearl Abyss' first ESG Report. We will continue to publish such reports every year to cover our financial and non-financial progress in a transparent manner and incorporate the input of our stakeholders within our ESG management.

### Reporting Principles

This report has been prepared in accordance with global sustainability reporting standards, including the Core Option of the Global Reporting Initiative(GRI) Standards. Financial performance data is based upon the Korea International Financial Reporting Standards(K-IRFS). It also covers our activities and progress we have made in meeting the ISO 26000, the standards for the disclosure set by the Sustainability Accounting Standards Board(SASB), the 10 Principles of the UN Global Compact, and the UN Sustainable Development Goals(SDGs).

### Reporting Scope and Boundaries

The scope of this report is limited to the Pearl Abyss headquarters in South Korea. Certain data covering the ESG activities and performances of its overseas business sites are reflected in this report. While financial information has been prepared in accordance with consolidated K-IFRS accounting standards, non-financial information has been prepared for the fiscal year in line with the Pearl Abyss disclosure standards. This report covers the business operation from January 1, 2021, to December 31, 2021, including certain key performances in the first half of 2022. Quantitative data for the latest three years are provided to allow for trend analysis.

### Reporting Assurance

To ensure the credibility and fairness of the reporting process and disclosed data, BSI(British Standards Institution) was contracted to conduct a third-party assurance process. The detailed statements are included in the Appendix on page 65.

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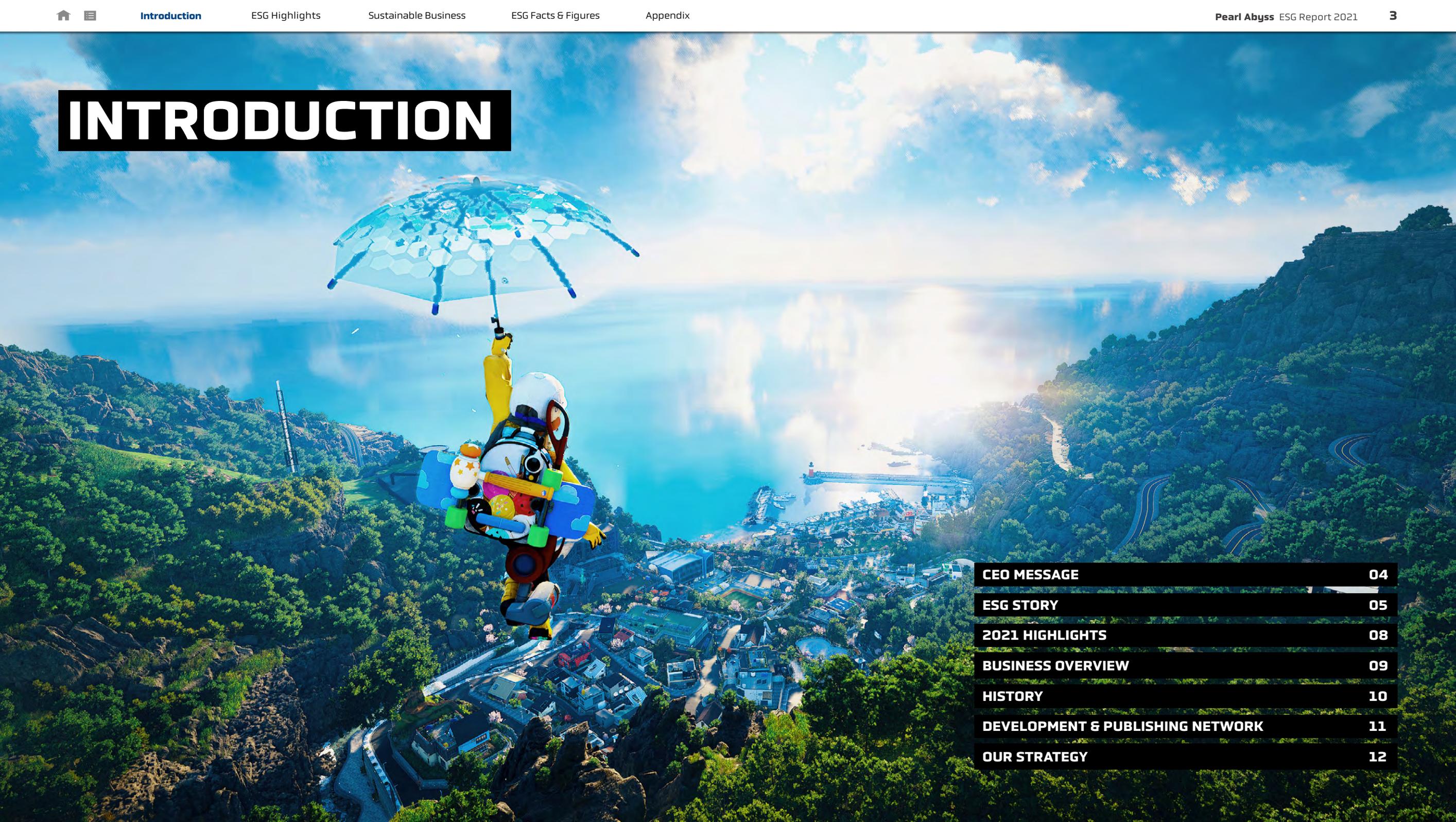
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# INTRODUCTION



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# CEO MESSAGE



**In 2021, we signalled our intent for ESG management and laid the foundation for sustainable growth. Now, we are taking further steps to establish mid and long-term strategies and communicate our progress with our stakeholders.**

Hello. My name is Heo Jin-young, and I am the CEO of Pearl Abyss.

Pearl Abyss is committed to providing users with a new, exciting, and immersive experience that connects them through our efforts to drive innovation.

To fulfill our social responsibilities and meet the expectations of not only users but also our shareholders, employees, and partners, we introduced an ESG management system in 2021. As part of this effort, we are publishing our first ESG Report to outline our progress and provide deeper transparency into what we stand for.

There are growing uncertainties due to numerous internal and external risks, including the COVID-19 pandemic, which has continued since the beginning of 2020. Under these circumstances, we have stayed committed to keeping everyone safe and developing growth engines for the future.

First of all, we organized a COVID-19 taskforce to establish an effective response system. Significant efforts were made to prevent infection by creating safe spaces as we implemented stringent social distancing policies for our essential facilities, and quickly reorganized infrastructure to provide remote working environment. By doing so, we managed to develop new projects to drive the company's sustainable growth, and through announcing them to the global market, we enhanced our chances of success for our new game titles.

In upholding our responsibility to respond to natural disasters and global crises caused by climate change, we have reached out to offer our help to those in need. By organizing a dedicated team for social responsibilities, we give back to society and go beyond the boundaries of our local communities.

In 2021, we signalled our intent for ESG management and laid the foundation for sustainable growth. Now, we are taking further steps to establish mid and long-term strategies and communicate our progress with our stakeholders.

First, we will focus on protecting human rights by creating an organizational culture that respects diversity in terms of background and values. To this end, we have established our Human Rights Charter and will foster a corporate culture that promotes "respect" and "empathy" based on diversity and inclusion.

Second, we will increase sponsorship activities for a sustainable society to pave the way for a sustainable future.

We have engaged in various social contribution activities centered on regions and communities affected by disasters. Moving forward, we will continue to support charity events with our users and employees to raise awareness.

Third, we will focus on our development capabilities to gain competitive advantages in the global market. For the past 12 years, we have developed high-quality games based on our specialized game engines. In the future, we will continue to leverage our R&D capabilities to provide amazing and immersive experiences, and the best game quality, to users around the world.

To implement these ESG management strategies in a more systematic manner, we established an ESG task force in 2021 and an ESG Committee under the board of directors in March 2022 to promote responsible business practices. Moreover, we plan to set up mid and long-term sustainability management strategies through the ESG Committee, report on the implementation process, and build a better ESG management system.

At Pearl Abyss, we have gained a competitive edge in the global market through our advanced technology.

Going forward, we will continue to enhance our competitiveness in our core businesses and fulfill our social responsibilities through ESG management, whilst managing and strengthening both the financial and non-financial areas of our business in an integrated manner.

We will also ensure a high level of transparency through various channels so that we can share our future values and grow together with our stakeholders.

We would appreciate your support and feedback as we continue to fulfill our social roles and responsibilities as a global game company.

Pearl Abyss Corp.  
CEO Heo Jin-young

# ESG STORY

## Net Zero

## ENVIRONMENTAL

Pearl Abyss supports the 2050 Carbon-Neutral Strategy established by the Korean government and Long-term low greenhouse gas Emission Development Strategies(LEDs). As part of our commitments to sustainable eco-friendly practices, we are implementing a range of environmental protection measures including GHG reduction, energy saving, and resource management.

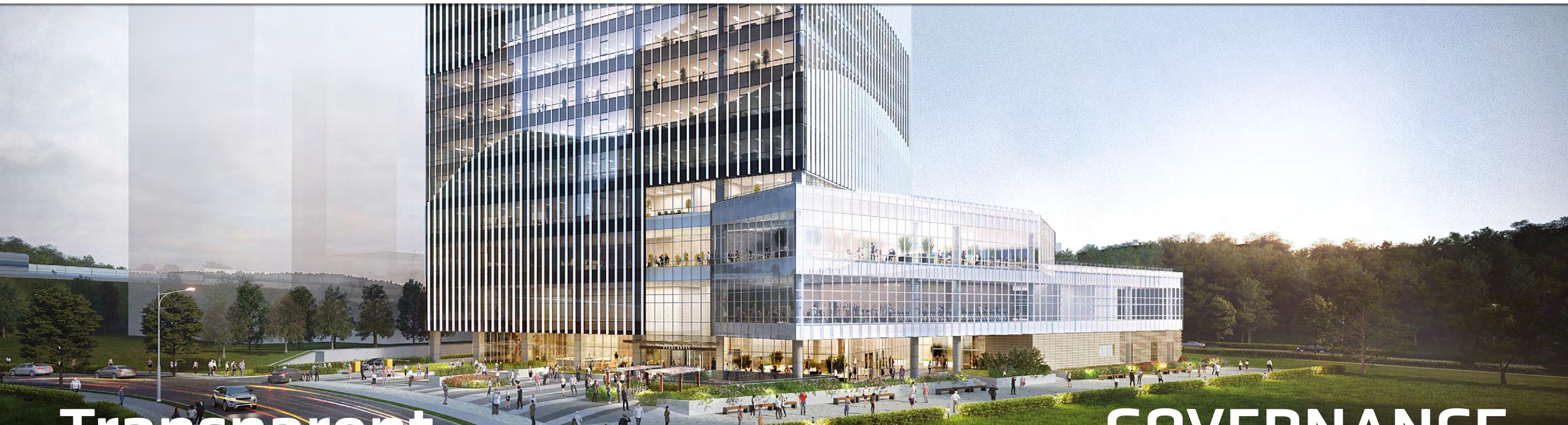


# Sustainable

# SOCIAL

Pearl Abyss operates continuous and sincere social contribution activities based on the active participation of our employees. In addition, we are engaged in activities to create social values and promote mutual growth with our local communities





# Transparent

Pearl Abyss realizes shareholder and corporate values through its Board of Directors and specialized committees with a high degree of independence, diversity, and expertise. We strive to create a sustainable business environment by building a transparent and sound corporate governance structure.

# GOVERNANCE

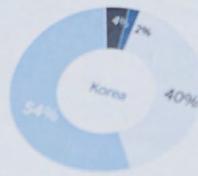


## Overview : Market Analysis

### Market Share by Region



### Market Share by Platform



### Seeking growth by going global

- More opportunities from global
- Seek revenues beyond Korea (Korea M/S at 6.2%)
- Target western market (NA/EU)
- Focus more on western to be a global studio (a 29% of rev. from NA/EU, as of Q1'19)

### Diversify platform with console

- (A major platform in global)
- Console M/S at 25% compared to 2% in Korea
- Diversify rev. by going console
- Stable stream of revenue expected
- Console-based AAA IPs
- Various merits of console games
- Strong P&L and increased IP awareness

# 2021 HIGHLIGHTS

## ESG Management

- Established the ESG Committee(March 2022)
- Organized ESG TF
- Enhanced security practice, diversity in the organization, and global competitiveness with a focus on developing capabilities and ESG Highlight Issue.
- Defined the system, risk and opportunity factors, and response activities as part of risk management
- Selected partners, built a management system, and applied the Code of Conduct across our supply chain

**ESG Organization**  
Dedicated Management Unit



## Investor-friendly Management



2021 KOSDAQ

**Excellent Public Announcement Corporation**

[Excellent IR Activities]



Increased outstanding shares  
**Stock split**

## Stakeholder Engagement & Communication

- Operation of customer support center, hotline and bulletin board as communication channels
- Engagement in user communication activities
  - Black Desert Heidel & Calpheon Ball
  - Pearl Abyss Store
  - Night Talk(Black Desert)
- VOC management & response: Complaint Management process

Black Desert Heidel & Calpheon Ball



**100,000+** viewers

## Commitment to the Environment

- Responded to climate change
  - Built infrastructure for electric vehicles
  - Promoted the use of eco-friendly transportation
  - Implemented energy-saving measures
- Managed water resources
  - Introduced certified water-saving systems for sanitation equipment
  - Reflected heavy water systems
  - Water consumption monitoring system
  - Built systems
  - Used eco-label certified products for water meters
- Managed waste and contaminants
  - Waste reduce efforts at Pearl Café
  - Managed office waste
  - Managed air pollutants



Installed EV charging stations at the new office building

**50** stations

## Diversity

- Introduced maternity programs. Reduced working hours during pregnancy and family-friendly systems
- Created jobs for people with disabilities
- Increased jobs for foreigners



No. of foreign employees

approx. **48**

## Local Community

- Provided global support for local communities including donations to Doctors Without Borders and support for wildfires in Australia and earthquakes in Turkey
- Organized support for local communities including donations for children with leukemia and cancer, as well as support for local children's centers
- Organized employee volunteer programs. Activities included sharing "On-Tact" KITS and donation of pouches for children at orphanages

Donation to Doctors Without Borders

KRW **100** M

Donations for children with leukemia and cancer

KRW **20** M

Number of employees who participated in the pouch donation for children at orphanages

**59** employees

## Response to COVID-19

- Provided support for the underprivileged and medical professionals affected by the COVID-19
- Donated emergency livelihood fund for the Child Fund Korea
- Organized COVID-19 Response Control Tower
- Adopted remote work
- Created a safer working environment. Minimized contact and installed full-body disinfection booths
- Organized a corporate-wide campaign such as providing gift vouchers for vaccination and promoting preventive measures



Donation for COVID-19 Recovery

KRW **500** M

## Human Rights

- Established human rights charters and policies
- Ensure compliance
  - Implemented a system for compliance with the Code of Ethics
  - Supported HR Committee and Audit Team
  - Operated compliance risk management group "Corporate Ethics Keeper"
  - Operated "Corporate Ethics Reporting Center" for violations
- Internalized ethical practice and compliance
  - Organized corporate-wide online ethics training
  - Organized offline compliance training for new employees



## Information Security

- Developed a stable information security system
- Raised security awareness including security training and weekly security awareness campaign
- Implemented cyber security strategies related to prevention of security breaches and privacy violation
- Obtained certification for information protection and cyber security

**ISO 27001 & ISMS Certified**

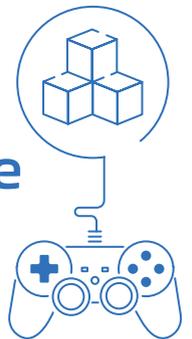


## Global Competition

- Strengthened R&D capabilities with our specialized game engine
- Expanded the global market by increasing overseas service areas

## Pearl Abyss Game Engine

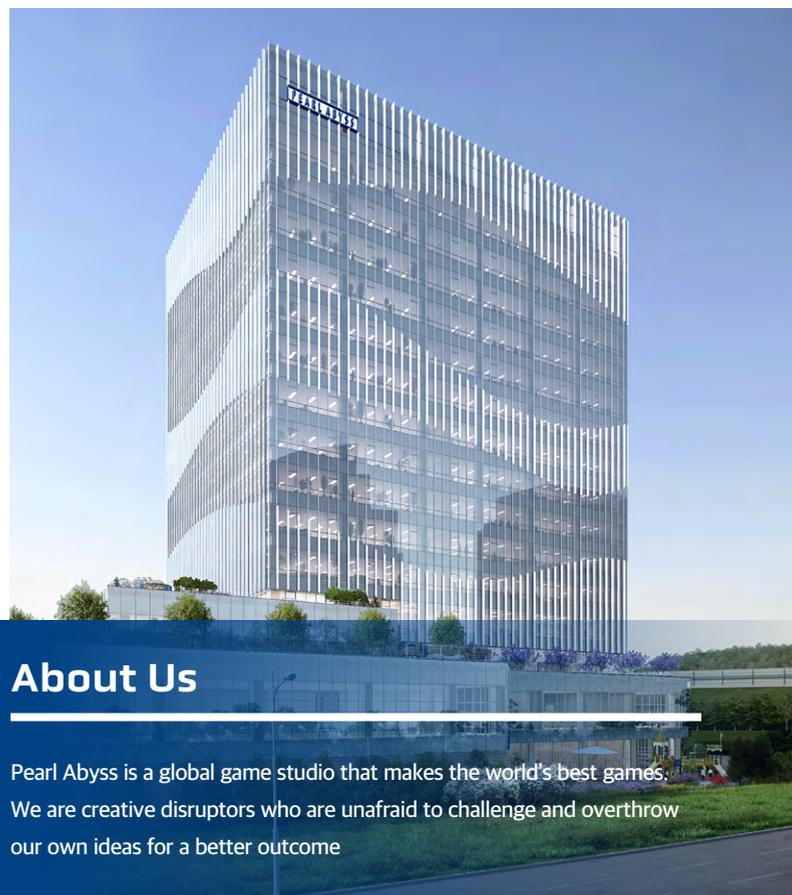
**Black Desert & Black Space Engine**



# BUSINESS OVERVIEW

## Company

Pearl Abyss is a game software developer and service provider that publishes its games directly or through local publishers. We have been diversifying our portfolio by expanding the service areas for Black Desert and EVE IP while working on three new IPs, Crimson Desert, DokeV, and Plan 8 based on our next-generation "Black Space Engine."



### About Us

Pearl Abyss is a global game studio that makes the world's best games. We are creative disruptors who are unafraid to challenge and overthrow our own ideas for a better outcome

### Company Profile

- **Name of Company** Pearl Abyss Corp.
- **Founder** Kim Dae-il
- **CEO** Heo Jin-young(as of March 2022)
- **Date of Foundation** September 10, 2010
- **Number of Employees** 1,572
- **Number of Subsidiaries** 17
- **Head Office** 24, Shimin-daero 327beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do
- **Website** [www.pearlabyss.com](http://www.pearlabyss.com)

### Intellectual Properties

Pearl Abyss is committed to the development and protection of its intellectual property rights around the world. We hold the rights to all our intellectual properties and apply them to our game servers and programs that are being serviced or newly developed.

#### Live Service



Black Desert Franchise  
(PC, mobile, console)



EVE Online  
(PC, mobile)

#### New Games



Crimson Desert  
(PC, console)



DokeV  
(PC, console)



Plan 8  
(PC, console)

### External Ratings<sup>(2021)</sup>

#### Credit Rating

Korea Corporate Rating

**A0**

NICE CREDIT RATING

**A-**

#### KCGS ESG Rating

ESG Rating

**B**

Environment

**D**

Social

**B**

Governance

**B**

# HISTORY



**MAY 2015**  
[Black Desert] Launched game in Japan

**OCT 2015**  
[Black Desert] Launched game in Russia

**2015**



**JAN 2017**  
[Black Desert] Launched game in Taiwan

**JUN 2017**  
[Black Desert] Launched game in South America  
Acquired Nettention

**AUG 2017**  
Established a subsidiary in Europe

**SEP 2017**  
Listed in KOSDAQ

**DEC 2017**  
[Black Desert] Launched game in Turkey and Middle East

**2017**



**FEB 2019**  
[Black Desert Mobile] Launched game in Japan

**MAR 2019**  
[Black Desert Xbox One] Launched game in North America and Europe

**AUG 2019**  
[Black Desert PS4] Launched game in North America, Europe, South Korea, Japan and eight other countries in Asia

**DEC 2019**  
[Black Desert Mobile] Launched global service

**2019**



**JAN 2021**  
Established a subsidiary in Canada

**MAY 2021**  
Acquired Factorial Games

**AUG 2021**  
Launched EVE Echoes in China

**2021**

**2010-2014**

**SEP 2010**  
Pearl Abyss Corporation was founded

**JUL 2012**  
[Black Desert] Signed publishing contract in Japan(GAMEON)

**NOV 2012**  
[Black Desert] Signed publishing contract in South Korea(Daum Game)

**DEC 2013**  
[Black Desert] Signed publishing contract in Russia(GameNet)

**MAR 2014**  
[Black Desert] Signed publishing contract in North America and Europe(Daum Game)

**DEC 2014**  
[Black Desert] Launched OBT in South Korea



**2016**

**MAR 2016**  
[Black Desert] Launched game in North America and Europe

**NOV 2016**  
Established a subsidiary in Taiwan

**DEC 2016**  
[Black Desert] Signed publishing contract in South America (Redfox Games)



**2018**

**JAN 2018**  
[Black Desert] Launched game in Thailand and Southeast Asia

**FEB 2018**  
[Black Desert Mobile] Launched game in South Korea

**JUN 2018**  
Established Pearl Abyss Capital

**JUL 2018**  
Established a subsidiary in Japan

**AUG 2018**  
Established a subsidiary in the US  
[Black Desert] Remastered the graphic and sound  
[Black Desert Mobile] Launched game in Taiwan

**SEP 2018**  
Acquired CCP Games



**2020**

**MAR 2020**  
[Black Desert Console] Cross-play

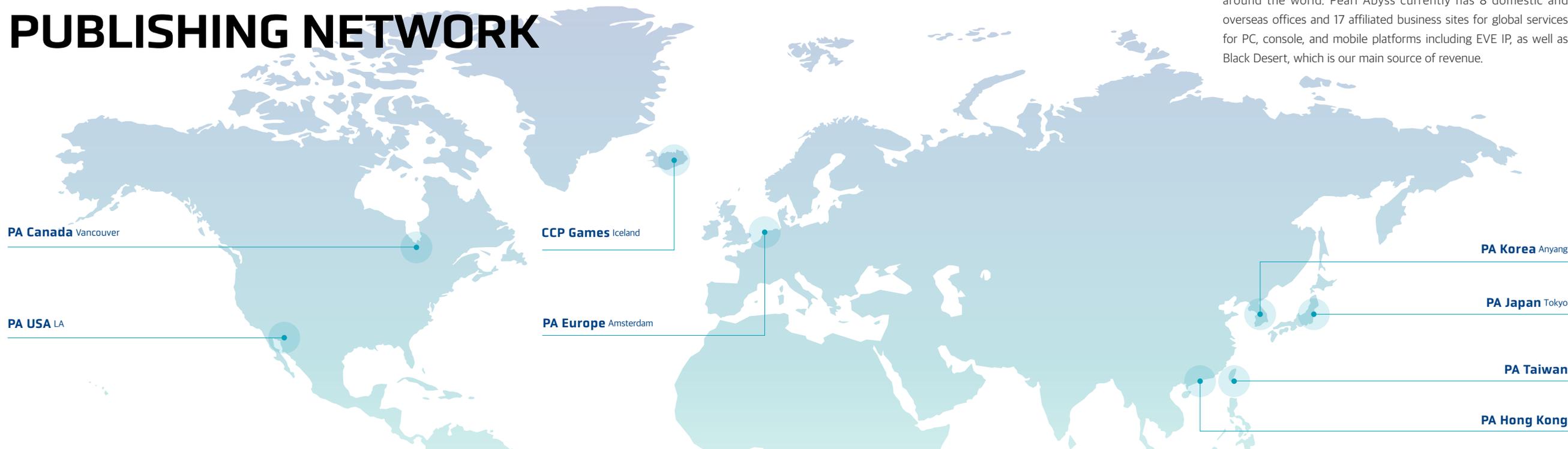
**APR 2020**  
Launched EVE Online in China

**AUG 2020**  
Launched EVE Echoes Global

**MAY 2020**  
[Shadow Arena] Provided global early access



# DEVELOPMENT & PUBLISHING NETWORK



Black Desert, developed by Pearl Abyss with its unique engine, accounts for 83% of overseas sales and is serviced in 150 countries around the world. Pearl Abyss currently has 8 domestic and overseas offices and 17 affiliated business sites for global services for PC, console, and mobile platforms including EVE IP, as well as Black Desert, which is our main source of revenue.

## Business Sites

Business Name	Date of Establishment	Address	Areas of Business
PearlAbyss Taiwan Corp.	NOV 17, 2016	11F, No. 35, Sec. 3, Minquan E. Rd., Zhongshan Dist., Taipei City 104, Taiwan(R.O.C.)	Game service
Nettention	AUG 13, 2009	5F(Gwanyang-dong, Misum Sytech), 12-20, Citizen-daero 327 beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do	Development and sale of game servers and network engines
PearlAbyss H.K. Ltd.	AUG 14, 2017	Unit A, 18th Floor, Public Bank Centre, No. 120 Des Voeux Road Central, Hong Kong	Game service
PearlAbyss EU B.V.	AUG 22, 2017	Van Heuven Goedhartlaan 7D, 1181 LE, Amstelveen, Netherlands	Server and line service
PearlAbyss SEA Pte. Ltd.	SEP 5, 2017	10 Adson Road, #34-10 International Plaza, Singapore	Server and line service
PearlAbyss Capital	JUN 19, 2018	#706(Samseong-dong, Korea City Airport Terminal), 22, Teheran-ro 87-gil, Gangnam-gu, Seoul	Investment and management consulting
PearlAbyss JP Co., Ltd.	JUL 13, 2018	8-1-2, Nishi-Shinjuku, Shinjuku-Ku, Tokyo, 160-0023, Japan	Operation service
Pearl Abyss America, Inc.	AUG 10, 2018	1230 Rosecrans Ave, Suite 230, Manhattan beach, CA 90266, USA	Operation service
Pearl Abyss Canada Studio Inc.	JAN 26, 2021	2015 Main Street, Vancouver, British Columbia, V5T 3C2, Canada	Game development

Business Name	Date of Establishment	Address	Areas of Business
Factorial Games	2014. 3. 17	F14-15(Yeoksam-dong, Keungil Tower Building), 223, Teheran-ro, Gangnam-gu, Seoul, 14th and 15th floors	Software development and distribution
Pearl Abyss Iceland ehf.	2018. 2. 20	Bjargargotu 1, 102 Reykjavik, Iceland	Investment and management consulting
CCP ehf.	1997. 6. 5	Bjargargotu 1, 102 Reykjavik, Iceland	Game development and service
CCP Games UK Ltd.	2005. 5. 9	Tower House, 10 Southampton Street, London, WC2E 7HA, United kingdom	Game development
CCP Asia Ltd.	2010. 5. 21	Herschel House, 58 Herschel Street, Slough, Berkshire SL1 1PG, United Kingdom	Investment and management consulting
CCP Information Technology(Shanghai) Co. Ltd.	2010. 12. 28	6 Bldg, 800 Changde Rd, Jing An District 20040, Shanghai China	Game development
CCP Platform ehf.	2017. 7. 1	Bjargargotu 1, 102 Reykjavik, Iceland	Game development
CCP North America, Inc.	2006. 11. 2	Suite 2300 South Tower, 225 Peachtree Street, N.E, Atlanta, GA, 30303, USA	Game development

# OUR STRATEGY

## Products & Services

Pearl Abyss develops and distributes games directly or through local publishers. The main revenue source of our game business is global services of PC, console, and mobile games such as Black Desert and EVE IP. We are also diversifying our portfolio with three new games under development: Crimson Desert, DokeV, and Plan 8.



## Black Desert IP

Genre	MMORPG
Theme	Character-based Medieval Fantasy
Platforms	PC, mobile, console(multi-platform)
Released in	150 countries(12 languages)

- Powered by Pearl Abyss' proprietary "Black Desert" Engine
- Leading MMORPG title with global popularity
- Stable live service with frequent updates
- User community and user-friendly services through self-publishing

### Black Desert PC

- 20+ million players
- Top-notch graphics
- Released in 150 countries
- Winner of 21 awards



### Black Desert Mobile

- 35+ million downloads
- Advanced Action Combat
- Winner of 17 awards



### Black Desert Console

- 4.1+ million players
- Xbox/PS
- Business model package + In-game purchase
- SANDBOX MMO



### Highlights



Played for over 500 million hours



Accumulated sales of KRW 1.8 trillion (as of December 2021)



More than 40 million players (on all platforms)

# EVE IP

**Company** CCP Games (as of end of December 2021)  
**CEO** Hilmar Pétursson  
**No. of Employees** 335  
**Location HQ** Iceland, Other studios: London, China

- The largest sci-fi MMO game
- Retains highest number of loyal users and communities
- Released in China based on partnership with NetEase Games
- Long-term smooth live service powered by proprietary game engine
- Immersive PVP mode and a persistent world connected to the real economy
- Continuous growth in users with high payment and access rate



2003	Released in May
2006	EVE Online released in China(-2016)
2016	BM changed to Free-to-Play (from the existing subscription-based model)
2020	March: Approval of EVE Online Chinese edition April: Launched EVE Online(Publisher: NetEase Games) August: Launched EVE Echoes Global
2021	February: Approval of EVE Echoes Chinese edition August: Launched EVE Echoes(Publisher: NetEase Games)

## EVE Online (Global & China)

- **Genre** Sci-Fi MMORPG
- **Platform** PC
- **Release Date** May 6, 2003
- **Features** World's most famous Sci-fi MMO  
19 years of service  
40 million players in total

- Top 100 Games of All Time 2015(PC Gamer)
- MMO Hall of Fame 2012
- MMORPG Game of The Year 2012
- Best Indie MMO of The Decade(Massively)
- Community Relations Nominee(GDC Online)
- Best Live Game(GDC Online)
- Best Non-fantasy MMO 2010(Massive Online Gamer)



## EVE Echoes (Global & China)

- **Genre** Hardcore Sci-Fi MMO
- **Platform** Mobile
- **Release Date** August 13, 2020(Global)  
August 5, 2021(China)
- **Features** SANDBOX MMO  
Co-developed by NETEASE and CCP



# New Titles

## Crimson Desert

[Subtitle: A saga written in blood]



**Genre** Open World Action Adventure

**Platforms** PC & Console

**Features**

- A saga written in blood
- An epic and bloody saga of mercenaries surviving in the unforgiving lands of Pywel



## DokeV



**Genre** Open World Action Adventure

**Platforms** PC & Console

**Features**

- Family-friendly game taking place in a unique world
- Unique and charming characters including DokeV
- High level of freedom and endearing graphics



## Plan 8



**Genre** Exosuit MMO Shooter

**Platforms** PC & Console

**Features**

- Unique and stylish open-world action
- Large map and immersive world
- Realistic graphics in modern settings



## Payment Policies for Key Services

The payment policies for online games are largely divided into a pay-for-download, CD packages, monthly flat-rate subscriptions, hourly flat-rate subscriptions, and free-to-play games. In free-to-play games, users are granted access to fully functional games with the option of purchasing in-game items to accelerate character growth and customization for added perks. Our main source of revenue consists of global services for PC, console, and mobile games such as Black Desert and EVE IP. Different revenue models are applied according to the service area for each platform.

IP	Platform	Game	Revenue Model	Market
Black Desert	Online	Black Desert	Free-to-Play	South Korea, Japan, Russia
			Package Sales & Free-to-Play	North America, Europe(excl. Russia), Taiwan, South America, Turkey, Middle East, Thailand, Southeast Asia
	Mobile	Black Desert Mobile	Free-to-Play	Global
			Package Sales & Free-to-Play	Global
EVE	Online	EVE Online	Free-to-Play	Global, China
	Mobile	EVE Echoes	Free-to-Play	Global, China

## Sales Performance

Pearl Abyss's operation is divided into game and non-game businesses. We review the performance of our game business based on the nature of the business and regions. The consolidated operating income of our game business in 2021 was KRW 363.2 billion. From this income, the sales of Black Desert and EVE IP constituted KRW 290.1 billion(80% of the total sales) and KRW 73.1 billion(19.3%), respectively.

Sales by Service Region

(Unit: KRW million)

Category	Region	2021	2020	2019
Domestic	South Korea	69,082	111,059	156,536
	America, Europe	188,836	213,898	144,962
Overseas	Asia	102,988	156,361	229,608
	Others	2,705	2,994	2,563
Total		363,611	484,312	533,669

# ESG HIGHLIGHTS

It is the company's mission to realize change and innovation by identifying opportunities and alternatives amid the post-COVID-19 recovery. In particular, as demand for scalable content and corporate social responsibility grows, particularly among the Generation MZ, Pearl Abyss continues to drive creativity and innovation while strengthening its global competitiveness based on advanced technology.

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ISSUE. 01

# Information Security



The demand for safe security systems and preventive measures is growing as more types of cyber security threats emerge including login abuse and credential stuffing. Pearl Abyss is committed to building a secure environment so that our users can enjoy a safe and stable game services. We have established comprehensive information protection management and authentication systems as well as other security-related measures in response to security breaches and abnormal activities.

UN SDGs



## Information Security System

### Establishing a Comprehensive Information Security System

To keep our information assets secure so that we can provide stable game services to users around the world, we have implemented a corporate-wide information security system in which the top management and team security managers work together to prevent and respond to security threats. To this end, we are fulfilling our legal responsibilities with a focus on compliance with local regulations. We are also supporting the stable operation of the system and user protection through a certified security system that complies with local security standards, based on ISMS and ISO 27001. In particular, the security policy is applied to subsidiaries and affiliates by preparing security regulations and guidelines that reflect the efforts of the Security Committee, which consists of the CEO, CTO, COO, and CISO. Furthermore, we are organizing security training and awareness programs to ensure full compliance with our security standards. A dedicated team of experts has been established to support real-time monitoring of external threats, as well as a detection and response environment for cyberattacks that disrupt our game service, ensuring that our users can safely and securely enjoy our games.

#### Information Protection Committee & Privacy Committee

(as of December 2021)



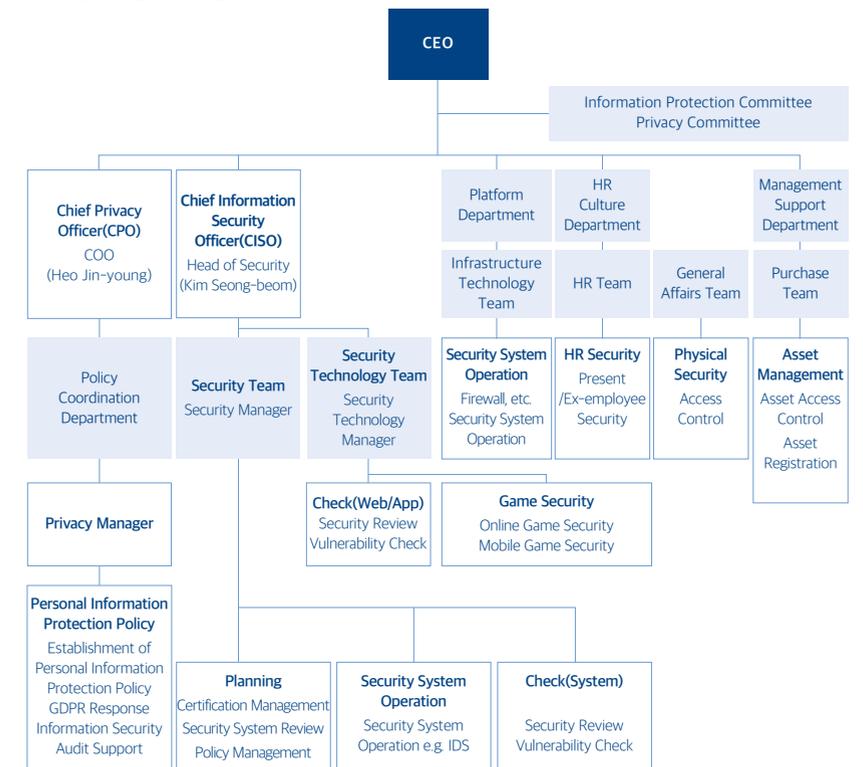
#### [Key Roles]

1. Present security issues to the Steering Committee for resolution
2. Deliberation and resolution on the direction for information protection operation
3. Deliberation and resolution on the goals, objectives and priorities of the information protection policy
4. Deliberation and resolution on budget and enforcement matters necessary for the implementation of information protection
5. Deliberation and resolution on the appointment of members of the Information Protection Committee
6. Deliberation and resolution on the appointment of the Chair of the Information Protection Committee
7. Deliberation and resolution on matters deemed important by the Information Protection Committee

## Operation of Security Management Organization with Top Experts

Pearl Abyss established an organization for security management composed of top experts in each field and designated CISO(Chief Information Security Officer) and CPO(Chief Privacy Officer) to ensure professionalism and independence in the security operation. As a measure to expedite the decision-making process, the organization operates a working council in which all working-level staff participate and communicate with the relevant teams. We also created an environment where we can continuously gather input and feedback on information protection risks, in which measures are developed and verified at a working level. Both the working-level consultative body and the decision-making council are operated through horizontal communication lines within the company so that internal information is shared without restrictions. Our risk management organization operates in a way that effective measures are shared and applied under the leadership of the security organization, while ensuring information protection policies reflect the direction set by the management.

#### Security Management Organization



## Security Culture

### Raising Security Awareness

#### Employee Security Training

Pearl Abyss engages in various activities to protect personal information and enhance security. In order to raise security awareness among our employees, we organize training for new employees. The two most important aspects of the training are the disclosure of inside information and the protection of personal information. This is our commitment to making sure that our games are enjoyable for users by protecting their personal information and ensuring fair competition among users. We also strive to strengthen our internal security system by providing specialized security training for developers and security personnel as part of our efforts to raise security awareness.

This specialized security training is conducted on an annual basis by a third-party institution. In 2021, ISMS-P certification training and two training sessions were held in response to the infringement of K-SHIELD.

#### Creating a Culture of Security

In order to raise employee awareness of information protection and create a culture that promotes security, we organize weekly security campaigns, periodic security environment inspections and mock trainings. By doing so, we are developing our capabilities in addressing intrusions and security breaches.



## Cyber Security Strategy

### Prevention & Response to Security Breaches

#### Prevention of Security Breaches

Due to the growing number of cybersecurity issues and damages, the importance of cybersecurity is becoming greater than ever. At Pearl Abyss, we maintain the highest level of security to protect our services and user information. We have established a systematic strategy to monitor, analyze, develop, and respond to internal and external environments across all service areas in accordance with the company's information protection principles.

<p><b>Anomaly detection and game security</b></p> <p>In order to provide equal opportunities and enjoyable experiences to our users, we monitor anomalies within our games and implement security measures to restrict actions that circumvent our services.</p>	<p><b>Internal monitoring and information protection operation</b></p> <p>Internal monitoring is carried out to ensure compliance with the requirements of laws and regulations in order to protect the personal information of our users. We also develop and operate security systems to prevent unauthorized disclosure of personal information.</p>
<p><b>Operation of automated service environment and security review system</b></p> <p>To create a secure development and service environment and prevent the risk of unintended security breaches, we provide an automated service environment together with the system operating teams. The information security organization operates a security review system in all development processes.</p>	<p><b>Configuration of the threat monitoring system</b></p> <p>In order to prevent service failure caused by internal and external threats and provide secure services, we operate a cybersecurity strategy in response to all internal and external abnormalities by establishing a threat monitoring system.</p>

### Personal Information Protection

Pearl Abyss has established security and monitoring systems to protect personal information of our customers. We also organize various customer information protection initiatives.

<p>Establishing an internal risk management system to check compliance with laws (e.g. Personal Information Protection Act) at each stage of the personal information life cycle collection-use-storage-provide-destruction</p>	<ul style="list-style-type: none"> <li>• Preliminary review and destruction process for one-time personal information collection by Security Policy Team</li> <li>• Preliminary review process by the Privacy Policy Team before sending DMs and text messages to customers</li> </ul>
<p>Implementing procedures to support the personal information rights</p>	<ul style="list-style-type: none"> <li>• Rights to access, move, correct, suspend processing, and delete</li> </ul>
<p>Inspecting third-party service providers that handle personal information before, during and after service contract through privacy checklists</p>	<ul style="list-style-type: none"> <li>• 16 checklist items in total</li> <li>• Working on the areas of improvement</li> </ul>
<p>Organize security training for departments that handle personal information of users and employees as well as developers</p>	<ul style="list-style-type: none"> <li>• Training for departments handling customers' personal information: 65 employees</li> <li>• Training for departments handling the personal information of employees: 31 employees</li> <li>• Training for departments handling non-personal information: 9 employees</li> </ul>

### Response to Personal Data Breaches

Pearl Abyss strives to prevent unauthorized disclosure of customers' personal information through a corporate-wide risk management system and security awareness campaigns. To this end, we organize training for those with or without access to personal information in recognition of the importance of protecting all accessible information. We also have a process for reporting to the relevant authorities and notifying information subjects to ensure compliance with the regulations. Thanks to these efforts, there have not been any security violations in our company.

### Information Protection & Cyber Security Certification

#### Security Management System Certifications

Pearl Abyss has been certified to international standards such as ISO 27001 and ISMS for the security management of all its games serviced in South Korea in 2021. ISO 27001 is an international standard certification for the operation of information security management systems, and we have met all 113 requirements across 14 categories. The design and operation of security systems are assessed through the conformity assessment(ISMS) for the operation of the domestic security management system required by the Act on Promotion of Information and Communications Network Utilization and Information Protection. By passing the screening criteria of these external organizations, we continue to review our current information security system and make necessary improvements to ensure business continuity.

#### Certification of Pearly Abyss' Information Protection Management System



#### ISO 27001 Certification

**Scope of Certification**  
Information security management system for all activities related to game software development and distribution

**Validity**  
March 9, 2021 - March 9, 2024

**Certifier**  
DQS GmbH



#### ISMS Certification

**Scope of Certification**  
Pearl Abyss game service operation

**Validity**  
August 18, 2021 - August 17, 2024

**Certifier**  
KAIT(Korea Association for ICT Promotion)



#### ISMS-P & ISO 27701 Certifications

In 2022, to enhance our security systems and earn trust in the global market, Pearl Abyss is working on acquiring ISMS-P, which is a more advanced security and personal information protection management system certification, and ISO 27701, an international standard for personal information protection management systems.

#### ISMS-P Certification(Domestic Services) & Global ISO 27701 Certification(Domestic Services)

#### Scope of Certification

Black Desert Korea, Black Desert Mobile, Black Desert Console, Shadow Arena



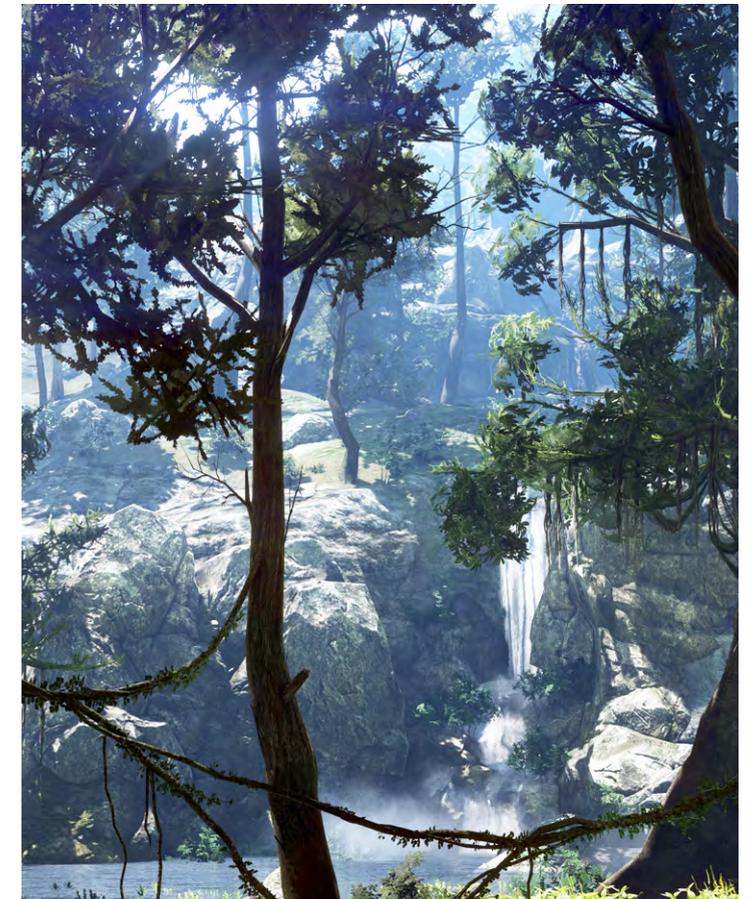
#### ISMS-P Personal Information & Information Security Management System

ISMS-P is issued by the Korea Internet & Security Agency, which certifies a series of measures and activities for security and privacy meet the certain criteria and requirements. Companies and institutions that do not meet the criteria for mandatory applicants but voluntarily establish and operate the security and privacy management systems are classified as voluntary applicants.



#### ISO 27701 International Standard Personal Information Protection Certification

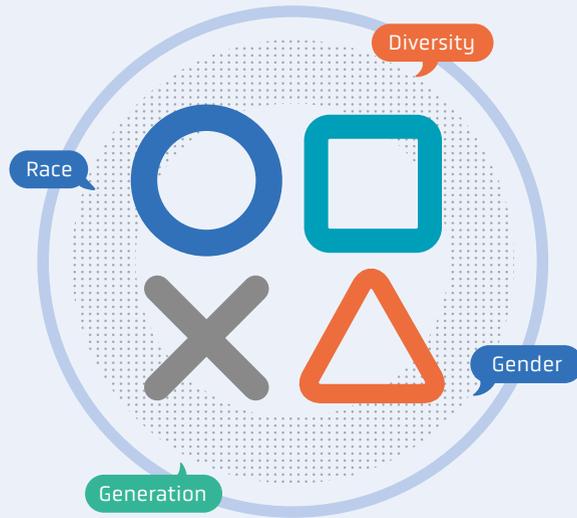
ISO 27701 is the first global privacy management system standard and an extension of ISO 27001, which contains specific requirements, goals, and management measures related to the establishment of Privacy Information Management System(PIMS). ISO 27701 is an important step towards privacy and meets the existing regulations by providing organizations with practical guidelines on data and privacy protection. These guidelines allow us to comply with applicable regulations, including the EU General Data Protection Regulation(GDPR) while protecting Personally Identifiable Information(PII).



Pearl Abyss acquired these certifications by meeting all 113 requirements in 14 categories in information security. Furthermore, the design and operation of security systems are evaluated through a compliance assessment(ISMS) for the operation of the domestic security management system required by the Act on Promotion of Information and Communications Network Utilization and Information Protection.

ISSUE. 02

# Workplace Diversity



Diversity and inclusion at workplace are important not only to resolve race and gender conflict, but are key to enhancing company's competitiveness.

Pearl Abyss is committed to providing an inclusive environment that respects diverse backgrounds and values at the workplace. We prohibit discrimination based on age, gender, origin, religion, race, nationality, and disability in the selection and recruitment process.

UN SDGs



## Anti-discrimination Practices and Respect for Diversity

Black Desert is our flagship multi-platform game that is available in 12 languages in over 150 countries around the world. As a global game developer, Pearl Abyss hires global talent spanning diverse cultural backgrounds and languages. We promote diversity in our workplace and are against any discrimination based on age, gender, origin, religion, race, nationality, and disability in the recruitment and selection process. We are dedicated to creating an organizational culture and work environment that respect diversity and the values of individualism, where multinational employees can work together in harmony. We are also promoting a culture free from discrimination by creating more jobs for people with disabilities at a corporate-wide level.

### Maternity Protection

In many countries, low birthrate has emerged as a social issue, emphasizing social responsibility for women's pregnancy, childbirth and childcare. At Pearl Abyss, we are committed to maternity protection through various policies and support programs for pregnancy and childcare.

<p><b>Reduced working hours during pregnancy</b> Reduced working hours without adjustments in pay for employees within 12 weeks or after 36 weeks of pregnancy(6 hours per day)</p>	<p><b>No overtime work during pregnancy</b> No overtime for pregnant employees(including night shift, weekends and holidays)</p>
<p><b>Leave for prenatal medical examination</b> Paid leave for prenatal medical examination</p>	<p><b>Maternity and parental leave</b></p> <ul style="list-style-type: none"> <li>• <b>Maternity leave</b> 90 days (120 days for twins)</li> <li>• <b>Parental leave</b> 1 year per child</li> </ul>
<p><b>Reduced working hours for childcare</b> For employees with children under the age of 8 or 2nd graders, the reduced work hours are available up to two years including parental leave period.</p>	<p><b>No overtime after childbirth</b> No overtime work for female employees within 12 months of giving birth (no overtime work exceeding 2 hours per day, 6 hours per week, or 150 hours per year)</p>
<p><b>Family care programs</b></p> <ul style="list-style-type: none"> <li>• Family care leave(max. 10 days/year)</li> <li>• Long-term family care leave (max. 90 days/year)</li> <li>• Reduced working hours for family care</li> </ul>	

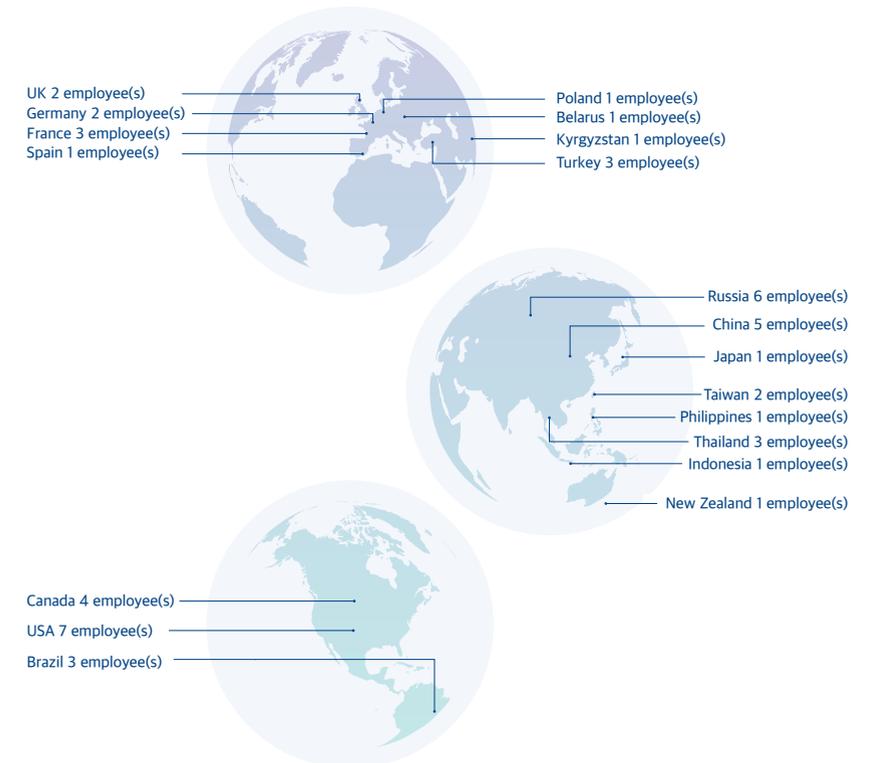
## Creating Jobs for People with Disabilities

Pearl Abyss is committed to creating jobs for people with disabilities. To this end, we prohibit discrimination in the recruitment process and provide support for employees with disabilities who are hired through general recruitment. In addition, we are expanding the recruitment of disabled people by creating more positions at our in-house healing room and support desks.

## Expansion of Overseas Recruitment

Currently, Pearl Abyss employs about 48 foreign employees, accounting for 5% of the total number of employees. We will continue our efforts to become a multinational organization.

Foreign Employees by Country <sup>1)</sup>



<sup>1)</sup> Based on the Head office

ISSUE. 03

# Global Competitiveness through Game Development



The convergence of emerging technologies such as AI, VR, and Cloud computing is fueling rapid growth for the gaming industry.

Pearl Abyss aims to be at the forefront of strengthening the global competitiveness of the gaming industry. We are actively investing in R&D, and through the implementation of our proprietary game engine, we seek to take a leading position in responding to the changing market environment.

UN SDGs



## R&D Investment

In 2021, Pearl Abyss developed the “Black Space Engine”, an advanced, next-generation engine that is powering our new games in multi-platforms including PC, console, and mobile games. In addition, we implement a range of R&D initiatives led by our best-in-class research organization and seek to gain differentiated competitiveness by operating a state-of-the-art in-house motion capture studio for high-quality graphics.

### R&D Organization

Our game development and global service are made possible by talented developers and operators with extensive experience and know-how in the industry. In order to deliver the best gaming and non-gaming experience, 619 employees are working on R&D projects. Our R&D organization is committed to advancing innovation for next-generation games as well as implementing various functions for rendering engines, expression of virtual nature and characters, development of technologies, research and planning of in-game content. The organization is also responsible for gameplay balance with a focus on in-game content, characters, items, servers, clients, and engines. They also work on development and programming in addition to 2D/3D character drawings and rendering, database research, design and construction, program development of various module programs, and problem-solving measures in the development process. The organization is also tasked conducting research on various sound effects such as game background music, improving quality and resolving errors in games, operating data center security and network planning.

Development	Management & Operation
<p><b>Kim Dae-il</b> (Founder and Chairman, Executive Producer)</p> <ul style="list-style-type: none"> <li>Over 22 years of experience in game development</li> <li>2003 - 2010 NHN Games(Titles: R2, C9)</li> <li>2000 - 2003 Gama Soft(Title: RYL)</li> </ul>	<p><b>Heo Jin-young</b> (CEO)</p> <ul style="list-style-type: none"> <li>Over 26 years of experience in the game industry</li> <li>Kakao</li> <li>Daum Games</li> <li>SK Communications</li> </ul>
<p><b>Yoon Jae-min</b> (Vice President)</p> <ul style="list-style-type: none"> <li>Over 22 years of experience in game development</li> <li>Game About, Winoble</li> </ul>	<p><b>Kim Kyoung-man</b> (Chief Business Officer)</p> <ul style="list-style-type: none"> <li>Over 14 years of experience in the game industry</li> <li>OnNet, DaediPay</li> </ul>
<p><b>Ji Hee-hwan</b> (Chief Technology Officer)</p> <ul style="list-style-type: none"> <li>Over 20 years of experience in game development</li> <li>Game About, Winoble</li> </ul>	<p><b>Jin Jeong-hee</b> (Head of US Office)</p> <ul style="list-style-type: none"> <li>Over 16 years of experience in the game industry</li> <li>Kakao Games(US), NHN</li> </ul>

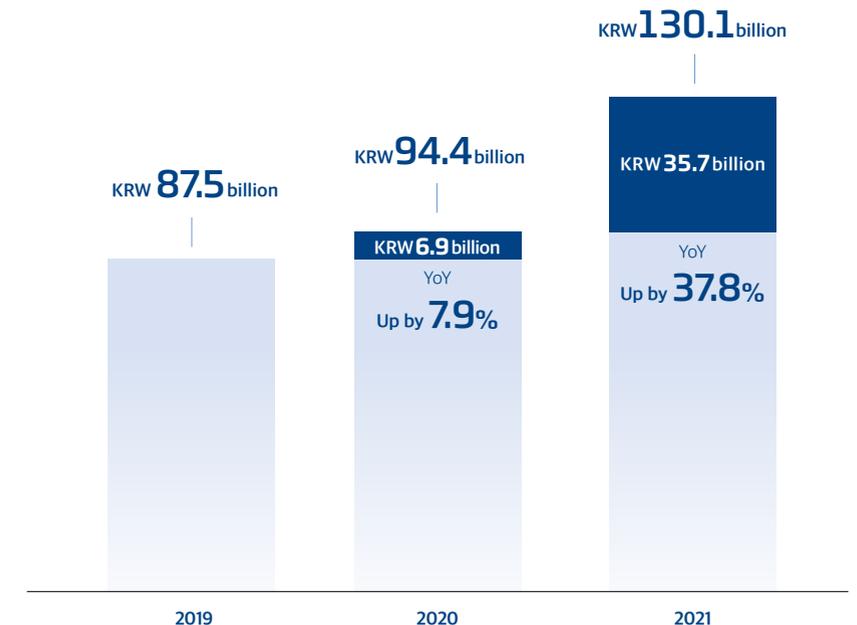
## R&D Investment

Each year, Pearl Abyss earmarks a substantial amount of resources into R&D projects to introduce the best-quality gaming experience to gamers around the world. We increased our R&D cost by KRW 6.9 billion(7.9%) in 2020 and 35.7 billion(37.8%) in 2021, respectively, compared to the previous year. In 2021, R&D costs significantly increased due to staffing for new project development and the addition of infrastructure.

(Unit: KRW million)

Category	2021	2020	2019
HR	110,677	81,220	77,983
Other expenses	19,447	13,200	9,553
Government subsidy	-	-	-
Total	130,124	94,420	87,536
Accounting Operating expenses	130,124	94,420	87,536
R&D expenses/operating margin	32.23%	19.32%	16.33%

YoY Growth of R&D Expenses



### Strengthening R&D Capabilities

Pearl Abyss has a wealth of experience as an MMORPG developer. Our executives and senior developers are equipped with the expertise and in that genre, creating synergy in the development process. For instance, they led the development of Black Desert, which requires a high level of expertise since it is based on an Open-World system as well as offering high-quality graphics and extensive content.

### Internalization of Development Expertise

We internalize and amass infrastructure capabilities to optimize and accelerate the speed of our product development. Although graphics and sound are generally outsourced, key graphics are spearheaded by our in-house designers. In addition, our sound designers are responsible for producing high-quality audio assets for our games. In particular, we built our own motion capture studio to create natural movements of characters in our games and introduce high-quality content.

### Proprietary Game Engine

The competitiveness of Pearl Abyss built on the back of our Black Desert Engine, a game engine developed in-house that can handle fast rendering and enables developers to effortlessly fulfill their needs. Our Black Desert game is powered by this engine instead of commercial engines such as Unity and Unreal. Prior to the game development, the company spent two years to develop our own unique engine.

We also developed 'Black Space Engine', a next-generation engine in response to the growing market demand and user expectations. Our next-generation engine boasts the highest level of graphic quality, featuring realistic textures and natural lighting effects. This new engine also has the advantage of reducing development time, taking the quality of our upcoming games to the next level. It is expected to help us stay ahead in an evolving marketplace since it can be applied to all platforms including PC, console, mobile, and streaming.

### Advantages of In-house Game Engines

**High-quality Games**

Although commercial engines provide a wide range of features for various genres such as FPS, Racing and MMORPG, they are limited in terms of in-depth functions that are required by specific genres. However, our proprietary game engine is specialized for MMO and open-world games. This allows us to develop high-quality games that cannot be created by commercial engines.

**Faster and Efficient Development**

We are able to expedite our development process since our proprietary game engines are optimized for our games under development. As a result, we are able to update our content every 1 - 2 weeks, and extend the life cycle of the games as continuous supply of content is possible. Since most commercial engines are designed to develop games of various genres, they require developers to have a high level of expertise to fully utilize them. Our optimized engines allow novice developers adapt quickly and start working on their projects within 1-2 months. This makes it easier to supply the needed manpower, in which game development can be achieved efficiently by reducing labor costs and the training period.

**Predictable Cost Structure**

For commercial engines, royalties are paid regularly based on the number of users or revenue. When a game is successful, and users and sales increase, so does the cost, thus affecting operating profit. Pearl Abyss does not pay royalties and are free from any royalty-related issues as we use our own proprietary engine.

**Extensive Updates**

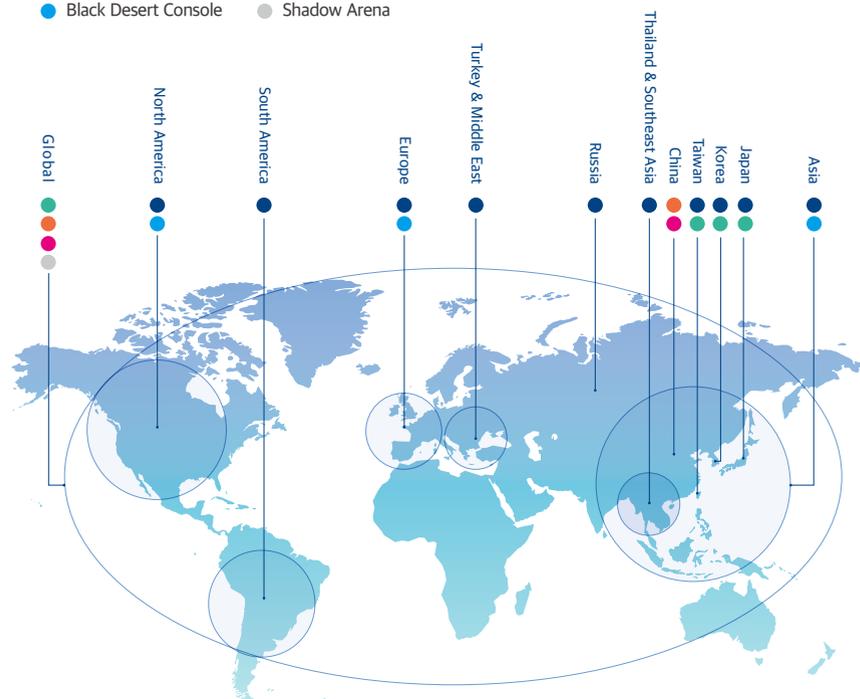
For commercial engines, the game needs to be developed in accordance with the specifications of the engine and upgrading is not feasible as it requires considerable time and effort. Another drawback of commercial engines is that the game has to be serviced according to the specific version at the time of initial release despite the introduction of new technologies. Our proprietary engines, however, make modifications and upgrades possible as new technology is developed. This allows us to implement extensive updates, thus extending the service life of our games.

### Advantages of AI-based Proprietary Engines

<p><b>AAA Titles</b></p> <ul style="list-style-type: none"> <li>• Cutting-edge graphics</li> <li>• Specialized in high-quality MMO and open-world game development</li> </ul>	<p><b>Live Services</b></p> <ul style="list-style-type: none"> <li>• Fast development speed</li> <li>• Facilitating regular updates</li> </ul>	<p><b>Productivity</b></p> <ul style="list-style-type: none"> <li>• Cross-platform development (platform compatibility)</li> <li>• AI-based automation system</li> </ul>	<p><b>Cost Efficiency</b></p> <ul style="list-style-type: none"> <li>• Eliminate the cost associated with using third-party engines</li> <li>• Eliminate the cost associated with the release of new versions of third-party engines (Upgrade proprietary engine)</li> </ul>

### Expanding Global Reach

- Black Desert Online
- EVE Online
- Black Desert Mobile
- EVE Echoes
- Black Desert Console
- Shadow Arena



### Game Service in China

**Black Desert Mobile**

Most anticipated game ranking in mobile games by 17173  
The largest game website in China

**Ranked 2<sup>nd</sup>**

**EVE Echoes**

No. of Pre-registration

**5.9 million users**

## Expanding Global Market

### Expanding Global Service Market

The global game market is growing every year, and this trend is expected to continue. Pearl Abyss is staying ahead of the rapid changes in the global market with its unique publishing strategy while working together with global branches around the world. By doing so, we are improving customer loyalty, providing seamless live services, and implementing flexible marketing strategies. We also carry out effective marketing strategies by developing long-term relationships with overseas media and influencers based on extensive global publishing experience. Currently, we are servicing Black Desert and EVE IP on PC, console, and mobile platforms. Each platform-specific service applies a different revenue model for each market, and the types of individual items available for sales vary according to the service region for each platform.

IP	Platform	Game	Market	Date of Release	Publisher	
Black Desert	Online	Black Desert	South Korea	DEC 2014	Pearl Abyss	
			Japan	MAY 2015	Pearl Abyss	
			Russia	OCT 2015	Pearl Abyss	
			North America & Europe	MAR 2016	Pearl Abyss	
			Taiwan	JAN 2017	Pearl Abyss	
			South America	JUN 2017	RedFox Games	
			Turkey & Middle East	DEC 2017	Pearl Abyss	
			Thailand & Southeast Asia	JAN 2018	Pearl Abyss	
			Shadow Arena	Global	MAY 2020	Pearl Abyss
			Mobile	Black Desert Mobile	Korea	FEB 2018
Taiwan	AUG 2018	Pearl Abyss				
Japan	FEB 2019	Pearl Abyss				
Global	DEC 2019	Pearl Abyss				
Console	Black Desert Console	North America & Europe			MAR 2019	Pearl Abyss
		Asia	AUG 2019	Pearl Abyss		
EVE	Online	EVE Online	Global	MAY 2003	CCP ehf.	
			China	APR 2020	NetEase	
	Mobile	EVE Echoes	Global	AUG 2020	NetEase	
			China	AUG 2021	NetEase	

### Release of Black Desert in China

Pearl Abyss is working with local partners to expand services in China and preparing to release Black Desert Online and Black Desert Mobile. In June 2021, we received the version approval for Black Desert Mobile in China and are working with local partners to launch the service in China. Black Desert Mobile is poised to achieve success as there is much excitement already in the market with 17173, the largest gaming website in China, citing Black Desert Mobile as the No.2 most anticipated mobile game.



### Release of EVE Echoes in China

EVE Echoes was released in China on August 5, 2021. The game was co-developed by CCP ehf. and NetEase.(CCP ehf. is a subsidiary of Pearl Abyss.) EVE Echoes was highly anticipated by local users even before its release due to the popularity of Sci-Fi games. The number of Pre-registration exceeded 5.9 million, earning top spots at the Apple App Store's game charts including most downloaded games category, in the first week of its release. Pearl Abyss and CCP ehf. will continue to provide a variety of entertainment content including massive content updates and events for EVE Echoes.

# SUSTAINABLE BUSINESS

Pearl Abyss is achieving steady growth through its creative organizational culture and by providing an optimal work environment that enables employees to focus on work and enhance their values. We plan to relocate to our new office building in Gwacheon in 2022, and recognize that a pleasant work environment, a healthy organizational culture, and a robust employee benefit program will drive sustainable growth

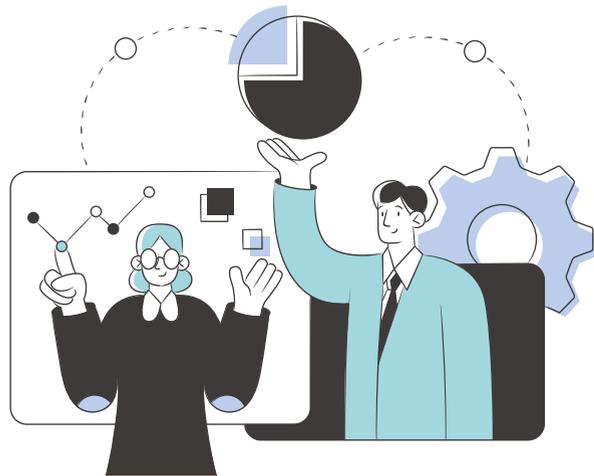
<b>EMPLOYEES</b> Creating Value for Employees	<b>24</b>
<b>ENVIRONMENT</b> Protecting the Environment	<b>32</b>
<b>SOCIETY</b> Community Engagement	<b>34</b>
<b>CUSTOMER</b> Customer Satisfaction	<b>37</b>

# Employees

## Creating Value for Employees

### Creating a Healthy Corporate Culture & Workplace

Pearl Abyss is committed to building a thriving workplace for all by creating a safe and healthy organizational culture and implementing an extensive employee benefit program.



#### UN SDGs



## Organizational Culture

At Pearl Abyss, we strive to create an organizational culture that promotes respect and empathy. We also seek to build a collaborative workplace that values open and honest communication among employees. Mutual respect and empathy among co-workers will enable us to improve our performance and quickly solve problems.

## Work-Life Balance

Pearl Abyss is implementing flexible and efficient working hours that reflects the unique demands required in different job positions. We are able to boost employee morale and productivity while maintaining a healthy work-life balance by increasing the freedom and responsibility of our employees through the adoption of flexible work schedule system, 50-hour work week, and PC-OFF campaign.

### Flexible Work Schedule

Pearl Abyss operates diverse work schedule systems to support optimal job performance in consideration of employees' personal or professional needs.



#### Flexible Work Hours

Provides flexible working hours for departments or personnel that need to set their work schedules outside of regular working hours.



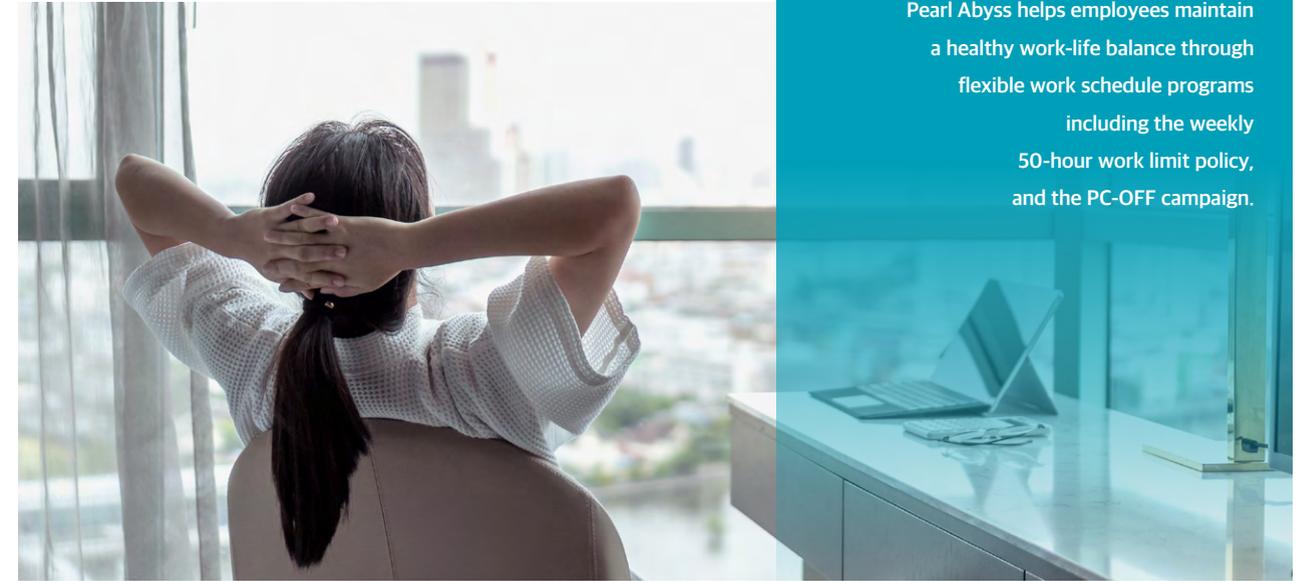
#### Selective Work Hours

Allows employees to choose their work hours based on the set monthly working hours for each department or personnel to meet their job requirements



#### Flexible Commuting Time

Provides flexible commuting time for employees with children under the age of 10, or 3rd grade in primary school, and require adjustment in their commuting time



Pearl Abyss helps employees maintain a healthy work-life balance through flexible work schedule programs including the weekly 50-hour work limit policy, and the PC-OFF campaign.

### Limiting to 50 Hours per Week

At Pearl Abyss, we have reduced the statutory work hours of 52 hours a week to 50 hours to avoid excessive overtime work. Individual work schedules are effectively managed through a computer system, and associated risks are checked and prevented through monitoring.



#### Computerized System to Manage Working Hours

Employee working hours, requests and registrations for overtime work, breaks, and leave are operated through a computerized management system.



#### Monitoring Employee Working Hours

Monitor employees who have worked close to 50 hours, and inform the employees and team leaders about their overtime.



#### PC-ON

Registered work hours (regular work hours, overtime)



#### PC-OFF

All dates other than work hours(holidays, leave)

### PC-OFF Campaign

As a measure to comply with regular work hours and to avoid unnecessary overtime, we introduced the PC-OFF campaign to ensure that PCs are only used during working hours. To this end, we only allow access to PCs, laptops, and other devices during working hours. In addition, we regularly review access data records of PCs and implement necessary improvements.

## Healthy Organizational Culture

Pearl Abyss is committed to creating a healthy organizational culture that promotes open communication. We operate various in-house communication channels to support open communication and organize various campaigns in which all employees can participate. By doing so, we create an organizational culture that improves job satisfaction while boosting teamwork and collaboration.

### In-house Blog

Pearl Abyss operates an in-house blog to communicate and share news with its employees. The blog is comprised of four sections including News, News\_Eng, Initiative, and Inside Pearl Abyss. Through the Blog, we share a range of case studies on successful team building as well as various stories from our overseas and branch offices, and messages from the management through CEO keynotes.

### 'Pearl Tube' Corporate-wide Communication Platform

On November 5, 2021, we launched "Pearl Tube," an in-house video platform, to share engaging content on our unique culture, company events, interviews, educational content, as well as "Pearl Quiz."



Corporate-wide communication platform "Pearl Tube"



Clean-up after work campaign



Mutual respect at the workplace campaign

### Digital Communication Billboards

We deliver news in real-time and share our corporate culture through electronic billboards installed in six locations in our office building. During the COVID-19 pandemic, we worked together to create a safe working space by sharing information related to COVID-19 through the billboards.

### In-house Campaigns

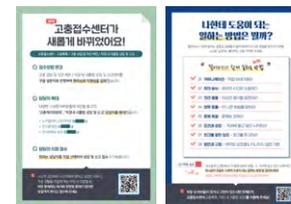
We do fun and lively in-house campaigns to draw the attention of our employees and help them enjoy a pleasant and healthy work-life. So far, the campaigns have been organized to promote a culture of respect, how we call each other work environment improvements, work focus campaigns, and share guidance on grievance center.



Title improvement campaign



How to use Slack(screensaver)



Information

## Fair Employee Evaluation System

Pearl Abyss organizes training for evaluators and conducts mid-term and year-end evaluations to achieve a fair and consistent employee performance evaluation. The feedback received through the employee satisfaction survey is utilized to improve the employee evaluation system.

### Operation of Employee Evaluation System

#### Mid-term Review & Year-end Evaluation

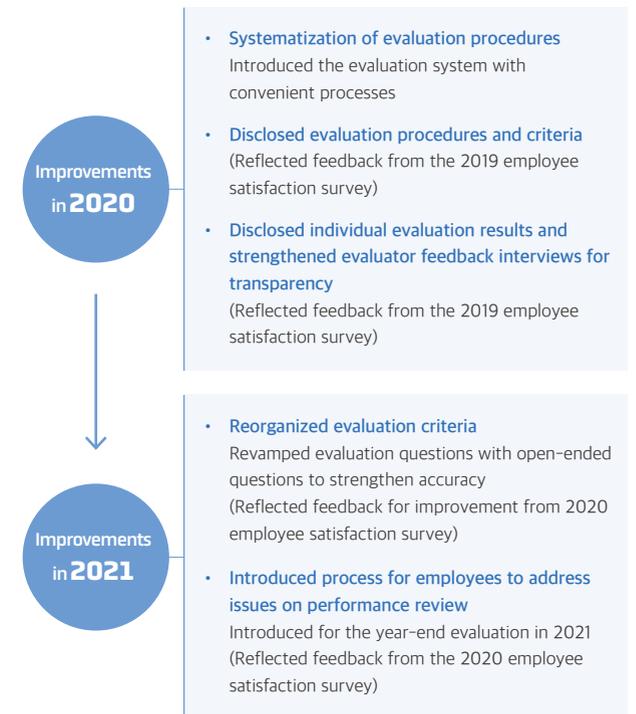
At Pearl Abyss, employees set their own annual goals each year for review by the evaluators based on their expectations. During the year, we check whether employees are meeting their goals and provide feedback to prevent issues arising in the year-end performance evaluation, in which employees who reach their goals in the year-end receive favorable performance evaluation. The year-end evaluation determines the overall job competency and performance, and whether the goal has been achieved. We also conduct individual interviews with employees and share the results. Starting with the 2021 year-end evaluation, a process for raising objections to the results was adopted to provide an opportunity to coordinate opinions between the employees and evaluators.

#### Training for Evaluators and Feedback Training

To ensure evaluations are conducted fairly, Pearl Abyss organizes training sessions for evaluators to learn the evaluation criteria and procedures for the current year. If needed, additional training for key details is provided, even after the evaluation has started. We also provide training on the feedback and interview process to make sure the delivery of evaluation results is conducted correctly.

### Efforts to Improve Employee Evaluation System

At Pearl Abyss, feedback collected through the employee satisfaction survey are reflected in our operation. As a result, employee satisfaction significantly improved in 2021 compared to the previous year.



## Fair Compensation System

Pearl Abyss is committed to improving work satisfaction of its employees with competitive compensation and benefit programs. In 2021, we provided an unprecedented pay raise of a KRW 8 million increase in annual salary for all employees as well as an additional KRW 2 million in bonuses and stock options.

### Performance-based Salary

In 2017, Pearl Abyss removed the comprehensive wage system for the first time in the game industry to prevent unnecessary overtime and to compensate employees fairly. We also operate an annual salary system based on job performance instead of seniority and apply rational pay raises and rewards based on year-end evaluation results.

### Stock Compensation Program

Pearl Abyss introduced stock compensation program as a reward to share present and future values with all employees who are dedicated to the company. The shares are determined based on individual performance levels.

### Cash-based Benefits

Pearl Abyss provides the best cash-based benefits in the industry that includes housing expenses, child support, tuition, welfare points, and parental care expenses. We also offer financial support to employees with infertility or disabilities, Naeil Chaeum Deduction for young employees, along with up to KRW 10 million and 20 days of paid leave as a reward for long-term employees.

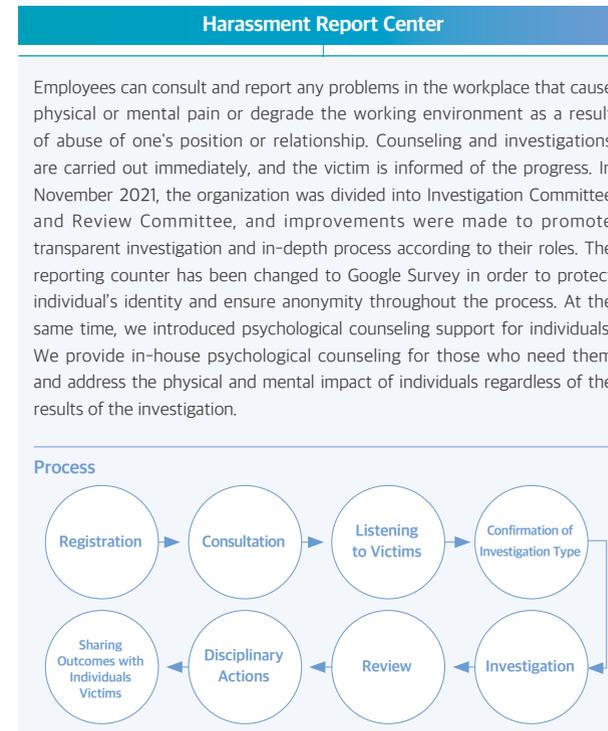
## Labor-Management Culture

Pearl Abyss operates various communication channels for resolving labor-management issues and creating a healthy organizational culture. We organize the Labor-Management Council, Grievance Report Channel, and teatime with the management for employees who have been with the company for two years. We listen to employees' complaints and suggestions to build a workplace where labor and management work together for change and growth.

### Labor-Management Council

The Labor-Management Council, which consists of 6 members, 3 employees and 3 managers, discusses ways to promote the common interests of labor and management on a quarterly basis, and decides on specific directions for improvement. The results of the meetings apply to all our employees. The council plays a key role in appointing Grievance Committee members and handles issues such as "welfare benefits, employment rules, work hours and organizational culture" as a communication channel between labor and management. In January 2021, the council decided to pay compensation in response to the Covid-19 pandemic to employees of Pearl Abyss and overseas offices, as well as dispatched employees.

### Grievance Resolution Channels at Pearl Abyss



### Grievance Resolution Program



## Talent Development Program

Pearl Abyss selects, supports, and nurtures passionate and talented individuals who want to become game-changers.

### Fostering Key Talents

We make on-going efforts to discover and nurture creative and innovation-driven talents with the keywords of "Perseverance", "Drive", and "Trust".

We provide relevant information through a dedicated recruitment channel and proceed with the ongoing recruitment and internship programs for hiring. After recruitment, we cultivate our talents with various training programs including the on-boarding program.

### Ideal Candidates

At Pearl Abyss, we look for "perseverance" towards achieving a goal, "drive" that creates a thirst for challenges and success in new ways, and "trust" that leads to accountability.

### Recruitment Approach

Pearl Abyss is a self-innovative game company that offers new, exciting, and unforgettable adventures. Therefore, we are committed to recruiting talented individuals who are passionate about creating excellent games and collaborating with best-in-class teams. We use a fair talent recruitment process prioritizing job competency rather than restricting applicants for qualifications they hold.

### Job Information Channel "Pearl-Cruit"

We operate a YouTube channel "Pearl-Cruit" that provides information to applicants and candidates. The channel provides a variety of job information, including interviews with senior executives, recruitment process, job introduction, corporate culture, employee benefits, and

tips related to job interviews. We also have social media channels to answer questions in real time. We are committed to maintaining close communication with our applicants at all times and making sure they have access to the information they need.

### New Employee Onboarding Program

Through orientation and on-boarding training, new hires will be guided on the requirements needed to adapt to our organization. Seminars are organized so that employees can ask questions about Pearl Abyss to management. By doing so, we help our employees better understand our company and adapt to the workplace.

### How We Work Together

By providing training on "how we work together," we increase the efficiency of our employees and help them find solutions to problems. We are always dedicated to making the best choice based on collaboration and communication.

### Three Characteristics Valued at Pearl Abyss



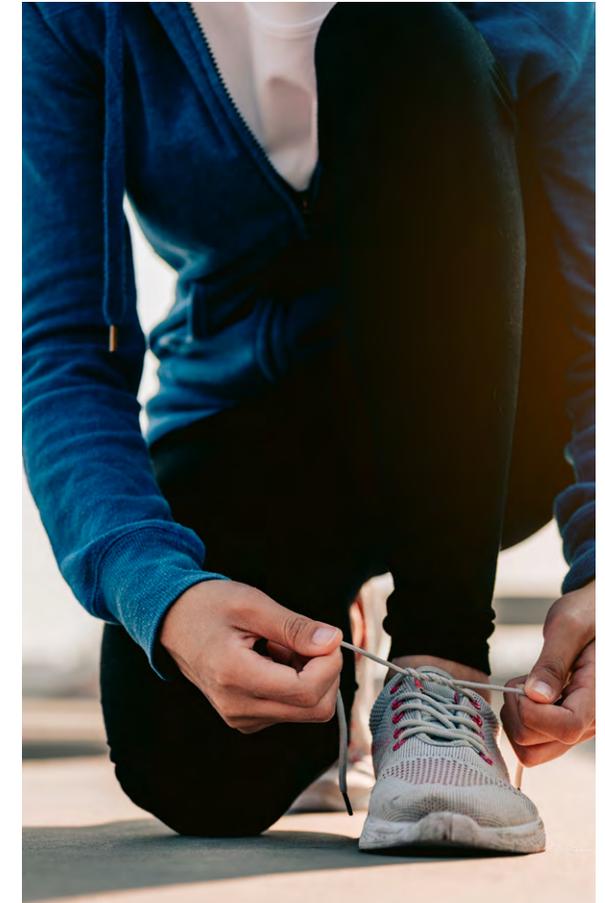
We endeavor to go beyond what is required in experience and quality when it comes to our games.  
We look for individuals who are passionate about their goals rather than being discouraged by small failures and hardships.



We are not afraid to challenge and overthrow our own ideas for a better outcome.  
We look for individuals who are driven by a thirst for new challenges and success.



We believe teamwork helps pave the way to greater achievements.  
We look for individuals who are mutually supportive and reliable without being blinded by greed.



Pearl Abyss selects, supports, and nurtures passionate and talented individuals who want to become game-changers. We make ongoing efforts to discover and develop creative and innovation-driven talents with the keywords of "Perseverance", "Drive", and "Trust".

## How We Work Together

It is our mission to provide gamers with fun and unforgettable adventures never experienced before. We relentlessly push the boundaries in terms of fun and quality, and change our course at any time to pursue the best path. We take initiatives and come up with ideas to provide a better gaming experience for users. We believe teamwork helps pave the way to greater achievements.

<p><b>Speak Directly</b></p>	<p><b>Express Ideas</b></p>	<p><b>Find Better Ways</b></p>
<p>Pearl Abyss is built on foundations of Direct and Fast Communications. We actively tackle problems by communicating with each other instead of waiting for issues to be raised.</p>	<p>We are not afraid of conflict in the pursuit of a better outcome. Cooperation is based on Trust and Respect. Being ready to listen to others is just as important as being vocal.</p>	<p>Excellence is important, but we put more value on people who can Improve Beyond the limits.</p>
<p><b>Make Problems Known</b></p>	<p><b>Take the Initiative</b></p>	<p><b>Pursue Excellence</b></p>
<p>Focus as a group to understand the problem, and Work Together to solve it. Offering a solution is more important than defining accountabilities.</p>	<p>We are not afraid to embrace new challenges. We encourage people to take Immediate Action, instead of too much planning or fearing failure. We believe that these challenges are opportunities to unlock our potential.</p>	<p>We strive for excellence. We persistently search for the most Optimum Answers until the very last moment.</p>

## Job Training

Pearl Abyss provides training programs to help its employees improve their job competencies. The programs focus on leadership training so they can develop core leadership competencies and job-specific study sessions.

### Leadership Training

Training is conducted on a regular basis to help our employees develop core leadership skills such as communication, feedback, and interviewing. We organize forums for sharing values between management and Team Leaders. Based on leadership analysis, individual leadership strengths and weaknesses are identified and training is tailored to their individual needs. If employees have any concerns about leadership, they can ask for consultation and mentoring at any time at the "Leadership Talk Talk Center." In 2022, we plan to design and implement customized training for each position to diversify training programs for team leaders.

### Job Training

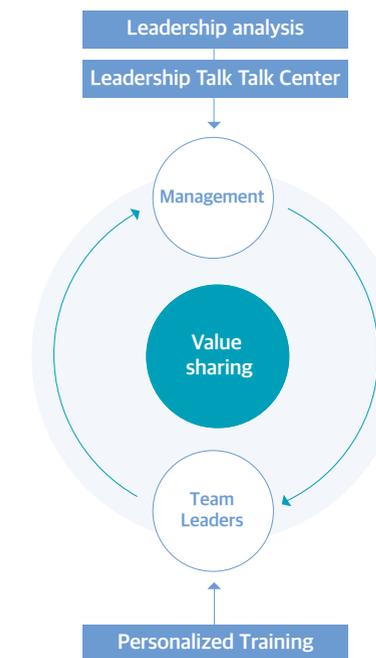
We provide financial support for job-related external training, and job-specific studies for each department. We help our employees gain insights by organizing special lectures and providing expenses for online coding training such as Python, JS, and SQL.

### Reading Campaign "Book-jeok Book-jeok"

To encourage our employees to read more books, we organize a campaign in which all employees read one recommended book every quarter. A library is established within the company to create an environment where books can be available to read at all times.

<p>Personalized leadership training based on the regular analysis</p>	<p>Full financial support for job-related training</p>	<p>Various financial support for online coding training</p>
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### Leadership Training



### Book-jeok Book-jeok Campaign



## Employee Benefits

Pearl Abyss is committed to providing the highest level of employee benefits in the game industry. To help our employees focus on delivering the best games and services, we pay close attention to their well-being through personalized benefits.

### Employee Benefit Programs

Our employee benefit programs are designed to offer total care that includes essential benefits for employees and family-friendly support as well as basic and personal benefits. To this end, various benefit programs have been introduced including housing, childcare, health, living, and education. In 2020, we reflected the input of our employees through the "Welfare Contest for Singles" to expand our programs for house cleaning, pet insurance, anniversaries, and birthdays. In 2022, we plan to create a healthy work environment for our employees as we prepare to move into the new office building.

#### Housing Support

Providing financial support for purchasing or renting a house to maintain a stable living environment.



**Employees living far from the company**  
Expenses up to KRW 375,000 per month for any interests on housing loan



**Employees living near the company (Anyang, Gwacheon, Uiwang, Gunpo)**  
KRW 500,000 per month for any housing contract

#### Healthcare

Provide an annual health checkup, group insurance, and dental expenses as part of employee healthcare program.



**Health checkup**  
Free health checkups worth up to KRW 300,000 once a year and one day of paid-leave



**Group accident insurance**  
Insurance premiums including immediate family members, and support for medical expenses



**Dental treatment**  
Personal dental treatment expenses, up to KRW 3.15 million per year for preventive and prosthetic treatment

#### Education

Provide necessary support for self-development including the latest technology training programs, welfare cards, and purchases of books.



**Technology training**  
Training on technologies, e.g., AI, 3D graphics, PBR, and DB



**Books**  
Purchases of books necessary for the job

#### Daily Living

Provide comprehensive benefit programs that support daily living, as recommended by employees.



**Beauty Salon**  
Fully cover the cost of a haircut at a beauty salon that has a contract with Pearl Abyss(once a month)



**Massage chair and professional massage**  
Massage chairs and professional masseurs are available at the Healing Room



**On-site banking service**  
Banking services are available at the company



**Wedding preparation**  
Provide support to reserve wedding venue affiliated with Pearl Abyss and rent wedding dresses



**Gift for students**  
Gifts worth KRW 300,000 including backpacks and school supplies for employees' children entering elementary school



**House cleaning**  
Monthly house cleaning support for employees who are single or living alone e.g. cleaning the living room, bedroom, bedding, kitchen, washing dishes and taking out garbage



**Pet insurance**  
Pet insurance that covers medical expenses and compensation for up to three dogs or cats per employee

#### Anniversary gift



Arrange delivery of anniversary celebration gifts once a year. Wedding anniversary gifts for the employees and their parents, birthday presents for spouses, parents, children, siblings, and nephews, as well as gifts for Children's Day, employment anniversary, and Christmas



**Night and emergency transportation**  
Taxi fares for the safety and convenience of employees when they need to work late nights and for emergencies

#### Living Support

Provide a variety of living support programs including medical expenses for employees' parents, couples with infertility, welfare cards, support for people with disabilities, and Naeil Chaem deduction programs for young employees



**Medical expenses for parents**  
Up to KRW 400,000 per month for parents with severe and geriatric diseases, depending on the severity of illness



**Support for infertile couples**  
Up to KRW 1 million per procedure regardless of the number of treatments



**Welfare card**  
Provide welfare cards that can be used regardless of business type and on/offline  
- KRW 170,000 per month



**Support for employees with disabilities**  
KRW 500,000 per month to employees with a disability registration card



**Naeil Chaem Deduction for Young Employees**  
The government, company, and employees deposit deductibles for 5 years for the Naeil Chaem Deduction Program to provide refunds at maturity to help young employees raise money.

## Newly Introduced Benefit Programs

### On-site Bike Maintenance

We provide maintenance services for employees who commute by bicycle to improve their health and to protect the environment. Technicians visit our office to inspect bicycles across 19 categories to make sure they are safe to ride. The company pays for any replacements required.

### Online Coding Training

We organize online coding training to increase opportunities of our employees and promote self development. We support external online training so that anyone can learn various languages such as Python, JS, and SQL. We provide 100% of the admission fees for up to 4 courses per year. We also provide 16 courses that can be easily learned by non-developers and those who are not proficient in the C language.

### 24-hour unmanned laundry box

We introduced the 24-hour unmanned laundry box for employees who do not have the time to visit the laundromat. Employees can leave their laundry on the way to work and pick up their laundry when they leave work. The service is available for any items such as washing, dry cleaning, sneakers, and bedding.



## Employee Satisfaction Survey

Pearl Abyss conducted an employee satisfaction survey consisting of organization and job satisfaction, reliability and communication, work performance, conflict and grievance resolution, HR system(benefits, compensation, evaluation) in July 2020 to listen to our employees, and to reflect the results in making necessary improvements. We collected feedback from our employees regarding the procedures and results of performance evaluation and improved the process in 2020 and 2021. In addition, we expanded the scope of benefits tailored to unmarried employees in 2021 by introducing benefits for housing and parental care expenses. We also improved the Grievance Committee and workplace harassment counseling center in 2021, based on the suggestions received through the grievance report program. Analysis is conducted based on the survey results, and the results were presented to the heads of each organization. As a result of these efforts, the positive response rating increased from 63%(3.74/5.00) in 2020 to 68%(3.88/5.00) in 2021.

### Employee Satisfaction Survey Results

	2020		2021			
	Positive Response	Score (Out of 5)	Score (Out of 100)	Positive Response	Score (Out of 5)	Score (Out of 100)
Organization and job satisfaction	72%	4.00	74.9	77%	4.10	77.6
Reliability and communication	70%	3.87	71.7	73%	3.98	74.5
Work process	62%	3.68	67.0	64%	3.73	68.3
Conflict and grievance	62%	3.72	68.1	63%	3.78	69.4
Welfare benefits	89%	4.38	84.6	92%	4.48	86.9
Reward	56%	3.61	65.2	70%	3.96	73.9
Evaluation	32%	3.61	65.2	70%	3.96	73.9
Improvement from previous year	-	-	-	63%	3.73	68.1

\* Positive response: the percentage of employees who have given a score of 4 or higher

## Safety Management

Pearl Abyss has established the Code of Conduct for Suppliers as a measure to prevent physical risks and other risk factors as well as to respond to risks in the workplace. We require strict compliance with the standards stipulated in the Code by all our suppliers. We apply this in the construction, planning, and operation of our new office building while reducing risks related to the safety and health of our employees through regular safety training.

### Occupational Safety & Health

Pearl Abyss set compliance standards for industrial safety, emergency preparedness, occupational accidents and work-related diseases, workplace hygiene and residential environment, work overload, safety maintenance of machinery and equipment, safety and health education. These standards are specified in the Code of Conduct for Suppliers. Prompt disciplinary and remedial actions are applied for violations and breaches.

### Employee Safety & Health Practice

Pearl Abyss conducts an annual risk evaluation survey that is participated by all of our employees. Each employee identifies risk factors related to company's safety and health environment. We then analyze the risks identified and implement appropriate measures at the corporate-wide level.



#### Employee Safety

For the safety of our employees, we conduct inspections for safety, fire, electricity, and elevators(FM service) and manage MSDS for chemical products(e.g., cleaning products, detergents) on a regular basis. Safety equipment such as helmet, boots, and insulated gloves are provided and used. We operate a remote monitoring system(FM service) for major facilities including water storage tanks.

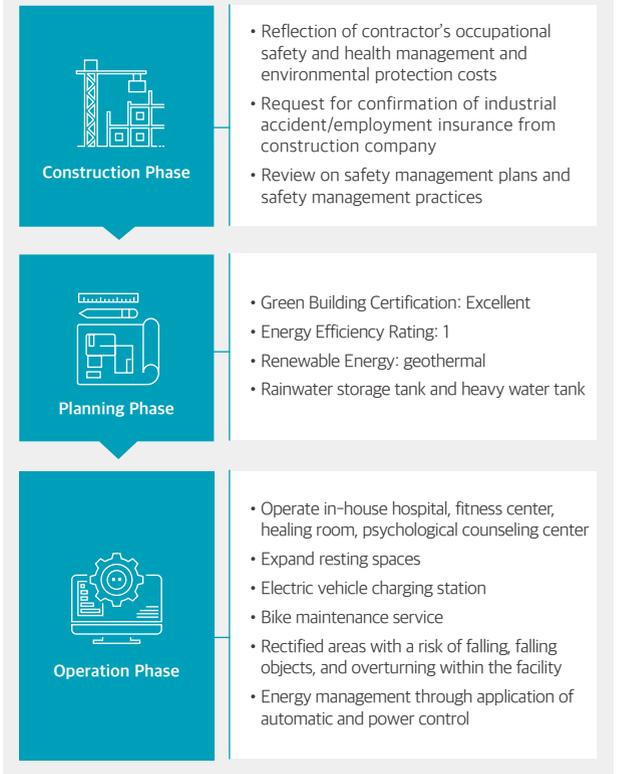


#### Employee Health

To strengthen the health practice of our employees, we make sure first aid kits are available at the in-house support desk while supporting company-wide disinfection and quarantine, and indoor air quality measurement. We also manage an in-house healing room and affiliated fitness center, psychological counseling center, employee health check-ups, and investigate risk factors at the workplace that can lead to the musculoskeletal disorders.

## Occupational Safety & Health of New Office Building

Pearl Abyss established various measures to ensure occupational safety and health across each phase including construction, planning, and operation of its new office building while implementing preventive measures for risk factors.



## Employee Healthcare

Pearl Abyss is committed to promoting the physical and mental health of all employees by implementing various welfare programs and facilities.

### Healthcare Support

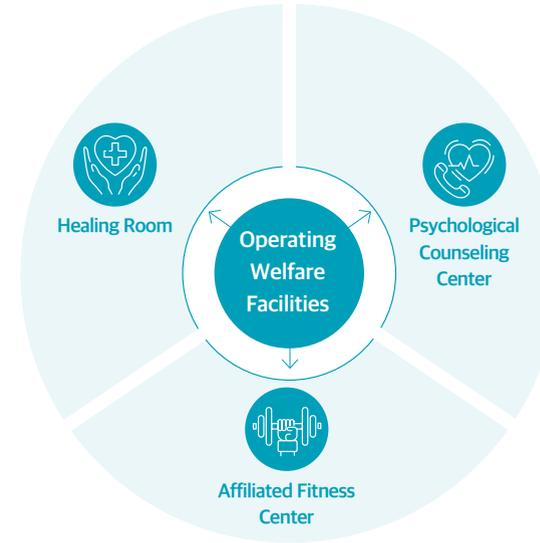
Pearl Abyss strives to promote and maintain the health of its employees and prevent diseases. We implement various welfare programs, improve the working environment and organize campaigns while operating facilities in consideration of physical and mental health.

### Healthcare Support

We provide group accident insurance and cover dental expenses for our employees along with annual health check-ups(including leave) to help reduce their medical expenses. We are also committed to maintaining the health of our employees by improving the work environment and organizing disease prevention campaigns.

### Welfare Facilities

As part of our support for the physical and mental health of all employees, we operate various facilities including a healing room, a fitness center, and a psychological counseling center so that our employees are able to maintain their health by relieving their fatigue on a daily basis.



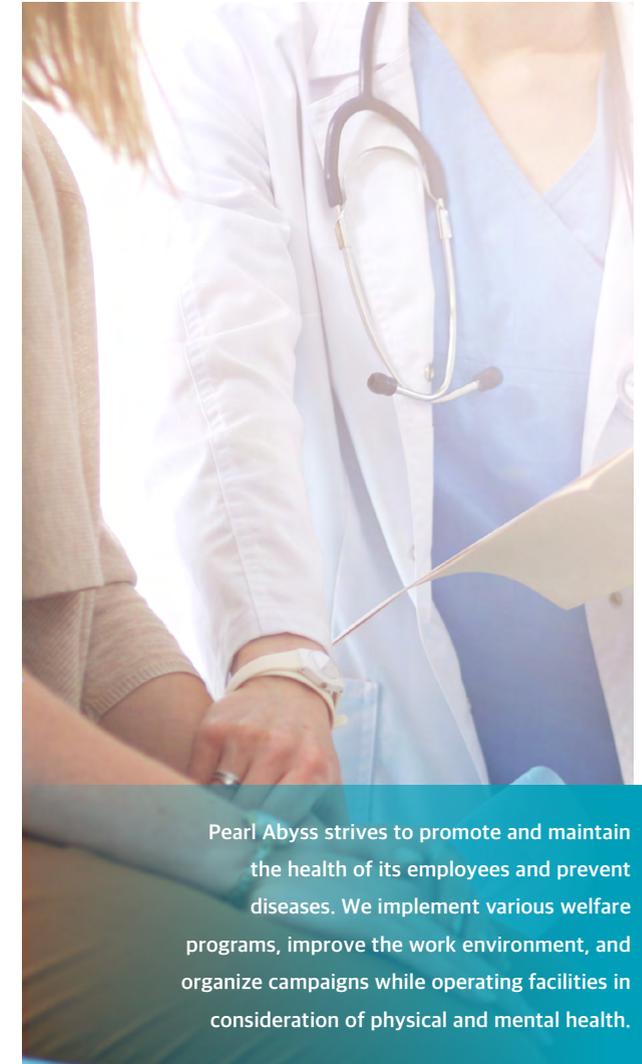
Healthcare	
	<b>Group accident insurance</b> Insurance premiums for employees and their immediate family members(including spouses, children, and parents)
	<b>Dental expenses</b> Up to KRW 3.15 million per year(flat rate) (Up to three preservation and prosthetic treatments)
	<b>Annual employee medical checkup</b> Free medical checkup and paid leave

Work Environment	
	<b>Research on musculoskeletal risk factors</b>
	<b>Disinfection and quarantine procedures, indoor air quality monitoring</b> (FM service)
	<b>First aid kits at the in-house support desk</b>

Disease Prevention Campaign	
	As part of employee healthcare programs, Pearl Abyss Cleanup Campaign is organized every Thursday to encourage people to wear masks and use indoor shoes during winter when respiratory diseases are prevalent.



Pearl Abyss Cleanup + Respiratory Disease Prevention Campaign



Pearl Abyss strives to promote and maintain the health of its employees and prevent diseases. We implement various welfare programs, improve the work environment, and organize campaigns while operating facilities in consideration of physical and mental health.

# Environment

## Protecting the Environment

### Environmental Awareness and Practice

Pearl Abyss recognizes the impact of climate change and the need for response measures. We realize that climate change is an environmental problem that negatively affects the planet and humanity. We are committed to our corporate social responsibility for sustainable growth for future generations, emphasizing daily practices to protect the environment and raising environmental awareness.



#### UN SDGs



## Response to Climate Change

The international community is working together to reduce GHG(Greenhouse Gas) emissions, which are considered the main cause of climate change. The Korean government is also participating in the Green New Deal, having declared its goal to become "2050 Carbon Neutral" by transforming the existing economic and industrial structure into an eco-friendly one to reduce GHG emissions. In support of these efforts, Pearl Abyss is engaging with the government's policies through emissions management and saving. Furthermore, we ensure full compliance with environmental laws and regulations, and we have been subject to any sanctions on violations.

### GHG Emission Management

Pearl Abyss promotes the use of eco-friendly transportation options to reduce GHG emissions. To this end, we are expanding the low-carbon infrastructure, including 20 electric vehicle charging stations in our building. We are also supporting eco-friendly transportation by expanding the parking space for bicycles and introducing bicycle maintenance services. Light dimming systems that automatically turn off lights in parking areas have been installed to save energy in the new building. Furthermore, we plan to install 50 additional charging stations for electric vehicles to encourage employees to participate in GHG emission reduction while expanding charging stations according to the demand for electric vehicles.

#### EV Infrastructure



- Operate 20 EV charging stations
- Building 50 EV charging stations in the new office building and considering additional installations according to demand

#### Eco-friendly Transportation Options



- Expand parking spaces for bicycles
- Provide bicycle maintenance space and services

#### Energy Saving



- Install light dimming systems in the parking lot in the new office building

## Water Resource Management

Recognizing the importance of water resources, we recycle domestic sewage and rainwater as well as save water to optimize our water management. In the new office building, which is under construction, we will be able to monitor water consumption, expanding water conservation and recycling while also applying environmental certification.

### Water Resource Management Status

Pearl Abyss uses certified water-saving systems for all sanitation units such as toilets, urinals, and various water currents used in the Anyang office building. The new office building in Gwacheon, which is under construction, uses a water-saving facility plan with a heavy water system so that wastewater and rainwater can be recycled. We also plan to install a monitoring system for water usage, in which all water consumption meters throughout the building will be eco-label certified products.

#### Anyang Office



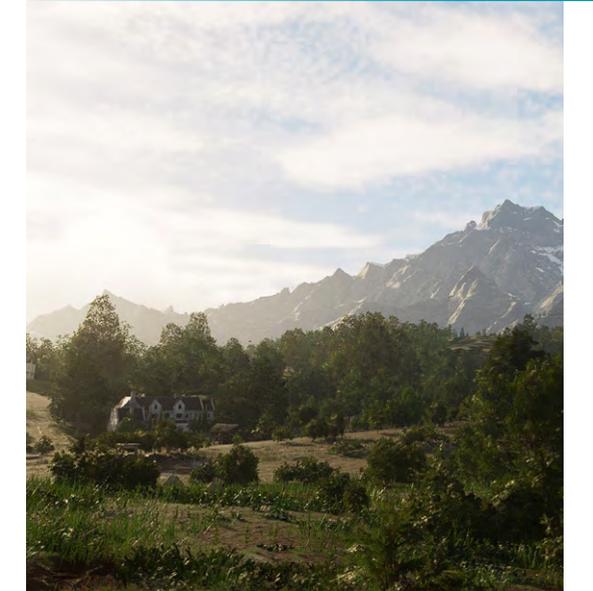
- Use of certified water-saving systems for sanitation units

#### New Office Building



- Construction of water-saving systems for sanitation units
- Inclusion of a heavy water system
- Install water consumption monitoring system
- Secure eco-label certified products for water meters

Recognizing corporate social responsibility, Pearl Abyss is working together to support the government policies by managing GHG emissions and energy consumption while implementing various practices.



## Waste and Contaminant Management

Our efforts to protect the environment start with waste reduction activities in daily practice and the use of eco-friendly transportation options. Beginning with the daily practice of reducing pollutants and protecting the environment, our employees promote environmental causes with support from the company.

### Waste and Air Pollutant Management

Pearl Abyss has established a separate storage area for recyclables in the head office building for collection and regularly organize recycling campaigns to reduce waste. At the in-house cafe, "Pearl Cafe," we recycle our resources by offering beverages in personal tumblers and mugs, replacing plastic straws with biodegradable ones, and installing a collection box for disposable cups. We will also set up a separate recyclable storage area and collection site in the new office building to manage waste discharge. Furthermore, we are committed to establishing an eco-friendly culture to reduce air pollution and maintain carbon neutrality. To this end, we operate electric vehicle charging stations and plan to install more charging stations in our new office building, as well as encourage our employees to use bicycles.

#### Reduction campaign at Pearl Cafe



- Serve drinks in personal tumblers or mugs
- Use biodegradable plastic straws
- Install disposable cup bins

#### Managing office waste



- Ensure collection of waste by managing a separate storage area for recyclables
- Organize regular recycling campaigns
- Prepare storage for recycling materials and a separate collection point in the new building

#### Managing air pollutants



- Operate and expand EV charging stations
- Encourage the use of bicycles

## Energy Consumption Management

Pearl Abyss controls the heating and cooling system at optimal temperatures by monitoring energy consumption. In addition, as a measure to minimize the environmental impact of building maintenance and operation, we installed and adopted high efficiency products from the construction stage of the new office building. We are also introducing eco-friendly energy resources such as geothermal systems.

### Energy Monitoring System

Pearl Abyss is constantly seeking ways to improve energy consumption and minimize its environmental impact. Our office building is equipped with central air conditioners, and we monitor the temperature on an ongoing basis to maintain optimal temperature. For the new office building, a system to monitor and control various devices through integrated SI has been installed. In particular, we have removed unnecessary energy waste factors through lighting and power control in our new office building by enabling efficient operation of energy consumption, lighting and power maintenance. Going forward, we plan to install remote monitoring systems to track the amount of electricity by period and time of use so that we can assess daily and monthly energy usage.



**Integrated SI Management System**  
A system that integrates the key functions necessary for facility operation into a single system to achieve efficiency in monitoring and management



**Energy Efficiency Rating A**  
Provides accurate information on energy used in buildings for energy savings

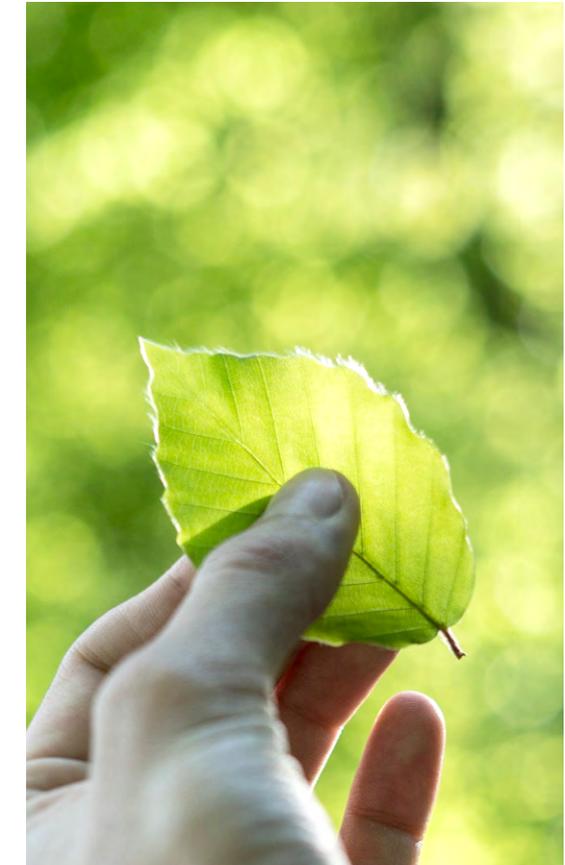
## Energy Saving Plan for New Office Building

Our new office building is seeking to acquire the Excellent Green Building Certification Rating and First Energy Efficiency Rating, thus reducing the environmental impact of building maintenance and operation. The equipment and materials used in the design and construction of the building are energy efficient products from registered companies, as specified according to the Act for Rationalizing Energy Consumption. We also plan to use eco-friendly energy resources for daycare centers using a geothermal system.



**Building Energy Efficiency Rating Certification**

This is a system designed to ensure that profits return to all building-related entities, including project developers, owners, management companies, and building users, by providing information such as the energy performance of buildings and the quality of the residential environment and recognizing the value of buildings. For energy saving in the building sector, accurate information on energy consumption is provided to attract investment in energy-saving technology, realize the economic benefits, raise awareness on energy-saving and create a comfortable indoor environment.



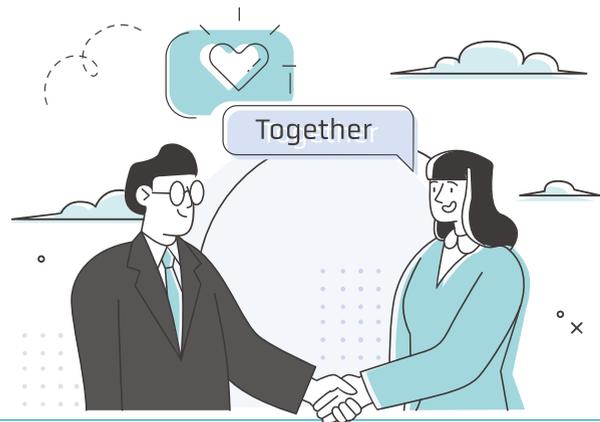
Our efforts to protect the environment begin with waste reduction activities in daily practice and the use of eco-friendly transportation options. With the daily practice of reducing pollutants and protecting the environment, our employees promote environmental causes with support from the company. We also control the air conditioners according to the temperature by monitoring energy consumption while using energy efficient products.

# Society

## Community Engagement

### Philanthropic Campaigns for Users

Pearl Abyss promotes positive donation culture by organizing participatory donation events for users around the world. We are working together to make the world a better place to live through various social contribution activities including community donations and employee volunteer activities.



UN SDGs



## Social Contribution Program

“  
Black Desert shares your kind heart!  
”

At Pearl Abyss, we are committed to supporting areas and communities where disasters occurred. In particular, we organize participatory charity campaigns for users around the world to raise awareness and create a sense of community. This leads to a virtuous cycle and makes our society a better place to live. In order to make small changes for a better world, our social contribution activities will continue to grow in the future.

### Global Relief Assistance

Pearl Abyss is committed to providing relief assistance in times of global disasters and crises. As a game service provider, we organize various events to promote sharing among global users. Our relief support programs are mainly “un-tact”, or contact-free, activities with game users around the world. Through participation in the event, we expect to create a synergy effect that goes beyond donations and promote the true meaning of giving back to society.



## Social Contributions by Year

### Activities in 2021

**KRW 100M Donation to Doctors without Borders**

In December 2019, Black Desert prepared for a large charity event in which users from all over the world could participate. The event was titled “Send Your Message through Black Desert,” and we donated KRW 100 million when users purchase Tokens of Sharing, a donation item with silver coins, which can be obtained in-game. The funds donated to Doctors Without Borders were used for medical support for patients without proper medical attention in areas of armed conflict, epidemics, and natural disasters around the world. The donation event has been held for 3 years in a row, generating great interest from users.

**Donation of 7,000 Trees to Areas with Wildfires in Turkey**

In July 2021, Turkey suffered massive wildfires which had destroyed more than 100,000 hectares of forest. When we heard the news from Black Desert users in Turkey, we organized an event to donate trees through Black Desert and Black Desert Mobile users around the world. Whenever the in-game “[Event] Small Tree” item is delivered to the NPC in the game, we donated the same number of trees. As a result, a total of 7,000 trees were donated to the TEMA(Turkish Foundation for Combating Soil Erosion).

### Activities in 2020

**KRW 50M Donation for Wildfires in Australia and Earthquake in Turkey**

At the beginning of 2020, we donated KRW 100 million to help Australia, which was hit hard by the worst wildfires in history, and Turkey, which suffered a massive earthquake. A large charity event was completed with the participation of Black Desert and Black Desert Mobile users. A KRW 50 million donation, each given to local relief organizations in Australia and Turkey, was used to help recover the damages and support the victims.

2021

- Donated KRW 100 million to Doctors Without Borders
- Donated KRW 10 million for wildfire relief in Turkey(7,000 trees)

2020

- Donated KRW 50 million for wildfire relief in Australia
- Donated KRW 50 million for earthquake relief in Turkey
- Donated KRW 100 million to Doctors Without Borders

2019

- Donated KRW 100 million to Doctors Without Borders



Termian Water Festival



Pictures Sent after Termian Water Festival

## Supporting Local Communities

At Pearl Abyss, we pay attention to our neighbors in need and promote the value of sharing and cooperation. To this end, we donated KRW 1.01 billion in 2020 and engaged in various community outreach programs in 2021. Part of Pearl Abyss' community outreach initiatives was made possible through the sponsorship of our users.

### Local Community Support by Year

#### Activities in 2021

##### Termian Water Festival

Termian Water Festival was held in 2020 and 2021 when it was difficult to go outside due to the pandemic, and we organized the Termian Beach Event with Black Desert and Black Desert Mobile users to present an exciting water park to orphans. To this end, the Termian Water Festival, which is the name of the beach in Black Desert and Black Desert Mobile, was held in the garden of the "Good House," an orphanage in Anyang. Children of all ages including teenagers enjoyed the day.

##### Donation for Children with Leukemia and Childhood Cancer

We donated KRW 20 million to Make-A-Wish Korea for children who are battling leukemia and childhood cancer by collecting Tokens of Sharing purchased by Black Desert and Black Desert Mobile users in the game. Children who have game-related wishes were invited to our office building and were given opportunities to fulfill their wishes.

##### Donation of Smart Devices for Youths Preparing for Self-reliance

In October 2021, we donated smart devices including tablet PCs to 20 people at three local childcare facilities in Anyang to support young people preparing to become self-reliant after completing their education.

##### Sponsorship for Busan Indie Connect Festival 2021

Pearl Abyss sponsored the Busan Indie Connect Festival 2021, a global indie game festival. This sponsorship was intended to increase influence within the game industry through the promotion of indie games and to help create an ecosystem. It also provided opportunities for indie game developers to communicate with gamers.

#### Activities in 2020

##### Donation of KRW 500M to COVID-19 Victims and Medical Professionals

In May 2020, we donated KRW 500 million to help COVID-19 victims and medical professionals in Daegu and Gyeongbuk. KRW 300 million was donated to Hope Bridge Association of the National Disaster Relief and KRW 200 million to Child Fund Korea to support medical staff and volunteers who are dedicated to preventing the spread of the virus and low-income families who were affected by the pandemic.

##### Supporting the Hearing Impaired with the Proceeds from Music

In 2019, we donated KRW 30 million, the proceeds from "Storm Rage" to the Sign Language Interpretation Center and two other places to support the hearing-impaired who have difficulty hearing music. In July 2020, we donated KRW 24 million from Black Desert Mobile's "Fighter X Windfury Road" and "Adventurer" collaboration song to Anyang City. The proceeds were used for emergency living expenses, replacement of devices, and renovation of outdated facilities through the Sign Language Interpretation Center in Anyang.

##### Donation for Creating Learning Environment at Anyang Children's Center

In September 2020, we donated KRW 50 million to the local children's center in Anyang as part of the Learning Environment Support Project in order to minimize the blind spots in education for local children without access to online classes due to COVID-19 and create a pleasant learning environment. The donation was used to purchase devices for online learning(laptops, PC), desks, chairs, and lockers at 21 local children's centers in Anyang.

#### Activities in 2019

##### Donation of KRW 100M for Wildfire Relief in Gangwon-do

In April 2019, we donated KRW 100 million for the recovery of wildfires in Gangwon and the relief of the victims through the Hope Bridge Association of the National Disaster Relief in April 2019.

2021

- Donated KRW 24 million in proceeds from the Black Desert Mobile music for people with hearing disabilities(Sign Language Interpretation Center Anyang)
- Donated KRW 20 million to support 4 children with incurable diseases(Make-A-Wish)
- Donated smart devices(worth KRW 20 million) to 20 young people preparing for self-reliance
- Built a swimming pool and organized events for a local children's center("Good House" in Anyang)
- Donated home appliances and furniture worth KRW 7,052,850(Anyang Children's House)



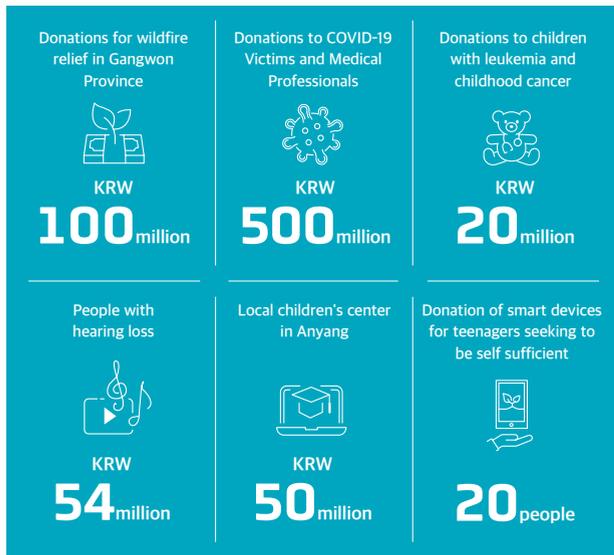
2020

- Donate KRW 500 million to the COVID-19 victims and medical professionals
- Sponsored Busan Indie Connect Festival
- Donated KRW 50 million to local children's centers to improve their learning environment(Anyang City Hall)
- Built a swimming pool and organized events for a local children's center("Good House" in Anyang)
- Donated KRW 20 million to support childcare centers through in-game events



2019

- Donated KRW 100 million for wildfire relief in Gangwon Province(Hope Bridge Association of the National Disaster Relief)
- Sponsored the pre-event of Busan Indie Connect Festival
- Donated adaptive furniture for children with disabilities
- Developed Indie Game Industry Support Project



### Emergency Relief Fund for ChildFund Korea in Response to COVID-19

The COVID-19 pandemic was especially challenging for underprivileged children. Pearl Abyss identified the support needed and provided emergency living expenses for low-income families and children facing challenging times due to the pandemic. Through the COVID-19 Emergency Relief Project, we donated KRW 1 million a month per household and KRW 300,000 per child from April to September 2020. To this end, we identified the needs through ChildFund Korea's nationwide network and donated KRW 200 million to 169 children in 16 cities and provinces. We also organized additional support through donations as part of the project.

#### What is Hope Fund?

Selection and support for low-income families according to the characteristics of employment type



**인형 친OO 아들의 엄마**  
 코로나19로 생계관란을 겪고 있었는데 지원해주셔서 감사합니다. 코로나로 저처럼 외국에 생활이 큰 도움이 되었고 큰 사랑을 받아 저희 가족들도 큰 감동을 받았습니니다. 좋은 일 꼭 써주세요 도울 주셔서 감사드립니다.

**부산 친OO 아들의 엄마**  
 남편의 건강과 두 아이들의 육아 및 집안일 그리고 코로나19로 인한 실직까지 모든 것이 지치고 힘들어서 다 포기하고 싶었지만 초록우산 긴급지원 덕분에 다시 힘을 내고 희망을 가질 수 있게 되었습니다. 국민 모두가 어렵고 힘든 시국일수록 다 같이 힘을 모아 이겨내야 하지만 저희같은 국민은 좋은 재난이 오면 모든 상황이 나아지고 싶어합니다. 하지만 초록우산의 후원으로 다시 이겨낼 수 있게 해주셔서 정말 감사드립니다.

**대구 친OO 아들의 담양자**  
 코로나19로 인해 아동 모의 통역활동이 중단되면서 아동 부의 일용직 근로를 통한 100만원 남짓의 수입으로 겨우 생계만 유지하며 생활하던 중 어린이재단의 도움으로 긴급생계비를 지원받게 되면서 위기상황에 대처하며 아이와 가족의 생존권을 보장받을 수 있었습니다. 또한 아이 용기를 얻어 아동 모는 더욱 열심히 구직활동을 통해 식음료장 근로를 시작하게 될 수 있었습니다. 지원금액만 의존하지 않고 스스로 열심히 살아가려 오늘도 노력하는 아이와 가족들에게 열심히 살아갈 힘을 주셔서 감사합니다.

**대전 이OO 아들의 엄마**  
 안녕하세요^^  
 저희에게 후원해주신분에게 감사할 따름이고 이만 글로 표현할 뻔하지만  
 항상 좋은 일만 일어나게 해주셔서 감사드립니다. 후원해 주신 용품들과 후원금(간접지원)으로 인해 정말 너무 잘 쓰고 있습니다.  
 저도 배움에 심고 노력할 힘에 초록우산 어린이재단을 항상 응원하며 감사히 생각합니다.  
 계속 후원해 주시길 바라고 또 한번 댕이드립니다.  
 정말 감사드립니다

Thank-you letters from parents(COVID-19 Emergency Relief Fund)

Handwritten letters expressing gratitude for the support received during the COVID-19 pandemic. The letters are written in Korean and mention the help from Pearl Abyss and ChildFund Korea.

Thank-you letters from children(ChildFund Korea)

### Employee Volunteer Activities

Our employees participate in various volunteer activities under the name of "Pearl-vengers." The activities are often organized in a contact-free form and don't require too much time or money to start. We also share our interest and love for our neighbors, society, and the environment with our families.

#### Employee Engagement

##### On-tact Kit Campaign

In 2021, Pearl Abyss launched On-Tact KIT distribution campaign, an event for all employees to participate, to promote a positive experience of volunteering. It was organized to promote the spirit of sharing and raise awareness among our employees in response to the COVID-19 pandemic. The employees who participated in this campaign select and donate among three kits that included "Condol," a corn husk doll, "Poljjak" shoes, and a pop-up book "Twinkle Twinkle Clean.". The finished products were delivered to children in Cambodia, the Philippines, and Vietnam, and a total of 85 employees participated in the campaign.



On-Tact Kit Campaign "Sharing Love"



Plogging Quest

### Donation of Proceeds from 2021 Limited Edition Calendar Sales for Children of Low-income Families

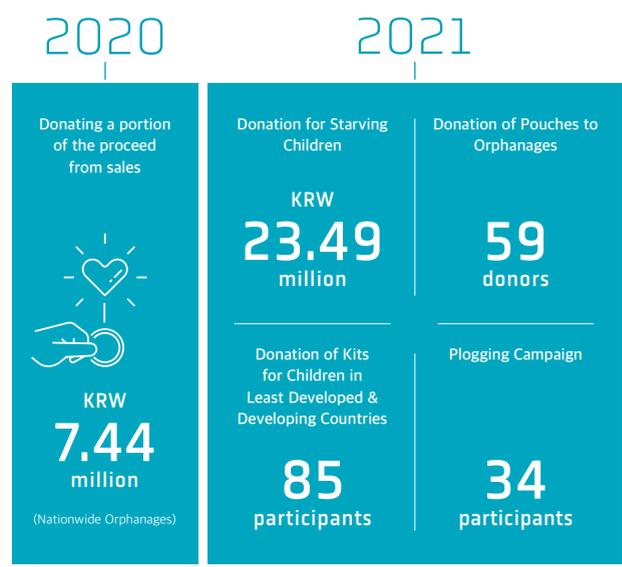
In December 2020, 90 of our employees and users of Black Desert and Black Desert Mobile donated KRW 23.49 million from the sale of the 2021 limited edition calendar for children of low-income families who are skipping meals.

#### Donation of Pouches to Orphanages

Our employees made pouches with hand-drawn pictures from children at the orphanage and donated them as presents. A total of 59 employees participated in this event and raised a total of KRW 1.3 million.

#### Plogging for the Earth and neighbors- "Jopping Quest"

In May 2021, we organized a plogging campaign where participants pick up litter while jogging. The term "plogging" is coined from the English word "jogging" and "ploacka upp," a Spanish term that means "picking up." Inspired by plogging, we launched our Jopping Quest. Thirty-four employees and their family members participated in the campaign, where they walked around their neighborhood to protect the environment.



# Customer

## Customer Satisfaction

### User-centric Value Creation

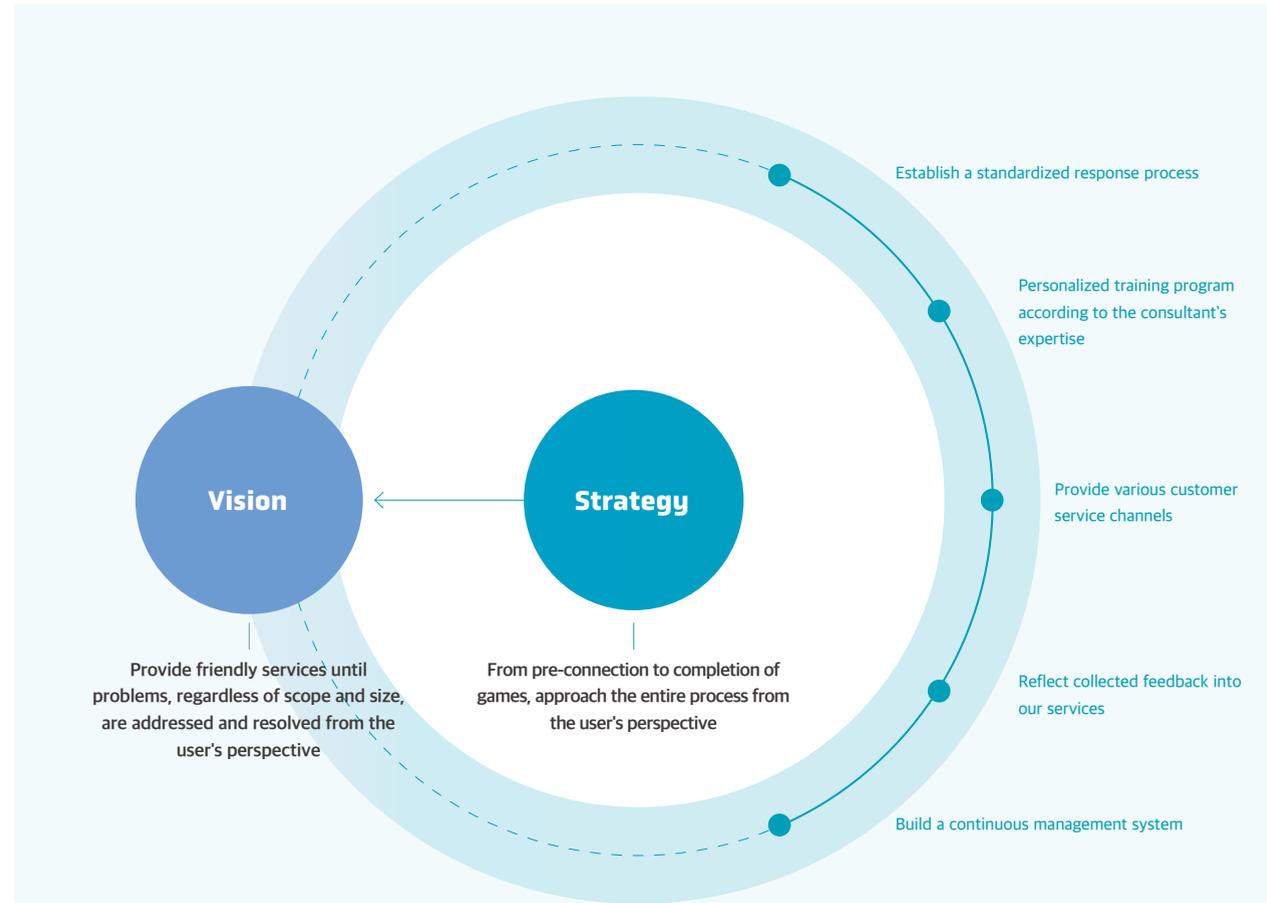
Pearl Abyss always provides user-centric services. We are committed to increasing customer satisfaction and value communication with users. We also listen to their input and incorporate their feedback into our practice through various online and offline channels.



### UN SDGs



## Customer Service Vision and Strategy



### Vision & Strategy

We define our vision for customer satisfaction as, “approaching service from the user’s perspective until we solve every problem.” To this end, we approach the entire process, from pre-access to the end of the game, from the user’s point of view. By establishing a standardized response process, we are able to provide fair services to all users while ensuring prompt, accurate, and friendly responses through our personalized training programs based on each representative’s level of expertise. We also try to collect input from as many users as possible by providing various customer service channels, including the customer support center, feedback forum, and Dev Talk Talk, and we are creating a rolling system to incorporate input from these channels into our practices.

## Customer Service Channels

### Customer Service Channels

To maintain close communication with users, we operate various customer service channels, including customer support, a hotline, offline support, an in-game channel, a web forum, an external forum(chat), a mobile app, and fax.

### Communication Channels & Processes

- CS

**Customer Support**

Respond to web inquiries through the customer support provided on each game’s website
- Hotline**

Respond to inquiries through the hotline(T.1661-8572)
- Offline Support**

Respond to inquiries at the offline support center
- In-game Support**

Respond to various reports and provide information through an operator character who is active in the game
- Website Forum**

For certain games, inquiries are submitted on specific forums on the website(and the operator or developer responds directly to comments).

  - Shadow Arena: Dev Talk Talk
  - Black Desert: Feedback Forum
- External Forum(Chat)**

For certain games, inquiries are submitted to the operator in the chat channel within the external voice chat program(Discord).

  - Shadow Arena • Black Desert Mobile GL
- Mobile App**

Respond to inquiries through the customer support center using the Black Desert+ app
- FAX**

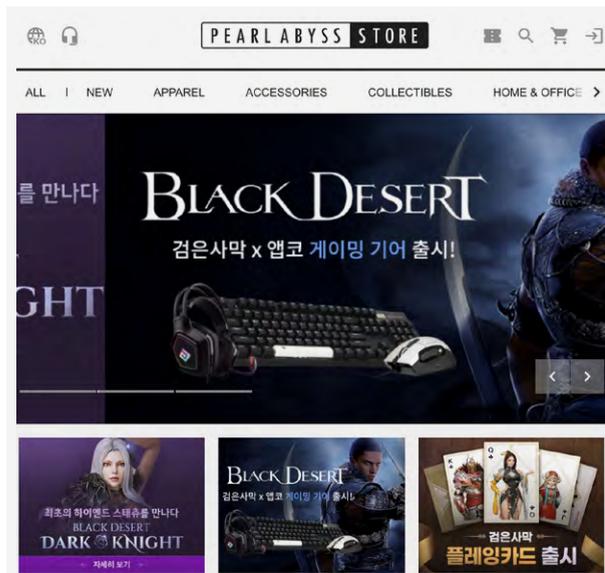
If supporting documents are required after the first inquiry, then they can be sent via fax.

## Communication with Users

Pearl Abyss hosts the Heidel and Calpheon Balls every year as part of its community support program for Black Desert, and during the services, a store selling various goods from the game is operated. We also organize a late-night talk and a real-time communication broadcast as part of our efforts to maintain close communication with our users.



Black Desert Heidel and Calpheon Ball

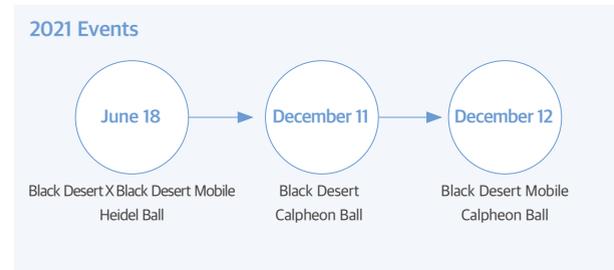


Pearl Abyss Store

## Black Desert Heidel and Calpheon Balls

The Heidel and Calpheon Balls are massive community festivals for Black Desert users covering all platforms, from Black Desert Online to Black Desert Mobile and Black Desert Console.

To show our appreciation for Black Desert users, we hold two big festivals every year. However, due to the pandemic, these were switched to online events in 2020 which were broadcast live around the world in various languages, including Korean, English, Russian, Spanish, Turkish, Portuguese, Japanese, Chinese, and Thai. The events were viewed live by more than 100,000 players around the world, and the announcement of road map created huge anticipation for future updates. In addition to the Black Desert IP, we are expanding the Black Desert fandom culture through the Calpheon Art Festival, an event that supports users' creations. Moving forward, we plan to organize an offline event after the pandemic to support the community and communication channels for our fans.



## Pearl Abyss Store

The Pearl Abyss Store opened in December 2020 with the goals of facilitating customer communication and building a fanbase for current and new IPs that are scheduled for future service. The store is a goods shopping mall that extends the experience of playing our games. We develop characters and various illustrations in the game, including clothing, office supplies, and fancy items. In 2021, we released items in collaboration with various brands and developed and sold high-quality goods. The Pearl Abyss Store ships not only to Korea, but around the world, and will continue to develop and sell goods for our new IPs.

## Late Night Talk(Black Desert)

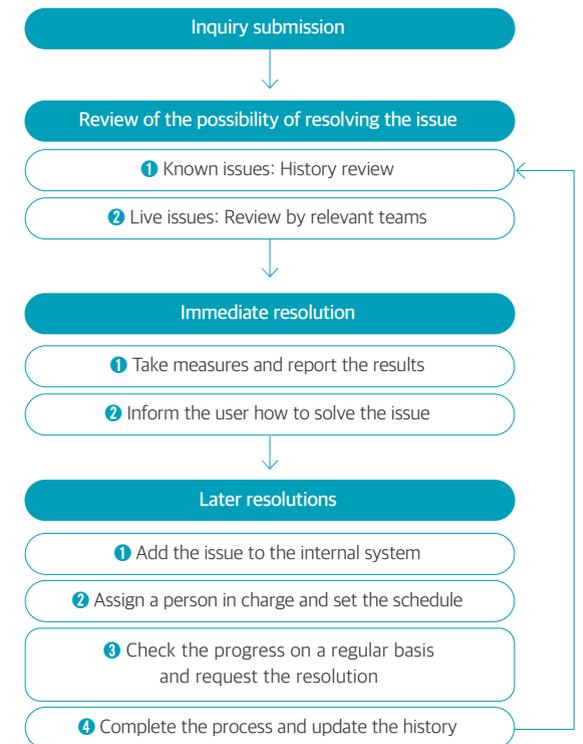
Late Night Talk is a real-time live stream for sharing the development direction of our games as we develop them together with Black Desert users. Since the first stream on our official YouTube channel on August 1, 2021, it has been streaming once a month. Moving forward, we will continue to bring new monthly content, and we are looking for ways to encourage more users to participate.



## VOC Management & Response

### Customer Support Process

At Pearl Abyss, we collect feedback from our users through various channels, including customer support, websites, applications, and a feedback forum. Based on what users tell us, we analyze their needs, and in responding to complaints, we identify areas for improvement. We are committed to maximizing our work efficiency by removing unnecessary documentation processes and encouraging direct communication between departments and managers so that complaints raised by users can be shared and addressed. We also regularly keep track of issues to ensure that none are neglected.



# ESG FACTS & FIGURES

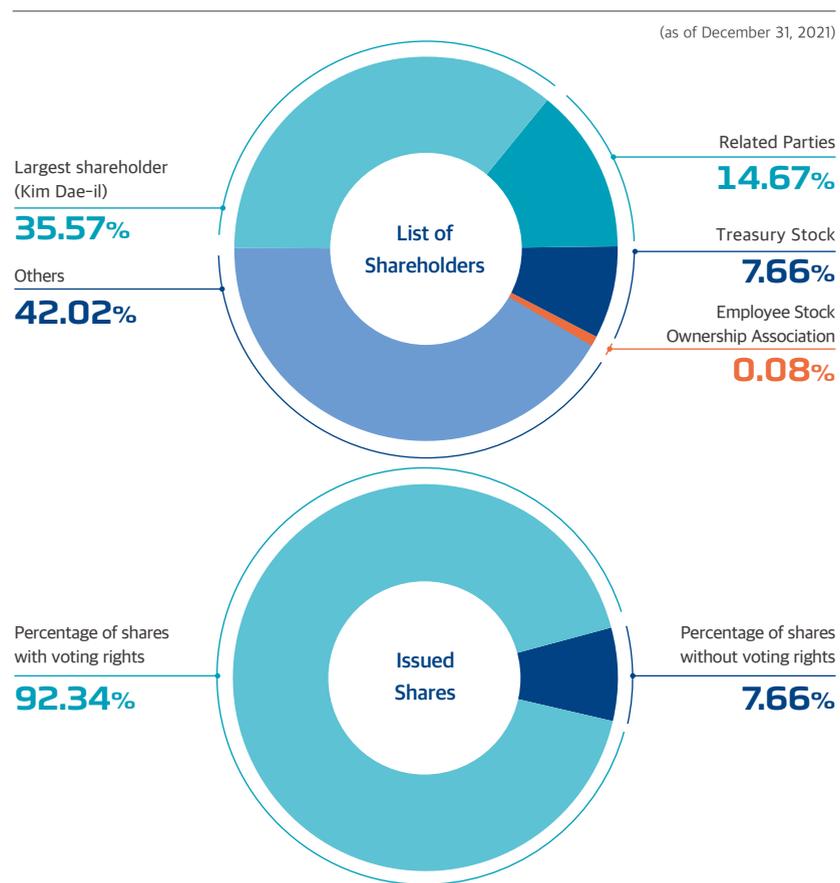
<b>GOVERNANCE</b>	<b>40</b>
<b>ETHICS &amp; COMPLIANCE</b>	<b>42</b>
<b>RISK MANAGEMENT</b>	<b>45</b>
<b>WIN-WIN MANAGEMENT</b>	<b>49</b>
<b>ESG DATASET</b>	<b>50</b>



## Corporate Governance

### Shareholding and Capital Structure

The largest shareholder of Pearl Abyss is Chairman Kim Dae-il, who owns 35.57% of the total issued stock. According to the Articles of Incorporation, a total of 1,000,000,000 shares can be issued. All stocks that have been issued are common shares, with voting rights granted according to the number of stocks. As of the end of December 2021, 66,221,500 shares have been issued including 5,068,570 treasury stocks plus 61,152,930 shares with voting rights, which account for 92.34%. In addition, we purchased our treasury stock in 2018 and 2020 to increase shareholder value. The value of the purchase totalled KRW 19.9 billion in 2018, which accounts for 1% of the market cap, and KRW 41.5 billion in 2020, which accounts for 2% of the market cap.



### Shareholder-Friendly Management and Advancement of Governance Structure

Pearl Abyss is committed to increasing value for its shareholders and building trust in the market by maintaining close communication with shareholders and investors through various channels and a shareholder-friendly IR policy. In order to improve shareholder access to information, the IR page is available on the website, and we participate in various IR events hosted by domestic and foreign securities companies to ensure transparency in our operations. Company stock was split in April 2021 to enhance shareholder value by increasing the number of outstanding shares. In addition, the company's ESG Committee was organized in March 2022 to implement ESG practices. Since then, efforts have been made to establish an environment that promotes ESG implementation. Going forward, we will continue to enhance ESG management by communicating with shareholder to meet with the development of ESG environment.

### Protection of Shareholder Rights

At Pearl Abyss, we ensure that our shareholders are informed about the general meeting of shareholders well in advance and make sure they can exercise their shareholder rights. By announcing the resolution to convene the 2021 general meeting of shareholders via an electronic document, we encouraged shareholders to exercise their voting rights by proxy or to participate in the general meeting of shareholders so that they could exercise their voting rights through electronic voting.

### Implementation of a Shareholder Return Policy

Pearl Abyss will continue to review treasury stock purchases and dividends to enhance shareholder value, and promote the investment and business environment to support the company's financial priorities and sustainable growth.

### Composition and Independence of the BOD

Pearl Abyss ensures the independence of its board of directors by separating roles of chairman and the CEO. In accordance with regulations, BOD meetings are held every quarter to strengthen the roles of board members and the transparency of management. As of the end of 2021, two out of eight board members were independent directors.

### Our Efforts to Support Shareholder-Friendly Practices & the Advancement of Governance

- Organized the ESG Committee**  
March 2022
- Reviewed the proper dividend level**  
Stated in the Articles of Incorporation
- Provided sufficient information about the general meeting of shareholders**  
Exercise voting rights through e-voting
- Secured the independence of the board**  
Separated the roles of Chairman and CEO

## BOD Operation

The board of directors is our highest decision-making body. It is composed of executive and independent directors and a standing auditor who are experts in business management, finance, accounting, law, and development. In the case of independent directors, each department provides the information necessary for them to perform their job, and external training is available to help them gain insight into operations. To strengthen the role and responsibilities of the standing auditor, we monitor amendments to laws and regulations and regularly conduct external training using the consolidated internal accounting management system. We also comply with the Articles of Incorporation and the BOD Regulations for overall operations, and for review and prompt decision-making on proposed agendas, we hold BOD meetings every quarter along with special meetings when necessary. In 2021, we held seven meetings, including four regular board meetings and three special meetings, and voted on twenty-two resolutions and six reports.

## The ESG Committee

In March 2022, Pearl Abyss established the ESG Committee under the Board of Directors to enhance its long-term corporate value and drive sustainable growth with a focus on the environment, society, and corporate governance. The committee manages, oversees, and reviews our ESG strategies and makes decisions on our ESG policies and other matters necessary for ethical practices and compliance.



### Board of Directors <sup>1)</sup>

(as of December 31, 2021)

Category	Name	Gender	Responsibilities	Experience	Date of Appointment
Executive Directors	Kim Dae-il	Male	Development & Operations	<ul style="list-style-type: none"> <li>Gama Soft</li> <li>NHN Games</li> <li>CEO, Pearl Abyss</li> <li>(Present)Chairman, Pearl Abyss</li> </ul>	SEP 2010
	Jeong Kyeong-in	Male	General Management	<ul style="list-style-type: none"> <li>Materials Science and Engineering, Seoul National University</li> <li>Taesan LCD</li> <li>Hewlett-Packard Korea</li> <li>LB Investment</li> <li>Non-Executive Director, Pearl Abyss</li> <li>(Present)CEO, Pearl Abyss</li> </ul>	JUN 2016
	Seo Yong-soo	Male	Graphic Development	<ul style="list-style-type: none"> <li>IsotNet</li> <li>Jinkyung CNS</li> <li>Nexon(Devcat)</li> <li>E-Fusion</li> <li>NC(LO)</li> <li>NHN</li> <li>WebZen(C9)</li> <li>(Present)Executive Director, Pearl Abyss</li> </ul>	JAN 2010
Independent Directors	Ji Hee-hwan	Male	Program Development	<ul style="list-style-type: none"> <li>Jungkyung Engineering College</li> <li>NHN Games</li> <li>(Present)Executive Director, Pearl Abyss</li> </ul>	SEP 2013
	Yoon Jae-min	Male	General Management	<ul style="list-style-type: none"> <li>CEO, Winoble</li> <li>CEO, ETWOWEB</li> <li>CEO, GameAbout</li> <li>Auditor, Pearl Abyss</li> <li>(Present)Executive Director, Pearl Abyss</li> </ul>	FEB 2011
	Heo Jin-young	Male	Service	<ul style="list-style-type: none"> <li>SK Communications</li> <li>OnNET</li> <li>Daum Game</li> <li>(Present)Executive Director, Pearl Abyss</li> </ul>	JAN 2017
	Han Jeong-hyeon	Male	Business Consultation	<ul style="list-style-type: none"> <li>PhD, Computer Engineering, Seoul National University</li> <li>MD, Univ. of Cincinnati, Computer Science</li> <li>PhD, Univ. of Southern California, Computer Science</li> <li>NIST Researcher, U.S. Department of Commerce</li> <li>Associate Professor, Department of Information and Communication Engineering, Sungkyunkwan University</li> <li>PM, Digital Content, Ministry of Information and Communication   Ministry of Knowledge Economy</li> <li>(Present)Professor, Department of Computer Science, Korea University</li> <li>(Present)Independent Director, Pearl Abyss</li> </ul>	MAR 2017
	Choi Hyeong-kyu	Male	Business Consultation	<ul style="list-style-type: none"> <li>Bachelor of Computer Science, KAIST</li> <li>Techno MBA, KAIST</li> <li>Director of NHN Entertainment</li> <li>(Present)CEO of Devsisters Ventures</li> <li>(Present)Independent Director, Pearl Abyss</li> </ul>	MAR 2018

<sup>1)</sup> ESG Committee(established on March 30, 2022) members:  
Heo Jin-young(Chair, executive Director), Yoon Jae-min(Executive Director)

## Evaluation and Remuneration of the BOD

Pearl Abyss compensates its directors and auditors based on their duties and performance and according to the limits set by the general shareholders' meeting and the company's executive remuneration policies. Compensation for executive directors consists of salaries and performance bonuses. Salaries are determined based on the executive remuneration table and the rate of increase in executive standards, as well as the level of pay in the industry. Overall performance is based on leadership, job performance, expertise, and responsibilities. Performance bonuses are calculated in comprehensive consideration of sales and sales profit, leadership, expertise, and the executive directors' level of responsibility.

### Remuneration for the BOD

(Unit: KRW million)

Category	Number of Directors	Total Amount	Per Person Average
Registered Directors(excluding Independent Directors and members of the Audit Committee)	6	2,729	455
Independent Directors(excluding members of the Audit Committee)	2	36	18
Members of Audit Committee	-	-	-
Auditors	1	126	126

## Audit Body

### Standing Auditor

In accordance with Article 542-10 of the Commercial Act, standing auditors perform audits. The standing auditor focuses on securing the independence and soundness of corporate governance by drawing upon his or her expertise in the game industry.

### External Auditor

Pearl Abyss ensures the fairness and transparency of accounting information through independent external audits. To reinforce the independence and expertise of the external auditor, during the appointment process, it is evaluated for independence, compliance with laws, and industry expertise and experience. In January 2021, the Auditor Selection Committee re-appointed Samil Accounting Corporation as the external auditor for three fiscal years from January 1, 2021, to December 31, 2023, and rated the company "appropriate."



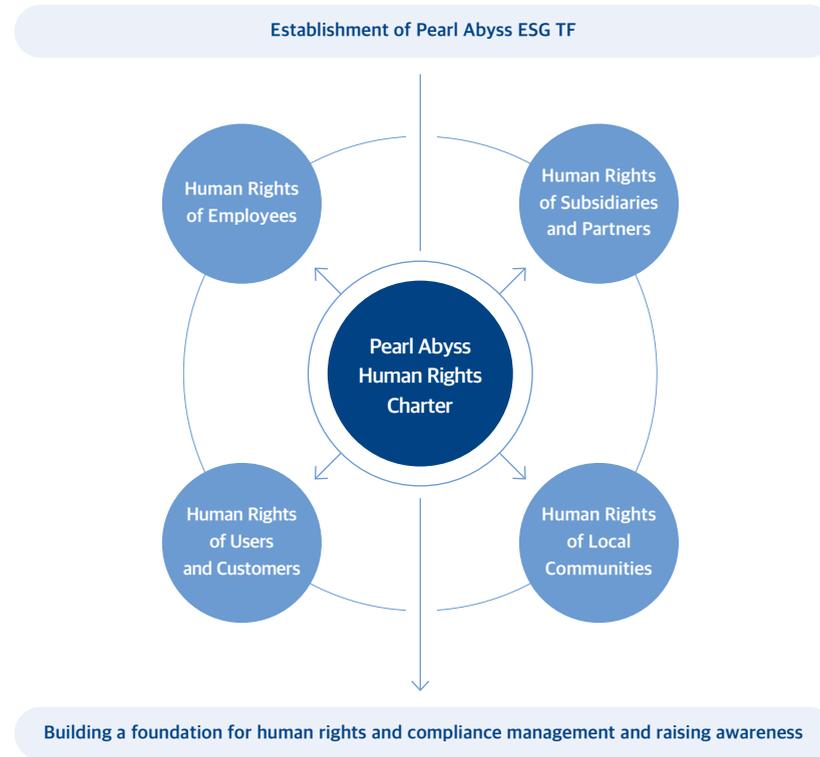
# Ethics & Compliance

Pearl Abyss is committed to creating a corporate culture based on trust by internalizing ethical practices and compliance management, establishing an in-house Human Rights Charter, compliance organization and monitoring system, operating an ethics reporting center, and training employees.

## Code of Ethics

### Human Rights Charter and Operating Policy

Pearl Abyss established the Pearl Abyss ESG TF in June 2021 to promote sustainable ESG management while raising awareness of ethical practices and compliance in all businesses. We support global human rights initiatives and respect the laws and ethical standards of local communities where we operate our business. When it comes to human rights issues, we apply stricter standards than required by regulations. For the establishment and promotion of human rights management, the scope of application includes not only our executives and employees, but also all our internal and external stakeholders such as users, subsidiaries, and partners. To this end, we have set operating guidelines for our whistleblower program and are operating a grievance-handling channel on an ongoing basis. By ensuring the anonymity of whistleblowers and promptly responding to feedback, we are promoting human rights and compliance in our business operations.



## Compliance System

### Programs for Compliance with the Code of Ethics

At Pearl Abyss, we hold a seminar for communication with the management once a year to raise awareness of ethical practices. We also organize ethics training sessions once a year for all employees and monthly compliance training for new hires, and require all employees and business partners to sign the ethics pledge. In addition, we run a “No Holiday Gifts” campaign along with a program for reporting any gifts received from other companies(Corporate Ethics Keeper) and the whistleblowing system. We protect the identities of whistleblowers and work to raise awareness of ethical practices and compliance among all executives and employees.

## Compliance Organization

### Organization in Charge

Pearl Abyss’s HR Committee, which is chaired by CEO, serves as a control tower for improving the company’s organizational culture, and deals with ethical management, gender equality, and the prevention of harassment in the workplace. The committee meets every week to discuss ways to improve corporate culture and support stable operations while managing risks that affect the company’s competitiveness and the working environment. In addition to the HR Committee, the Audit Team has been established and is operating a whistleblowing system for daily, regular and special audit practices to establish a more transparent and ethical corporate culture, while RMO sets up responsive measures to deal with issues. Other departments such as the Management Support Office, Legal Team, and Recruitment Training Team are also working on these tasks.

### Efforts to Improve Organizational Culture

 Expanded the Grievance Center	 Implemented solutions for improving organizational culture	 Conducted training to prevent harassment in the workplace
 Conducted training for sexual harassment awareness	 Performed a survey of the organization	 Established a whistleblowing system

## Compliance Risk Management

We are operating our Corporate Ethics Keeper program to monitor compliance with internal control standards and laws and to manage risks as part of our efforts to promote a healthy corporate culture.

### Corporate Ethics Keeper

The purpose of Pearl Abyss's Corporate Ethics Keeper program is to ensure compliance with the company's Code of Ethics and protect our employees. One of our principles that neither employees nor their families receive any favors or benefits from our business partners, regardless of monetary value or reasons. Any offers, gifts entertainment and such should be reported through Corporate Ethics Keeper, and they will be returned or rejected with a polite message, or donated for charity. Through this process, we protect the identity of the whistleblower and ensure that he or she is not subject to any unfair disadvantages while also sharing the results with him or her. Since its establishment, an average of eight reports have been made per month, and necessary measures have been taken and completed as we take the lead in advancing a corporate ethics culture. We encourage the participation of our employees in establishing a healthy corporate culture and making necessary improvements in this process through continuous monitoring.

## 떨어비스 기업 윤리지킴이

올바른 기업문화 정착을 위해 '기업 윤리지킴이'를 찾아주세요 감사합니다.

떨어비스는 윤리강령 준수와 떨어비스 임직원 보호를 목적으로 '기업 윤리지킴이'를 운영 중입니다. Business Partner로부터 금품 및 편의 등을 제공 받으셨을 경우 '기업 윤리지킴이'에게 알려주세요.

'기업 윤리지킴이'는 신뢰를 바탕으로 운영되며, 알려주신 내용에 대해서는 본인의 동의 없이 그 신분을 노출하거나 이를 입시하는 어떠한 정보도 공개하지 않습니다.

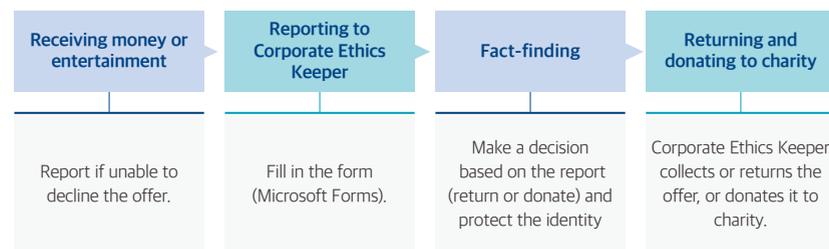
Business Partner와의 공정한 거래를 위해, 금품(선물) 또는 향응 등의 제인이 있었다면 회사 차원에서 취합하여 정중한 메시지와 함께 반송(거절) 또는 복지단체에 기부하고자 합니다.

◆ 다음 실문에 따라 접수할 내용을 적어주시기 바랍니다. ◆

- ◆ 시정 통보에 위배되는 점대, 향응 등을 적법한 절차 없이 제공받은 사실이 밝혀지면, 취업규칙에 인거하여 징계할 수 있음을 양지하여 주시기 바랍니다.
- ◆ 과거에 금품(선물) 또는 향응을 제공받으신 적이 있는 경우는 '기업 윤리지킴이'와 상의하여 주시기 바랍니다.
- ◆ 기업 윤리지킴이( @help\_ethics ) : \_\_\_\_\_

"Corporate Ethics Keeper" Application Form

### Corporate Ethics Keeper Reporting Process



## Reporting Violations

Any violations of the company's Code of Ethics or internal accounting regulations can be reported to the Corporate Ethics Reporting Center. The reporters remain completely anonymous, and all reports are investigated and handled fairly.

### Corporate Ethics Reporting Center

We operate our Corporate Ethics Reporting Center with the goal of creating a transparent and ethical corporate culture. Through this channel, employees can consult on and report any unethical conduct, including demands for money, valuables or entertainment, as well as corruption and other abnormal practices. Reports can be made under a real name or anonymously by anyone, including executives and employees, business partners, other parties to a transaction or a third party related to the report, and all reports are investigated and handled fairly and strictly under the supervision of our audit team.

### Corporate Ethics Reporting Center



## Reporting Target

Violations of the Code of Ethics
<ul style="list-style-type: none"> <li>• Corruption—e.g., embezzlement, misuse of company assets(including digital assets, in-game items and character information) and misappropriation of business opportunities</li> <li>• Unauthorized use and disclosure of information owned by the company—e.g., trade secrets, customer information, and information about the company</li> <li>• Unfair practices—e.g., bribery, unfair trades(unfair selection of suppliers)</li> <li>• Other unethical business practices—e.g., sexual harassment</li> </ul>
Violations of Internal Accounting Regulations
<ul style="list-style-type: none"> <li>• Creating accounting information that violates laws and company policies</li> <li>• Forgery, alteration, or destruction of accounting information</li> <li>• Acts of designing, operating, evaluating, and reporting internal accounting systems in violation of laws and company policies</li> <li>• Instructing others to commit the above violations</li> <li>• Other unfair accounting-related practices</li> </ul>

## Principle of Confidentiality

Consultations and reports as well as the identity of the whistleblower are kept strictly confidential. Reporters will not be subject to any unfair disadvantages or discrimination under any circumstances.

### Operating Guidelines for Whistleblowing

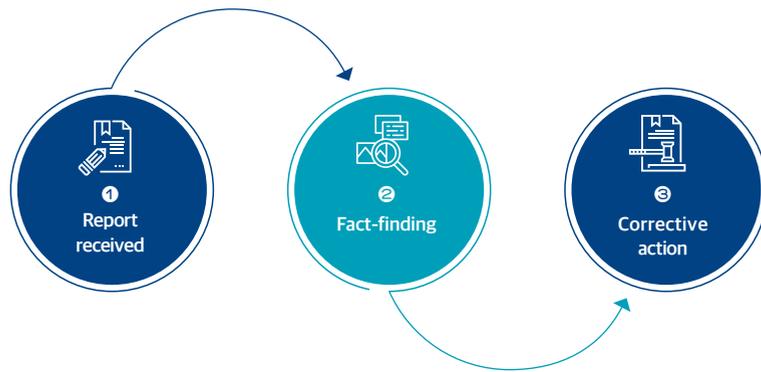
#### Article 7(Protection of Whistleblowers)

- 1 The audit department shall keep the identity of whistleblowers and the content of reports strictly confidential, and ensure that only authorized personnel have access to the information.
- 2 Anyone with access to the reports shall keep the identity of whistleblowers confidential.
- 3 The company shall keep whistleblowers anonymous and prevent any unfair disadvantages or discrimination against whistleblowers.
- 4 In the event of a violation of Article 3-3, the company shall take disciplinary action against the violator in accordance with the policies.

### Whistleblowing Process and Status

There were a total of 12 whistleblowing cases in 2020 and 7 incidents in 2021. Necessary measures have been taken in response to all reports.

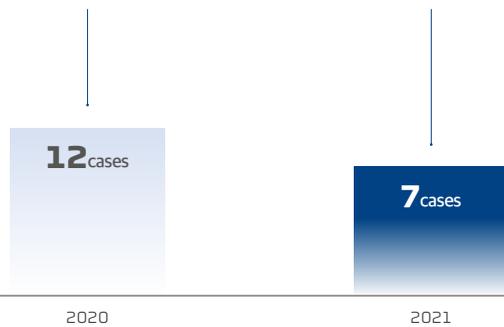
Handling Process



Status of the Report

Measures were taken for 12 cases (1 ethical grievance case and 11 other cases)

Measures were taken for 7 cases (1 ethical practice case and 6 other cases)



### Internalization of Ethical Practices and Compliance

We organize online and offline training for our employees to internalize ethical practices and compliance. Corporate-wide online training is held once a year along with monthly offline compliance training for new employees.

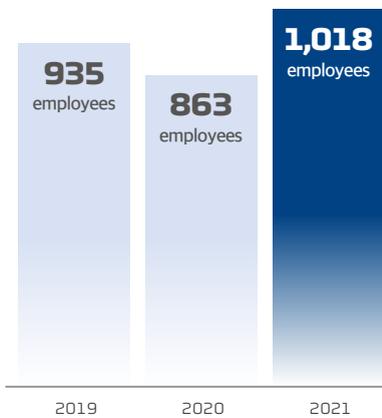
#### Online Corporate-wide Ethics Training

We conduct annual ethics training once a year for all employees as part of the mandatory training required by law. This training covers the Code of Ethics, ethical management, and case studies, and it is provided to new employees along with a consent form. In 2021, all personnel subject to the training(1,018 employees) completed the online training.

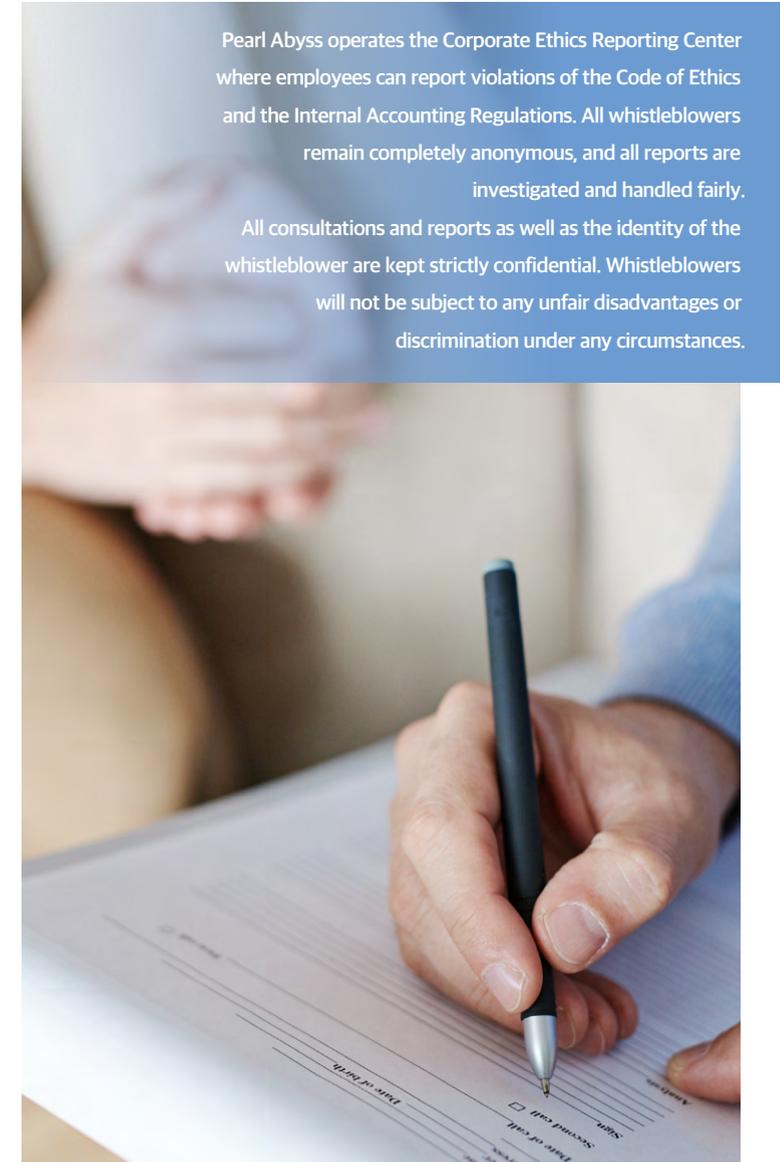
#### Offline Compliance Training for New Employees

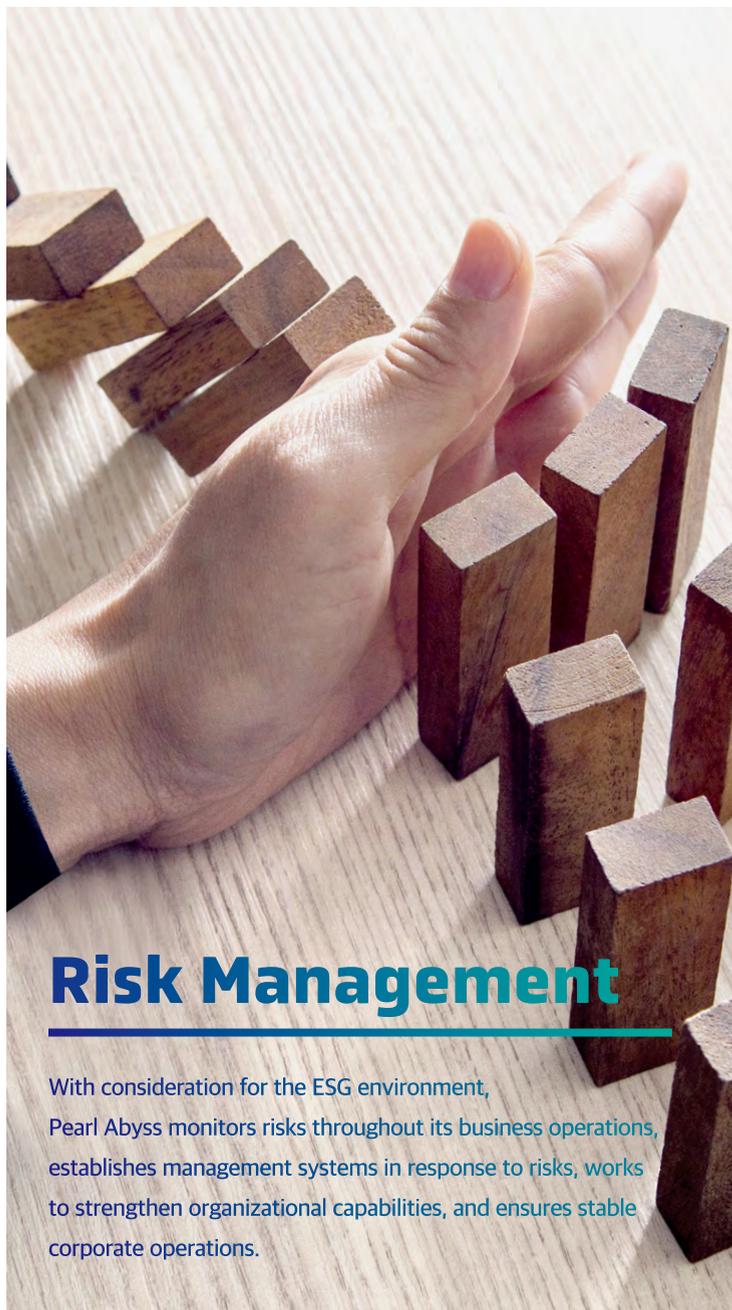
Offline compliance training for new employees is conducted every month. In order to prevent violations that may occur in a game company, the training focuses on the Unfair Competition Prevention Act and the Copyright Act.

Ethics Training Record



Compliance Training Record





# Risk Management

With consideration for the ESG environment, Pearl Abyss monitors risks throughout its business operations, establishes management systems in response to risks, works to strengthen organizational capabilities, and ensures stable corporate operations.

## Risk Management System

Pearl Abyss is committed to dealing with not only financial risks related to liquidity, but also risks caused by external environmental changes, such as the growing demand for social responsibility, strengthened rights and interests of users, improvements in the working environment in the IT industry, prevention of over-indulgence in gaming, and regulatory requirements on probability of random boxes. That is why we are establishing a risk management system in the form of committees and task forces in various areas, including the HR Committee chaired by the CEO, the RMO(Risk Management Organization) under the COO, the Policy Cooperation Office under the CEO, and the Financial Planning Office under the CFO.

<p><b>HR Committee</b></p> <p>As the organization that oversees the company's human resources and corporate culture, the HR Committee is dedicated to improving organizational culture and labor-management relations by securing talent and preventing turnover and harassment in the workplace, with a focus on ethical management and gender equality.</p>	<p><b>RMO</b></p> <p>Monitors and manages risks associated with business operations and services, and takes necessary actions when issues arise.</p>
<p><b>Information Security Committee</b></p> <p>Establishes and manages the information security system, including gaming services and personal information management.</p>	<p><b>COVID-19 Response TF</b></p> <p>Takes a corporate-wide responses to protect our employees safe from COVID-19.</p>
<p><b>Operation Policy TF</b></p> <p>As part of the organization that establishes policies on the operation of services, the Operation Policy TF protects users' rights and interests and ensures fair operations. It is also in charge of the training of operators.</p>	<p><b>Policy Cooperation Office</b></p> <p>Responds to various domestic policy changes and monitors regulatory risks across industries.</p>
<p><b>Financial Planning Office</b></p> <p>Manages financial risks related to liquidity, currency, interest rates, and credit.</p>	

## Risks and Opportunities

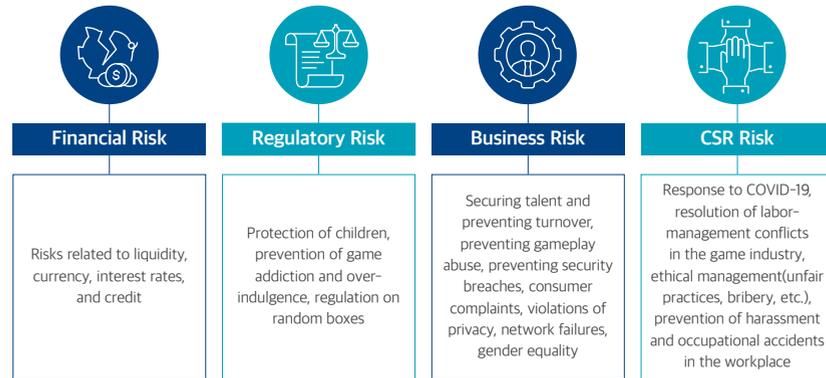
### Risk Analysis

Businesses are always exposed to environments where various risks and opportunities coexist. Pearl Abyss analyzes risk factors in terms of business operation, the job environment, services, and finance so that we can turn them into opportunities.

<p><b>Business Factors</b></p>	<ul style="list-style-type: none"> <li>• Expansion of the boundary-free global game market</li> <li>• Regulatory requirements on the probability of random boxes</li> <li>• Growing demand to put the obligations of business operators in line with the protection of children</li> <li>• Social responsibility for the registration of game addiction codes</li> <li>• China's tightening of regulations on games and Korean content</li> </ul>
<p><b>Job Environmental Factors</b></p>	<ul style="list-style-type: none"> <li>• Response to COVID-19</li> <li>• Competition to secure talent</li> <li>• Improving the working environment in response to the 50-hour work limit policy</li> <li>• Labor-management conflict in the game industry</li> <li>• Awareness of sexual issues in the workplace</li> <li>• Employee grievances(e.g., prevention of harassment in the workplace)</li> <li>• Psychological pressure and stress relief</li> <li>• Corporate responsibility for occupational accidents and safety</li> <li>• Working environment due to the establishment of the 50-hour work limit policy</li> <li>• Awareness of ethics among members</li> </ul>
<p><b>Service Factors</b></p>	<ul style="list-style-type: none"> <li>• Protection of users' rights and interests and increase in user engagement in operations</li> <li>• Collective action of users against companies</li> <li>• Negative public opinions on social media</li> <li>• Growing social demand for equality and political correctness</li> </ul>
<p><b>Financial Factors</b></p>	<ul style="list-style-type: none"> <li>• Liquidity risk</li> <li>• Currency risk</li> <li>• Interest rate risk</li> <li>• Credit risk</li> </ul>

## Potential Risk Response Activities

### Risks Managed by Pearl Abyss



### Risk Response Activities

At Pearl Abyss, we respond not only to financial risks, but also to non-financial risks such as regulatory risks, business risks, and social responsibility risks. Our activities and efforts to reduce the company's potential risks are centered on the relevant organizations, but when necessary, we carry out our responses all together..

#### HR Committee

Since 2017, HR Committee meetings have been held weekly with CEO as chairperson and attended by executives, the heads of departments and the head of the HR Culture Office. We are taking the lead in improving our corporate culture and establishing HR policies and operating plans in response to changes in the environment, including talent recruitment strategies and compliance with the 52-hour workweek policy. We are committed to raising employee satisfaction through efforts to ensure the stable operation of the company in response to risks that impair our competitiveness and worsen the working environment as we deal with intensifying competition in securing programmers, labor-management conflict, and psychological pressure on employees, as well as harassment in the workplace.

In 2021, we established our compensation system to increase employee satisfaction(individual annual salary increase, KRW 8 million lump-sum increase for all employees in 2021, company-wide stock compensation program). We are also handling grievances more effectively by expanding our grievance center, and providing psychological counseling for employees, offering training programs to prevent harassment in the workplace and improve awareness of sexual ethics, providing leadership training for executives, conducting organizational surveys in 2021, and implementing measures for improvement.

#### RMO and Operational Policy TF

In response to the growing demand for users' rights and interests and CSR of game companies, RMO(Risk Management Office) is seeking solutions to deal with company mistakes and user complaints that occur during operation, taking effective measures to prevent recurrence, and playing a key role in planning strategies to restore trust. Meanwhile, Operational Policy TF is helping with decision making on issues that are difficult to resolve on their own.

Operation Policy TF is responsible for checking guidelines on service operation and establishing a user-friendly policy to ensure stability. We also prepare behavioral guidelines for training that service operators should follow, collect and manage country-specific considerations that operators should take note of when performing global services, and guide them to reflect them in their work.

By doing so, RMO and Operation Policy TF are developing social media activity guidelines, including revised service operation policies and terms, the definition of banned words, precautions and event management by country and region, the establishment of game usage guidelines for operators, and external broadcasting of employees while engaging in various activities, such as reviewing the risk of collaboration with partners, monitoring copyright infringement, and dealing with illegal programs and websites.

#### Financial Planning Office

Financial Planning Office oversees asset management and planning while predicting and dealing with regulatory changes. It also assesses the impact of regulatory changes on our business model and capital requirements and manages financial risks such as liquidity risk, currency risk, interest rate risk, and credit risk.

#### Liquidity Risk

For liquidity risk, where we may have difficulty in meeting our obligations in terms of financial liabilities, we monitor and maintain our cash flow through annual business strategies to cover general estimated operating expenses. We are also adjusting the size of our debt to maintain sufficient cash flow based on our mid- to long-term business plan.

#### Currency Risk

As a global game service provider, we are exposed to currency risk for sales denominated in currencies other than the Korean won. The main currencies in which transactions are conducted are USD, JPY, TWD, and RUB, and we hold vehicle currencies with high marketability such as USD, JPY, and EUR. Risk is also managed by checking the status of foreign currency holdings on a monthly basis and adjusting positions to limit holdings of more than a certain percentage.

#### Interest Rate Risk

There is risk in the fluctuation in value of the company's assets and liabilities due to changing market interest rates. The company holds both financial assets and liabilities at variable and fixed interest rates. We manage our interest rate risk by adjusting the proportions of variable-rate financial assets and liabilities and fixed rate financial assets and liabilities according to market conditions.

#### Credit Risk

This is a risk of financial loss to the company as a result of a customer or a related party not fulfilling its contractual obligations on financial instruments, and this mainly arises from trade receivables and investment assets for customers. Our exposure to credit risk is affected by the characteristics of each customer and related party, and we evaluate the financial credit of our customers and other parties in consideration of their financial status, experience, and other factors to manage our credit risk.

#### Information Protection Committee

In order to provide a smooth gaming experience for users and to protect their privacy, the Information Security Committee establishes relevant regulations and guidelines, discloses our security standards to all employees, including those of subsidiaries and affiliates, and conducts security training. We also monitor and respond to external threats in real-time, and are creating an environment for detecting and responding to cyberattacks.

The committee is responsible for the establishment, revision, and abolition of regulations and guidelines, the review of information security and privacy protection activity plans, records of security incident handling, and processes for responding to internal or external events(business requirements, business processes for achieving the current business requirements, regulatory or legal environment) that may affect the ISMS(Information Security Management System), feedback from stakeholders, the review of the results of following-up on reported risks, and other issues that the chairpersons consider necessary. Decisions are also made on the allocation of protection resources, the risk level and the risk tolerance level for determining the target of the application of the protection measures based on the result of the risk assessment, measures to prevent the recurrence of security breaches, and matters related to the improvement and development of information security measures and systems.

#### Policy Cooperation Office

Policy Cooperation Office manages risks to offer a smooth gaming service environment based on laws and policies. The office is mainly in charge of responding to policies and preventing risks through game policies and the systematic management of external organizations. The risks include game policy violations(subscription withdrawal, advertisements, game ratings, protection of minors,regulation on random boxes), game service-related risks(non-compliance with and violation of policies), disputes and litigation(mediation of disputes with external organizations, such as the Content Dispute Committee, Consumer Agency, Fair Trade Commission), and prevention of decline in credibility(reduced credibility due to collective action by users, such as trucker protests, concerns about decline in value and regulatory investigations). To this end, we developed an integrated global policy checklist based on legal requirements and established measures for inspections and improvements in each country and service.

# Tax Risk Management

## Tax Risk Management Policy

Recognizing that compliance with tax laws and fair tax payment not only contribute to the national economy, but are also part of our social responsibility for sustainable practices, we ensure strict compliance with domestic and foreign tax laws and maintain a transparent relationship with the domestic and local tax authorities in order to file and pay taxes. We have established tax principles to manage the various tax risks that may arise, and our tax payment information is disclosed through our annual business report.

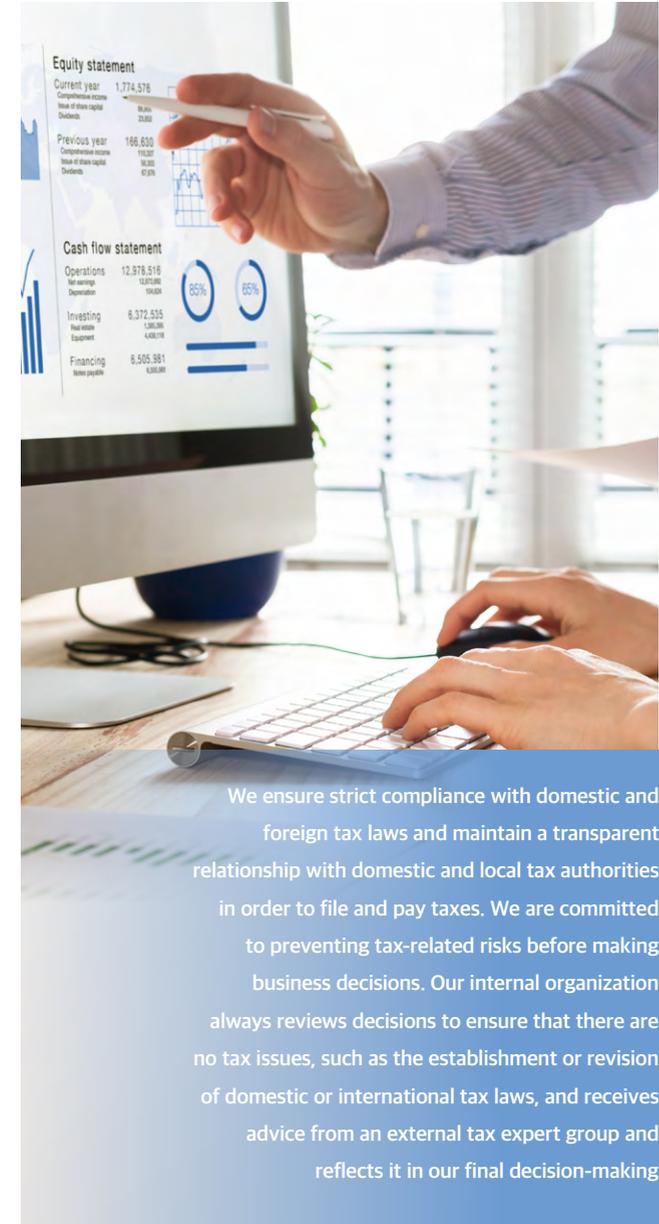


## Tax Risk Assessment Process

We are committed to preventing tax-related risks before making business decisions. Our internal organization always reviews decisions to ensure that there are no tax issues, such as the establishment or revision of domestic or international tax laws, and receives advice from an external tax expert group and reflects it in our final decision-making.

## Tax Risk Management Activities

We carefully conduct tax risk management in line with our company policies and principles, and our tax information is disclosed transparently.





COVID-19 Control Tower

We have established the Corona-19 TF, an in-house control tower for managing the pandemic and building a response system. In the event of a suspected or confirmed case within the company, there is a specific response scenario for each situation to prevent infection and normalize business operations as soon as possible. So in the case of an emergency, we are able to carry out quarantine procedures, group PCR tests, and self-isolation of employees. We also operate the 24-hour COVID-19 Report Center to expedite our response process.



Contact-free Working Environment

In case the situation elevates, we have changed our work environment to contact-free. In doing so, infrastructure was quickly reorganized so that all employees could work from home, and people with suspected cases can switch to telecommuting without delay. As part of our efforts to minimize contact, we deliver PCs and monitors to employees' homes to support telecommuting so that they can work in an environment similar to their existing work environment.

[Special]  
**Response to COVID-19**

COVID-19 has emerged as a global crisis and is still ongoing, causing an enormous impact on and changes to our economy, industry, and society as well as our daily life. At Pearl Abyss, we have established the Corona 19 TF, an in-house control tower for managing the pandemic and the crisis caused by the virus. By taking a preemptive approach to the situation, we have demonstrated a prompt response to prevent infection and normalize business operations as soon as possible.



Creating a Safe Space

A full-body sanitizer and thermal imaging camera are installed at the entrance of our office building to prevent infection and we supply masks to all employees on a daily basis to ensure that there is no shortage of personal quarantine supplies during work. We temporarily shut down our healing rooms(massage rooms), where there was frequent contact, and took appropriate quarantine measures including social distancing and adjusting the operating hours for essential facilities such as the cafeteria. As per the government's quarantine guidelines, we have relocated offices throughout the company to reduce the density of office spaces.



Company-wide campaign

Various campaigns are being carried out to support quarantine procedures and join in efforts to respond to COVID-19. Vaccinated employees were provided with a gift certificate worth KRW 100,000 as well as paid leave of up to four days to encourage our employees to get the jab. Through a promotional campaign using in-house printed materials and sculptures, we are creating an environment where people can incorporate personal quarantine rules into their daily life, such as wearing a mask, washing hands, and filling out a self-quarantine questionnaire.



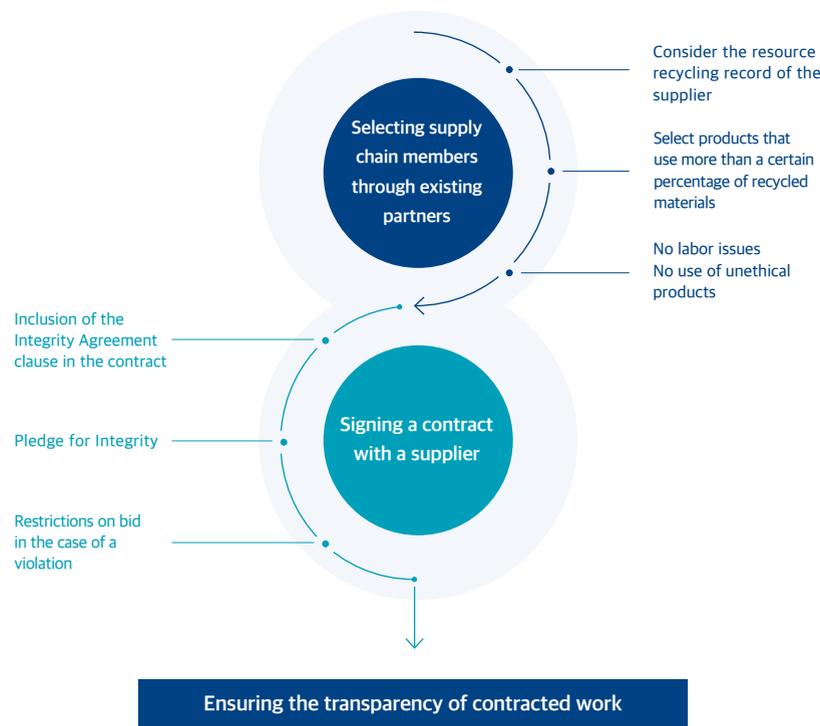
# Win-Win Management

Pearl Abyss pursues win-win strategies with its business partners in consideration of ESG practices. To this end, we have established a system for selecting and managing our supply chain, and maintaining transparent and fair practice based on the Supplier Code of Conduct to promote ESG practices and shared growth..

## Selection and Management of the Supply Chain

When it comes to selecting a supply chain member, we consider their abilities in resource recycling, their use of recycled materials and unethical products, and labor issues. We make sure that an integrity clause is included in the contract or require a pledge of integrity so that the contracted work is conducted in a transparent manner. As part of our win-win strategy, we will guide our supply chain members to comply with the supplier code of conduct and provide them with a contract when registering new suppliers and renewing contracts with existing suppliers. By doing so, we assess not only existing evaluation factors such as technology and price, but also ESG evaluation factors such as human rights, safety, health, the environment, privacy, and ethical practices to support mutual growth and voluntary compliance with the code.

### Considerations for Selecting Supply Chain Members and Signing Contracts



## Supplier Code of Conduct

To promote mutual growth based on partnerships, Pearl Abyss maintains transparency and fair practice when dealing with its suppliers. The Pearl Abyss Supplier Code of Conduct defines the requirements that all our suppliers must comply with and failure to do so may result in termination of the contract. In the event of a conflict between this Code of Conduct and local laws, the stricter one shall apply.

 <h3>Human Rights &amp; Labor</h3> <ol style="list-style-type: none"> <li>1 Freedom to work</li> <li>2 Protection of underage workers</li> <li>3 Compliance with working hours</li> <li>4 Wages and benefits</li> <li>5 Humane treatment</li> <li>6 Non-discrimination</li> <li>7 Freedom of association</li> </ol>	 <h3>Occupational Health &amp; Safety</h3> <ol style="list-style-type: none"> <li>1 Occupational safety</li> <li>2 Emergency preparedness</li> <li>3 Occupational accidents and diseases</li> <li>4 Sanitation and housing</li> <li>5 Physically demanding work</li> <li>6 Maintaining the safety of machinery</li> <li>7 Safety and health training</li> </ol>
 <h3>Environmental Protection</h3> <ol style="list-style-type: none"> <li>1 Environmental permits and reporting</li> <li>2 Prevention of pollution and saving resources</li> <li>3 Hazardous substances</li> <li>4 Solid waste and wastewater</li> <li>5 Air pollution</li> <li>6 Regulation and labeling of substances contained in products</li> <li>7 Energy consumption and greenhouse gas emissions</li> </ol>	 <h3>Ethical Practice</h3> <ol style="list-style-type: none"> <li>1 Business integrity</li> <li>2 Financial transparency</li> <li>3 Fair practices</li> <li>4 Protection of intellectual properties</li> <li>5 Protection of privacy</li> </ol>



## Economic Data

### Consolidated Statement of Financial Position

(Unit: KRW)

	2021	2020	2019
<b>Assets</b>			
<b>Current assets</b>	721,734,325,357	481,792,565,684	450,128,976,715
Cash and cash equivalents	243,870,688,201	202,123,560,995	176,366,336,406
Trade receivables and other receivables	57,841,530,789	52,681,684,199	68,923,761,511
Short-term financial instruments	72,288,020,860	207,760,000,000	184,595,600,000
Financial assets at fair value through profit or loss	330,729,100,913	3,512,336,121	3,895,837,705
Financial assets at fair value through other comprehensive income	0	6,201,443,374	6,122,381,407
Other current assets	17,004,984,594	9,513,540,995	10,225,059,686
<b>Non-current assets</b>	634,865,991,154	415,399,076,400	417,262,038,130
Other bonds	3,616,803,454	5,375,325,452	17,247,143,067
Long-term financial instruments	921,060,000	831,405,000	827,320,000
Financial assets at fair value through profit or loss	106,868,694,463	16,336,337,429	7,858,406,686
Financial assets at fair value through other comprehensive income	202,500,000	202,500,000	202,500,000
Investments in associates	58,891,173,599	3,818,573,790	832,112,332
Tangible assets	137,414,039,369	96,776,663,391	78,120,882,149
Intangible assets	302,370,514,681	270,083,191,794	293,395,046,728
Other non-current assets	1,301,073,887	1,210,799,469	1,187,551,484
Deferred tax assets	23,280,131,701	20,764,280,075	17,591,075,684
<b>Total assets</b>	1,356,600,316,511	897,191,642,084	867,391,014,845
<b>Liabilities</b>			
<b>Current liabilities</b>	274,164,894,675	181,651,123,827	123,273,086,757
Other debts	78,602,420,658	32,481,673,936	38,730,773,619
Short-term borrowings	35,000,000,000	0	0
Current long-term borrowings	0	84,400,000,000	30,000,000,000
Financial liabilities at fair value through profit or loss	54,869,285,085	0	0
Current lease liabilities	5,078,946,255	5,416,003,914	3,937,189,422
Outstanding corporate tax	12,370,023,894	11,303,142,740	11,029,715,753

	2021	2020	2019
Provisions	694,367,572	0	0
Other current liabilities	87,549,851,211	48,050,303,237	39,575,407,963
<b>Non-current liabilities</b>	363,438,566,480	78,629,476,259	155,101,250,836
Debentures	146,715,972,984	0	0
Other liabilities	5,848,438,781	4,434,763,208	3,250,149,581
Long-term borrowings	143,675,000,000	20,000,000,000	87,890,000,000
Non-current lease liabilities	13,819,388,355	13,221,603,333	28,325,244,621
Provisions	408,662,609	954,060,931	591,784,339
Defined benefit obligations	595,932,618	0	0
Other non-current liabilities	24,710,820,694	19,168,921,287	11,476,666,411
Deferred corporate tax liability	27,664,350,439	20,850,127,500	23,567,405,884
<b>Total liabilities</b>	637,603,461,155	260,280,600,086	278,374,337,593
<b>Equity</b>			
<b>Total equity attributable to equity holder</b>	718,996,855,356	636,911,041,998	589,016,677,252
Share capital	6,622,150,000	6,539,925,000	6,511,500,000
Capital surplus	211,315,378,108	202,252,806,029	200,033,532,039
Retained earnings	549,450,817,186	490,085,251,348	389,231,287,193
Other equity	(59,868,402,673)	(52,690,528,457)	(11,728,738,855)
Accumulated other comprehensive income	11,476,912,735	(9,276,411,922)	4,969,096,875
<b>Non-controlling interest</b>	0	0	0
<b>Total equity</b>	718,996,855,356	636,911,041,998	589,016,677,252
<b>Total equity and liabilities</b>	1,356,600,316,511	897,191,642,084	867,391,014,845

## Consolidated Statement of Comprehensive Income

(Unit: KRW)

	2021	2020	2019
Operating income	403,789,463,993	488,768,843,749	535,936,506,392
Operating expenses	360,807,192,070	331,475,101,191	385,333,014,800
Operating profit	42,982,271,923	157,293,742,558	150,603,491,592
Financial profit & loss	36,784,886,682	(23,171,165,170)	30,002,809,139
Financial income	50,243,256,153	20,217,711,424	46,455,081,511
Financial expenses	13,458,369,471	43,388,876,594	16,452,272,372
Other operating profit & loss	583,089,661	7,827,690,975	604,902,691
Other operating income	7,394,305,399	9,352,121,972	4,256,273,715
Other operating expenses	6,811,215,738	1,524,430,997	3,651,371,024
Equity method profit & loss	(2,615,818,516)	25,646,206	81,757,489
Net income before tax	77,734,429,750	141,975,914,569	181,292,960,911
Corporate tax expense	18,368,863,912	41,121,950,414	23,641,747,210
Net income	59,365,565,838	100,853,964,155	157,651,213,701
<b>Attribution of net income</b>			
Total equity attributable to equity holder	59,365,565,838	100,853,964,155	157,651,213,701
Non-controlling interest	0	0	0
Other comprehensive income	20,753,324,657	(14,245,508,797)	8,134,098,398
<b>Items that will not be reclassified as profit or loss</b>			
Remeasurement component of defined benefit liability	508,569,221	0	0
<b>Items that will be reclassified as profit or loss</b>			
Gain(loss) on financial assets measured at fair value through other comprehensive income	783,189	(32,565,227)	53,699,575
Gain or loss on translation of overseas operations	20,192,734,974	(14,173,758,822)	8,065,708,239
Equity method capital change	51,237,273	(39,184,748)	14,690,584
<b>Total comprehensive income for the period</b>	<b>80,118,890,495</b>	<b>86,608,455,358</b>	<b>165,785,312,099</b>
<b>Attribution of total comprehensive income for the period</b>			
Total equity attributable to equity holder	80,118,890,495	86,608,455,358	165,785,312,099
Non-controlling interest	0	0	0
<b>Earnings per share</b>			
Basic Earnings per Share(Unit: KRW)	973	1,655	2,600
Diluted Earnings per Share(Unit: KRW)	971	1,631	2,549

## Consolidated Statement of Changes in Equity

(Unit: KRW)

	Equity					Non-controlling interest	Total equity	
	Equity attributable to the equity holder							
	Share capital	Capital surplus	Retained earnings	Other equity	Accumulated other comprehensive income	Total equity attributable to the equity holder		
JAN 1, 2019(Equity at the beginning of year)	6,471,500,000	192,111,223,168	231,580,073,492	(18,972,046,200)	(3,165,001,523)	408,025,748,937	0	408,025,748,937
Current net income	0	0	157,651,213,701	0	0	157,651,213,701	0	157,651,213,701
Remeasurement of the net defined benefit liability	0	0	0	0	0	0	0	0
Gain(loss) on financial assets measured at fair value through other comprehensive income	0	0	0	0	53,699,575	53,699,575	0	53,699,575
Gain or loss on the translation of translation overseas operations	0	0	0	0	8,065,708,239	8,065,708,239	0	8,065,708,239
Gain or loss on the valuation of investment stock using the equity method	0	0	0	0	14,690,584	14,690,584	0	14,690,584
Exercise of stock options	40,000,000	2,221,920,000	0	(1,581,920,000)	0	680,000,000	0	680,000,000
Stock issuance costs	0	(7,335,000)	0	0	0	(7,335,000)	0	(7,335,000)
Acquisition of treasury stock	0	0	0	0	0	0	0	0
Disposition of treasury stock	0	5,707,723,871	0	1,180,579,950	0	6,888,303,821	0	6,888,303,821
Share-based compensation	0	0	0	939,697,860	0	939,697,860	0	939,697,860
Treasury stock on the condition of employment	0	0	0	1,708,470,699	0	1,708,470,699	0	1,708,470,699
Effects of stock option taxes	0	0	0	4,996,478,836	0	4,996,478,836	0	4,996,478,836
Total increase(decrease) in equity	40,000,000	7,922,308,871	157,651,213,701	7,243,307,345	8,134,098,398	180,990,928,315	0	180,990,928,315
DEC 31, 2019(Equity at the end of year)	6,511,500,000	200,033,532,039	389,231,287,193	(11,728,738,855)	4,969,096,875	589,016,677,252	0	589,016,677,252
JAN 1, 2020(Equity at the beginning of year)	6,511,500,000	200,033,532,039	389,231,287,193	(11,728,738,855)	4,969,096,875	589,016,677,252	0	589,016,677,252
Current net income	0	0	100,853,964,155	0	0	100,853,964,155	0	100,853,964,155
Remeasurement of the net defined benefit liability	0	0	0	0	0	0	0	0
Gain(loss) on financial assets measured at fair value through other comprehensive income	0	0	0	0	(32,565,227)	(32,565,227)	0	(32,565,227)
Gain or loss on the translation of overseas operations	0	0	0	0	(14,173,758,822)	(14,173,758,822)	0	(14,173,758,822)
Gain or loss on the valuation of investment stock using the equity method	0	0	0	0	(39,184,748)	(39,184,748)	0	(39,184,748)
Exercise of stock options	28,425,000	1,587,934,200	0	(1,133,134,200)	0	483,225,000	0	483,225,000
Stock issuance cost	0	(3,756,400)	0	0	0	(3,756,400)	0	(3,756,400)
Acquisition of treasury stock	0	0	0	(41,540,944,300)	0	(41,540,944,300)	0	(41,540,944,300)
Disposition of treasury stock	0	635,096,190	0	107,903,730	0	742,999,920	0	742,999,920
Share-based compensation	0	0	0	457,129,426	0	457,129,426	0	457,129,426

(Unit: KRW)

	Equity						Non-controlling interest	Total equity
	Equity attributable to the equity holder					Total equity attributable to the equity holder		
	Share capital	Capital surplus	Retained earnings	Other equity	Accumulated other comprehensive income			
Treasury stock under working conditions	0	0	0	(283,260,661)	0	(283,260,661)	0	(283,260,661)
Effects of stock option taxes	0	0	0	1,430,516,403	0	1,430,516,403	0	1,430,516,403
Total increase(decrease) in equity	28,425,000	2,219,273,990	100,853,964,155	(40,961,789,602)	(14,245,508,797)	47,894,364,746	0	47,894,364,746
DEC 31, 2020(Equity at the end of year)	6,539,925,000	202,252,806,029	490,085,251,348	(52,690,528,457)	(9,276,411,922)	636,911,041,998	0	636,911,041,998
JAN 1, 2021(Equity at the beginning of year)	6,539,925,000	202,252,806,029	490,085,251,348	(52,690,528,457)	(9,276,411,922)	636,911,041,998	0	636,911,041,998
Current net income	0	0	59,365,565,838	0	0	59,365,565,838	0	59,365,565,838
Remeasurement of the net defined benefit liability	0	0	0	0	508,569,221	508,569,221	0	508,569,221
Gain(loss) on financial assets measured at fair value through other comprehensive income	0	0	0	0	783,189	783,189	0	783,189
Gain or loss on the translation of overseas operations	0	0	0	0	20,192,734,974	20,192,734,974	0	20,192,734,974
Gain or loss on the valuation of investment stock using the equity method	0	0	0	0	51,237,273	51,237,273	0	51,237,273
Exercise of stock options	82,225,000	4,057,224,450	0	(3,190,424,450)	0	949,025,000	0	949,025,000
Stock issuance cost	0	(2,914,800)	0	0	0	(2,914,800)	0	(2,914,800)
Acquisition of treasury stock	0	0	0	0	0	0	0	0
Disposition of treasury stock	0	5,008,262,429	0	1,830,515,130	0	6,838,777,559	0	6,838,777,559
Share-based compensation	0	0	0	114,577,830	0	114,577,830	0	114,577,830
Treasury stock on the condition of employment	0	0	0	(594,341,194)	0	(594,341,194)	0	(594,341,194)
Effects of stock option taxes	0	0	0	(5,338,201,532)	0	(5,338,201,532)	0	(5,338,201,532)
Total increase(decrease) in equity	82,225,000	9,062,572,079	59,365,565,838	(7,177,874,216)	20,753,324,657	82,085,813,358	0	82,085,813,358
DEC 31, 2021(Equity at the end of year)	6,622,150,000	211,315,378,108	549,450,817,186	(59,868,402,673)	11,476,912,735	718,996,855,356	0	718,996,855,356



## Consolidated Cash Flow

(Unit: kRW)

	2021	2020	2019
<b>Cash flows from operating</b>	<b>64,436,408,118</b>	<b>157,434,023,396</b>	<b>168,357,272,875</b>
Net income	59,365,565,838	100,853,964,155	157,651,213,701
Adjustment	3,428,731,084	77,719,896,799	29,545,810,336
Gain on financial assets measured at fair value through profit or loss	(40,022,706,628)	(1,379,013,297)	(949,133,518)
Gain on disposition of financial assets measured at fair value through profit or loss	(21,937,013,086)	(2,691,131,601)	(909,150,700)
Salaries and wages	9,129,687,916	2,216,508,604	11,028,125,392
Severance and retirement benefits	1,427,527,098	0	0
Depreciation	15,182,553,703	13,106,118,326	9,097,669,044
Depreciation of intangible assets	9,166,832,549	8,806,833,539	8,272,040,284
Bad debt expenses	654,082	10,511,885	185,274,473
Stock compensation costs	114,577,830	457,129,426	939,697,860
Loss on financial assets measured at fair value through profit or loss	2,142,026,938	577,895,136	681,417,612
Loss on the disposition of financial assets measured at fair value through profit or loss	468,621,472	452,751,036	172,758,665
Interest income	(2,562,911,479)	(4,832,352,140)	(5,861,263,007)
Dividend income	(167,610,040)	(20,359,167)	(4,012,376)
Foreign currency conversion	(1,945,113,320)	(645,837,109)	(2,079,498,180)
Foreign exchange profit	(15,136,731)	0	(583,466,791)
Interest expense	4,319,158,172	3,474,237,550	6,295,454,345
Foreign currency translation loss	1,155,494,086	18,078,721,865	4,903,302,915
Foreign exchange loss	9,765,000	0	0
Loss on financial liabilities measured at fair value through profit or loss	69,285,085	0	(28,491,862,888)
Gains on the disposition of tangible assets	(73,545,405)	(1,331,299,301)	(26,514,382)
Reversal of provision for recovery	(1,143,560)	0	0
Miscellaneous profit	0	(71,763,561)	0
Loss on disposal of tangible assets	8,016,768	45,448,748	0
Loss on disposal of intangible assets	8,637,533	56,192,652	413,724,163
Impairment loss on intangible assets	5,812,653,173	0	1,691,553,128

	2021	2020	2019
Other bad debt expenses	153,737,500	313,000,000	0
Miscellaneous loss	0	0	1,209,704,576
Gain(loss) on equity method	2,615,818,516	(25,646,206)	(81,757,489)
Corporate tax expenses	18,368,863,912	41,121,950,414	23,641,747,210
Increase or decrease in assets and liabilities	25,365,300,230	22,507,056,014	24,525,367,789
Trade receivables	826,354,056	17,707,732,042	(19,642,084,208)
Other receivables	(776,831,922)	(2,275,812,593)	3,478,806,560
Other current assets	(6,125,178,713)	377,459,954	7,438,154,797
Other non-current assets	(470,569,077)	(422,000,000)	0
Other debts	2,501,794,874	(4,472,532,365)	13,285,009,211
Other current liabilities	36,406,948,813	8,969,211,009	12,784,819,662
Other non-current liabilities	5,051,706,536	7,709,127,719	11,104,361,913
Financial assets measured at fair value through profit or loss	(12,048,924,337)	(5,086,129,752)	(3,923,700,146)
Interest received	3,013,881,480	5,110,229,287	3,832,075,083
Interest paid	(4,878,051,027)	(4,689,136,517)	(6,827,970,141)
Dividends received	167,610,040	20,359,167	4,012,376
Corporate tax	(22,026,629,527)	(44,088,345,509)	(40,373,236,269)
<b>Cash flow from investments</b>	<b>(237,679,464,412)</b>	<b>(70,418,994,203)</b>	<b>(180,056,683,550)</b>
Decrease in short-term financial products	510,713,200,000	436,548,600,000	269,015,710,000
Decrease in financial assets measured at fair value through profit or loss	87,018,146,211	93,985,857	67,760,622
Decrease of financial assets measured at fair value through other comprehensive income	6,373,021,459	6,087,697,739	4,537,440,000
Decrease in deposits	597,338,000	143,228,400	288,337,600
Decrease in long-term loans	254,925,000	357,513,000	0
Disposition of tangible assets	76,754,012	132,377,528	24,950,562
Acquisition of short-term financial instruments	(375,054,831,398)	(471,985,880,000)	(402,541,450,000)
Acquisition of long-term financial products	0	0	(679,320,000)
Increase in financial assets measured at fair value through profit or loss	(338,889,754,208)	(1,405,008,442)	(399,390,233)

	2021	2020	2019
Increase in financial assets measured at fair value through other comprehensive income	0	(7,724,181,023)	(6,336,426,651)
Increase in deposits	(370,438,632)	(933,571,734)	(1,412,948,341)
Increase in long-term loans	0	(150,000,000)	0
Acquisition of tangible assets	(47,398,975,928)	(26,658,219,938)	(36,952,795,940)
Acquisition of intangible assets	(1,246,581,129)	(1,925,535,590)	(5,668,551,169)
Acquisition of investment in associates	(56,333,658,000)	(3,000,000,000)	0
Cash outflow due to changes in the scope of consolidation	(23,418,609,799)	0	0
<b>Cash flow from financial activities</b>	<b>211,019,013,324</b>	<b>(55,694,000,511)</b>	<b>(41,827,777,827)</b>
Borrowing of short-term borrowings	35,000,000,000	0	0
Borrowing of long-term borrowings	34,400,000,000	20,000,000,000	0
Issuance of bonds	146,666,340,000	0	0
Exercise of stock options	949,025,000	483,225,000	680,000,000
Repayment of short-term borrowings	0	0	(20,000,000,000)
Repayment of current long-term borrowings	0	(30,000,000,000)	(20,000,000,000)
Payout of leases	(5,993,436,876)	(4,632,524,811)	(2,500,442,827)
Acquisition of treasury stock	0	(41,540,944,300)	0
Stock issuance costs	(2,914,800)	(3,756,400)	(7,335,000)
<b>Increase(decrease) in cash and cash equivalents</b>	<b>37,775,957,030</b>	<b>31,321,028,682</b>	<b>(53,527,188,502)</b>
<b>Cash and cash equivalents of at the beginning of the year</b>	<b>202,123,560,995</b>	<b>176,366,336,406</b>	<b>228,971,320,992</b>
<b>Effect of exchange rate changes on cash and cash equivalents</b>	<b>3,971,170,176</b>	<b>(5,563,804,093)</b>	<b>922,203,916</b>
<b>Cash and cash equivalents at the end of the year</b>	<b>243,870,688,201</b>	<b>202,123,560,995</b>	<b>176,366,336,406</b>

## Financial Performance

Category	Unit	2021	2020	2019
Total assets	KRW 100 million	13,566	8,972	8,674
Total liabilities		6,376	2,603	2,784
Total equity		7,190	6,369	5,890
Operating income		4,038	4,888	5,359
Operating profit		430	1,573	1,506
Current net profit		594	1,009	1,577

## Distribution of Economic Value <sup>1)</sup>

Category	Unit	2021	2020	2019
Total economic value distribution	KRW 100 million	1,159	1,158	1,002
Shareholders and investors[dividends]		0	0	0
Employees[salaries, benefits]		941	678	709
- Benefits		814	573	609
- Salaries & wages		127	105	100
Local community[total contributions]		4	8	2
Government [corporate tax, taxes and dues]		214	472	291
- Corporate taxes		196	459	278
- Taxes and dues		18	13	13

<sup>1)</sup> Based on the Head Office

## Composition of the BOD

Category	Unit	2021	2020	2019
Total	Person	8	8	8
Executive Directors		6	6	6
Independent Directors		2	2	2
Male		8	8	8
Female		0	0	0

## BOD Operation

Category	Unit	2021	2020	2019
No. of Meetings	Meetings	7	7	12
Agenda	Items	22	22	29
Attendance <sup>2)</sup>	%	89	100	83

<sup>2)</sup> Average BOD Attendance Rate

## Remuneration of the BOD

Category	Unit	2021	2020	2019
Executive Directors (excl. Independent Directors, Audit Committee Members)	KRW million	2,729	2,416	4,138
Independent Directors (excl. Audit Committee Members)		36	66	5
Audit Committee Members		0	0	0
CEO		410	366	374
Median employee pay		67	57	50
Average employee pay		91	75	73
CEO to employee pay(median) ratio	%	6.1	6.4	7.5
CEO to employee pay(average) ratio		4.5	4.8	5.1

## Tax Report

Category	Unit	2021	2020	2019
Profit before tax	KRW 100 million	777	1,420	1,813
Corporate tax expenses		184	411	236
Corporate tax		220	441	404
Effective tax rate	%	24	29	13

## Social Data

### Employee Data

Category	Unit	2021	2020	2019		
Total employee	Total	Person	931	764	839	
	Male		669	548	587	
	Female		262	216	252	
Employment status	Permanent	Male	Person	567	488	431
		Female		223	188	170
	Temporary	Male		102	60	156
		Female		39	28	82
Senior Managers	Total	Person	147	124	95	
	Male		122	103	82	
	Female		25	21	13	
	Percentage of Males	%	83	83	86	
	Percentage of Females	%	17	17	14	
Junior Managers	Total	Person	784	640	744	
	Male		547	445	505	
	Female		237	195	239	
	Percentage of Males	%	70	70	68	
	Percentage of Females	%	30	30	32	
Age	Less than 30	Male	Person	211	157	219
		Female		118	100	141
	30	Male		361	314	303
		Female		124	95	94
	40	Male		90	72	61
		Female		13	13	7
	50s+	Male		7	5	4
		Female		7	8	10

## Data by Region<sup>1)</sup>

Category	Unit	2021	2020	2019
South Korea	Person	931	764	839
Netherlands		19	1	0
Japan		50	40	28
Taiwan		65	49	54
USA		38	22	16
Canada		2	0	0
Others		9	7	8

1) Including overseas workplaces

## Diversity

Category	Unit	2021	2020	2019
People with disabilities	Person	14	13	11
Foreigners		49	42	50
Veterans		4	4	4
Others		181	149	200

## New Recruitment<sup>2)</sup>

Category	Unit	2021	2020	2019
Total	Person	328	165	441
Male		245	124	309
Female		83	41	132

2) Based on the Head Office

## Turnover Rate<sup>3)</sup>

		Unit	2021	2020	2019
Turnover rate	Male	%	13	22	22
	Female		5	10	8
No. of turnovers	Male	Person	123	166	185
	Female		44	77	66
Voluntary turnover rate	Male	%	41	37	39
	Female		21	14	15
No. of voluntary turnovers	Male	Person	69	76	98
	Female		35	42	38

3) Based on the Head Office

## Parental Leave<sup>4)</sup>

		Unit	2021	2020	2019
No. of employees on parental leave	Male	Person	4	2	2
	Female		8	8	7
No. of employees returning from parental leave	Male		1	0	1
	Female		4	2	1
No. of employees working 12 months after parental leave	Male		0	1	0
	Female		2	1	0

4) All Employees

## Welfare Benefits

Category	Unit	2021	2020	2019
Total welfare benefits cost	KRW	12,675	10,486	9,973
Welfare benefits cost per person	million	14	14	12

## Employee Training

		Unit	2021	2020	2019
Training hours	Total training hours	Hour	15	13	11
	Training hours per person		2	2	1
Training cost	Total training cost	KRW	40	21	6
	Training cost per person	million	0	0	0
Training participants	Total no. of training participants	Person	2,077	1,931	1,520
	Training participants per person		2	3	2

## Human Rights & Ethics Training

		Unit	2021	2020	2019
Ethical management training	Training hours	Hour	1	1	1
	Training session	Session	1	1	1
	Training participants	Person	1,018	863	935
Sexual harassment training	Training hours	Hour	1	2	1
	Training session	Session	1	2	1
Security training	Training participants	Person	1,018	863	935
	Training hours	Hour	1	1	1
	Training session	Session	1	1	1
	Training participants	Person	1,018	863	935

## Case of Ethics Violation

Category	Unit	2021	2020	2019
Total	Case	7	12	0
Report on violation <sup>1)</sup>		1	1	0
Consumer(user) complaints		2	9	0
Others		4	2	0

<sup>1)</sup> No. of completed cases 1

## Industrial Disasters

Category	Unit	2021	2020	2019
No. of industrial disasters <sup>2)</sup>	Case	0	1	0
No. of off days due to industrial disasters	Day	0	17	0
Industrial accident rate	%	0	0.13	0

<sup>2)</sup> In 2020, there was a single incident(fractured leg) involving an accident that occurred while commuting

## Social Contribution

Category	Unit	2021	2020	2019
Total contribution	KRW million	351	761	210

## Association Membership Dues

Category	Unit	2021	2020
Korea Association of Game Industry	KRW	120	130
Korea Internet Corporations Association	million	20	6
Game Self-governance Organization of Korea		15	10

## Environmental Data

### Energy Consumption<sup>3), 4)</sup>

Category	Unit	2021	2020	2019
City Gas		1,296	1,325	1,252
Power	GJ	19,836	18,672	19,013
Total		21,131	19,997	20,264

<sup>3)</sup> Based on the Head Office

<sup>4)</sup> Estimated based on the Guidelines for Reporting and Certification of the GHG Emissions Trading Scheme

### Water Consumption<sup>5)</sup>

Category	Unit	2021	2020	2019
Water Consumption	m <sup>3</sup>	11,871	12,822	12,204

<sup>5)</sup> Based on the Head Office



# APPENDIX

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# ESG Policies



## Human Rights Policies

### Pearl Abyss Human Rights Charter

Pearl Abyss is a self-innovative company which offer new, exciting, and unforgettable experiences based on respect for various stakeholders, including our employees and gamers. We support 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 respect the laws and ethical standards of different countries, and apply more stringent regulations than local standards on human rights, and do not engage in any violations. We apply the Human Rights Charter when making game stories and characters, and also apply to both internal and external stakeholders including employees, subsidiaries, business partners, and users. We operate a grievance channel that provides complete anonymity for whistleblowers and takes prompt action while maintaining close communication.



#### Human Rights Guidelines for Employees

- ❶ Any type of forced labor, including mental, and physical restraint, including slavery and human trafficking, are strictly prohibited.
- ❷ The minimum working age should be complied with and children under the age of 15 should not be hired.
- ❸ We should comply with local regulations on working hours, holidays, minimum wage, and overtime pay without imposing sub-standard working conditions.
- ❹ No discrimination is allowed against any employee or job applicant and all should be provided with equal opportunities and evaluated fairly. We do not discriminate against any executive, employee or applicant for any reason (such as skin color, gender, age, hometown, educational background, religion, marital status, political opinion, social status or disability).
- ❺ We provide opportunities for self-development and education based on individual talent and qualities and evaluate and reward people according to their job performance.
- ❻ We guarantee freedom of association and the right to collective bargaining in accordance with local labor laws and regulations, and we do not discriminate on the grounds of union membership or activities.
- ❼ We put the safety and health of employees and the local community first and ensure that all workers comply with our policies. We offer a safe working environment without any risk factors, follow risk prevention measures and safety rules, and provide personal protective equipment.



#### Human Rights Guidelines for Subsidiaries and Suppliers

- ❶ We do not allow illegal labor practices including forced labor, child labor, and discrimination, and implement necessary measures to prevent them.
- ❷ In addition, human rights for subsidiaries and suppliers are defined in a separate supplier code of conduct.



#### Human Rights Guidelines for Users and Customers

- ❶ We respond quickly and accurately to the needs of our users and customers and are committed to increasing their satisfaction with our products and services.
- ❷ We continue to improve technical and physical security measures to protect their personal information.
- ❸ We do not provide any services or game content that discriminates against anyone based on gender, race, religion or political orientation.
- ❹ We respect the needs and expectations of our customers, develop products and services that meet their needs, and provide them in an ethical and professional manner.



#### Human Rights Guidelines for Local Communities

- ❶ We consider environmental and social issues that our local community faces, comply with local environmental laws, and disclose environmental data internally and externally.
- ❷ We make sure that no rights are infringed in our local community and actively engage in social contribution activities as a member of the local community.

## Supplier Code of Conduct

### Pearl Abyss Supplier Code of Conduct

We maintain a transparent and fair business relationship with our suppliers, promoting mutual growth based on the spirit of partnership. The Supplier Code of Conduct defines the requirements that our business partners should comply with. Any serious violations of the code or failure to correct such violations may result in a suspension of the business relationships or the termination of the contract. If there is any conflict between the code and local laws, the stricter rules shall prevail.



#### Human Rights and Labor

##### 1 Free Labor

- Any association with forced labor, exploitative labor, or involuntary labor is not allowed; all labor work should be voluntary.
- Demanding any government-issued ID, passport, or working visa from a worker for reasons of hiring is not permitted.
- The working conditions should be documented in a language that the workers can understand and delivered to them.
- The processing fees accrued during hiring should never be charged to the workers.

##### 2 Protection of Underaged Workers

- No partners shall hire a child worker<sup>1)</sup> in any manufacturing process.
- Hiring youth workers above the legal minimum hiring age is permitted, but workers under the age of 18 should never be asked to perform risky work, overtime or night shift duties for the purpose of safety.

##### 3 Compliance with Working Hours

- All local and domestic labor laws and regulations on working hours and overtime shall be complied with.

##### 4 Wages & Benefits

- Wages must include the minimum wage, overtime, and statutory benefits and comply with all applicable local laws and regulations.

- All overtime work must be done voluntarily with the consent of the worker, and according to local laws and regulations, overtime pay must be higher than the hourly rate applied for regular working hours.
- Partners should provide workers with written information in a language they can understand through pay stubs or similar documents about pay standards and working conditions, such as wages and benefits.

##### 5 Humane Treatment

- No harsh or inhumane treatment, such as sexual harassment, sexual abuse, corporal punishment, mental or physical coercion, verbal abuse, or unreasonable restrictions is allowed at the workplace.

##### 6 Non-discrimination

- There shall be no discrimination based on a person's race, color, age, gender, sexual orientation, ethnicity, disability, pregnancy, religion, political orientation, union membership, nationality, marital status or health status when it comes to opportunities for promotion, training and education.
- No medical examination shall be required from a worker or job applicant unless required by law or for the purpose of safety in the workplace.

##### 7 Freedom of Association

- Partners should respect the rights of workers to form, or not form, unions in a peaceful, reasonable way, and to engage in such activities by complying with all local laws that set forth the rights of employees.
- Workers and the workers' representatives should be able to communicate openly with the management about the working conditions without fear of threats, intimidation, or torture.



#### Safety & Health

##### 1 Occupational Safety

- Precautionary measures should be taken to eliminate physical hazards and risk factors to prevent accidents and occupational diseases.
- All workers must be provided with well-maintained personal protective equipment.
- Proper measures should be taken to exclude pregnant or lactating workers from hazardous work, and they should be provided with proper equipment.

- Channels should be established for workers to freely raise concerns to managements when they are aware of issues related to occupational safety.

##### 2 Response to Emergency

- In the case of an emergency, the damage should be minimized by identifying and evaluating the situations and implementing response procedures in advance, and training and education for responding to emergencies should be conducted on a regular basis.

##### 3 Industrial Disasters and Disease

- Procedures and systems should be established for preventing, managing, tracking, and reporting industrial disasters and vocational diseases.
- Any physical abnormality, injury or disease should be classified and documented and necessary measures should be taken to investigate, remove the cause and facilitate the return process.

##### 4 Sanitation in the Workplace

- The exposure of employees to chemical, biological and physical hazards should be identified, evaluated and managed.
- Employees should be provided with clean toilets, drinking water, and sanitary food, storage, and dining facilities.
- Dormitories for workers must be kept clean and safe, and all workplaces should have emergency exits, heating and ventilation systems, adequate personal space, and reasonable access rights.

##### 5 Physical Work Overload

- Workers' exposure to the risks of manual labor<sup>2)</sup> should be identified, evaluated and managed, and necessary improvements in processes, and rotational work, stretching exercises is recommended for the prevention of accidents.

##### 6 Maintenance of Mechanical Facilities

- The safety of production facilities should be assessed.
- The safety of the facilities should be ensured through regular maintenance and repair.

##### 7 Safety & Health Training

- Appropriate health and safety training should be provided in the workers' native language or in a language they understand.
- Safety and health information should be posted in a place where everyone can see it.

1) A minimum age of 15 with mandatory education completed, or the legal minimum age for employment according to local laws and regulations, whichever is higher.

2) Including manual labor, lifting heavy objects, standing for a long time, and repetitive or physically demanding assembly work.



## Environmental Protection

### 1 Environmental Permits & Reporting

- Environmental licenses and permits should be obtained or renewed in accordance with local laws and regulations.

### 2 Prevention of Pollution and Conservation of Resources

- Pollutants such as wastewater and waste should be reduced by increasing the efficiency of maintenance and production facilities, using alternate resources, recycling and reusing resources.

### 3 Hazardous Substances

- Environmental and quality control standards should be complied with and compounds or other substances that pose a hazard if released into the environment should be identified. Safety should be ensured when handling, moving, storing, using, recycling, reusing and disposing of these substances.
- Applicable local laws and regulations that prohibit or regulate the use or handling of certain substances shall be complied with.

### 4 Solid Waste & Wastewater

- Solid waste and wastewater produced from operational industrial processes and sanitation facilities must be identified, monitored, controlled and treated prior to discharge as required by laws and regulations, and measures must be taken to reduce its generation.
- The efficiency of the wastewater treatment process should be monitored at all times.

### 5 Air Pollution

- Volatile organic compounds, aerosols, caustic agents, particulate powders, ozone-depleting substances, and combustion by-products generated during the manufacturing process should be identified, monitored, and controlled prior to emission under relevant laws and regulations. They should be managed and disposed of in accordance with laws and regulations.

### 6 Regulations on Product Content and Labeling

- Applicable laws and regulations regarding the prohibition or restriction of certain substances, including labeling information about the substances, should be complied with when it comes to recycling and disposal.

### 7 Energy Consumption and GHG Emissions

- Cost-effective ways of increasing energy efficiency should be researched while energy consumption and GHG emissions should be minimized.



## Ethical Management

### 1 Business Integrity

- The highest level of integrity should be maintained in all business dealings.
- Any form of corruption, extortion, embezzlement, bribery, kickback, or personal gift, including giving money or any other form of advantage to any person concerned for the purpose of influencing decision-making, should be strictly prohibited.
- Any means of obtaining an unfair or improper advantage should not be allowed while monitoring and procedures to ensure compliance with anti-corruption laws must be implemented.

### 2 Financial Transparency

- All commercial business transactions should be conducted transparently and recorded in detail in our accounting books and journals.
- Financial information should be provided to shareholders and other stakeholders on a regular basis, and proper care should be taken to ensure that no money is used for criminal activities.
- No financial information should be used to support insider trading.

### 3 Fair Practices

- Any local laws that apply to fair practices should be complied with and the company shall not engage in unfair practices by using its superior position over its business partners.
- Any formal or informal agreement or consultation to exchange information or to use information to collude with or influence a competitor in terms of prices, products, terms of sale, revenues or margins, market share, or distribution method is prohibited and should be reported.
- Any illegal acquisition of information about a competitor, slandering of a competitor, or accepting money or entertainment is not allowed. Any negligent receipt or use of confidential information should be notified to our management immediately.

### 4 Protection of Intellectual Property

- Intellectual property rights and transfers of technology and know-how should be protected at all times.
- The information of Pearl Abyss should be kept confidential.
- Individuals with access to confidential information have an obligation to maintain its confidentiality, and inside information should not be accidentally disclosed or used to make investment decisions.

### 5 Privacy

- Any necessary of acquired corporate information should be kept to a minimum and personal information related to corporate management(including suppliers, customers, consumers and employees) should be protected at a reasonable level.
- Privacy laws should be complied with when storing, processing, transmitting and sharing personal information.
- Training should be conducted on a regular basis to protect personal information.



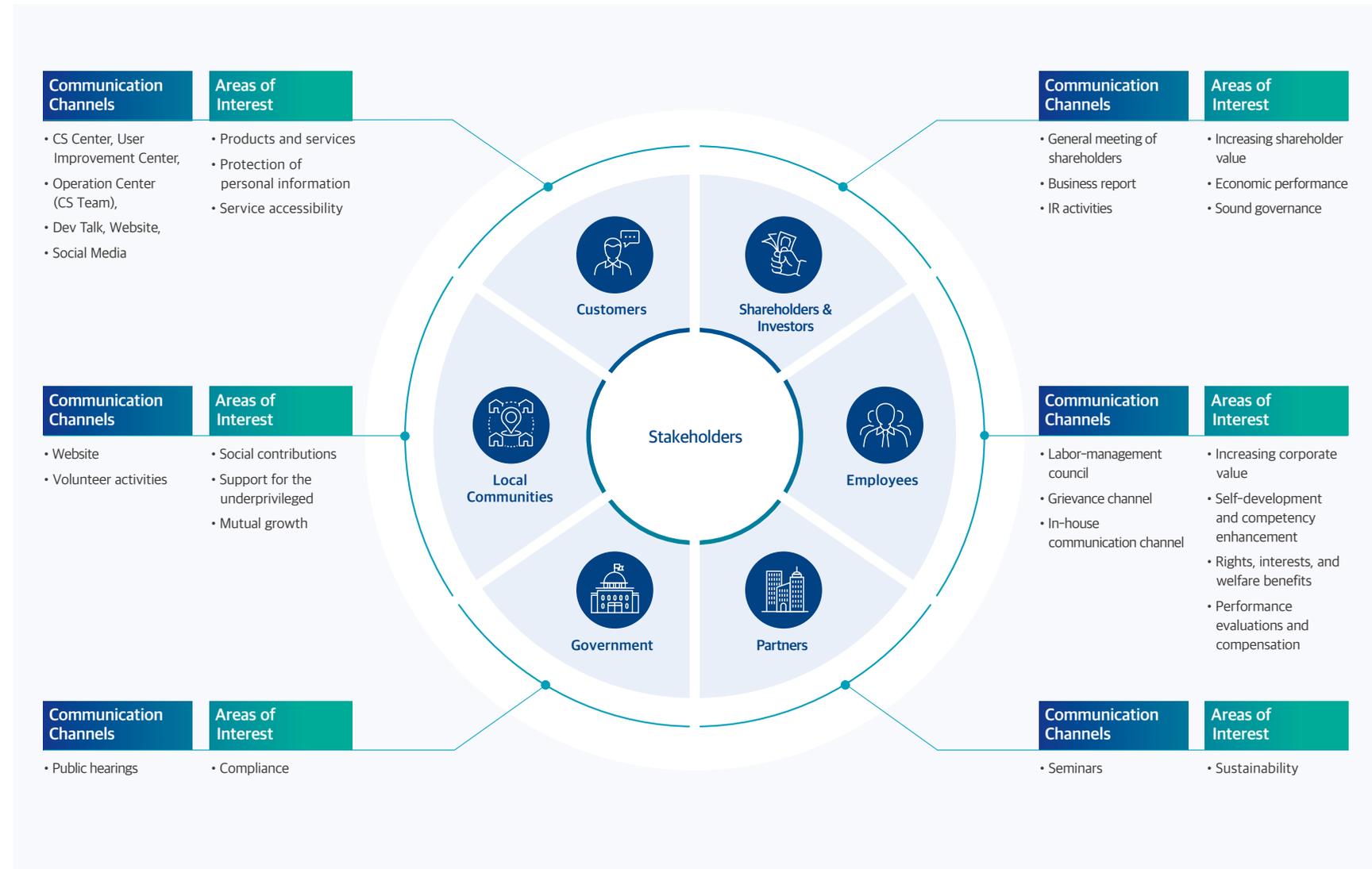
Pearl Abyss is a self-innovative company which respects for its various stakeholders, including employees and game users. We support various global human rights initiatives, respect local laws and ethics, and apply stricter standards for human rights than required so as to ensure that we do not engage in or aid in any human rights violations. In addition, we maintain transparent and fair transaction relationships with our business partners and pursue shared growth based on these partnerships.

# Stakeholder Engagement



## Stakeholder Engagement

Pearl Abyss strives to develop into a company that practices ESG management and defines customers, shareholders and investors, employees, business partners, local communities and the government as major stakeholders. Through various communication channels with stakeholders, we identify their interests and expectations, and actively incorporate these in key decision-making in management activities.



# Materiality Assessment



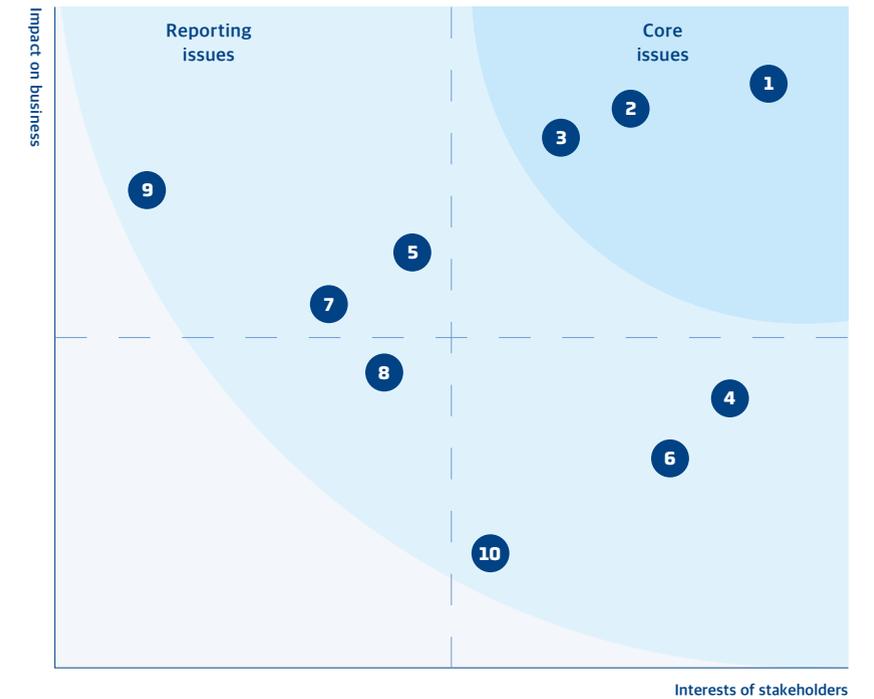
## Materiality Assessment

Pearl Abyss conducted a materiality assessment to review issues of sustainability and report them in a consistent manner. Leading companies were benchmarked to analyze global leaders and competitors, and media analysis was conducted using international standards and articles such as GRI Standards, DJSI, and ISO 26000, to create a pool of issues in six sectors. Then, three core and seven reporting issues were selected in consideration of the degree of business impact and stakeholder interest. We ensure transparency in our disclosure of progress that we made in key material issues to stakeholders, collect feedback, and reflect it in our sustainability practices.

### Materiality Assessment Process



### Results of the Materiality Assessment



No	Issue	Content	Page
1	Privacy and Data Security	Issue 1. Information Security	16~18
2	Discrimination and Diversity	Issue 2. Workplace Diversity	19
3	Economic Value Creation	Issue 3. Global Competitiveness through Game Development	20~22
4	Ethical Practices	Ethics & Compliance	42~44
5	Response to Climate Change	Environment Protecting the Environment	32
6	Enhancing Employee Welfare Benefits	Employees Creating Value for Employees	29~30
7	HR Management	Employees Creating Value for Employees	27~28
8	Sound Governance & Transparent Operations	Governance	40~41
9	Customer Satisfaction	Customer Customer Satisfaction	37~38
10	Engagement in Local Communities & Social Contributions	Society Community Engagement	34~36

# GRI Standards Index

## Universal Standards(GRI 100)

Topic	Indicator	Page	Remarks	
Corporate Profile	102-1	Name of the organization	9	
	102-2	Activities, brands, products, and services	12~14	
	102-3	Location of headquarters	9	
	102-4	Location of operations	11	
	102-5	Ownership and legal form	9, 40	
	102-6	Markets served	11	
	102-7	Scale of the organization	9, 11, 14, 50~54	
	102-8	Information on employees and other workers	54~55	
	102-9	Supply chain	49, 59	
	102-10	Significant changes to the organization and its supply chain	-	No significant change
	102-11	Precautionary principle or approach	32	
102-12	External initiatives	66		
102-13	Membership in associations	66		
Strategy	102-14	Statement from a senior decision-maker	4	
Ethics and Integrity	102-16	Values, principles, standards, and norms of behavior	24~25, 42, 59~60	
	102-17	Mechanisms for advice and concerns about ethics	42~44	
Governance	102-18	Governance structure	40~41	
	102-20	Executive-level responsibility for economic, environmental, and social topics	41	
	102-22	Composition of the highest governance body and its committees	41	
	102-23	Chair of the highest governance body	41	
	102-28	Evaluating the highest governance body's performance	41	
	102-34	Nature and total number of critical concerns	41	
102-35	Remuneration policies	41		
	102-40	List of stakeholder groups	61	
Stakeholder Engagement	102-41	Collective bargaining agreements	26	

Topic	Indicator	Page	Remarks	
Stakeholder Engagement	102-42	Identifying and selecting stakeholders	61~62	
	102-43	Approach to stakeholder engagement	61~62	
	102-44	Key topics and concerns raised	61~62	
Reporting Practices	102-45	Entities included in the consolidated financial statements	50	
	102-46	Defining report content and topic boundaries	62	
	102-47	List of material topics	62	
	102-48	Restatements of information	2	
	102-49	Changes in reporting	2	
	102-50	Reporting period	2	
	102-51	Date of the latest report	2	
	102-52	Reporting cycle	2	
	102-53	Contact point for questions regarding the report	2	
	102-54	Claims of reporting in accordance with the GRI Standards	2	
102-55	GRI content index	63		
	102-56	External assurance	65	
	Management Approach	103-1	Explanation of the material topic and its boundaries	16, 19,
		103-2	The management approach and its components	20, 62
		103-3	Evaluation of the management approach	

## Topic-specific Standards

### Economic Performance(GRI 200)

Topic	Indicator	Page	Remarks	
Economic Performance	201-1	Direct economic value generated and distributed	8, 50~54	
	203-2	Significant indirect economic impacts and influences	34~36	
Indirect Economic Impacts	205-2	Communication about and training on anti-corruption policies and procedures	42~44, 55	
	205-3	Confirmed incidents of corruption and actions taken	44, 56	
Anti-competitive Behavior	206-1	Legal actions for anti-competitive behavior, and anti-trust and monopoly practices	Business Report	p.287
Tax	207-1	Approach to tax	47	

### Environmental Performance(GRI 300)

Topic	Indicator	Page	Remarks	
Energy	302-1	Energy consumption within the organization	56	
Water and Effluents	303-5	Water consumption	56	
Environmental Compliance	307-1	Non-compliance with environmental laws and regulations	32	No violation

### Social Performance(GRI 400)

Topic	Indicator	Page	Remarks	
Employment	401-1	New employee hires and employee turnover	55	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	29	
	401-3	Parental leave	55	
Occupational Health and Safety	403-9	Work-related injuries	56	
Training and Education	404-2	Programs for upgrading employee skills and transition assistance programs	27~28	
Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	54~55	
Non-discrimination	406-1	Incidents of discrimination and corrective actions taken	-	N/A
Human Rights Assessment	412-2	Employee training on human rights policies or procedures	55	
Local Communities	413-1	Operations with local community engagement, impact assessments, and development programs	34~36	
Supplier Social Assessment	414-2	Negative social impacts in the supply chain and actions taken	-	N/A
Customer Health and Safety	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	-	N/A
Marketing and Labeling	417-2	Incidents of non-compliance concerning product and service information and labeling	-	N/A
	417-3	Incidents of non-compliance concerning marketing communications	-	N/A
Customer Privacy	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	-	N/A
Compliance	419-1	Non-compliance with laws and regulations in the social and economic area	-	N/A

# SASB Disclosure

Pearl Abyss has disclosed key ESG data in accordance with the software and IT service industry standards of the SASB(Sustainability Accounting Standards Boards) to share the financial impact of its sustainability management.

## Sustainability Disclosure Topics & Accounting Metrics

Topic	Code	Accounting Metric	Location	Status
Environmental Footprint of Hardware Infrastructure	TC-SI-130a.1	<ol style="list-style-type: none"> <li>Total energy consumed</li> <li>Percentage grid electricity</li> <li>Percentage renewable</li> </ol>	p.56	<ol style="list-style-type: none"> <li>21,131GJ</li> <li>93.9%</li> <li>N/A</li> </ol>
	TC-SI-130a.2	<ol style="list-style-type: none"> <li>Total water withdrawn</li> <li>Total water consumed</li> <li>Percentage of each in regions with high or extremely high baseline water stress</li> </ol>	p.56	<ol style="list-style-type: none"> <li>N/A</li> <li>11,871m<sup>3</sup></li> <li>N/A</li> </ol>
	TC-SI-130a.3	Discussion of the integration of environmental considerations into strategic planning for data center needs	p.32~33	-
Data Privacy & Freedom of Expression(Customer Privacy)	TC-SI-220a.1	Description of policies and practices relating to behavioral advertising and user privacy	Website	Refer to Pearl Abyss Privacy Policy <sup>1)</sup> for details..
	TC-SI-220a.2	Number of users whose information is used for secondary purposes	-	0 cases
	TC-SI-220a.3	Total amount of monetary losses as a result of legal proceedings associated with user privacy	-	-
	TC-SI-220a.4	<ol style="list-style-type: none"> <li>Number of law enforcement requests for user information</li> <li>Number of users whose information was requested</li> <li>Percentage resulting in disclosure</li> </ol>	-	<ol style="list-style-type: none"> <li>0 cases</li> <li>0 persons</li> <li>0%</li> </ol>
	TC-SI-220a.5	List of countries where core products or services are subject to government-required monitoring, blocking, content filtering, or censoring	-	-
Data Security	TC-SI-230a.1	<ol style="list-style-type: none"> <li>Number of data breaches</li> <li>Percentage involving personally identifiable information(PII)</li> <li>Number of users affected</li> </ol>	-	<ol style="list-style-type: none"> <li>0 cases</li> <li>0%</li> <li>0 persons</li> </ol>
	TC-SI-230a.2	Description of the approach to identifying and addressing data security risks, including the use of third-party cybersecurity standards	p.16~18, 45~46	-
Recruiting & Managing a Global, Diverse & Skilled Workforce	TC-SI-330a.1	Percentage of employees that are foreign nationals	p.19	5% <sup>2)</sup>
	TC-SI-330a.2	Employee engagement(percentage)	p.30	3.88Point <sup>3)</sup>
	TC-SI-330a.3	<ol style="list-style-type: none"> <li>Percentage of gender and racial/ethnic group representation in management</li> <li>Percentage of gender and racial/ethnic group representation among technical staff</li> <li>Percentage of gender and racial/ethnic group representation among all other employees</li> </ol>	p.54	<ol style="list-style-type: none"> <li>p.54 'Composition of the BOD'</li> <li>p.54 'Employees'</li> <li>p.54 'Employees'</li> </ol>
Intellectual Property Protection & Competitive Behavior	TC-SI-520a.1	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations	-	-
Managing System Risk	TC-SI-550a.1	<ol style="list-style-type: none"> <li>Number of performance issues</li> <li>Number of service disruptions</li> <li>Total days of customer downtime</li> </ol>	-	<ol style="list-style-type: none"> <li>0 cases</li> <li>0 days</li> <li>0 days</li> </ol>
	TC-SI-550a.2	Description of business continuity risks related to disruptions of operations	-	-

1) [https://account.pearlabyss.com/ko-KR/Policy/policy?\\_policyNo=2](https://account.pearlabyss.com/ko-KR/Policy/policy?_policyNo=2)  
 2) Ratio to the total number of employees  
 3) Out of 5 points, positive responses in 2021: 68%



# Independent Assurance Statement

## To: The Stakeholders of Pearl Abyss Corp

### Introduction and objectives of work

BSI Group Korea(hereinafter "the Assurer") was asked to verify Pearl Abyss Corp.'s 'ESG Report 2021'(hereinafter "the Report"). This assurance statement applies only to the relevant information contained in the scope of the assurance. Pearl Abyss Corp. is solely responsible for all information and assertion contained in the report. The responsibility of the assurance is to provide independent assurance statement with expert opinions to Pearl Abyss Corp. by applying the verification methodology and to provide this information to all stakeholders of Pearl Abyss Corp.

### Assurance Standards and Levels

This assurance was based on the AA1000AS v3 Assurance Standard and GRI as reporting standards that applied internationally as the standards for this sustainability assurance. The assurance level was applied Type 1, moderate level of AA1000AS that confirms compliance with the four principles of AA1000 AP(2018) and Core Option / in accordance of GRI standards.

### Scope of Assurance

The scope of assurance applied to this report is as follows;

- Disclose contents from January 1, 2021 to December 31, 2021 included in the report. Some content included in the first half of 2022.
- Information related to material issues determined as a result of materiality assessment

The following items were not included in this assurance

- Financial information in the report
- Additional information contained in publicly available data not presented in the report and on the website
- Sustainability activities carried out in overseas businesses

### Methodology

The assurer has used the methodology developed to collect relevant evidence to comply with the verification criteria and to reduce errors in the reporting, and has performed the following activities;

- To determine verification priorities, review of materiality issue analysis process and verification of the results
- System review for sustainability strategy process and implementation
- Review the evidence to support the material issues through interviews with senior managers with responsibility for them
- Suitability and robustness of processes and systems for information collection, analysis and review.

### Assurance Opinion

As a result of the verification, the assurer did not find anything that could lead to the conclusion that the information and data contained in the Pearl Abyss report was inappropriately described in terms of materiality. It is decided that the report was prepared in accordance with the core option of the GRI Standards, and the assurance opinion on the four principles in the AA1000 AP(2018) is as follows.

### AA1000 AP(2018)

#### Inclusivity: Stakeholder Engagement and Opinion

Pearl Abyss divided stakeholders into customers, shareholders and investors, employees, suppliers, government and local communities, and has communication channels and processes to implement stakeholder engagement program. They have communication channels for each group and collect opinions. Also, 20 issues were derived by benchmarking advanced company reports, analyzing international norms, analyzing media, and surveying to identify stakeholder issues, and it was confirmed that derived material issues are reflected in decision-making on sustainability management.

#### Materiality: Identification and reporting of material sustainability topics

Pearl Abyss identified materiality for issues by analyzing stakeholder interest and business impact on the 20 issues derived. As a result, the core material issues of 3 topics and the reporting issues of 7 topics were selected.

#### **[Material Topics]**

- Privacy and data security
- Prohibition of Discrimination and Respect Diversity
- Creating economic value through core business operations

#### Responsiveness: Responding to material sustainability topics and related impacts

Pearl Abyss establishes and implements a response plan for each issue to appropriately respond to the derived core issues that reflects the expectations of stakeholders, and discloses detailed response activities and performance for them through the report.

#### Impact: Impact of an organization's activities and material sustainability topics on the organization and stakeholders

Pearl Abyss strives to establish processes to monitor, measure, assess and manage the impact of organizational activities for more effective decision making and management. Identified impact should be integrated into stakeholder engagement and periodic importance assessment processes to inform organizational governance, strategy, goal setting and operations, thereby increasing informed decision making and responsiveness. In addition, the impact determined by each key issue from a sustainability topics are disclosed in the report.

### Key areas for ongoing development

The assurer provides the following opinions to the extent that it does not affect the verification results.

- In order to identify stakeholder issues, a wide range of topics in the context of sustainability are included in the pool, but it is necessary to strengthen the criteria for stakeholder engagement and issue selection so that the social interest of the game industry can be more clearly reflected in the issues. For this purpose, it is necessary to classify the stakeholders to those on whom it has an impact and to those who have an impact on it, and to understand the types and correlations of each relationship.
- The reporting boundaries are limited to Korea, where the headquarters are located. However, Pearl Abyss' services are occurring more abroad than at local, so it is recommended that future reports extend reporting boundaries to include sustainability issues in major countries where services are being performed(e.g., privacy issues in the EU).
- Pearl Abyss established ESG Committee under the board of directors in March 2022 to complete the higher management system for starting full-scale sustainability operation. Through this, the company hopes to be loved as a corporate citizen as well as a leading position in the game industry by registering as a Partnership with the UN SDGs and establishing an action plan and pursuing sustainable management centered on ESG.

### Statement of independence and competence

The assurer is an independent professional institution that specializes in quality, health, safety, social and environmental management with almost 120 years history in providing independent assurance services. No member of the assurance team has a business relationship with Pearl Abyss. The assurer has conducted this verification independently, and there has been no conflict of interest. All assurers who participated in the assurance have qualifications as AA1000AS assurer, have a lot of assurance experience, and understand the BSI Group's assurance standard methodology.

### Evaluation against GRI 'In Accordance' Criteria

The assurer confirmed that this report was prepared in accordance with the GRI Standards Core Option and the disclosures related to the following Universal Standards and Topic-specific Standards Indicators based on the data provided by Pearl Abyss

#### [Universal Standards]

Organizational Profile 102-1~13/ Strategy 102-14~15/ Ethics and Integrity 102-16, 102-17/ Governance 102-18, 102-20, 102-23, 102-28, 102-34, 102-35 23 / Stakeholder Engagement 102-40~44/ Reporting practice 102-45~56/ Management Approach 103-1~3

#### [Topic-specific Standards]

- Economic: 201-1, 203-2, 205-2, 205-3, 206-1, 207-1  
 - Environmental: 302-1, 303-5, 307-1  
 - Social: 401-1~3, 403-9, 404-2, 405-1, 406-1, 412-2, 413-3, 414-2, 416-2, 407-2, 417-3, 418-1, 419-1

11st.Apr.2022

BSI Group Korea,  
Managing Director

S.H Lim



# Sustainability Initiative

## UN SDGs

As a global corporate citizen, Pearl Abyss upholds the causes promoted by the UN SDGs(Sustainable Development Goals) and strives to contribute to the achievement of the goals. Since 2021, we have organized various activities to support the UN SDGs for the sustainable growth of the international community.

SDGs indicator	Relevant Activities	SDGs indicator	Relevant Activities
<p><b>Goal 1</b></p> <p>End poverty in all its forms everywhere</p>	<ul style="list-style-type: none"> <li>• <b>Society</b> Engagement in Local Communities</li> </ul>	<p><b>Goal 8</b></p> <p>Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</p>	<ul style="list-style-type: none"> <li>• <b>Issue 3.</b> Global Competitiveness through Game Development</li> <li>• <b>Employees</b> Creating Value for Employees</li> </ul>
<p><b>Goal 3</b></p> <p>Ensure healthy lives and promote well-being for all at all ages</p>	<ul style="list-style-type: none"> <li>• <b>Employees</b> Creating Value for Employees</li> </ul>	<p><b>Goal 9</b></p> <p>Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</p>	<ul style="list-style-type: none"> <li>• <b>Issue 1.</b> Information Security</li> </ul>
<p><b>Goal 4</b></p> <p>Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</p>	<ul style="list-style-type: none"> <li>• <b>Employees</b> Creating Value for Employees</li> </ul>	<p><b>Goal 10</b></p> <p>Reduce inequality within and among countries</p>	<ul style="list-style-type: none"> <li>• <b>Customer</b> Customer Satisfaction</li> </ul>
<p><b>Goal 5</b></p> <p>Achieve gender equality and empower all women and girls</p>	<ul style="list-style-type: none"> <li>• <b>Issue 2.</b> Workplace Diversity</li> </ul>	<p><b>Goal 11</b></p> <p>Make cities and human settlements inclusive, safe, resilient, and sustainable</p>	<ul style="list-style-type: none"> <li>• <b>Society</b> Engagement in Local Communities</li> </ul>
<p><b>Goal 6</b></p> <p>Ensure availability and sustainable management of water and sanitation for all</p>	<ul style="list-style-type: none"> <li>• <b>Environment</b> Environmental Protection</li> </ul>	<p><b>Goal 13</b></p> <p>Take urgent action to combat climate change and its impacts</p>	<ul style="list-style-type: none"> <li>• <b>Environment</b> Environmental Protection</li> </ul>
<p><b>Goal 7</b></p> <p>Ensure access to affordable, reliable, sustainable and modern energy for all</p>	<ul style="list-style-type: none"> <li>• <b>Environment</b> Environmental Protection</li> </ul>	<p><b>Goal 17</b></p> <p>Strengthen the means of implementation and revitalize global partnerships for sustainable development</p>	<ul style="list-style-type: none"> <li>• <b>Society</b> Engagement in Local Communities</li> <li>• <b>Customer</b> Customer Satisfaction</li> </ul>

# Awards & Associations

## Associations



## Awards

Year	Organizer	Awards	Year	Organizer	Awards
2022	Korea Exchange	2021 KOSDAQ Corporate Disclosure Company with Excellent IR Performance	2019	Korea Venture Business Association	2019 Venture 100 Billion Company - Minister of SMEs and Startups Award
	Steam	2021 Best Game Best Seller		Korea Association of Game Industry	2019 Korea Game Awards - Business Innovation Award
	Taipei Game Show	2022 Taipei Game Show - Top PC Game		Korea IR Awards	2019 Korea IR Awards - Top Company
2021	Forbes	MMORPG TOP 10 Console Title of the Year		OGN	G-Rank - Black Desert Mobile Top Award
	Newzoo	TOP 5 Global Open World RPG		Taipei Game Show	2018 Taipei Game Show - Silver in Online Category
	MMO Populations	TOP 5 Most Played MMORPG in the World			2018 Taipei Game Show - TOP 10 Popular Games in the Mobile Category
2020	Korea International Trade Association	100-Million Top Service Top	2018	Google	Google Play Best of 2018 - Best Game of the Year
	KOSDAQ Listed Companies Association	KOSDAQ Awards - Best Marketing Company			Google Play Best of 2018 - Game of the Year
	Sony	2020 PS Partner Awards - Partner Award			Google Play Best of 2018 - Best Competitive Game
	Google	Google Play Best of 2020 - Google Play Best Competitive Game		Korea Association of Game Industry	2018 Korea Game Awards - Best Game
	Taipei Game Show	2019 Taipei Game Show - Best Online Game			2018 Korea Game Awards - Game Sound
	KOHARU	GoHa Awards 2019 - 2019 Best MMORPG			2018 Korea Game Awards - Game Character
	Pocket Gamer	2020 Pocket Gamer Mobile Game Awards - 2020 TOP 5 MMORPG			2018 Korea Game Awards - Popular Game
	Mein-MMO	2020 TOP 5 MMORPG			2018 Korea Game Awards - Best Developer Program
	TechSpot	2020 Best MMO Game			2018 Korea Game Awards - Best Developer Planning & Design
2019	Ministry of Employment and Labor	Excellent Contribution to Job Creation - Presidential Award		Taipei Game Show	Best MMORPG Award
				Money Today	2018 Korea IB Awards - Best IB Company

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