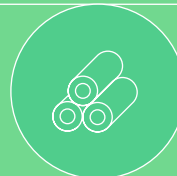
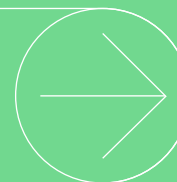
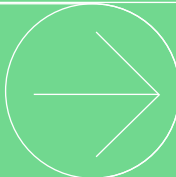
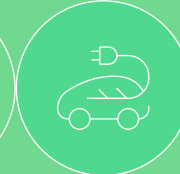
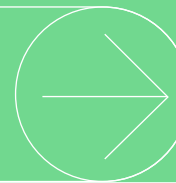
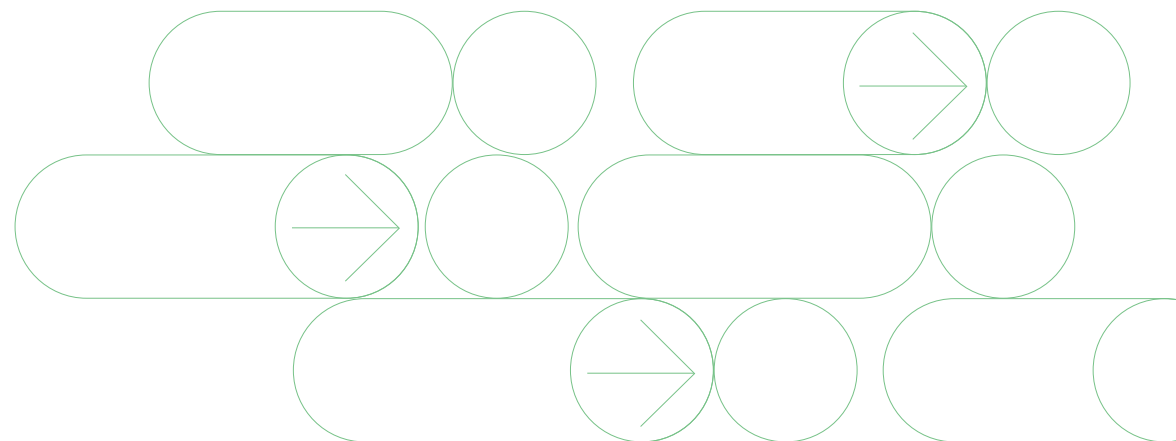


Green Energy and Global Business Pioneer

POSCO INTERNATIONAL CORPORATION SUSTAINABILITY REPORT 2022



CONTENTS



	Material Sustainability Topics			
At a Glance	Materiality Assessment	Strategy and Risk Management	Metrics and Targets	Appendix
04 Message from the CEO	12 Materiality Assessment Process	23 Risks and Opportunities for Material Topics	73 ESG Factbook	87 ESG Policy Book
05 Overview of Corporate Citizenship	13 Materiality Assessment Results	24 Climate and Environmental Impact	85 Financial Performance	96 GRI Standards Index
06 New Vision and Identity		35 Employee Value Enhancement		99 SASB Index
07 3 Core Businesses and Growth Strategy	Governance	43 Sustainable Supply Chain		103 Financial Statement
10 Global Network	15 Board of Directors	48 Health & Safety		109 About POSCO International
	17 Shareholders	54 Ethics/Fair Trade		110 Total Impact Measurement and Management(TIMM)
	18 Stakeholder Communication	61 Information Security		112 Certifications & Trademarks/Memberships
	20 ESG Management System	64 Social Impact		113 Independent Assurance Statement
		69 ESG Issue Paper		

About This Report

This report is the seventh sustainability report published by POSCO International to communicate our efforts to pursue sustainable growth and fulfill social and environmental responsibility. This report serves as a channel to transparently disclose our sustainability management activities for the year 2022 and reach out ever closer to wide-ranging stakeholders.

Reporting Principles

In accordance with the GRI Standards(2021)

Reporting Period

Jan. 1, 2022 ~ Dec. 31, 2022(2021 ~ H1 2023 for some performance data)

Reporting Boundary

Economy: On a consolidated basis in accordance with the K-IFRS
Social & Environment: HQ & main operational sites* and some of its domestic/overseas subsidiaries**

* Shwe Project in Myanmar, Incheon LNG Combined Cycle Power Plant, Gwangyang LNG Terminal

** POSCO Mobility Solution, PT.BIA, POSCO International Textile, etc.

Key Change

POSCO International merged with POSCO Energy on January 1, 2023 to integrate the functions of the distributed energy businesses of POSCO Group and complete

our LNG business value chain in so doing, boosting our business competitiveness and management efficiency while paving the way for sustainable growth.

Reporting Cycle Annual(most recent report: 2022)

Assurance (Financial data) Ernst & Young, (Non-Financial data) DNV

Contact Information

Address: 165 Convensia-daero(POSCO Tower-Songdo), Yeonsu-gu, Incheon, Republic of Korea

Tel: +82-2-759-2861, 3717

Department: ESG Strategy Section, Corporate Citizenship Bureau

E-mail: sustainability@poscointl.com



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

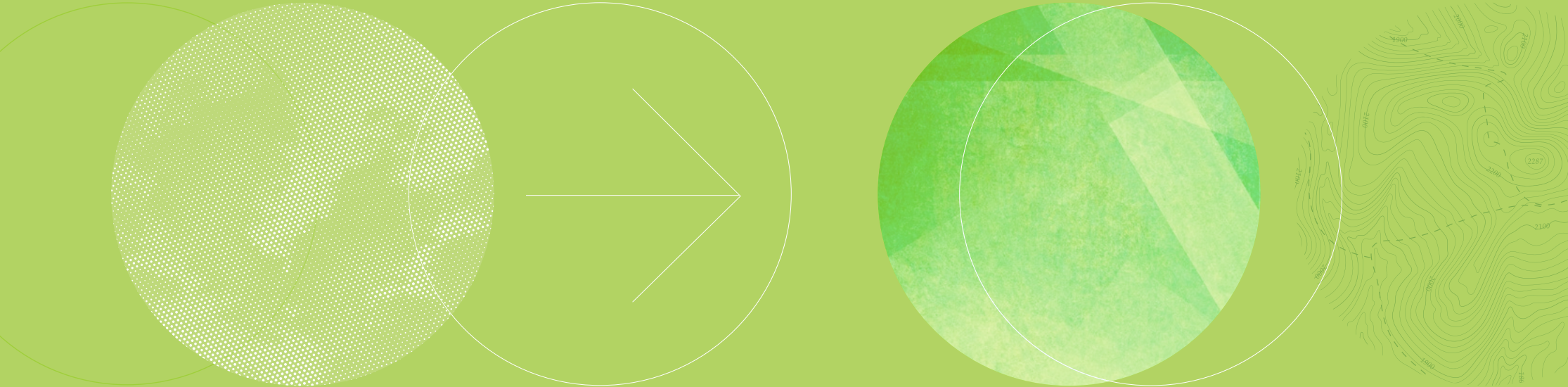


Metrics and Targets

Appendix

01 At a Glance

- 04 ____ Message from the CEO
- 05 ____ Overview of Corporate Citizenship
- 06 ____ New Vision and Identity
- 07 ____ 3 Core Businesses and Growth Strategy
- 10 ____ Global Network





At a Glance

Message from the CEO

Overview of Corporate Citizenship
New Vision and Identity
3 Core Businesses and Growth Strategy
Global Network

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

At a Glance

Message from the CEO



POSCO International Vice Chairman & CEO

Jeong, Tak

Green Energy & Global Business Pioneer!

As POSCO International emerges as a Green Energy & Global Business Pioneer, we will blaze the trail towards sustainable development on the strength of our responsible ESG management.

Dear Respected Stakeholders,

We, POSCO International, would like to begin with appreciation for your trust and encouragement for our journey towards sustainable growth and development.

The New Normal of life as we know it is increasingly defined by unpredictability amid the global economic crisis spurred by high inflationary pressure and interest rate hikes, the US-China competition for technology dominance, the Russo-Ukrainian war, and the continuing severity of climate change. In the face of mounting economic uncertainty, POSCO International has merged with POSCO Energy based on the enterprising spirit which has served us for the past 56 years to transform crisis into opportunity. This merge creates for us an added competitive edge of energy business which tops off who we already are as a globally integrated corporation, redefining our identity as an 'Eco-friendly Globally Integrated Corporation'.

We have bolstered our ESG management system to put 'sustainability' as top priority throughout our businesses. The ESG Committee was formed under the Board of Directors to expand its role of ESG management and supervision as required by the global community. In addition, the ESG Council is organized by the CEO in order to increase the driving force of company-wide ESG management. As we strengthen our institutional settings to shape a more sustainable future, we will also fulfill our social responsibility towards the environment and society at large.

In line with the emerging global consensus concerning climate change risks, which further highlights the importance of corporate environmental management capabilities, we define our Carbon Neutral Basic Roadmap to join in the Group's Net-Zero Carbon 2050 Declaration in the first year of merger with POSCO Energy. We will begin by setting reduction target from our energy business to further commit to achieving carbon neutrality, and will take the initiative in renewable energy development business to lead the Group's green business.

As the importance of sustainable supply chain management is escalating, we are putting our utmost efforts into promoting ESG management to establish a stable and responsible supply chain management for domestic and global operations and partners. Our Modern Slavery and Human Trafficking Statement attests to our respect for human rights in compliance with international standards along the entire length of our supply chains. As a member of the UN Global Compact, we integrated UNGC's 'The 10 Principles' into our management strategy including human rights, labor, environment, and anti-corruption to bolster sustainable growth and spread the POSCO Group's Corporate Citizenship management philosophy. We will carry forward with ESG management that is both sustainable and responsible in order to pursue shared growth in cooperation with our business partners.

Green Energy & Global Business Pioneer!

As we start anew with the merger, POSCO International is making a leap towards a more sustainable future with a new vision. We are determined to pioneer the lead in global eco-friendly energy, materials, and agri-bio business, and will remain steadfast in overcoming any challenges as we continue to stay the course. We will also build a corporate culture that provides each member with equal opportunity to unleash their creative potential and constantly push the boundary while ensuring we remain respectful and considerate as one cohesive team. In line with the management philosophy of 'Corporate Citizenship: Building a Better Future Together', we will become an ESG leader that creates a positive impact on society.

As our journey to evolve into an 'Eco-friendly Globally Integrated Corporation' begins anew to reinforce our legacy as a centennial company, we look forward to your ever-lasting encouragement and support every step of the way.



At a Glance

Message from the CEO
Overview of Corporate Citizenship
New Vision and Identity
3 Core Businesses and Growth Strategy
Global Network

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

At a Glance

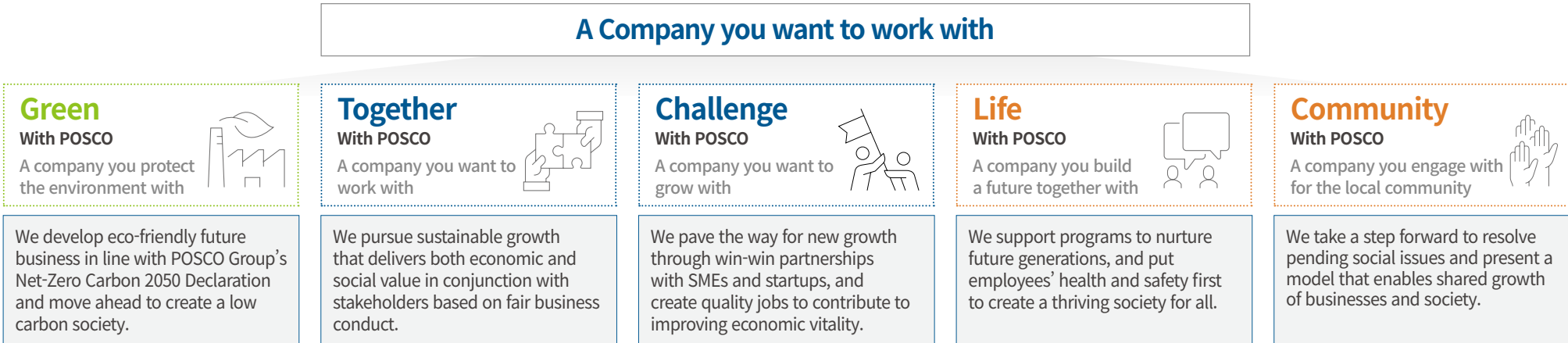
Overview of Corporate Citizenship

In 2018, the POSCO Group declared a new vision of ‘With POSCO’ and established a new management philosophy of ‘Corporate Citizenship: Building a Better Future Together’ to become a trustworthy enterprise for all stakeholders. A ‘corporate citizen’ refers to a member of the society with its own rights and duties, acting upon it’s own responsibility to achieve co-existence and co-prosperity to promote social development. To act on this corporate citizenship philosophy, POSCO International engaged in corporate citizenship activities under five brand pillars across the areas of Business, Society, and People in a way that relates to all stakeholders.

Core Value



Five Brands of Corporate Citizenship





At a Glance

Message from the CEO
Overview of Corporate Citizenship
New Vision and Identity
3 Core Businesses and Growth Strategy
Global Network

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

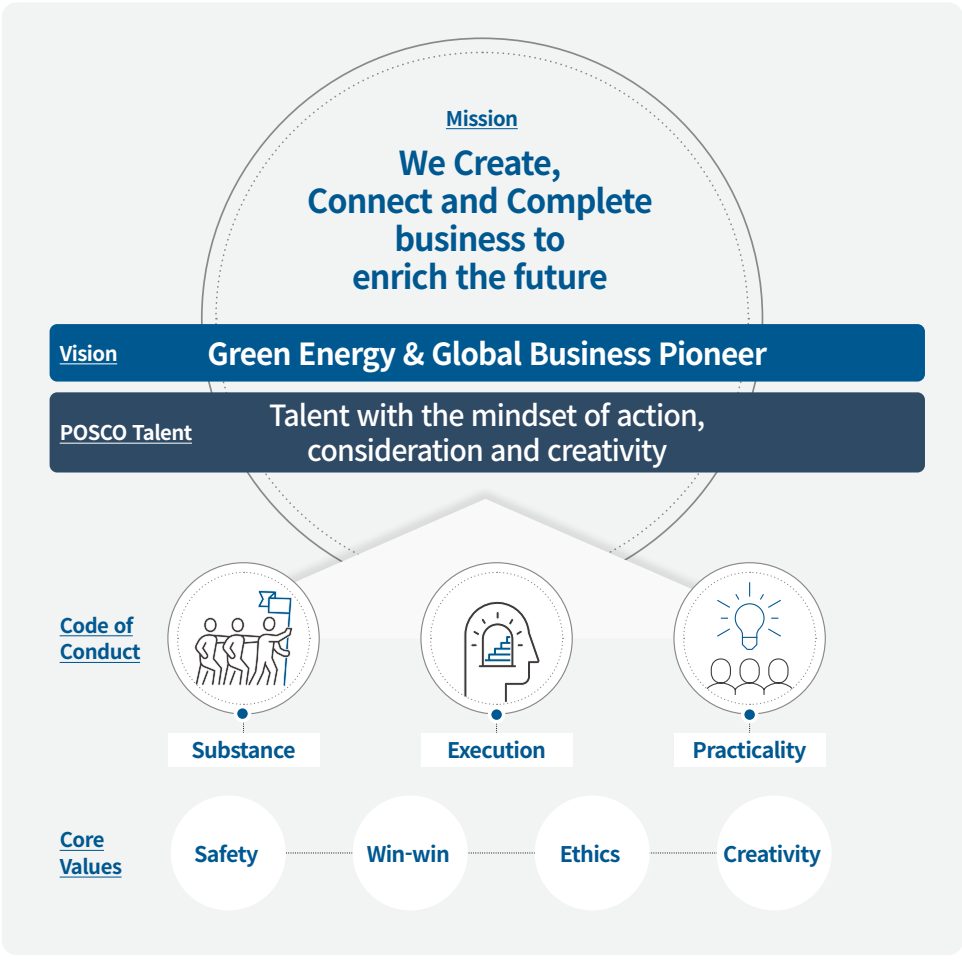
Appendix

At a Glance

New Vision and Identity

New Vision

With the integration of energy business operations, we have defined our vision to become a ‘Green Energy & Global Business Pioneer’ to establish a corporate identity centered on ‘Eco-friendliness and Sustainability’. We connected the value chains of LNG, hydrogen, and other green energy businesses to generate synergy, uncover business across industry boundaries, and challenge ourselves to unlimited business opportunities as a ‘Global Eco-friendly Corporation’.



Emerging as a Global Integrated Energy Company

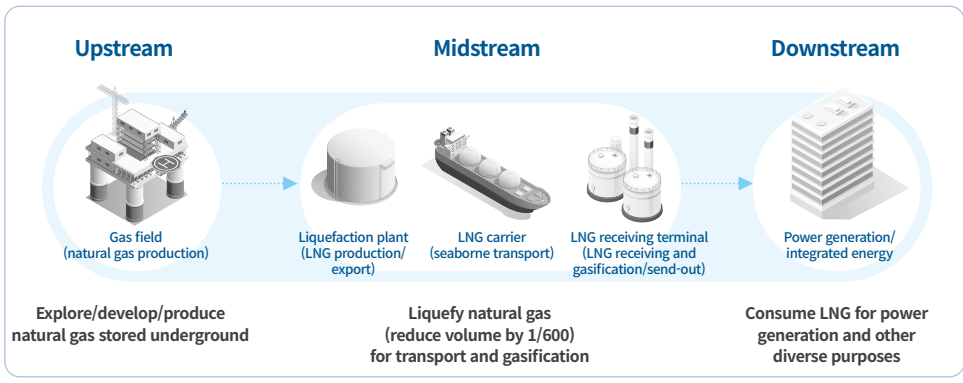
In January 2023, POSCO International merged with POSCO Energy, Korea’s first and largest private-sector power generator, to initiate the journey to becoming a global integrated energy company. Starting with the Shwe Project in Myanmar for gas field development in 2013 and the acquisition of Senex Energy Australia in 2022, we expanded our business portfolio from trading to energy and agro businesses, and has grown into a global energy company. The merge with POSCO Energy has completed the LNG business value chain spanning from exploration to production, storage, and generation. Based on this merge, our goal is to accelerate our growth as an eco-friendly corporation by investing in renewable, hydrogen, and other green businesses.

We are expecting synergy in the following areas.

First, significant improvement in the operational efficiency of POSCO Group’s energy business. The once divided energy business sector has now been integrated into POSCO International to establish a complete LNG value chain for both upstream and downstream activities.

Second, global competitiveness in the rapidly-shifting energy market. The captive demand from LNG terminals and gas power plants will help balance out supply and demand and expand trading volumes to improve production reliability and sales profitability.

Third, expansion in green energy business and diversification of power generation business in alignment with POSCO Group’s strategic directions. POSCO International will continuously expand reserves through exploration and expansion, and focus on strategic countries related to Gas to Power(GtP) business. In addition, POSCO International is shifting towards building a green business portfolio in renewable energy, ammonia infrastructure, CCS(Carbon Capture and Storage) and other businesses.





At a Glance

Message from the CEO
Overview of Corporate Citizenship
New Vision and Identity
3 Core Businesses and Growth Strategy
Global Network

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

At a Glance

3 Core Businesses and Growth Strategy

Energy

The Leader of sustainable future

Expanding future industries and markets
by leveraging owned assets as **a leader**

- Building a full-spectrum portfolio of green energy and generate value chain synergy

Growth Strategy



LNG Value Chain

Establish a complete LNG value chain to generate synergy from upstream to downstream businesses to
'Make Energy Business the Group's 3rd Growth Driver'

E&P Increase reserves through additional gas field development and new exploration, and broaden the value chain through the expansion of new assets that could be rendered LNG resources

LNG Expand the terminal infrastructure, and diversify the types of trading through the expansion of business aligned with terminals and LNG carriers

Power Generation Lay the basis for Net-Zero through co-firing generation and secure demand through the expansion of overseas GtP(Gas to Power) business



Renewable Energy/Hydrogen

Lay the basis to expand offshore wind power in partnership with leading companies, and 'Lead the Future Green Energy Business' through phased-in hydrogen/ammonia business implementation

Renewable Energy Reach 2.0GW in offshore wind power capacity through the timely completion of the Jeonnam Offshore Wind Farm and joint project development with leading companies

Hydrogen Build clean hydrogen and ammonia procurement(through cooperation with Group affiliates) and supply infrastructure based on hydrogen co-firing at the Incheon LNG Combined Cycle Power Plant and internal demand for ammonia co-firing for Samcheok Blue Power

POSCO International's energy business sector pursues a wide range of green energy business across upstream, midstream, and downstream operations along the entire LNG value chain. Oil and gas resource development has been our growth driver, directly engaged in the entire E&P(Exploration & Production) process including Myanmar Shwe project, Vietnam offshore block 11-2, Peru block 8, Malaysia offshore block PM524, and Bunga block of Indonesia. As Korea's first-ever LNG trader, we are developing our midstream business by bolstering the overseas project development and specialized trading capabilities, as well as expanding the LNG trading business via Gwangyang LNG Terminal. As an IPP(Independent Power Producer), we are capable of operating overseas generation projects, investment, financing, and operation in pursuit of downstream business for which we expect POSCO Group synergy. Furthermore, we are engaged in wide-ranging renewable energy business in line with the Korean government's 'Renewable Energy 3020' and '2050 Net Zero' policy.

Breakdown of Business

Upstream The Shwe Project is the largest overseas resources development project ever undertaken by a Korean private-sector business, and is currently supplying 500 million cubic feet of gas per day to Myanmar and China. The promotion of stable expansion of the upstream business occurred with the acquisition of Senex Energy in Australia along with a local partner. The exploration business is expected to grow based on our operatorship for Malaysia offshore block PM524 and Bunga block of Indonesia.

Midstream The Gwangyang LNG Terminal is increasing synergy through integrating midstream and downstream as core asset of LNG value chain, which is required from natural gas transportation to the final consumption phase. We also plan to build bunkering-exclusive infrastructure at the terminal to supply low-carbon fuel to ships. This will activate the domestic LNG bunkering market and help us to proactively respond to international environmental regulations.

Downstream We aim to expand our power generation business via the Incheon LNG Combined Cycle Power Plant. The Incheon LNG plant has 7 power generators and total capacity of 3,412MW, which is nearly 10% of power generated in the Seoul metropolitan area.

Renewable Energy Since the acquisition of the wind power company Shinan Green Energy in 2022, we are continuing to expand our green business portfolio in wind power and clean hydrogen to join POSCO Group's Net-Zero Carbon 2050.

Key Operational Sites

Shwe Project



Year of participation:
2000 (production initiated in June 2013)
Equity ownership: 51%(operator)
Area: 5,560km²
Project shareholders:
ONGC Videsh(India's national oil company) 17%
MOGE(Myanmar Oil and Gas Enterprise) 15%
GAIL(India's national gas company) 8.5%
KOGAS(Korea gas company) 8.5%

Gwangyang LNG Terminal



Location:
2148-581, Jecheol-ro, Gwangyang-si,
Jeonnam, Republic of Korea
Area: 260,000m²
Storage capacity: 730,000kℓ (unit no.1-5
tanks in operation)
Note: Korea's first private LNG
import terminal

Incheon LNG Combined Cycle Power Plant



Location:
314, 405-beon gil, Jungbongdae-ro,
Seo-gu, Incheon, Republic of Korea
Area: 478,060m²
Generation capacity: 3,412MW
Note: Korea's first private thermal
power plant



At a Glance

Message from the CEO
Overview of Corporate Citizenship
New Vision and Identity
3 Core Businesses and Growth Strategy
Global Network

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

At a Glance

3 Core Businesses and Growth Strategy

Materials

The Partner of core business

Pursuing the global advancement of the Group's 7 core businesses and value chain connection as a **partner**

- Expanding the global application of eco-friendly POSCO products as a steel solution provider

Growth Strategy



Steel

Emergence as a global top class steel business company to become a 'Total Steel Solution Provider' leading the green industry demand

Steel Trading Optimize our global network and export channels to lead domestic/overseas markets for Group affiliates and ensure reliable supply for customers

Raw Materials Procurement Strengthen our role as a procurement window of rechargeable battery raw materials and materials for Group affiliates in preparation for the transition to low-carbon operations

Expansion of Future Business Strengthen the sales portfolio for green growth industries including wind power, PV, and EVs
Lead the steel e-commerce market



Mobility

Emergence as a Global No.1 Mobility Solution Provider to position ourselves as a 'Manufacturer of Core Traction Parts for Eco-friendly Future Mobility'

Traction Motor Core Reach 7 million +α in global production capacity by 2030 (2 million +α in Korea, 5 million overseas)

Core Connected Parts Internalize the production of magnets, processed EV parts and other components to provide traction motor total solutions

R & D Leverage the Group's research infrastructure to develop next-generation traction motor core technology to gain competitive advantages

In cooperation with the global steel company POSCO, POSCO International trades leading domestic steel products with global partners. POSCO Mobility Solution specializing in steel processing and eSTEEL4U, our online steel sales platform, play a significant role in expanding our domestic steel processing and distribution business. We are also expanding our inventory storage service to ensure in-time delivery and raise our profile as a 'Total Steel Solution Provider' with an integrated value chain for both domestic and overseas supply.

Breakdown of Business

Trading From semi-finished and long steel, hot-rolled steel, steel plates, cold-rolled steel and galvanized steel to energy pipe steel, automotive steel, stainless steel, and steel raw materials, we handle a wide array of products to conduct diversified and segmented business. To keep up with our new green vision and strategy, we are shifting our sales portfolio towards PV and wind power structures, as well as green mobility automotive parts. Our online steel sales platform eSTEEL4U was developed to diversify traded products and deliver customized services for increased customer convenience with an aim to emerge as Korea's No.1 steel e-commerce platform.

Mobility POSCO Mobility Solution specializes in steel and parts production for green vehicles, UMA(Urban Air Mobility), and drones. The company's portfolio includes ultra-thin stainless precision materials for mobility products, green mobility traction motor core, hydrogen fuel cell metal separators, and also manufactures battery pouch materials, smartphone components and other products that help expand the emerging green industries. POSCO Mobility Solution will continue to strengthen its competitiveness in the green materials and parts business and improve management efficiency to expand synergy with POSCO Group.

Key Operational Sites

POSCO Mobility Solution



Location:
115, Gunsu 1-gil, Jiksan-eup, Seobuk-gu, Cheonan-si, Chungcheongnam-do, Republic of Korea
Year of establishment: 2020
Production capacity: 648,000 tons, 1.43 million units of traction motor core
Sales: KRW 1,419 billion

SUZHOU POSCO-CORE TECHNOLOGY



Location:
Suzhou Industrial Park, Jiangsu Province, China
Year of establishment: 2005
Production capacity:
52,300 tons, 96,000 units of traction motor core
Sales: KRW 150.4 billion

POSCO Mexico e-Mobility



Location:
Ramos Arizpe, Coahuila State, Mexico
Year of establishment:
2022(mass-production to begin in November 2023)
Production capacity:
1.5 million units of traction motor core

POSCO TMC INDIA



Location:
Pune City, Maharashtra State, India
Year of establishment: 2009
Production capacity: 23,300 tons
Sales: KRW 65.4 billion



At a Glance

Message from the CEO
Overview of Corporate Citizenship
New Vision and Identity
3 Core Businesses and Growth Strategy
Global Network

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

At a Glance

3 Core Businesses and Growth Strategy

Agri Bio

The Innovator of emerging industry

Discovering and creating future growth drivers aside from 7 core businesses as **an innovator**

- Exploring green/white bio business opportunities

Growth Strategy



Agro

Emerge as a global top-tier integrated agro company based on the expanded up/downstream value chain and green agro business to serve as a 'Food Security Guardian'

Business Expansion Reach 21 million tons in global agro handling to emerge as a global player

Value Chain Expansion Secure fixed demand based on stable supply chains to emerge as Korea's leading food security company

New Business Strengthen the function and portfolio of new growth/future business platforms in the green materials sector



Bio/New Business

Serve as a 'New Growth Momentum Discoverer for the Group' by creating a bio industry ecosystem and conducting on/offline platform business

Bio Lead the Group's green business with a focus on white bio(bioplastic) and green bio(smart farming, biomass, etc)

New Business Establish an integrated on/offline trading platform Discover promising venture firms through POSCO Venture Capital and CHANGEUP GROUND

We are the only trading company in Korea enlisted as a member of GAFTA(Grain and Feed Trade Association) and FOSFA(Federation of Oils, Seeds and Fats Association). Based on corn, wheat, rice, soybean and other grain imports into Korea, we are expanding our third party transactions in Asia(Korea, China, etc), CIS(Russia, Ukraine), North/Latin America, the Middle East and Africa via our global network. CPO(Crude Palm Oil) manufactured from our large-scale palm plantation is traded in the Indonesian domestic market and in the global market as well. In Uzbekistan, our textile corporation is focusing on sustainable future agro resources based on the abundant raw cotton available.

Breakdown of Business

Grain and Oil The Ukraine grain terminal business helps strengthen our procurement competitiveness near the Black Sea region, a major grain-producing area. From our 20 years of rice import business experience, we are operating the Rice Processing Complex(RPC) which serves as the core of the rice industry's value chain in Myanmar.

In Indonesia, we are operating a sustainable palm plantation business in conformity with the RSPO(Roundtable on Sustainable Palm Oil) certification, to become an eco-friendly company by building an integrated up & downstream value chain.

Bioplastic We are keeping up with the global market trends by handling bioplastics(PBAT, PLA, PBS), PTA, and rubber. We are also expanding our business in the bio industry including both green and red bio projects, and raising our status not only in international trading but also as a green company operating and investing in an integrated value chain spanning across both Korea and overseas.

Key Operational Sites

PT.BIA in Indonesia



Location: Papua, Indonesia
Year of establishment: 2011
Scale: 3 CPO mills, 9 religious facilities, 3 Clinics, etc.
Area: 34,195ha (planted area: 21,166ha)
Production capacity: 186,368 tons (2022)

POSCO International Textile in Uzbekistan



Location: Fergana Province, Andijan, Uzbekistan
Year of establishment: 1996
Production facility:
Fergana (spinning and weaving factory)
Tashlak (spinning factory)
Bukhara (spinning and weaving factory)
Cotton cultivation area: 5,210ha
Production capacity: (single yarn)50,000 tons/year, (fabric) 40,000 km/year

Grain terminal in Ukraine



Location: Mykolaiv, Ukraine
Date of operation: Dec. 2019
Facility capacity: Up to 2.5 million tons in annual handling volume
Grains handled:
Corn, wheat, barley, soybean, etc.

RPC in Myanmar



Location:
Yangon Thilawa Special Economic Zone, Ayeyarwady Region, Myanmar
Area: Factory 1 - 13,710㎡(3.4acre)
Factory 2 - 55,846㎡(13.8acre)
Scale: 100,000 tons in annual production capacity (based on raw materials)



At a Glance

Message from the CEO
Overview of Corporate Citizenship
New Vision and Identity
3 Core Businesses and Growth Strategy
Global Network

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



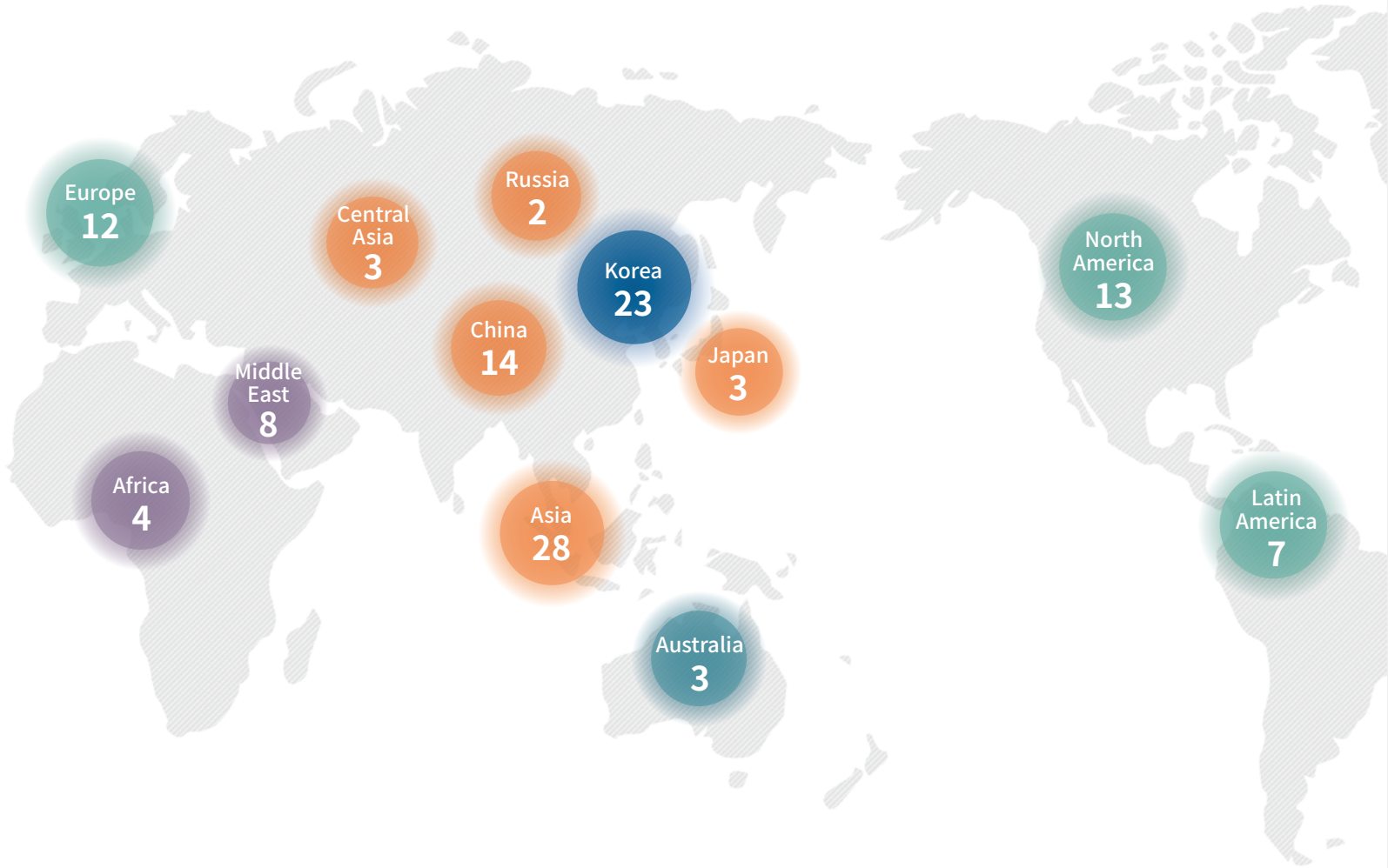
Metrics and Targets

Appendix

At a Glance

Global Network

POSCO International has continuously expanded business operations across various industries including energy, steel, agro, and parts & materials, based on global network and marketing know-hows. After the merge with POSCO Energy in January 2023, we have established a complete LNG value chain and is now evolving into a global green energy business enterprise.



Sales Breakdown by Region in 2022*

(As of the end of Dec. 2022, unit: KRW billion)

Region	Sales	Ratio of Sales(%)
Korea	5,582	14.7
Asia(excluding China)	16,946	44.7
China	4,618	12.1
Europe	3,464	9.1
North America	3,203	8.4
Others	4,165	11.0
Total	37,978	100

* This is based on net sales, and excludes KRW 10,810 million generated from property investments as leased income.

Global Network at a Glance

(As of Dec. 2022)

Overseas Presence(Countries)	50 countries
Overseas Corporations and Offices	125 locations
Trading Corporation	15
Affiliated Branch	17
Representative Office	24
Liaison Office	5
Investment Corporation	64

* Consolidated subsidiaries in 2022: See p.3 of the Annual Report

* New consolidated subsidiaries in 2022: Senex Holdings Pty Ltd (previously K-A Energy 1 Pty Ltd), Posco Mexico e-Mobility S.A DE C.V., eSTEEL4U

* Including affiliated subsidiaries in energy business in 2022



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



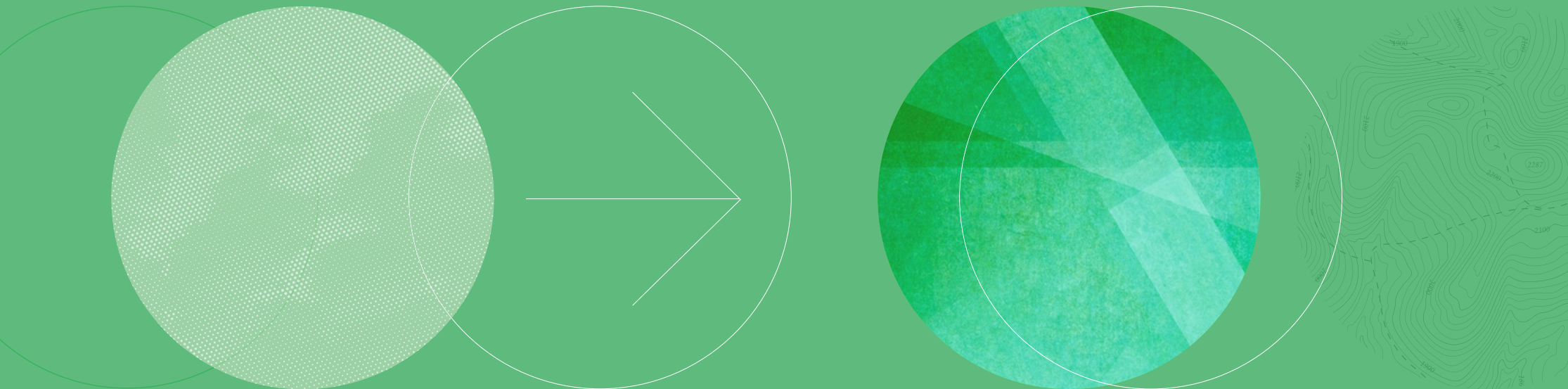
Metrics and Targets

Appendix

02 Materiality Assessment

12 ____ Materiality Assessment Process

13 ____ Materiality Assessment Results





At a Glance

Material Sustainability Topics



Materiality Assessment
Materiality Assessment Process
Materiality Assessment Results



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

Materiality Assessment

POSCO International performed materiality assessment based on the updated GRI(Global Reporting Initiative) Standards. ESG topics were derived based on the understanding of the company’s business context, and assessed on their impact on economy, environment, and people. This was followed by the impact assessment conducted by internal/external experts with a good understanding of the company and ESG. The assessment was based on 4 criteria(scale, scope, irremediable character, likelihood) and the 5 key ESG topics were approved after being reviewed by the Board of Directors.

Materiality Assessment Process

Process	Purpose and Activity	Detailed Process and Considerations	Deliverables
Understanding of the business context	To understand the company’s business activities, relationships and its sustainability context to fully identify the actual and potential impact on sustainability	- Overall activities: Mission, business model/strategy, products and services, geographic locations, types of employees, etc. - Business relationships: Type of business, nature of customers and supply chains, etc. - Sustainability context: Economic, environmental, and social challenges related to the company’s business sectors, activities, social issues and laws/regulations	Identify stakeholders: Shareholders & investors, customers, suppliers, employees, communities & civic organizations, governments & international organizations
Deriving the topic pool	To decide the disclosable topics on behalf of stakeholder’s request, related to the nature of the company and its business	- Analyze major disclosure guidelines(GRI, SASB, TCFD, etc.) - Analyze major ESG assessment standards(MSCI, DJSI, KCGS, etc.) - Analyze the material ESG topics reported by industry peers - Analyze the company’s internal ESG management data including sustainability management strategies and focus areas	List 22 topics
Identifying the characteristics of topics	Identify the impact of the topics (positive/negative, actual/potential), and determine the impact assessment method depending on their identified type	- Understand the policies and legal requirements, media articles, global disclosure and assessment standards, internal news, and shareholder/investor requirements related to respective topics - Identify the nature of the topics: Determine the scope of impact(economy, environment, people) and the positive/negative impact and actual/potential impact	Develop impact assessment tools
Conduct impact assessment on topics	Survey internal/external stakeholders with a good understanding of the company and ESG to prioritize topics	- Topic assessment criteria: Scale, scope, irremediable character, likelihood - Detailed assessment criteria by nature of impact Actual negative impact: Scale x Scope x Irremediable character Potential negative impact: Scale x Scope x Irremediable character x Likelihood Actual positive impact: Scale x Scope Potential positive impact: Scale x Scope x Likelihood	Generate impact assessment results and priorities
Choose material topics	Prioritize reporting topics through the highest sustainability decision-making body	- Perform quantitative analyses on impact assessment results - Group material topics as disclosure topics based on assessment results - Review and approval at the Board of Directors	Select material topics and group disclosure topics



At a Glance

Material Sustainability Topics



Materiality Assessment
Materiality Assessment Process
Materiality Assessment Results



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

Materiality Assessment Results

ESG	No.	Material Topic	Identified Results	Significant Impact	Scope of Impact	Level of Impact	Material Topic Ranking/ Change from the Previous Year		GRI Index	Material Topic Group	Page
E	1	GHG emissions	Negative-Actual	GHG emissions from the value chain cause negative climate impacts(abnormal weather events, natural disasters, ecosystem destruction) while incurring costs to respond to national/global regulations(GHG emissions schemes).	Environment	●●●●●	1	▲ 3	305-1, 2, 4	Climate and Environmental Impact	24-34, 73
E S	2	Diversifying new business portfolios	Positive-Actual	In order to keep up with the shifting internal/external conditions due to enforced carbon regulations and eco-friendly market needs, re-alignment of business portfolios towards new green businesses is required to respond to climate change in social and economic aspects.	Environment, Economy	●●●●●	3	▼ 2	Non-GRI		7-9, 24-30
E	3	Improving energy consumption efficiency	Positive-Actual	Contributing to lower energy costs and GHG emissions, as well as improving efficiency, by reducing total energy consumption directly generated from company-owned sources(operational sites, etc.) or energy purchased from external sources.	Environment	●●●●●	4	▲ 10	302-1		24-34, 73
E S	4	Protecting the ecosystem	Positive-Actual	Contributing to protecting the local communities and ecosystem by engaging in biodiversity activities.	Environment	●●●●●	10	▲ 8	304-3		66, 70-71
S G	5	Employee training	Positive-Actual	Securing future competitiveness and sustainability by identifying the core competencies for each job, and providing the proper education to train global talents.	People, Economy	●●●●●	8	▲ 2	401-1, 3	Employee Value Enhancement	35-37, 76-78
S	6	Protecting human rights	Positive-Potential	Conducting human rights impact assessments to understand and mitigate current or potential human rights risks employees, supplier workers, and members of the communities are facing.	People	●●●●●	9	▼ 2	406-1		40-41
E S G	7	Sustainable supply chain management	Positive-Potential	Establishing a supplier ESG risk management system and conducting ESG risk assessment-due diligence-improvement review to help suppliers recognize, prevent/avoid, mitigate actual/potential ESG risks.	People, Environment, Economy	●●●●●	6	▼ 4	414-1	Sustainable Supply Chain	43-44, 46-47, 52, 94
S	8	Employee health & safety	Negative-Potential	Any accidents or injuries that occur at operational sites may result in business delay or suspension, and cause losses for productivity and employee health & safety.	People	●●●●●	7	▼ 3	403-1~7, 9	Health & Safety	48-53, 81-82
G	9	Complying with laws/policies and international standards	Positive-Actual	Understanding the laws and regulations to be abided by in business conduct, and identifying ESG-related industry policies and regulatory trends to proactively manage risk factors and identify opportunities that may impact our business operations, including the Carbon Border Adjustment Mechanism, global ESG disclosures, the taxonomy, and the supply chain due diligence legislation.	Economy	●●●●●	2	▲ 10	206-1	Ethics/ Fair Trade	54-56, 59-60
S G	10	Bolstering ethical management and anti-corruption	Positive-Potential	Ensuring that the company abides by applicable laws, codes of conduct, and implementation norms associated with ethical management and anti-corruption, as well as providing all employees with anti-corruption and ethics training to build a corporate culture of anti-corruption and engage in anti-corruption activities.	People, Economy	●●●●●	5	▲ 12	205-1		54-60



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

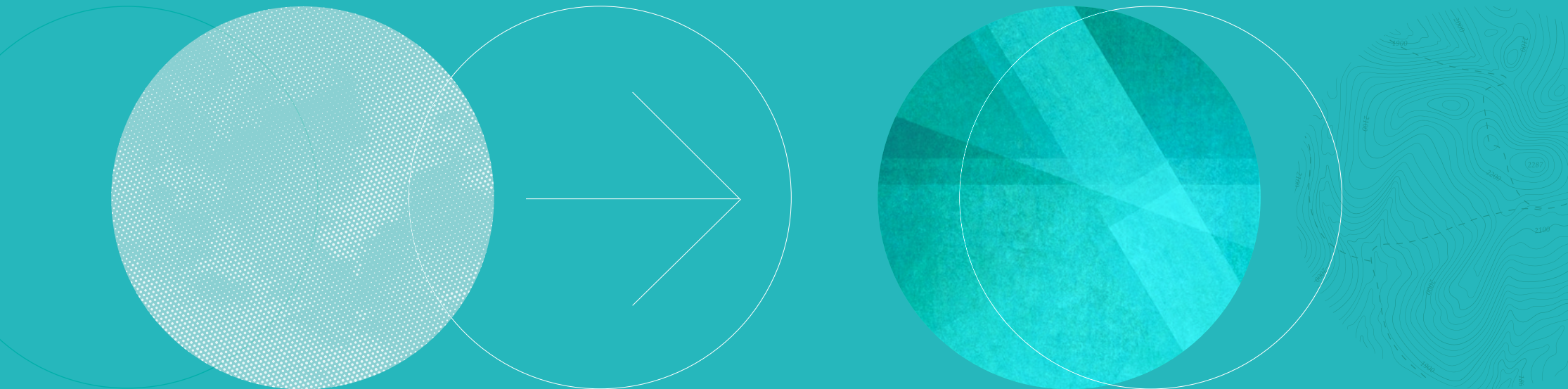


Metrics and Targets

Appendix

03 Governance

- 15 Board of Directors
- 17 Shareholders
- 18 Stakeholder Communication
- 20 ESG Management System





At a Glance

Material Sustainability Topics



Materiality Assessment



Governance

Board of Directors

Shareholders
Stakeholder Communication
ESG Management System



Strategy and Risk Management



Metrics and Targets

Appendix

Board of Directors

POSCO International's Board of Directors(BOD) consists of three inside directors and four outside directors. We ensure that our directors do not overlap in any specific backgrounds or represent any particular interests. Members of the board are qualified for their expertise, knowledge and extensive experience in management, accounting, environment, law, or industries we are associated with in accordance with outside director operational guidelines to promote the diversity and expertise of governance. We have appointed a female registered director since 2020 to abide by the Capital Market Act which mandates the gender diversity of the BOD, and increased the number of outside directors with expertise in the environmental area to bolster expertise in the Board's decision-making in relation to climate change. We also operate an internal organization dedicated to supporting outside directors to improve the efficiency of their activities.

Composition of the BOD

(As of Jun. 2023)

Type of Director	Name (Gender)	Position	Career	Date of Initial Appointment	Date of Term Expiration	Audit Committee	Outside Director Candidate Recommendation Committee	ESG Committee
Inside Director	Tak Jeong (Male)	Chair of the BOD Chair of the Outside Director Candidate Recommendation Committee	Curr. Vice Chairman & CEO, POSCO International Fmr. President and CEO, POSCO(Head of Marketing Division) BA in Arabic Studies, Hankuk University of Foreign Studies	2023.03.20			●	
	Kye-In Lee (Male)		Curr. Chief Officer of Global Business Unit, POSCO International Fmr. COO, Steel Business 1 Group, POSCO International MBA, Sungkyunkwan University	2023.03.20			●	●
	Jeon-Hyeok Lee (Male)		Curr. Chief Officer of Energy Business Unit, POSCO International Fmr. Head of Corporate Planning & Supporting Group, POSCO Energy MBA, Yonsei University	2023.03.20	Until the regular General Shareholder Meeting In 2024		●	●
Outside Director	Jong-Ho Hong (Male)	Chair of the ESG Committee	Curr. Professor, Graduate School of Environmental Studies, Seoul National University Fmr. President, Asian Association of Environmental and Resource Economics(AAERE) Chair, Korean Association of Environmental and Resource Economics PhD in Applied Economics, Cornell University, US	2020.03.30		●	●	●
	Haeng-Hee Lee (Female)		Curr. President & CEO, Coming Korea Fmr. Chair, Korean CEO's Association of Multinational Corporations PhD in Business Administration, Sookmyung Women's University	2022.03.21		●	●	●
	Jong-Soo Han (Male)	Chair of the Audit Committee	Curr. Professor, Accounting, Ewha Womans University, Outside director, LG Corporation Fmr. President, Korean Accounting Association Member, Accounting Deliberation Committee, Financial Supervisory Service PhD in Accounting, University of Pittsburgh, US	2023.03.20	Until the regular General Shareholder Meeting In 2025	●	●	●
	Yeong-Han Chun (Male)		Curr. Professor, Electrical and Electronics Engineering, Hongik University Fmr. Member, Presidential Commission on Carbon Neutrality and Green Growth Member, Electricity Regulatory Committee PhD in Electrical Engineering, University of Tokyo, Japan	2023.03.20		●	●	●

Board of Directors

Board Skills Matrix

Skills	Jeong Tak	Kye- In Lee	Jeon- Hyeok Lee	Jong- Ho Hong	Haeng- Hee Lee	Jong- Soo Han	Yeong- Han Chun
Leadership	●	●	●		●		
Law/regulation				●		●	●
Financial affairs/finance	●		●	●		●	
Global business experience	●	●			●		
Industry	●	●	●				●
ESG				●	●	●	●

Board Committees

The ESG Committee, the Audit Committee, and the Outside Director Candidate Recommendation Committee were established in affiliation with the BOD to strengthen the independence expertise of the Board’s execution. Each committee fulfills their role as stipulated in our Articles of Incorporation, internal regulations, and the Commercial Act, and is delegated by the Board to partially assume its role to expedite the Company’s decision-making and improve management efficiency in so doing. In particular, outside directors comprise more than two thirds of the Audit Committee to ensure its fairness and transparency.

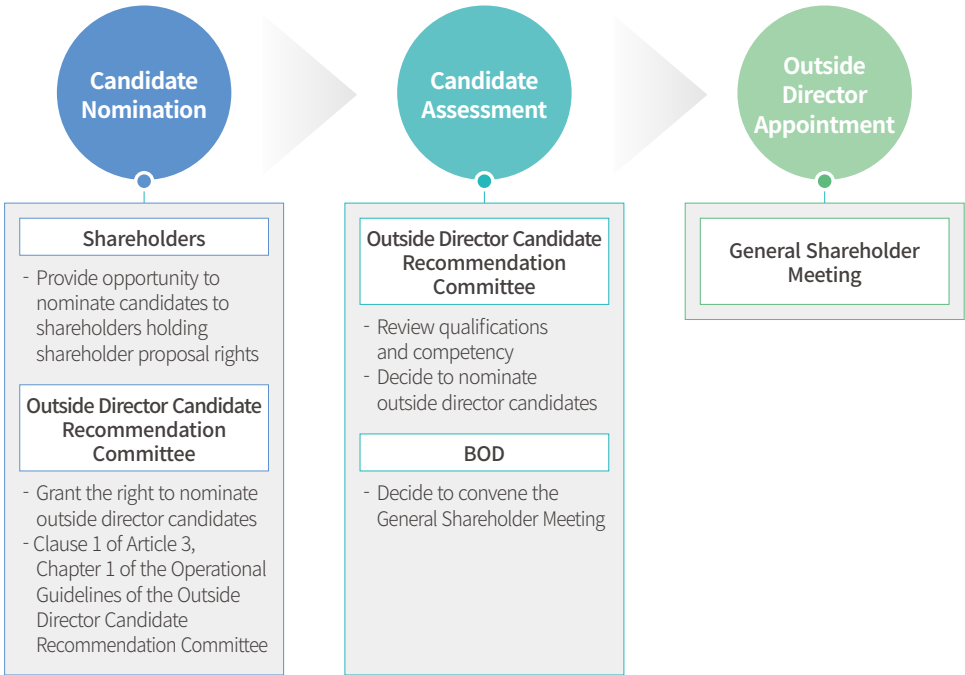
(As of Jun. 2023)

Committee	Mandate
ESG Committee	Make decisions on key matters of ESG management in conformity with Article 9 of the BOD regulations and ESG Committee operational guidelines
Audit Committee	Head audit operations in conformity with Article 415-2 and Article 542-11 of the Commercial Act, the Articles of Incorporation, and other applicable regulations
Outside Director Candidate Recommendation Committee	Review the qualifications of outside directors and deliberate on their nomination in conformity with Clauses 4 & 5 of Article 542-8 of the Commercial Act

Outside Director Appointment Process

The Outside Director Candidate Recommendation Committee has the right to nominate candidates based on their expertise in accordance with the qualifications set by the Commercial Act and our Articles of Incorporation. Shareholders holding shareholder proposal rights are able to nominate director candidates pursuant to the Commercial Act. We make sure outside director candidates are not discriminated against on the grounds of gender, race, and nationality and are respected for their diversity. Candidates who may undermine our corporate value or violate shareholder rights and interest, including those who have been previously subject to disciplinary action for regulatory non-compliance, are excluded in the nomination process.

Information on outside director candidates is made public for all shareholders at least two weeks before the General Shareholder Meeting to aid in their sufficient review. Director appointment requires a majority of the committee attending and voting for or against, and directors who have special interest in such matters are prohibited from exercising their voting rights. We make sure that we follow the fair process and reflect diverse feedback from stakeholders to appoint qualified outside directors and contribute to the sound business operations of the Company as a result.



Material Sustainability Topics



Materiality Assessment



Governance

Board of Directors

Shareholders

Stakeholder Communication

ESG Management System



Strategy and Risk Management



Metrics and Targets

Appendix



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance

Board of Directors
Shareholders

Stakeholder Communication
ESG Management System



Strategy and Risk Management



Metrics and Targets

Appendix

Board of Directors

Board Meetings Held

Board meetings are arranged on an annual basis, and the meeting agenda is announced seven business days prior to the meeting in accordance with BOD regulations. Reasons for changes in meeting schedule is notified immediately. In 2022, the Board met 11 times in total to decide on 36 agenda items. Director attendance was 97% in 2022.

Date	Agenda	Approval
2022.01.26	4 agenda items including approving the 21 st financial statements	Approved
2022.02.23	2 agenda items including convening the 22 nd General Shareholder Meeting and deciding on its agenda	Approved
2022.03.21	7 agenda items including appointing the CEO	Approved
2022.04.29	2 agenda items including participating in the paid-in capital increase for the motor core production corporation in Mexico and offering payment guarantee	Approved
2022.05.19	Providing payment guarantee for PIGD	Approved
2022.06.27	4 agenda items including changing the appointment of the voluntary compliance manager	Approved
2022.07.27	2 agenda items including amending compliance control regulations	Approved
2022.08.12	Approving signing the merger agreement with POSCO Energy	Approved
2022.09.28	4 agenda items including making donations to help those affected by heavy rain	Approved
2022.10.28	Amending BOD regulations in relation to ESG	Approved
2022.12.19	8 agenda items including approving the business plan for 2023	Approved

Shareholders

Shares and Dividends

As of the end of March 2023, the total number of issued common shares amounted to 175,922,788 shares, and the number of outstanding shares was 170,153,767 shares, excluding 5,769,021 treasury shares. The largest shareholder is POSCO Holdings with 70.7% of total, and other minority shareholders own 25.45% of total.

[Shareholders]

(As of Mar. 2023)

Category	POSCO Holdings	National Pension Service ¹⁾	Employee Stock Ownership Association	Others
No. of Shares	124,396,358	12,132,987	68,140	39,325,303
Ratio	70.71%	6.90%	0.03%	22.36%

1) National Pension Service's ownership changed to 5.90% as it sold shares on 26 May 2023.

[Dividends Paid]

(Consolidated)

Category	Unit	2020	2021	2022
Net income ²⁾	KRW million	238,557	360,789	589,750
Earnings per share	KRW	1,934	2,924	4,780
Total cash dividends	KRW million	86,362	98,700	123,355
Cash dividend payout ratio	%	36.2	27.4	20.9
Dividends per share	KRW	700	800	1,000

2) Net income attributable to the owners of controlling interests

Shareholder and Investor Communication

We provide ESG information in accordance with the standards presented by the SASB(Sustainable Accounting Standards Board), and engage in regular briefing sessions and year-round IR activities to raise awareness and understanding among shareholders and investors. We uploaded our ESG reports and hosted ESG Corporate Day events with securities firms to communicate with domestic responsible investing institutions to make our ESG information more widely accessible. We proactively communicated across diverse business areas including controversy issues to share information in a fair manner. In 2023, we will engage in joint IR activities with POSCO Group to share the Group's growth strategy and further reach out to stakeholders.

Major ESG Controversy issue(<https://poscointl.com/eng/esg/controversies.do>)



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance

Board of Directors
Shareholders

Stakeholder Communication
ESG Management System



Strategy and Risk Management



Metrics and Targets

Appendix

Stakeholder Communication

Stakeholder Communication Channel

POSCO International gathers feedback from stakeholders interacting with the Company directly and indirectly and integrates such feedback in its business operations. We open channels to reach out to our major stakeholders – shareholders & investors, customers, suppliers, employees, local communities & civic organizations, and governments & international organizations - to identify major pending issues. We will continue to connect with stakeholders and bring satisfaction to all stakeholders in conducting business.

Stakeholder	Major Issue	Major Communication Channel and Activity	Related Link
Shareholders & Investors	- Stakeholder value improvement - Reliable economic performance - Corporate accessibility improvement - Transparent governance	- Make disclosures and announcements through the general shareholder meetings and IR events - Conduct IR events including analyst meetings and conference calls - Publish IR Letters through the website - Collect feedback through interviews	Disclosures and Announcements https://poscointl.com/eng/ir/irPresentation.do IR materials https://poscointl.com/eng/ir/irPresentation.do
Customers	- Maintenance of stable transactions - Increased price and quality competitiveness - Socially/environmentally-friendly product development	- Collect feedback from responsible staff through interviews - Receive feedback through the website and e-mails	Feedback Collection Channels https://poscointl.com/eng/inquiry/bizInquiry.do eSTEEL4U https://www.esteel4u.com/
Suppliers	- Work condition improvement - Support for business partners' capacity building - Communication facilitation including the sharing of market information	- Hold Voluntary Compliance Committee meetings and management meetings - Support suppliers with quality and process improvements - Pursue global marketing collaboration with SMEs and startups - Collect feedback from responsible staff through interviews - Receive feedback through the website and e-mails	Abuse of Authority Report Center https://poscointl.com/eng/report/reportWrite.do?type=2 eSTEEL4U https://www.esteel4u.com/ Global Marketing Collaboration Portal for SMEs and Ventures https://withyou.poscointl.com/
Employees	- Employees' capacity building - Work-life balance - Fair appraisal and compensation - Facilitation of labor-management - Workplace safety	- Conduct employee satisfaction surveys (P-GWP) - Operate the Labor Management Council - Publish the in-house webzine POINT - Hold remote meetings presided by the CEO - Hold business group/unit specific townhall meetings - Conduct reverse mentoring	Bullying & Sexual Harassment Report Center https://poscointl.com/eng/report/reportWrite.do?type=3 Ethics Consultations https://poscointl.com/eng/report/reportWrite.do?type=4
Local Communities & Civic Organizations	- Community development - Human rights protection - Resolution of social issues	- Hold public consultation meetings with local residents - Operate grievance mechanisms - Collect feedback through interviews - Address stakeholder questions through CSR activities - Collect feedback through the website and e-mails	Feedback Collection Channels https://poscointl.com/eng/inquiry/bizInquiry.do
Governments & International Organizations	- Fair trade - Human rights protection - Environmental protection	- Hold public consultation meetings with local residents - Address stakeholder questions through CSR activities - Collect feedback through the website and e-mails	Feedback Collection Channels https://poscointl.com/eng/inquiry/bizInquiry.do

Report Publication



We report our achievements in fulfilling economic, social and environmental responsibility each year. Such reports assist us in transparently disclosing our sustainability management activities and communicating our sustainability management in general to wide-ranging stakeholders.

<https://poscointl.com/eng/esg/ccReport.do>



This environmental and social impact assessment report is prepared to study the potential impact of Phase 3 development of the Shwe Project in Myanmar on the surrounding environment and local communities and to develop plans and measures to prevent and mitigate such impact.

<https://poscointl.com/eng/esg/myanmarReport.do>



PT.BIA provides regular safety training on major facilities, equipment and vehicles to prevent fires and safety incidents through the creation of its own safety management committee(P2K3), and publishes reports to disclose the outcomes of such activities.



PT.BIA publishes Environmental Management Plan(RKL) and Environmental Monitoring Plan(RPL) reports to disclose its achievements in environmental management performance, concerning the plantation's water quality, air, soil erosion, biodiversity and local CSR activities.



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance

Board of Directors
Shareholders

Stakeholder Communication
ESG Management System



Strategy and Risk Management



Metrics and Targets

Appendix

Stakeholder Communication

Communication by Stakeholder Group

Communication with Employees

We collect employee feedback with the help of labor representatives appointed through the Labor Management Council and labor unions, and make necessary improvements accordingly. In addition, we perform employee satisfaction surveys(P-GWP) each year to identify their satisfaction with work life and reflect their feedback. We also arrange discussion sessions at our overseas operation sites to discuss a wide-range of agendas including labor-management to develop improvement measures with an aim to improve working conditions and protect human rights.

POSCO International Textile in Uzbekistan

Holding Labor-Management Discussions

POSCO International Textile in Uzbekistan hosts the Junior Board Meeting. The main purpose of this meeting is to protect human rights, improve working conditions, and listen to employee demands and proposals to present possible improvements. The Junior Board Meeting is attended by 16 members in total – four members from each of the four factories – and these members are required to have worked two years or longer at the company. The meeting agenda primarily concerns grievances raised by employees inside and outside their working environment including meals, rest areas, and shop floor reconstruction.

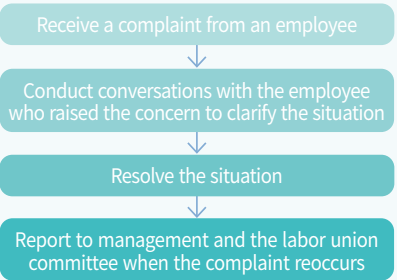
[Labor-Management Discussions Held]

Category	Unit	2021	2022
Meetings held	No. of meetings	7	9
Agenda discussed	No. of cases	41	50
Improvement actions taken for the discussed agenda	No. of cases	37	45

Complaint Handling Mechanism

Each factory operated by POSCO International Textile in Uzbekistan has a box for collecting anonymous complaints and agendas from employees, installed in areas not under video surveillance. They are collected by the person responsible for the complaint handling process with full confidentiality guaranteed. When this principle of anonymity is violated, the designated person takes responsibility. The processing of these complaints and agendas is recorded in a numbered log to document the progress made and their resolution process.

[Complaint Handling Process at POSCO International Textil]



Communication with Local Communities

We actively communicate with members of the communities where we operate to manage the impact of our business operations on these communities. We regularly open public consultation meetings, operate online report centers via our website, and provide grievances.

PT.BIA

Implementing the Community Development Program and Public Consultations

PT.BIA created a taskforce to implement its community development program for indigenous people living in the vicinity of the plantation, and opened public consultation meetings for stakeholders(government, indigenous people, and local NGOs, etc.) to promote mutual understanding on the program and explore ways to collaborate. PT.BIA is partnering with experts in the fields of government, academia, and NGOs to work on healthcare programs to reduce starvation, educational programs to lower illiteracy, and other community development programs including the organization of village-level economic cooperatives.

Implementing the Plasma Project

Plasma is a policy that states 20% of the allowed plantation area should be granted to and run by local famers. This is to create jobs and enhance economic activity in the local community, and has become a viable community development model. With the help of full support from PT.BIA, plasma estates are also achieving RSPO and ISPO certifications to operate on par with international standards. Not only do plasma estates contribute to the economic self-reliance of community members, but also they move forward to take responsibility for the environment and the human rights and safety of employees.

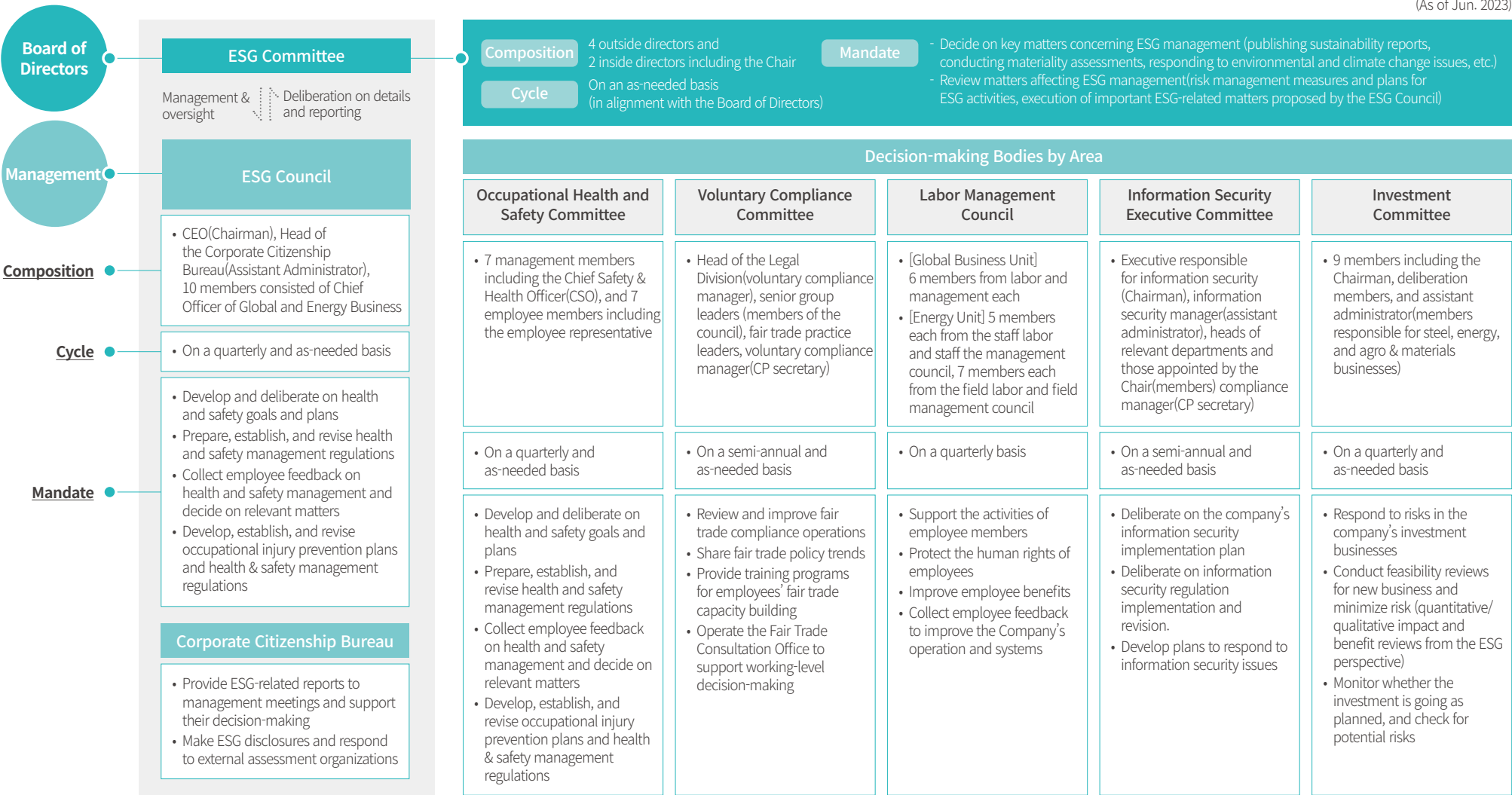
Operating the Grievance Mechanism

PT.BIA has been implementing its own Standard Operating Procedure to handle grievances since 2020. Grievances are received from external third-parties and communities, and are handled immediately. When such grievances are substantiated through rigorous investigation, they are logged and disclosed on PT.BIA's website. This grievance mechanism is made accessible through diverse channels including e-mail, phone, and social network among others. The grievances submitted will be fully disclosed through the 'Grievance Log'.

ESG Management System

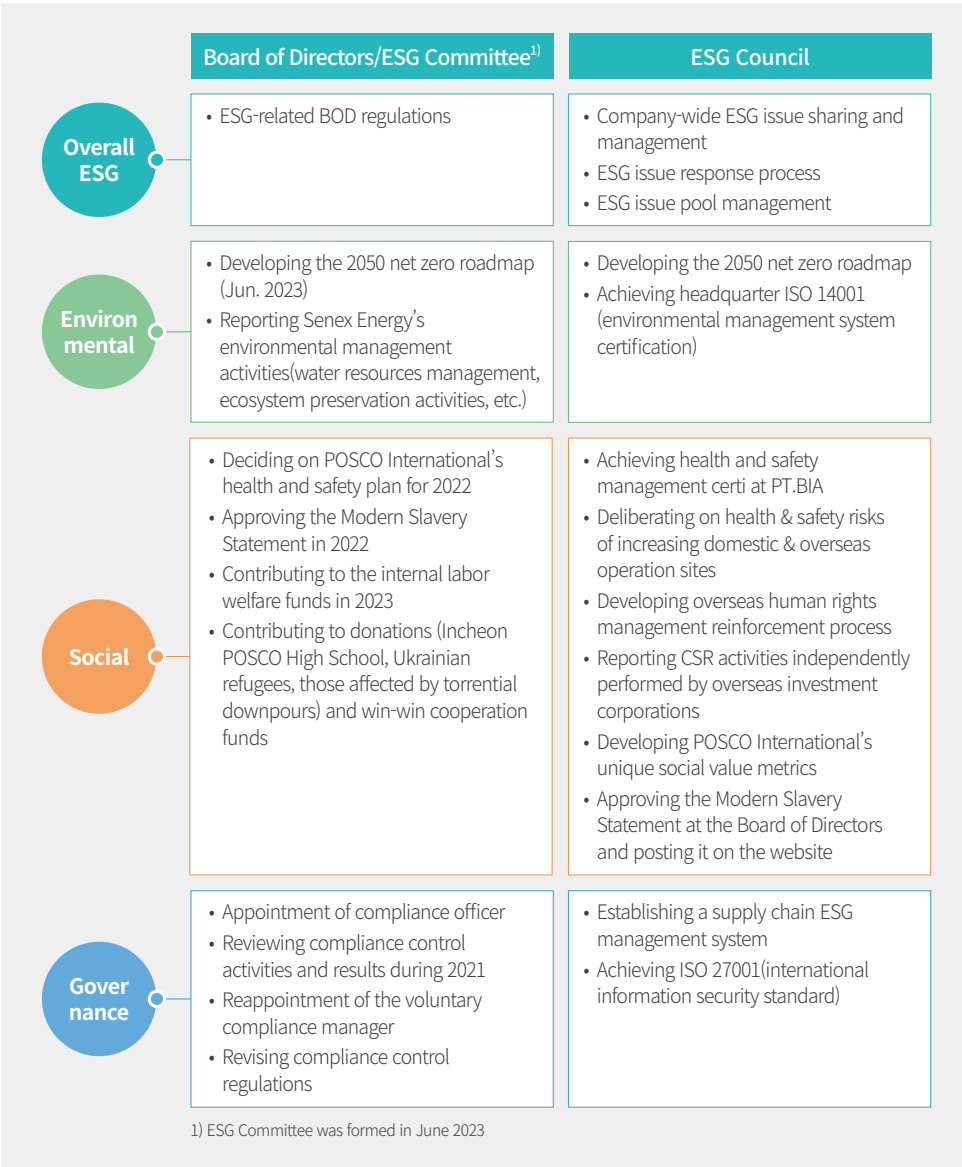
POSCO International is enforcing sustainability management governance to abide by the management philosophy of ‘Corporate Citizenship: Building a Better Future Together’. The Board of Directors, as our highest decision-making body, deliberates and decides on key matters related to ESG management. In 2023, the ESG Committee was formed under the Board of Directors to strengthen its management and oversight of ESG policies and issues in respective areas. Along with the ESG Committee, the Occupational Health and Safety Committee, the Voluntary Compliance Committee, the Labor Management Council, the Information Security Executive Committee, and the Investment Committee engage in responding to ESG issues in their area of responsibility and managing relevant risks.

(As of Jun. 2023)



ESG Management System

Key ESG Agendas for 2022~2023



Occupational Health and Safety Committee - Developing health and safety management guidelines and plans - Reporting operation results from the health and safety management system - Reviewing health and safety KPI management and injury status - Declaration of the 10 safety rules - Establishing an imported material MSDS management process - Operating a group psychological counseling program (休 Smile Counseling Center) - Reinforcing health check-up follow-up management - Reporting musculoskeletal risk factor investigation results - Reporting health management program operation results - Reporting CPR training and emergency kit inspection results	Voluntary Compliance Committee - Announcing the appointment of the voluntary compliance manager and organizing the Fair Trade Compliance Council - Operating the Fair trade pre-work consultation system - Appointing department-level compliance person-in-charge - Sharing recent Fair Trade Commission news and discussing on subcontract regulations - Conducting online training programs to enforce employees' fair trade competency - Conducting self-reviews on compliance with fair trade and subcontract regulations - Reviewing the Council activities and awarding top-performing leaders
Labor Management Council - Improving working conditions and institutions - Implementing and testing flexible working hours - Expanding smart offices for employees' geographic convenience - Creating a family-friendly culture - Providing honeymoon travel subsidies , childbirth gifts, and tuition support for families with multiple children - Healthcare for of employees and their families - Providing day-off for health check-up, extending time period for medical expense support - Discussing wage adjustments, leadership assessments, P-GWP results, and organizational culture - Reviewing employee grievances and complaints (operating labor management councils and grievance handling committees for each business operation sites)	
Information Security Executive Committee - Reporting current information security status in line with the amended Information Protection Industry Act - Conducting simulation training to prevent cyber attacks and minimize damage - Discussing how to establish a cyber attack response system - Reporting on the achievement of international information security certification - Develop plans to respond to the amended Personal Information Protection Act	Investment Committee Conducting impact assessments concerning wastewater storage and treatment at PT.BIA's palm oil production facility (on-going as of Jun. 2023)

At a Glance
Material Sustainability Topics
Materiality Assessment
Governance - Board of Directors - Shareholders - Stakeholder Communication ESG Management System
Strategy and Risk Management
Metrics and Targets
Appendix



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

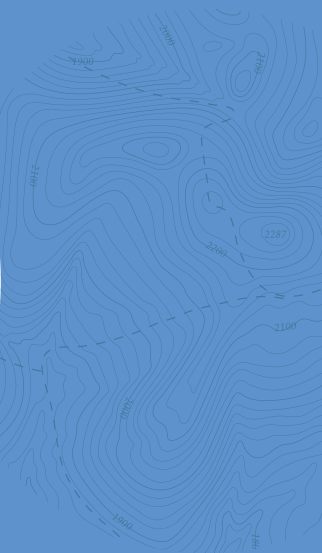
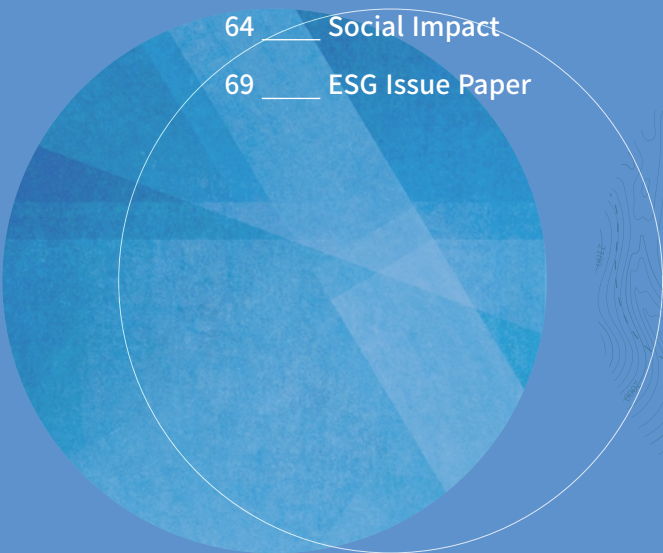


Metrics and Targets

Appendix

04 Strategy and Risk Management

- 23 ____ Risks and Opportunities for Material Topics
- 24 ____ Climate and Environmental Impact
- 35 ____ Employee Value Enhancement
- 43 ____ Sustainable Supply Chain
- 48 ____ Health & Safety
- 54 ____ Ethics/Fair Trade
- 61 ____ Information Security
- 64 ____ Social Impact
- 69 ____ ESG Issue Paper



Risks and Opportunities for Material Topics

Material Topics	Risk & Impact	Opportunity & Impact
Climate and Environmental Impact	(Transition risk) Increasing raw material costs and sales impact from reinforced environmental regulations - Increase in cost and price due to growing demands for low-carbon steel products (Physical risk) Increasing physical risks at operational sites due to typhoons, floods, droughts, and other abnormal climate - Risk of rising operational expenses from business discontinuation caused by abnormal weather	Contributing to climate crisis mitigation by expanding renewable energy and green business opportunities - Establish a Group-level value chain and expand green business opportunities based on our hydrogen roadmap, which increases demand among Group affiliates Building a corporate image as a leader in environmental management - Strengthening reputation and retaining/recruiting customers via low-carbon and proactive green management
Health & Safety	Reinforced global human rights regulations including the human rights due diligence mandate - Financial loss from failing to respond to human rights due diligence and changing local legislations	Improve competitiveness via global talent employment and training - Improve competitiveness in the global market through top talent attraction Improving organizational efficiency by establishing win-win, cooperative labor relations - Improving employee satisfaction based on friendly labor relations and employee benefit
Employee Value Enhancement	Increasing uncertainties in global trading due to international conflict (intensifying US-China conflict and prolonged Russo-Ukraine war) - Increasing operational expenses due to fluctuations in raw material prices and intensifying nationalism Reinforced import regulations such as the Carbon Border Adjustment Mechanism and the supply chain due diligence legislation in the EU/US - Rising costs to respond to laws/regulations and impact on sales	Ensuring business continuity by preemptively establishing a supply chain ESG management system - Ensuring sustained profit generation by diversifying supply chains and developing emergency scenarios Promoting shared growth with business partners by reinforcing supply chain management - Strengthening business partners' competitiveness and increased profit by protecting human rights and improving working conditions
Sustainable Supply Chain	Reinforced safety management responsibility and punishment with the enforcement of the Serious Accidents Punishment Act - Increasing costs and responsibility from reinforced prevention requirements Losses of human/physical resources from safety incidents - Loss of employee health, labor productivity, and costs from legal sanctions	Preemptive reinforcements in safety regulations - Improve productivity and working spirit by providing safe workplace Increase productivity by improving working environment - Prevent workplace injuries and minimize medical costs through reinforced health and safety management
Ethics/Fair Trade	Increasing severity of punishment due to reinforced fair trade regulations - Increasing cost and responsibility to meet compliance program requirements and conduct subcontractor transaction audits Market inefficiencies from insider trading, price discrimination, and monopoly - Increasing risk of economic losses for consumers and other stakeholders	Building a reputation as a leader in compliance management by establishing a culture of fair trade compliance - Strengthening reputation by receiving A or above rating in the CP operational assessments performed by the Fair Trade Commission Expanding fair trade compliance culture to the energy business sector - Set a good example in abiding ethics and compliance management



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics

Climate and Environmental Impact

Employee Value Enhancement

Sustainable Supply Chain

Health & Safety

Ethics/Fair Trade

Information Security

Social Impact

ESG Issue Paper



Metrics and Targets

Appendix



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics
Climate and Environmental Impact
Employee Value Enhancement
Sustainable Supply Chain
Health & Safety
Ethics/Fair Trade
Information Security
Social Impact
ESG Issue Paper



Metrics and Targets

Appendix

Climate and Environmental Impact

Strategic Approach and Our Commitment

Strategic Approach			Mid/long-term Goal	2023 Plan	Key Achievements in 2022
Strategy 1. Expanding Green Business	Energy	Renewable energy	Grow into a developer specializing in offshore wind power business in Korea and abroad based on renewable energy captive demand through joint investment with overseas leading companies	- Approval for the 300MW-capacity offshore wind power project in Shinan, Jeonnam - Initiate the commercial operation of the 2.2MW PV power generator on the rooftop of POSCO Future M's Gwangyang plant	- Established a SPC with a wind power business partner in Shinan, Jeonnam - Negotiated on REC purchase and PV power generation contract, which utilizes the rooftop of POSCO Future M's Gwangyang plant.
		Hydrogen	- Build hydrogen and ammonia supply infrastructure including domestic clean hydrogen and ammonia hub terminals, ammonia cracking plants, and hydrogen pipeline - Establish large-scale overseas clean hydrogen and ammonia procurement system based on the Company's captive demand and global demands, by collaborating with POSCO group affiliates	- Elaborate on clean hydrogen and ammonia supply infrastructure business - Elaborate on clean hydrogen and ammonia procurement system for co-firing in Incheon LNG power plant	- Reviewed green/blue ammonia procurement aligned with renewable energy and CCS business, and overseas hydrogen export infrastructure business - Developed hydrogen/ammonia co-firing plans for power generation - Reviewed regional hydrogen production and import infrastructure business in Korea
		CCS	Contribute to the Group's net zero goal through CCS business implementation	- Participate in CCS development with major partner companies in Korea and Southeast Asia - Improve competitiveness by making early foray into promising CCS markets(US, Australia, etc)	Pursued collaboration with key E&P partners for CCS business
	Materials	Steel	Enhance the sales portfolio in green energy industry, including wind power/solar energy, EV, rechargeable battery	- Strengthen cooperation with global wind turbine companies and PV tracker companies, improve our green mobility/green steel package sales portfolio - Expand supply based on the initial deliveries made for promising green industries (carbon capture, hydrogen energy, hyperloop)	- Reached the target supply volume to lay the basis to supply green steel materials to wind power/PV energy and green mobility industries - Initial green material delivered to promising green industries such as carbon capture, hydrogen energy and hyperloops
		Mobility	Reach production capacity of 7 million units of core traction parts for future green mobility	Reach production capacity of 2 million units of core traction parts for future green mobility	Reached production capacity of 1 million units of core traction parts for future green mobility
	Agri-bio	Green farming business	Establish a sustainable palm oil value chain	Expand the palm plantation business in line with our environmental and social policy	Decided to advance into palm oil refining business (Indonesia, 500,000 tons in annual production capacity)
		White and green bio	Establish reliable supply chains and the growth foundation through manufacturing green bio materials and securing technology	Develop demand and diversify handling items for bioplastic and other green future materials industries	- Signed MOUs and formed partnerships for bioplastic recycling business with Total Energies Corbion and eSOL(Korea) - Made a KRW 5 billion equity investment in Bioapp
Strategy 2.	Net-Zero roadmap		Reach Net-Zero by 2050	Establish the '2050 Carbon Neutral Basic Roadmap'	
Achieving Net-Zero Emissions and Mitigating Environmental Impact	Efforts to reduce environmental impact at operational sites		[POSCO Mobility Solution] Ensure the accuracy and reliability of discharge concentrations by introducing automatic operation and analysis systems for its water treatment facility	[POSCO Mobility Solution] - Introduce green water treatment chemicals in place of methanol which poses chemical hazards - Introduce sludge drying equipment to reduce the water content in sewage sludge	[POSCO Mobility Solution] Reached 95% in recycling waste generated from operations(previously 90%)



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
 for Material Topics
Climate and Environmental Impact
 Employee Value Enhancement
 Sustainable Supply Chain

Health & Safety
 Ethics/Fair Trade
 Information Security
 Social Impact
 ESG Issue Paper



Metrics and Targets

Appendix

Climate and Environmental Impact

Strategy 1. Expanding Green Business

Identifying and Addressing Risks and Opportunities in the Energy Industry

Energy

We are expanding our green business portfolio while proactively responding to the government’s ‘Renewable Energy 3020’ and ‘2050 Net Zero’ policies. Our business strategy is aligned with governmental policies to mitigate the impact of climate transition risks with a focus on green energy business and to advance CCS and hydrogen business. As such, we explore and pursue green energy business opportunities spanning LNG value chains, wind power, PV, and hydrogen to keep current with changing government policy initiatives. We conducted physical risk scenario analysis on the Shwe Project where we operate E&P business, and confirmed that it poses only minimal physical risks over the long haul as well as in the present.

Key Figures

Natural gas reserves

(Unit: Bcf¹⁾)

2022

1,628

2026E

1,865

2030E

2,493

LNG generation capacity

(Unit: MW)

2022

3,412

2026E

3,662

2030E

6,312

Renewable energy generation capacity

(Unit: MW)

2022

377.2

2026E

379.4

2030E

2,000

1) Bcf: An abbreviation for Billion Cubic Feet, which is the basic unit of measurement for volume in the natural gas industry

Key Climate-related Risk & Opportunity		Description of Impact on Our Business, Strategy, and Financial Planning	Impact
Transition risk	Regulation (T1)	Need to reduce the demand for fossil fuels while re-establishing our green business portfolio in line with the specific national energy transition policy	●●●
	Reputation(T2)	Risk of aggravating market position and financial performance due to criticism from external stakeholders and decline in credibility concerning thermal power plants	●●○
Opportunity	Market(O1)	Opportunity to expand natural gas, CCS, and hydrogen business in line with the government’s power supply/demand planning and hydrogen policy	●●○
	Market(O2)	Expected sales growth from increasing LNG demand in the energy transition towards net zero	●●○
Physical risk	Acute(P1)	Risk of discontinuing operations due to typhoons, floods, and other natural disasters	●○○
	Chronic(P2)	Risk of long-term sea level rises due to the sustained global temperature increases	●○○



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics
Climate and Environmental Impact
Employee Value Enhancement
Sustainable Supply Chain
Health & Safety
Ethics/Fair Trade
Information Security
Social Impact
ESG Issue Paper



Metrics and Targets

Appendix

Climate and Environmental Impact

Strategy 1. Expanding Green Business

Green Industry Investment and Business Expansion in 2022		2023 Plan	2030 Goal/Vision
Regulation(T1)	Market(O1)	Grow into a developer specializing in offshore wind power business in Korea and overseas based on renewable energy demand Starting with the acquisition of a 300MW-capacity power generation business license at Shinan, Jeonnam, we will develop green energy business as a growth driver for future industries. This is expected to reduce 290,000 tons of CO ₂ per year, which corresponds to planting 85 million pine trees.	Accelerate the dissemination of renewable energy and build a clean hydrogen ecosystem We are working on a 2GW-capacity offshore wind power development project, broadening our business area into East and West Sea regions for clean hydrogen alignment. We will partner with overseas leading companies to pave the way for the Group's Net-Zero while proactively responding to the Company's RPS demand.
Reputation(T2)	Market(O2)	Materialize hydrogen procurement and infrastructure development business to participate in the clean hydrogen power generation bidding market To ensure our timely participation in the clean hydrogen power generation bids conducted by the government in line with its clean fuel-based, zero-carbon power generation goal, we will materialize our efforts to develop overseas clean hydrogen and ammonia procurement business and hydrogen supply infrastructure investment business. In this regard, we are exploring optimal co-firing conditions for the Incheon LNG Combined Cycle Power Plant.	Build a supply system to cater to domestic clean hydrogen and ammonia demand We will develop external demand for domestic power generation and industrial application as well as clean hydrogen for our own co-firing power generation, and will introduce large-scale clean hydrogen and build supply infrastructure to help broaden the nation's hydrogen ecosystem.
Market(O1)		Participate in joint geological storage development We plan to participate in joint CO ₂ geological storage development in partnership with major companies in Korea and Southeast Asia while commercializing CCS business opportunities early on in the US, Australia, and other countries which established CCS support policies to elevate our CCS business execution capabilities.	Pursue CCS business We will secure geological CO ₂ storage in Korea, Southeast Asia, the US, and Australia among others while commercializing CCS business opportunities to contribute to the Group's efforts to reduce carbon emissions.

Responding to the Renewable Portfolio Standard(RPS)

We are subject to the Korean government's Renewable Portfolio Standard(RPS) program which revises its targets upwards to achieve the nation's 2050 Net Zero goal, and has met 100% of our obligations for six consecutive years to do our part in boosting the competitiveness of the nation's low-carbon, green energy industry. In 2022, we were allocated 2,140,346REC in compliance obligations. Pursuant to the Enforcement Ordinance of the Act on the Promotion of the Development, Use, and Diffusion of New and Renewable Energy, we are allowed to delay up to 20% of our annual compliance obligations for up to three years and to bring forward up to 20% of our compliance obligations for the following year and meet these obligations during the pertinent year. Not only did we fulfill all our compliance obligations allocated for the year 2022, but also we met some of our 2023 obligations earlier to reach 2,289,920REC in total compliance obligations fulfilled, contributing to the transition to a greener energy mix and improving the public welfare through environmental conservation.

* Change in annual compliance obligations pursuant to the amended Enforcement Ordinance of the Act on the Promotion of the Development, Use, and Diffusion of New and Renewable Energy (Apr. 11, 2023): 2% (2012)→ 13% (2023) → 15% (2026)



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics

Climate and Environmental Impact

Employee Value Enhancement

Sustainable Supply Chain

Health & Safety

Ethics/Fair Trade

Information Security

Social Impact

ESG Issue Paper



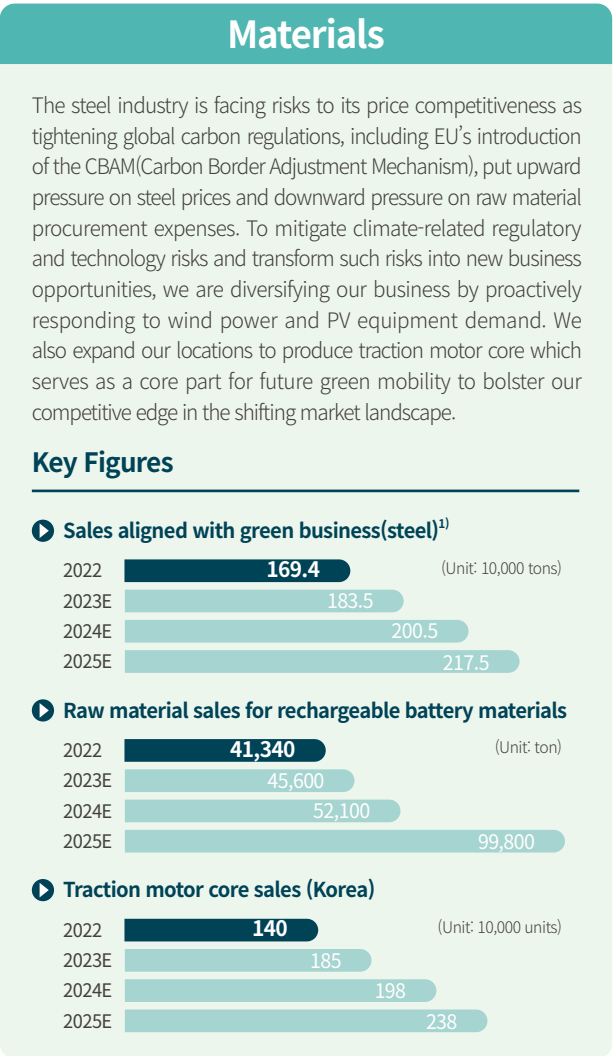
Metrics and Targets

Appendix

Climate and Environmental Impact

Strategy 1. Expanding Green Business

Risk and Opportunity Identification and Response Strategy in the Materials Industry



Key Climate-related Risk & Opportunity		Description of Impact on Our Business, Strategy, and Financial Planning	Impact
Transition risk	Regulation(T1)	Pressure to lower raw material procurement expenses in response to the increasing manufacturing costs on the part of steel makers in line with tightening carbon regulations	●●●
	Technology(T2)	Increasing investment/sales expenses due to the growing demand for new technology in the automotive industry	●○○
Opportunity	Products and services(O1)	Need to diversify business operations to meet the growing demand for steel equipment which stems from the expansion of global wind power and PV business	●●○
	Market(O2)	Potential to increase sales from the growing business opportunities associated with climate change mitigation and adaptation including rechargeable battery materials	●●○

1) Sales generated in relation to eco-friendly businesses including wind power/PV materials, hydrogen/carbon capture, eco-friendly vessels, cold-rolled steel for EV batteries



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

- Risks and Opportunities for Material Topics
- Climate and Environmental Impact**
- Employee Value Enhancement
- Sustainable Supply Chain
- Health & Safety
- Ethics/Fair Trade
- Information Security
- Social Impact
- ESG Issue Paper



Metrics and Targets

Appendix

Climate and Environmental Impact

Strategy 1. Expanding Green Business

Green Industry Investment and Business Expansion in 2022	2023 Plan	2030 Goal/Vision
Products and services(O1) Established a steel sales network to serve global green industries and explored demand industries We sold steel that goes into renewable energy generation structures to major global PV tracker and wind turbine companies, and supplied steel for the green mobility industry including electrical steel for EV traction motor core and battery pack steel. We chose CCS, hydrogen mobility, and hyperloop as promising industries and worked to develop new demand to strengthen our green industry portfolio.	Expand steel sales for global green industries and strengthen marketing for new demand industries We will focus on winning major projects by strengthening partnerships with major companies in the PV and wind power energy industry and by reinforcing relationships with varying partners in the industry value chain. We will work to supply green steel package offerings to global automakers to preemptively secure demand for EV steel that will only grow in the upcoming years. In addition, we will bolster our marketing in new demand industries to lay the basis for commercialization.	Emerge as a total steel solution provider in the green energy, green mobility sectors by focusing marketing capabilities on green industries We chose green energy – wind power, PV, hydrogen, and CCS – and green mobility – EVs and hyperloop – as the key two pillars of our green growth industries, and will expand our value chain based on steel material supply for green industries to create new business opportunities.
Products and services(O1) Secured raw material supply chains to advance into the rechargeable battery material value chain for Group affiliates We pursued off-take deals with the suppliers of natural graphite anode materials sourced from Africa to move away from the existing anode material supply chains which heavily depend on China and ensure reliable raw material procurement. We also supplied lithium hydroxide to POSCO Future M to pave the way for the reliable procurement of rechargeable battery raw materials for Group affiliates.	Market(O2) Establish a reliable supply and investment basis for rechargeable battery raw materials We will secure reliable raw material supply chains by investing in flake graphite off-take deals in Tanzania and in anode/cathode materials business. We will expand the scope of rechargeable battery raw materials and their procurement for POSCO Future M, POSCO HY Clean Metal and other Group affiliates.	Bolster our sales portfolio for the green energy industry spanning wind power/PV, EVs, and rechargeable battery We will focus on the expansion of green project materials and processed product sales for wind power and PV among others while identifying new demand in alignment with EVs, LNG and other green industries and strengthening our development and sales to preemptively respond to shifts in future demand. We will also establish a reliable supply chain for rechargeable battery raw materials to reinforce our role as a raw material procurement window for Group affiliates.
Response to the EU's CBAM The EU's Carbon Border Adjustment Mechanism(CBAM) mandates companies that import six target products(steel, aluminum, cement, fertilizers, electricity, and hydrogen) into the EU zone to report carbon emissions and purchase carbon certificates. The CBAM is set to take effect in 2026 following the transition period(Oct. 2023 ~ Dec. 2025). Businesses are obliged to report carbon emissions during the transition period, and to purchase and submit CBAM certificates from 2026 onwards. POSCO International is consulting with relevant departments at Group affiliates and global law firms to preemptively respond to the CBAM. Specifically during the transition period, we will seek legal assistance from global law firms with relevant expertise to ensure our organizations operating within the EU zone fully meet their obligation to submit carbon emissions reports and register as authorized CBAM declarant while working at the POSCO Group level to build an on-going cooperation system among departments responsible for legal affairs and trade & commerce. Work is also underway to set up a hotline with global law firms specializing in this specific area to receive legal advice on a regular and as-needed basis.		



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics
Climate and Environmental Impact
Employee Value Enhancement
Sustainable Supply Chain

Health & Safety
Ethics/Fair Trade
Information Security
Social Impact
ESG Issue Paper



Metrics and Targets

Appendix

Climate and Environmental Impact

Strategy 1. Expanding Green Business

Risk and Opportunity Identification and Response Strategy in the Agri-Bio Industry

Agri-Bio

Climate change is a global threat to food security in many countries, and causes decreases in agricultural production. Against this backdrop, countries are taking protection measures in their own food and grain industries. Declining production, when paired with growing trade protectionism, may expose our grain trading business to supply chain risks. Our palm business, which is not free from the impact of climate change, faces the growing market needs for sustainability, and the accelerating transition to a greener economy spurs the demand for eco-friendly bioplastics. Meanwhile, the accelerating transition to a green economy gives rise to the growing demand for eco-friendly bioplastics. All these risks and opportunities prompt us to further our efforts to identify business opportunities and bolster our portfolio.

Key Figures

▶ CPO production (Unit: 10,000 tons)

2022	18.6
2023E	19.2
2024E	20.6
2025E	21.4

▶ Eco-friendly material sales¹⁾ (Unit: 10,000 tons)

2022	1.5
2023E	1.9
2024E	2.3
2025E	2.8

▶ Contracts won for eco-friendly parts²⁾ (Unit: KRW 100 million)

2022	3,350
2023E	5,000
2024E	6,000
2025E	7,000

Key Climate-related Risk & Opportunity		Description of Impact on Our Business, Strategy, and Financial Planning	Impact
Transition risk	Regulation(T1)	Risk of supply chain sourcing in line with climate change-induced decreases in food production and the likelihood of protection measures being taken by countries	●●○
	Market(T2)	Increasing expenses to comply with market requirements such as NDPE policy and RSPO/ISPO certification in palm oil business	●○○
Opportunity	Market(O1)	New business opportunities created from the accelerating transition from petrochemical to eco-friendly materials amid the Carbon Neutrality paradigm shift(bioplastic, etc.)	●●○
Physical risk	Acute(P1)	Increasing likelihood of palm farming business being impacted and incurring losses due to typhoons, floods, and droughts	●○○
	Chronic(P2)	Growing likelihood of rising expenses to respond to decreasing fresh fruit bunch harvests due to temperature rises	●○○

1) Sales of bioplastics, recycled raw materials and chemical materials
2) Value of contracts awarded for EV and hydrogen vehicle components



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics
Climate and Environmental Impact
Employee Value Enhancement
Sustainable Supply Chain
Health & Safety
Ethics/Fair Trade
Information Security
Social Impact
ESG Issue Paper



Metrics and Targets

Appendix

Climate and Environmental Impact

Strategy 1. Expanding Green Business

Green Industry Investment and Business Expansion in 2022	2023 Plan	2030 Goal/Vision
Market(T2)Chronic(P2) Decided to launch refining business We are working to build a refining factory with 500,000-ton annual production capacity in Indonesia. In so doing, we will reach a critical milestone in advancing into diverse new businesses including bio energy, food, and fat & oil chemistry.	Expand the plantation and construct a palm oil refining factory We will acquire palm plantations operating in compliance with our green management standards (NDPE policy, RSPO principles) to ensure our palm oil refining factory set for completion in 2025 initiates its operation as planned.  NDPE Policy(https://www.poscointl.com/eng/esg/ndpe.do)	Evolve into a sustainable, integrated palm business We will proactively pursue GHG emissions reduction business and bio fuel business based on recycled raw materials. We plan to expand our palm business value chain both upstream and downstream to emerge as a sustainable, integrated palm business.
Market(O1) Contributed to creating an ecosystem for Korea's eco-friendly materials industry We reached 30% in market share in Korea's biomass-based biodegradable plastic material (PLA) supply market to contribute to creating an eco-friendly material ecosystem. We cooperated with domestic companies on multiple fronts to develop PLA recycling technology, and invested in venture companies in the domestic red/green/white bio sectors to fully advance into the bio industry in Korea and abroad.	Expand the boundary of eco-friendly material business In partnership with major global companies and domestic/overseas venture firms, we will expand our business territory from bioplastics and recycled plastics to CNT(Carbon Nanotube) and other eco-friendly future materials.	Emerge as a leader in the Group's eco-friendly materials sector Investing in bioplastic, bio raw material, and recycled plastic production facilities and securing relevant technology, we will establish our value chain across the entire eco-friendly bio industry.



At a Glance

Climate and Environmental Impact

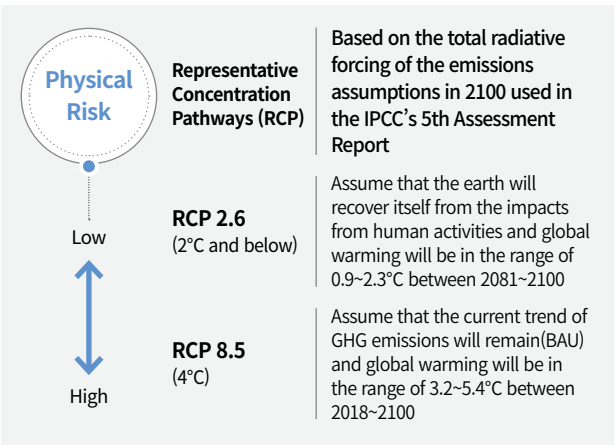
Strategy 2. Achieving Net-Zero and Mitigating Environmental Impact

Analyzing the Financial Impact of Physical Risks

In line with the TCFD recommendations, POSCO International reviewed physical risks for their impact level and our exposure under varying scenarios. This year's report analyzed PT.BIA in Indonesia and the Shwe Project in Myanmar

Analysis Methodology and Scenarios

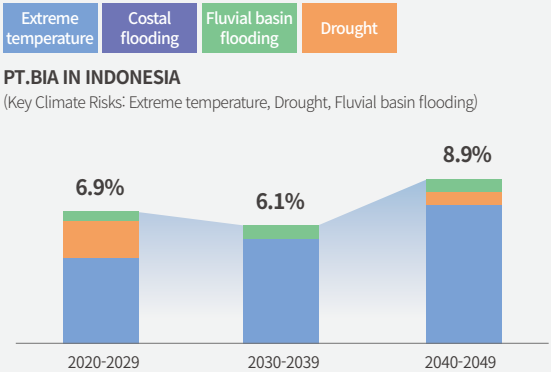
Our scenario analyses were based on the Hazard-Vulnerability-Risk modeling methodology of S&P Global Climonomics to identify financial impacts for seven climate risk factors(extreme temperature, coastal flooding, drought, wildfire, tropical cyclone, water stress, fluvial basin flooding) at each site. Analysis results are quantified in Modeled Average Annual Loss at each decadal period until 2100. Under this model, we applied four RCPs from the IPCC as physical risk scenarios. Comparative analyses were performed with a focus on RCP8.5 with the highest physical risk level(>4°C) and RCP2.6(<2°C) with assumes the most active removal of GHG from the atmosphere.



[Potential Asset Losses from Physical Risks by Operational Site by 2030(2020~2029)]

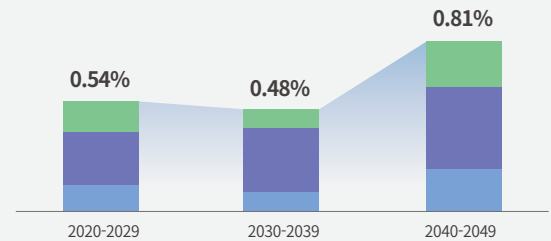
Site	Scenario	Modeled Average Annual Loss							
		Extreme temperature	Costal flooding	Drought	Wildfire	Tropical cyclone	Water stress	Fluvial basin flooding	Overall
PT.BIA in Indonesia	RCP 2.6	4.3%	N/A	0%	0%	N/A	0%	0.3%	4.5%
	RCP 8.5	4.6%	N/A	1.9%	0%	N/A	0%	0.3%	6.9%
Shew Project in Myanmar Offshore+Onshore	RCP 2.6	0.1%	0.2%	0%	0%	N/A	0%	0.1%	0.4%
	RCP 8.5	0.1%	0.4%	0%	0%	N/A	0%	0.1%	0.6%

POTENTIAL ASSET LOSSES UNDER THE RCP8.5(BAU) BY 2049 (MODELED AVERAGE ANNUAL LOSS(%) AT DECADEL PERIOD, AGAINST TOTAL ASSETS)



SHWE PROJECT IN MYANMAR

(Key Climate Risks: Extreme temperature, Costal flooding, Fluvial basin flooding)



Analysis Results

According to S&P's analysis modeling, PT.BIA conducting farming business is likely to suffer decreases in harvest yields due to extreme temperatures and droughts while the Shwe Project will not face significant physical risks under all pathways including RCP8.5 until 2049. As PT.BIA may face increasingly rising chronic risks, we are proactively implementing long-term environmental conservation programs.

PT.BIA in Indonesia

- The biggest risk lies in extreme temperatures and droughts, and financial impacts from other risks would be minimal. There is a possibility of intermittent droughts.
- Financial impacts from extreme temperatures and droughts are quantified as lost sales due to decreasing harvest yields, and the impact of lost sales is expected to rise from the current 6.9% to 8.9% in the 2040's under RCP8.5.

Shwe Project in Myanmar

- Analyses were performed on the offshore platform and the onshore pipeline. Impact on the offshore platform will be under 1% by 2049 under all pathways, posing only minimal physical risks.
- While the onshore pipeline faces low risks, acute risks from coastal flooding and fluvial basin flooding were identified. The risk of fluvial basin flooding may temporarily decline in the 2030's.

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

- Risks and Opportunities for Material Topics
- Climate and Environmental Impact
- Employee Value Enhancement
- Sustainable Supply Chain
- Health & Safety
- Ethics/Fair Trade
- Information Security
- Social Impact
- ESG Issue Paper



Metrics and Targets

Appendix



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics

Climate and Environmental Impact

Employee Value Enhancement

Sustainable Supply Chain

Health & Safety

Ethics/Fair Trade

Information Security

Social Impact

ESG Issue Paper



Metrics and Targets

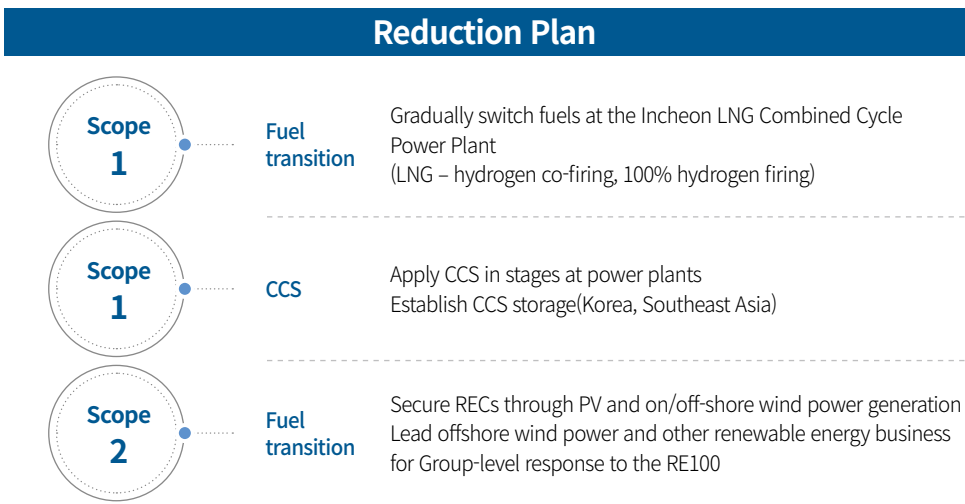
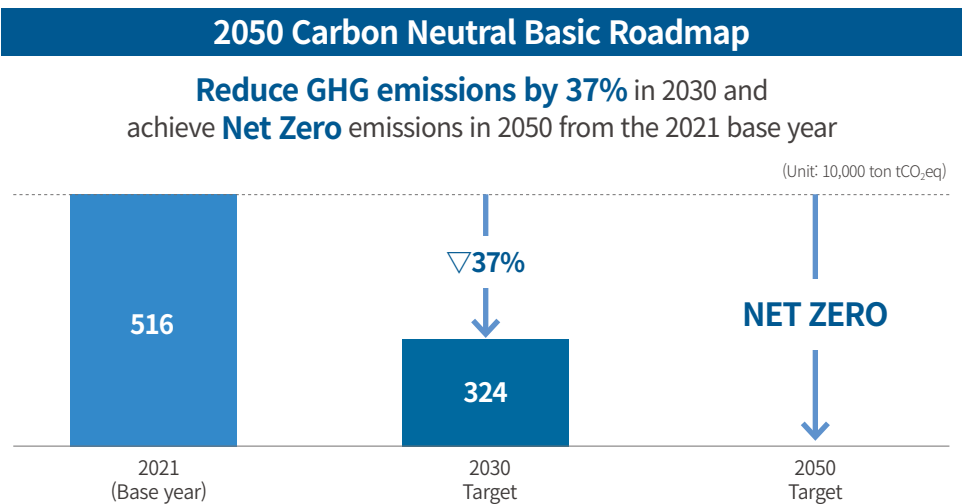
Appendix

Climate and Environmental Impact

Strategy 2. Achieving Net-Zero and Mitigating Environmental Impact

Net-Zero Commitment

We defined our '2050 Carbon Neutral Basic Roadmap' to set our carbon emissions reduction goal and implementation plans to reduce GHG emissions by 37% in 2030 and by 59% in 2040 to reach net zero in 2050 against 2021. This roadmap applies to the HQ and domestic subsidiaries which account for the majority of our GHG emissions, and is aligned with the Korean government's nationally determined contributions(NDC) for 2030. We will gradually include overseas subsidiaries to roll out this roadmap on par with global standards and bolster our execution towards the net zero goal to counter the climate crisis.



CASE STUDY. Samcheok Blue Power's Low-carbon Strategy

Samcheok Blue Power was established with 97% of Samcheok people giving their consent to materialize their long-cherished ambition. When the Korean government announced the '2050 Net Zero Strategy' as its overarching energy policy in 2020, Samcheok Blue Power as included in the 9th Basic Plan for Long-term Electricity Supply and Demand(2020~2034) in consideration of appropriate power mix by generation source and the phased exit of old coal-fired power plants, and this policy initiative also holds for the 10th Basic Plan for Long-term Electricity Supply and Demand(2022~2036) announced in January 2023. Samcheok Blue Power is joined by multiple partners in line with the government's energy supply policy to be completed in April 2024, indicating it is not possible for any single company to unilaterally decide on its discontinuation. With USC technology* applied early from the construction phase, Samcheok Blue Power can reduce GHG emissions on par with LNG power generation. With the application of ultra super critical technology early from the construction phase, Samcheok Blue Power is able to reduce GHG emissions on par with LNG-fueled power generation. We will participate in the 'carbon-free, eco-friendly ammonia power generation technology development' research project led by the government to pursue ammonia co-firing for power generation while rigorously managing our air pollutant emissions for minimum environmental impact.

Overview of Samcheok Blue Power

- Scale: 2,100MW (1,050MW-capacity x 2-units)
- Completion: April 2024
- Shareholders: (FI) KDB KIAMCO and others 57%
(SI) POSCO International 29%,
Doosan Enerbility 9%, POSCO E&C 5%

Low-carbon technology application and GHG emissions reduction plan

- Efficiency improvement: Apply ultra super critical technology to improve efficiency and minimize carbon emissions
- Renewable energy: Pursue renewable energy business including biomass co-firing generation and hydropower generation
- Fuel transition: Pursue ammonia co-firing power generation

* USC(Ultra Super Critical) technology: Raise the steam pressure and temperature fed into the power generation turbine to improve the efficiency of power generation. Reduce the fuel(coal) consumed per unit of electricity generated to lower fuel consumption and GHG emissions, making it economically and environmentally exceptional.



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

- Risks and Opportunities
for Material Topics
- Climate and Environmental Impact**
- Employee Value Enhancement
- Sustainable Supply Chain
- Health & Safety
- Ethics/Fair Trade
- Information Security
- Social Impact
- ESG Issue Paper



Metrics and Targets

Appendix

Climate and Environmental Impact

Strategy 2. Achieving Net Zero Emissions and Mitigating Environmental Impact

Environmental Management Governance

Organizatio	Mandate	Role & Responsibility
Energy Policy Division (Dedicated organization)	Energy Policy Department	Analyze & address laws/policies/systems in the climate environment energy and power industries, network with external organizations
	Energy Policy Department	Forecast & analyze the renewable energy and power markets, trade in RPS certificates and emission allowances
Legal Division		Respond to environmental energy laws/regulations

Participating in the GHG Emissions Trading System

Merging with POSCO Energy in 2023 made POSCO International subject to the GHG Emissions Trading System. Worksites participating in the allocation/trading of allowances abide by the Framework Act on Carbon Neutrality and Green Growth and the regulations governing the allocation and trading of GHG allowances. When there is shortfall, these sites purchase allowances to reach the set target, and they may sell excess allowances to effectively comply with the governmental policy. In 2022, we were allocated 3.57 million tons of allowances and our GHG emissions were 4.19 million tons. Our Incheon LNG Combined Cycle Power Plant contributed to effective power grid operations through constrained power generation, and will be given nearly 1.15 million tons of additional allowances by the government. To mitigate GHG emissions, we pursue efficiency gains by installing power-saving equipment, and will review hydrogen/ammonia co-firing generation and CCS business to reduce GHG emissions.

Establishing an Environmental Management System

The Shwe Project in Myanmar is establishing an environmental management system in accordance with the ISO 14001 (2015)

for systemic environmental management. The Shwe Project has remained certified to ISO 14001(2015) since 2019 through certification renewal in 2022. POSCO Mobility Solution's STS Division and Core Division are also certified to ISO 14001, and identify necessary environmental improvements and take immediate action through annual internal self-audits and third-party surveillance audits.

CASE STUDY. Environmental Impact Monitoring for the Shwe Project

The Shwe Project set its Environmental Management Plan(EMP) based on environmental impacts and risks identified through environmental impact assessment. The EMP details the environmental impact mitigation measures and reporting & monitoring requirements pursuant to Myanmar's environmental law, and received third-party audits to ensure objective and reliable environmental management. Environmental impact monitoring is conducted monthly through third-party audits, and results are reported to the Myanmar government semi-annually. Environmental impact monitoring in 2022 revealed no significant environmental impact from business operations, and verified all impacts were properly mitigated and managed at low levels. All hazardous and non-hazardous waste from the Shwe Project is processed through government-authorized waste treatment companies, and treatment results are reported in conformity with pertinent government regulations.

Environmental Management Training for Employees

We provide company-wide training to raise employees' environmental awareness. In 2022, mandatory training 'Corporate Citizen POSCO, ESG Management' was conducted online for employees to recognize the necessity for environmental management and implementation plans. In 2022, this training was attended by 1,405 employees in Global Business Unit and 607 employees in Energy Business Unit.

Operating Eco-friendly Commute Buses

When the existing commuter bus contract ended, we included the operation of low emission buses in the criteria used for contractor bidding and selection, and are operating CNG(Compressed Natural Gas) commuter buses with reduced environmental impact. We introduced 19 such buses in 2021, and increased the number to 23 in 2022. We will also introduce 20 hydrogen-powered EVs by the end of 2023. In 2022, we added five EVs for business purposes to transition to low-emission vehicles. While their current proportion is around 6% of total, we will raise this further by switching to eco-friendly vehicles. We also shifted 42 of our corporate fleet vehicles to low emission hybrid cars.

[Low Emission Vehicles Operated]

(unit: No. of vehicles, %)

 EVs	0	5(6%)
 CNG buses	19(41%)	23(45%)
	2021	2022

Ecosystem Diversity Protection

Mangrove Forest Restoration

PT.BIA in Indonesia planted 200 mangrove seedlings in June 2022 to restore the mangrove forests destroyed due to coastal development. Between 2019 and the end of 2022, 500 seedlings were cumulatively planted. We will plant 200 additional mangrove trees per year to contribute to local ecological restoration. In Myanmar, our mangrove forestation project started in 2011 mainly in Kyauk Phyu. As of the end of 2022, we cumulatively created mangrove forests sized 2,272acre(nearly 919ha) in Myanmar, which is estimated to store over 920,000 tons of carbon per year.



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics
Climate and Environmental Impact
Employee Value Enhancement
Sustainable Supply Chain
Health & Safety
Ethics/Fair Trade
Information Security
Social Impact
ESG Issue Paper



Metrics and Targets

Appendix

Climate and Environmental Impact

Strategy 2. Achieving Net Zero Emissions and Mitigating Environmental Impact

Investing in Improving the Workplace Environment and Mitigating Environmental Impact

Each year, we develop and implement investment plans to reduce environmental impact by replacing facilities and developing eco-friendly products while increasing environmental benefits. In 2022, the Headquarters and POSCO Mobility Solution invested a total of KRW 1,210 million to improve the work environment and to reduce resource consumption and environment-related expenses.

Worksite	Investment Plan	Execution Rate (Amount)
HQ	- Landscape maintenance in the vicinity of the HQ	100% (KRW 80 million)
POSCO Mobility Solution	- Repair the walls and pipes of the old septic tank at the Cheonan site to improve the efficiency of sewage treatment (KRW 70 million)	100% (KRW 1,130 million)
	- Apply sealing to air pollution control equipment and replace old tanks (KRW 680 million)	
	- Reduce the scattering of oil mist during polishing, and extract fumes from the cleaning process to reduce contamination (KRW 380 million)	

Efforts to Reduce Energy Consumption

POSCO Mobility Solution's STS Division replaced insulation materials to prevent thermal losses from thermal treatment equipment and replaced the manual furnace door with electric sliding one, which lowered the furnace pressure and improved insulation (110→78°C, 32°C improvement). This also minimized losses from external heat radiation and lowered the LNG intensity (39.16→31.70m³/ton, 7.46 improvement). The Core Division also reduced its oil consumption through equipment improvement: the Division opted for smaller pumps to minimize oil consumption while replacing old gauges and increasing their reuse. This resulted in a 19% reduction in oil consumption from 6,008L in 2021 to 4,806L in 2022.

Air Pollutant Management

We set and manage air pollutant emission targets in accordance with internal management standards that are even more stringent than legal thresholds¹⁾. POSCO Mobility Solution's STS Division ensured the concentration of its NOx emissions remained at 50% and below of the legal threshold through the maintenance of its air pollution control equipment and the monitoring of operating conditions, and reduced its NOx emissions by 22 tons against the 38 tons allocated by the Ministry of Environment per year to reach 16 tons in total emissions. The Core Division also performs annual self-measurements and manages its air pollutant emissions at a level which is 10% lower than the legal threshold.

Water Consumption Management

POSCO Mobility Solution is implementing ESG innovation tasks to reduce water consumption and wastewater generation for respective processes, and aims to reduce its wastewater generation by 10% from the 2022 base year through process optimization. POSCO Mobility Solution is planning to invest in sludge drying equipment to lower the water content in wastewater sludge generated as final byproduct in the wastewater treatment process from the current 60% to 30~40%.

Recycling Raw Materials and Waste While Improving Packaging Materials

POSCO Mobility Solution's STS Division fully reclaims the scraps generated from stainless processing and recycles them as raw materials. Out of nearly 8,000 tons of scraps generated from the process, 47% of them are returned to makers and 53% are melted and recycled. To reduce packaging materials, the SPM (Skin Pass Mill) was adopted in place of woodfree paper used as coil interleaving paper at the cold mill, and the use of SPM accounted for 45.9% of total in 2022. In addition, the treatment method for three types of general waste shifted from incineration to recycling to increase the proportion of recycling from 90% to 95%.

¹⁾ Legal thresholds for annealing furnaces stipulated in Article 15(Air Pollutant Emission Thresholds) of the Enforcement Regulation of the Clean Air Conservation Act: NOx 115.0ppm, SOx 200.0ppm, dust 20.0mg/Sm³

Risk Management

As a globally integrated corporation engaging in wide-ranging businesses worldwide, we are exposed to a broad array of risks including market/credit/investment risks. The risk of climate change is one of the most important issues for our business operations, and is integrated into our short/mid/long-term business plan, strategy, and investment deliberation and managed accordingly. Business divisions identify risks associated with climate change and the environment each year, and integrate them in making decisions on new investments and developing business strategies. Business plans and strategies that are highly relevant to climate change are escalated to the Management Committee through the ESG Council. To identify and manage climate-related risks, we performed scenario analyses to identify physical risks this year. The financial impacts verified through such analyses will be reflected in the decision-making process of respective business divisions and top management.

[Risk Management Plan]

Investment Deliberation	- Identify climate-related risks/opportunities during investment deliberation including business feasibility reviews - Conduct in-depth reviews on businesses at heightened environmental risk
Business Management	- Conduct environmental risk assessment through the ESG checklist by investment corporation - Collect GHG emissions data - Review GHG emissions reduction measures
Mid-term Strategy (3~5 years)	Reflect climate-related risks/opportunities and financial impacts in setting mid-term strategies by business group and investment corporation (allowance purchase expenses, investments in environmental impact reduction technology, etc.)



At a Glance

Employee Value Enhancement

Strategic Approach and Our Commitment

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics
Climate and Environmental Impact
Employee Value Enhancement
Sustainable Supply Chain
Health & Safety
Ethics/Fair Trade
Information Security
Social Impact
ESG Issue Paper



Metrics and Targets

Appendix

Strategic Approach	Mid/long-term Goal	2023 Plan	Key Achievements in 2022
Strategy 1. Attracting talent and nurturing experts	• Systematically nurture talent for integrated business(π talent¹⁾) and preemptively attract top talent • Nurture global staff and increase global staff in leader positions • Nurture entrepreneurial talent aligned with our strategic direction	• Establish a workforce management system and preemptively attract top talent for future business • Develop measures to implement the plans identified through the employee-led institutional improvement taskforce • Strengthen reskilling and upskilling programs - Open entrepreneurship development program(4 new modules) - Expand technical training for power plant operators - Create in-house digital skill training and expand POSCO Group digital training courses • Facilitate employees' self-directed learning and developing continuous e-learning environment	• Strengthened support for self-directed career development • Expanded recruitment-aligned internships by 100% and introduced year-round hiring, attracted talent for future business through the new business idea contest • Reviewed employee-led HR system improvements • Strengthened reskilling/upskilling programs - Opened Trade Academy to provide job training for global staff (5 courses, 6 sessions) - Created entrepreneurship training (finance/business analysis training, etc.) - Expanded job capacity-building training (regularized common job training, operated 2 sessions of 18 modules per year) - Operated technical training for power plant operators (33 courses)
Strategy 2. Respecting human rights and creating a great workplace	• Create a great workplace • Foster performance generating culture through trust, communication, and collaboration • Developing skills for future business and foster creative culture - Respond to business environment and management trends and improve expertise • Pursue smart work through digital technology - Improve working processes and work efficiency through AI • Reach 3.5% in employment rate for disabilities by 2025	• Pursue post merger integration • Improve communication between managers and workers • Build a creative working environment based on autonomy and responsibility - Review the implementation of flexible work hour system (selective work hours) • Generate synergy through mutual understanding/collaboration • Exceed the disabled employment quota²⁾	• Increased work autonomy - Expanded remote offices, launched "Work-where-you-want-to" campaign, piloted flexible work hour system • Stimulated performance generation and expanded collaboration through shared organizational vision/goals - Held company-wide and business group specific townhall meetings • Developed a corporate culture of collaboration - Hosted interFACE Lunch Talk, interTHANKS events - Developed our unique collaboration model and assessed our current level - Provided compensation for collaboration among individuals/departments - Expanded participation among on-site shift workers by hosting 'Culture Delivery', 'Health Delivery' • Reached the target disabled employment quota • Improved the maternity protection program - Fully implemented the work-at-home policy for expecting mothers amid COVID-19

1) π talent: Global talent capable of developing and leading business by leveraging business insights gained through expertise and diverse business experience in Korea and abroad spanning at least two areas(item/region/division level)

2) Disabled employment quota: The percentage of employees with disabilities was 3.1% in 2022, and the disability quota is calculated as (number of employees with disabilities/full-time employees) $\times$ 100



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

- Risks and Opportunities for Material Topics
- Climate and Environmental Impact
- Employee Value Enhancement**
- Sustainable Supply Chain
- Health & Safety
- Ethics/Fair Trade
- Information Security
- Social Impact
- ESG Issue Paper



Metrics and Targets

Appendix

Employee Value Enhancement

Strategy 1. Attracting Talent and Nurturing Experts

Recruiting Talent Based on Expertise and Personality

The recruitment-aligned internship program was initiated in 2020 and was expanded by 50% in 2021 and by 100% in 2022 to streamline the recruitment process and ensure the in-depth verification of candidates for their personality and job competency. We hosted the ‘New Business Idea Contest’ for undergraduates to secure future business talent equipped with job expertise and creativity, and the winning team was given precedence in the open recruitment process. We also hire year-round to swiftly respond to the staffing needs of our field operations. We actively use our employee referral program in recruiting experienced hires to select talent with proven competency, personality, and organizational fit.

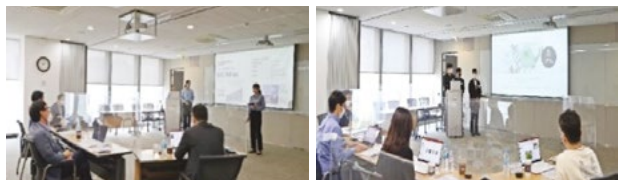
Securing Talent Diversity

We operate internships for college students during summer holidays to foster employment competency. In 2022, 50% of our open recruit employees were from a linkage program called “Gyeongbuk Youth Trade Academy & Busan Trade Rookie”, a program supervised by the Korea International Trade Association. To abide by the POSCO Group Corporate Citizenship, we provide advantage for employment vulnerable people such as members of veteran families and multicultural families in particular. In 2023 we plan to recruit globally(Japan, The United States) in order to enhance our competency in future food business and better understanding of local culture & language.

Attracting Global Top Talent

The key to continuously improving the performance of our global business lies in attracting and retaining outstanding local personnel at overseas organizations. As such, we standardize our company-

wide HR operation systems to improve their effectiveness, spanning the career level/compensation system, pay raise standards and recruitment processes. This involved discussion with all of overseas organizations to consider their regional specificities. For instance, a performance-based compensation system was introduced, pay raise criteria were developed by reflecting organizational performance and competitor’s pay levels, and personality/aptitude testing was introduced in the recruitment process. Furthermore, we produced and circulated tailor-made HR management guidelines including specifics of the HR operational systems of each overseas organization.



College Students New Business Idea Contest

Operating Talent Development Programs

In the beginning of each year, we share our major training operation directions and annual training course guidance at all levels so that individual employees may choose and attend necessary courses. In 2022, we published the ‘employee training guidance’ which outlines our training operation directions and

detailed courses to help employees improve their self-learning competency. We will also regularly introduce our e-learning content on the Group-wide HRD(Human Resources Development) platform and leverage such content in launching learning challenge events. Our efforts to facilitate training enabled us to operate a total of 5,257 courses(240 offline and 5,017 e-learning courses) for Global Business Unit and 2,408 courses(106 offline and 2,302 e-learning courses) for Energy Business Unit in 2022.

Conducting training satisfaction surveys and integrating VOC

To upgrade content for respective courses and improve their transfer of training, we conduct module-specific satisfaction surveys following the completion of each training and integrate the training needs identified into our training planning process. In fact, our new hire training and global staff training were upgraded based on the feedback generated from satisfaction surveys: new hire training was enriched with ‘Sales Process Role Play’ simulations to reflect trainees’ strong preference for participatory learning, and global staff training was upgraded with ‘Global Staff TED Story’ and ‘Negotiation Skill’ courses to cater to their needs for interactive learning and the acquisition of negotiation skills. Our Energy Infra Group and the Incheon LNG Combined Cycle Power Plant additionally develop and provide job training tailored to field operations when individual and departmental training needs arise, in addition to the 39 technical training courses currently provided each year.

[Training Hours and Expenses per Person (non-consolidated basis)]

	Global Business Unit	47.4hours	1.55KRW Mil.
	Energy Business Unit	79.9hours	1.21KRW Mil.



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics
Climate and Environmental Impact
Employee Value Enhancement
Sustainable Supply Chain
Health & Safety
Ethics/Fair Trade
Information Security
Social Impact
ESG Issue Paper



Metrics and Targets

Appendix

Employee Value Enhancement

Strategy 1. Attracting Talent and Nurturing Experts

Global Leadership

Global competence training	• Implement specialized business development programs targeting executives and team leaders: nearly 70 leaders completed the level-based Finance & Investment program in 2022 • Customized global leadership training for expatriate candidates regarding effective cross-cultural communication skills • Biannual general job training sessions including accounting, funding, trade finance(total 9 sessions)
Leadership training for leaders	• PBL(Problem Based Learning) training including workshops and individual/group coaching for team leaders to help address real-world leadership challenges in their fields
Training for prospective and returning expatriates	• Provide on-the-job training for expatriates candidates including rotational assignments in related departments and meetings with former representatives. • Practical training for accounting/investment and local language skills • Department-specific workshops and special lectures on child education in 2022 • Implement revised in-house policies, systems, and organizational culture for returnees
Executive candidates training	• Select executives to attend external CEO courses (3 executives completed in 2022)
Promotion training	• Self-leadership development training for promoted employees in interactive approach
Digital skill training	• Intensive training(20-week, off-job) to train AI experts(programming, data mining, machine learning, deep learning, etc.) • Provided online training course regarding Python-based big data and work automation via online HRD contents platform

Energy Expertise

Leadership training for energy business unit's leaders	• Special lectures on remote work management for leaders in line with the increasing remote work arrangements including work-at-home
Energy Business School	• Expert training on strategic business(renewable, hydrogen energy, etc.) development through financial/business analysis training provided by external instructors(16 employees in 2022)
Working-level leadership training	• Level-based leadership, communication, and engineer CoP training to help leaders and employees at all levels build leadership skills and create a culture of communication
Technical Training Center	• Category-specific, customized job training introduced for engineers and technicians to strengthen their competency and 39 technical training courses directly developed and operated(opened 6 courses and advanced training in 2022) • Category-specific, customized training for new employees, and diverse training formats provided including offline/virtual/e-learning
Domestic degree support system	• Domestic degree program to strategically nurture next-generation leaders by supporting P2(manager)-P5(general manager) to take MBA courses at five major domestic universities and energy policy major courses at Seoul National University of Technology and Science(5 employees in 2022, 6 in 2023)

Talent Development for Global Staff

Trade Academy for junior employees	• Practical trade training(5 courses on trade process, contract preparation, incoterms, etc.) and learning problems(2 real-time online training sessions operated and completed by approximately 300 employees in 2022) provided for junior employees, online Q&A bulletin board
Training for global staff promoted to managers	• Training on Company overview(mid/long-term vision, HR systems, etc.) and leader capacity-building(leadership, career development, etc.) • Transfer of learning encouraged through 4-week follow-up learning assignments and self-reviews after the completion of training
New hire training	• Preliminary online remote training(company overview, corporate citizenship, ethics management, etc.) for newly-recruited global staff to increase a sense of belonging and support organizational onboarding • Added courses on employee VOC integration, in-depth communication, vision creation, and understanding of different cultures
Global staff on-boarding guidebook	• Onboarding e-guidebook tailored to overseas organizational heads, mentors, and new hires to support systemic onboarding and strengthen basic job competency • Guide respective overseas corporations, office heads, and HR personnel to use the guidebook to ensure cycle-aligned onboarding support

Employee Value Enhancement

Strategy 2. Respecting Human Rights and Creating a Great Workplace

Operating Labor Management Councils and Labor Unions

POSCO International creates and operates the labor management council to promote shared interests through mutual participation and cooperation. The council operates in accordance with the Act on the Promotion of Worker Participation and Cooperation, and consists of six representatives from various business groups and job levels. The council convenes regular quarterly meetings as well as working-level meetings to consult on issues on an as-needed basis, along with level-based, year-round labor-management discussions. The labor union in Energy Business Unit discusses issues concerning employee grievances, wage system improvement, and work environment improvement while conducting annual wage negotiations and signing the collective bargaining agreement every two years. The Company fully protects the employees' freedom to engage in labor union activities pursuant to Article 33 of the Constitution and the labor law, and strives to establish mutually-beneficial labor relations and improve working condition. Both labor and management engage in regular consultations on the sustainable development of the Company, employee benefits, productivity gains, and health & safety among others.

[Composition]

(As of Apr. 2023)

Category	Type of Organization	Cycle	Members(Membership Ratio)
Global Business Unit	Labor management council	Quarterly	6 from labor and management each
	(Staff) Labor management council	Quarterly	5 from labor and management each
Energy Business Unit	(Field) Labor management council	Quarterly	7 from labor and management each
	Labor union		241 persons(nearly 46%)
STS Division	Labor management council	Quarterly	Ansan: 5 members from labor and management respectively Pohang: 3 members from labor and management respectively
	Labor union		380 persons(100%)
POSCO Mobility Solution	Labor management council	Quarterly	4 from labor and management each
	Labor union		462 persons(100%)
Plate Division	Labor management council	Quarterly	3 from labor and management each
	Labor union		69 persons(100%)

Key consultation issues in 2022

In 2022, our labor management council pursued institutional improvements to keep current with the shifting working environment, identified improvements required to disseminate a positive corporate culture, and worked to diversify communication channels with employees. To bolster our sales activities and improve work methods, the council proposed the pilot operation of distributed work for the sales

organization while sharing opinions between the Company and employees concerning the approach to establishing additional Smart Work Centers(SWC). This resulted in the creation of the SWC at the Seoul Station Grand Central in May 2022 to implement distributed work. We also implemented flexible work hours(selective work hours) to continuously pursue smart work. To review the effectiveness and feasibility, we first piloted flexible work hours for a total of 139 employees from 12 groups in total. The official implementation of flexible work hours will be determined by comprehensively reviewing the necessary improvements identified through pilot operations and employees' feedback.

[Improvements Made for Employees' Working Conditions]

Category	Support
Loan support	- Provided in-house loan support for residential stability(up to KRW 90 million, 1.5% rate) - Provided interest payment support for up to KRW 20 million in taking out bank loans for livelihood support(for interest rates in excess of 2%)
Promoting childbirth and creating a family-friendly culture	- Expanded the tuition support limit for multi-child families(KRW 80 million regardless of the number of children – KRW 160 million for 4 or more children) - Provided honeymoon travel support(KRW 2 million) - Provided gifts for one' first baby(KRW 500,000)
Promoting the health of employees and their families	- Expanded paid health check-up leave for the effective implementation of health check-ups(0.5 days – 1 day) - Expanded the application period for family medical expense reimbursement
Supporting employees to deal with surging prices	- Increased prices at the in-house cafeteria and improved quality management to upgrade the quality of meals provided - Raised base pay by 3.1% and provided career self-design grants(KRW 200,000) and lump-sum grants(KRW 3 million) to help employees maintain and improve their standard of living
Upgrading employee benefits	- Strengthened employee bereavement support(support five funeral helpers) - Purchased new memberships for corporate resort facilities
Support for employee hobby clubs	R- esumed employee hobby clubs and expanded budget support

Handling employee grievances

To collect and handle employee grievances, we assigned grievance handling members(1 male, 1 female) under the labor management council. These members together with the employee members of the labor management council interview employees to collect grievances in their affiliated business group and job level, and work to resolve these grievances through labor-management consultation. During the interview members of the council keep a record of the grievances, and those out of their jurisdiction are shared with the Human Resources Division and related departments. The progress of grievance resolve is to be shared within 10 days from the day they were received, and if they are not resolved at this stage, they are discussed by the labor management council.

At a Glance

Material Sustainability Topics

Materiality Assessment

Governance

Strategy and Risk Management

Risks and Opportunities for Material Topics

Climate and Environmental Impact

Employee Value Enhancement

Sustainable Supply Chain

Health & Safety

Ethics/Fair Trade

Information Security

Social Impact

ESG Issue Paper

Metrics and Targets

Appendix



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics
Climate and Environmental Impact
Employee Value Enhancement
Sustainable Supply Chain
Health & Safety
Ethics/Fair Trade
Information Security
Social Impact
ESG Issue Paper



Metrics and Targets

Appendix

Employee Value Enhancement

Strategy 2. Respecting Human Rights and Creating a Great Workplace

Employee Communication

Strengthening communication across different job levels

CO-Mentoring	- Launched Co-Mentoring program to boost mutual understanding between management and employees 13 division heads and 44 junior/manager employees participated in 2022
Townhall meeting	- Open communication across different job levels on corporate policies and strategic directions - In 2022, each business division held quarterly meeting - Performance stimulation index increased by 13 points and working method index by 10 points in the P-GWP(Great Work Place) results for junior positions
Gift-luck	Encourage employees and enhance communication through snack/tea gifts at power plants and terminals

Collaboration among cooperating organizations

interFACE Lunch Talk	- Designed to overcome organizational silo and spread organizational culture of consideration and respect 116 employees participated in 2022
interTHANKS	- Company-wide program to express gratitude for collaborative work 310 employees participated in 2022 - Working method index increased by 5 points and employee relationship index increased by 3 points in the P-GWP results
Building collaboration models	- Establish unique collaboration model with annual process ranging from establishing collaboration goal to diagnosis and assessment - The first group affiliate to assess internal collaboration levels by developing quantitative assessment - Reward individuals and departments for their outstanding collaboration performance to improve the compensation system and overcome organizational silos - Will assess collaboration levels each year and manage quantitative metrics(to be used as a collaboration effectiveness measurement tool along with the P-GWP survey)

Creating autonomous, integrated organizations

Operating remote offices	5 Smart Work Centers(SWC, 190 seats) operated in 2022 - Increase in the utilization of SWCs through a campaign to encourage the use of SWCs (nearly 100 persons/day on average) - Support system-related index increased by 5 points in P-GWP results (82 points on average in 2021 – 87 points on average in 2022)
Post-merger integration activities	- Diverse communication programs implemented to boost synergy between the trading and energy business - Facilitating interaction among employees through the declaration of a new vision, PMI workshops, tours around the Incheon LNG Combined Cycle Power plant/Gwangyang LNG Terminal, and interFACE Lunch Talk in 2023 - Plan to additionally operate diverse communication programs including inter-organizational joint team-building and employee debates on policy/institutional changes during the second half of 2023

Maternity Protection and Childcare Support

We operate a range of programs to support employees' pregnancy, childbirth and childcare to actively join in the government's childbirth encouragement policy to overcome the national challenge of low birth rates. Our Global Business Unit allows all expecting mothers to work at home to protect the health of these employees who are vulnerable to infections during the pandemic, and our Energy Business Unit implements reduced work hours for expecting mothers as well as 3+3 parental leave¹⁾. To promote childbirth among employees while relieving their childcare burden, we created baby gifts(worth of KRW 500,000) in addition to the existing childbirth grants(KRW 2 million for the first child, KRW 5 million for the second child). Furthermore, we raised the tuition support for employees with multiple children(KRW 120 million for 3 children, KRW 160 million for 4 children).

1) When both parents take parental leave simultaneously or consecutively for the same child within the child's first 12 months, each parent receives increased leave allowance for the first 3 months

[Programs under Operation]²⁾

Category	Program	Target	Support
Pregnancy	Prenatal checkup leave	Pregnant employees	1 day/month leave (paid)
	Fertility treatment leave	Employees	6-day paid leave + 4-day unpaid leave per year
	Fertility treatment expense support	Employees and their spouse	Up to KRW 1 million per session (treatment, surgery, diagnosis, testing, etc.)
Childbirth	Childbirth grants	Employees and their spouse	KRW 2 million for 1st child, KRW 5 million for 2nd child and onwards
	Baby gifts	Employees	KRW 500,000
	Flextime	Applicants	Start and finish work 1~2 hours before and after the regular work schedule
Childcare	In-house daycare center	Employees with a child 5 years old or younger	4 daycare centers under operation
	Parental leave	Employees with a child 8 years old or younger	Up to 2 yrs (1 yr paid + 1 yr unpaid)
	Reduced workhours during parenthood	Employees with a child 8 years old or younger	Up to 2 yrs, 15~30 work hrs/week (proportional decrease in wage)
	Tuition support for multi-child families	Employees with multiple children	KRW 120 million for 3 children, KRW 160 million for 4 children

2) Voluntary program which supports the legal obligations

Operating in-house daycare centers

Our Global Business Unit has operated two in-house daycare centers at Songdo office building since 2019 to meet the childcare needs of all employees. These facilities renovated their toddler toilets, repapered the classrooms and hallways, and changed the blinds in early 2023 to provide a safer and more pleasant learning environment. Our Energy Business Unit is operating workplace daycare centers in Seoul and Cheongna to help all its employees meet their childcare needs.

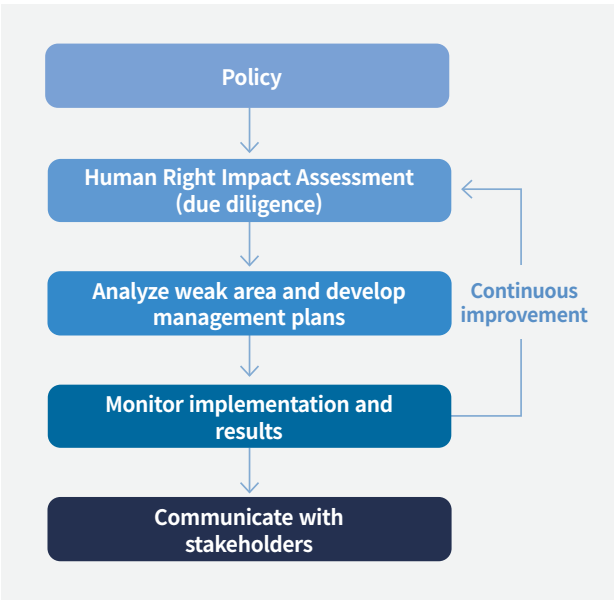
Employee Value Enhancement

Risk Management

Human Rights Impact Assessment

POSCO International operates the human rights management process established in accordance with the OECD Due Diligence Guidance to review our internal human rights management status and make improvements. We disclosed our Modern Slavery and Human Trafficking Statement 2021-22 drafted in conformity with the Modern Slavery Act(MSA) of the UK and Australia and approved by the Board of Directors. We also conduct regular human rights impact assessments on our employees to abide by international norms and regulations and protect the human rights of employees and to review and manage relevant risks. Going forward, we will put the human rights protection of our employees before all else and operate a field-driven, systemic human rights management process.

[Human Rights Management Process]



Conducting Human Rights Impact Assessments on Overseas Worksites

As of 2022, we conducted paper-based human rights due diligence on four overseas operational sites, including PT.BIA in Indonesia, POSCO International Textile in Uzbekistan, the Shwe Project in Myanmar, and the RPC in Myanmar. Improvement tasks were identified for vulnerable areas based on due diligence results, and each of these sites has developed and is implementing action plans accordingly.

Human rights impact assessment process

- 1) Conduct anonymous paper-based due diligence (presentation provided in advance in local language)
- 2) Identify short-term improvement tasks and mid/long-term management tasks
- 3) Classify tasks and develop implementation plans
- 4) Communicate with stakeholders

Due diligence result analysis method

- Analyze vulnerable areas(below 90% in positive response)

Task identification method

- Classify tasks based on management/improvement directions
- Develop implementation plans that are fit for each worksite

Stakeholder communication channel

- Fully disclose information through sustainability reports and the company website
- Coordinate tasks based on review results generated through employee/stakeholder communication

[Status and Goal of Human Rights Due Diligence at Overseas Worksites]

(unit: worksites)



2020~21
0

2022
4

2023~24
6

2025
8

* In 2020 and 2021, due diligence was not conducted amid the spread of COVID-19

[Participants in Paper-based Human Rights Due Diligence Conducted at Overseas Worksites in 2022]



2022
(Dec.)

1,077 persons

* 10% or more field employees randomly chosen at each worksite participated (including permanent/contract employees)

[Impact Assessment Result]

The closer to 100%, the higher the percentage of positive perceptions

Target Worksite	Human Rights Management	Working Conditions/ Employment Contract	Respect for and Protection of Human Rights	Compulsory Labor and Child Labor	Grievance Channel	Health & Safety	Wage Negotiations and Compensation	Freedom of Collective Bargaining /Association
PT.BIA	87%	92%	90%	92%	81%	94%	91%	89%
POSCO International Textile in Uzbekistan	87%	96%	90%	92%	92%	93%	97%	95%
Shwe Project in Myanmar	70%	91%	89%	94%	64%	96%	99%	52%
RPC in Myanmar	65%	80%	78%	84%	67%	84%	69%	38%

Based on the human rights impact assessment on the four overseas worksites in 2022, we identified their weak points in employee awareness-building and training. This prompted us to define employee awareness building and training expansion as the common improvement task for overseas worksites. Going forward, we will create training programs on human rights management, grievance channels, and collective bargaining among others at the HQ level while expanding human rights impact assessments to prevent adverse impact in relation to human rights and labor rights across our overseas operations.

At a Glance

Material Sustainability Topics

Materiality Assessment

Governance

Strategy and Risk Management

Risks and Opportunities for Material Topics

Climate and Environmental Impact

Employee Value Enhancement

Sustainable Supply Chain

Health & Safety

Ethics/Fair Trade

Information Security

Social Impact

ESG Issue Paper

Metrics and Targets

Appendix



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics
Climate and Environmental Impact
Employee Value Enhancement
Sustainable Supply Chain
Health & Safety
Ethics/Fair Trade
Information Security
Social Impact
ESG Issue Paper



Metrics and Targets

Appendix

Employee Value Enhancement

Risk Management

Myanmar Operations(Shwe Project, RPC)

In December 2022, POSCO International conducted paper-based human rights due diligence on our two worksites in Myanmar(Shwe Project, RPC). This revealed that positive responses were relatively low at the Shwe Project in the areas of ‘establishing a human rights management system’, ‘operating grievance handling channels and mechanisms’, and ‘guaranteeing the freedom of collective bargaining and association’. We are implementing short/mid/long-term improvement plans developed for the five high priority tasks identified, and will continuously monitor the progress made. In addition, work is underway to review worksite-specific working conditions to conduct training fit for local on-site conditions so that the human rights training program currently under development at the HQ could be implemented right upon its completion. As to HR systems, we work to use HQ’s level-based starting salary table and promotion system as the baseline to apply common wage increase rates for all employees as a way to ensure transparency in our employment and working environment. For grievance channels, we plan to strengthen guidance and training so that employees could better understand and use the currently-available grievance handling process which is operated in the same format as the HQ. Meanwhile, we aim to improve those questions which posted high non-response rates by revisiting each question to ensure they are appropriate for the environment of each worksite while improving these questions in consideration of respondents’ frequency of use and level of awareness for the terms used in the questionnaire. Looking ahead, we will make sure that our human rights due diligence accurately reflects the voice of local employees.

[CASE STUDY. Improvement Task Implementation Plan for the Shwe Project]

Vulnerable Area	Short-term(2023-2024)	Mid-term	Long-term
Regular human rights training	Provide regular training programs, manage the status of training completion		
Employee awareness on the human rights policy and its availability in local language	Strengthen guidance on the human rights policy and provide materials in local language		
Regular wage negotiations		Share information on wage adjustment results	
Grievance channel: accessibility, availability in local language, anonymity, transparent communication on the processing period and submission results	Strengthen guidance on the grievance handling process		
Guarantee of freedom of collective bargaining and association		Strengthen guidance on the activities of the labor management council	

Progress Made on Improvement Tasks

PT.BIA

PT.BIA immediately developed implementation plans for the 10 improvement tasks(7 short-term, 3 mid/long-term tasks) identified through human rights due diligence conducted in May 2022, and is sincerely and continuously making progress towards these tasks. In relation to ‘regular human rights training’, ‘guidance on the human rights management system’ and ‘strengthening guidance on grievance channels’ which were identified as short-term improvement tasks, the company is operating an integrated human rights training program independently developed to raise employees’ awareness, and a total of 720 employees completed training as of 2022.

Improvement task implementation status(as of Jun. 2023)

- Improvement task implementation rate: 90%(9 tasks completed out of 10)
- * task not completed is a mid-term management task, and work is underway to develop its implementation plan.

POSCO International Textile in Uzbekistan

POSCO International Textile held two employee meetings in the second half of 2022 for employees to freely present their feedback on improving the working environment. The company is working to promptly make improvements on the varying ideas raised through such meetings. An official telegram channel is also up and running to bolster free-flowing communication with employees, and this serves to share FAQs concerning human rights and labor rights.

Key agendas of employee meetings held in 2022

- Improve the quality of commuter bus services
- Establish kindergartens for employee children
- Review wage increases
- Re-establish work regulations
- Bolster workplace safety through improving the working environment



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics
Climate and Environmental Impact
Employee Value Enhancement
Sustainable Supply Chain
Health & Safety
Ethics/Fair Trade
Information Security
Social Impact
ESG Issue Paper



Metrics and Targets

Appendix

Employee Value Enhancement

Risk Management

Organizational Culture Assessment

Each year, we conduct online P-GWP surveys and Focus Group Interviews on all employees to assess our organizational culture in general. This serves to identify employees' satisfaction with the five factors that have impact on our organizational culture(vision, organizational management, institutions/support systems, employee relationships, work methods) and to perform correlation and causality analyses on these factors. Analysis results are used to identify the weak points compared to the previous year, and make improvement plans for the following year.

[Annual Organizational Culture Assessment Process]

Online Survey	- Perform regular GWP surveys and factor/level/organization-specific analyses - Develop hypotheses and perform cause-and-effect analyses on wide-ranging organizational culture factors
FGIs and Discussions among Employees	- Conduct organizational culture interviews on 20% of total workforce - Engage in organizational culture discussions with leaders, the Labor Management Council and Young Board members - Conduct verification analyses following job category/function/level-specific interviews and discussions
Setting Organizational Culture Improvement Direction	- Elaborate on policy/institutional improvements and action guidelines to deliver core values - Share the improvement directions with employees - Provide and review directions for each improvement task to relevant organizations, and support their implementation

[P-GWP Survey Results]

(unit: point)

2020	2021	2022	
		Global Business Unit	Energy Business Unit
83	88	92	85



CO-Mentoring program



CO-Mentoring certificate



HR system improvement presentation



Labor system improvement presentation



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

- Risks and Opportunities for Material Topics
- Climate and Environmental Impact
- Employee Value Enhancement
- Sustainable Supply Chain**
- Health & Safety
- Ethics/Fair Trade
- Information Security
- Social Impact
- ESG Issue Paper



Metrics and Targets

Appendix

Sustainable Supply Chain

Strategic Approach and Our Commitment

Strategic Approach	Mid/long-term Goal	2023 Plan	Key Achievements in 2022
Strategy 1. Supply chain ESG management	Advance supply chain ESG impact management in response to the EU's supply chain due diligence directive - Establish an IT system-based management system - Conduct on-site due diligence on top priority partners	Engage in supply chain due diligence and risk prevention activities - Gain consent to abide by the Code of Conduct - Request ESG management self-checklists	Established a supply chain management system - Established the supply chain policy and code of conduct - Created standards for high priority partners - Established an ESG risk screening system by transaction item/country
Strategy 2. Win-win partnership	Strengthen global marketing support for SMEs and startups - Bolster support programs by expanding collaboration with external organizations(6 to 10 organizations) - Expand companies receiving support for global market entry(52 to 64 companies)	Expand collaboration programs with external organizations(No. of companies supported) - Incheon Startup Park's Smart-X Global(3) - Korea International Trade Association's Go Global with POSCO International Program(5) - Korea Institute of Environmental Technology's global supply chain support program(9) - Korea Small and Medium Enterprises Promotion Agency's export counseling(12) - Daegu Techno Park's Dive with POSCO International(3) - POSTECH Holdings' global market entry capacity consulting (nearly 20)	Signed MOUs to strengthen collaboration with external organizations(5 organizations) - Dream Hill, Incheon Economic Development Agency, Incheon Startup Park, Korea Small and Medium Enterprises Promotion Agency(KOSMES), Korea Institute of Environmental Technology Worked with external organizations to explore overseas markets(No. of companies supported) - Incheon Startup Park Smart-X Global(6) - Vietnam export counseling with KOSMES(12) - Korea International Trade Association's Go Global with POSCO International Program(2) - POSTECH Holdings' global market entry capacity consulting(18)



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics
Climate and Environmental Impact
Employee Value Enhancement
Sustainable Supply Chain
Health & Safety
Ethics/Fair Trade
Information Security
Social Impact
ESG Issue Paper



Metrics and Targets

Appendix

Sustainable Supply Chain

Strategy 1. Promoting Supply Chain ESG Management

Supply Chain ESG Management System

We established our supply chain ESG management system in accordance with the OECD due diligence directive to preemptively respond to the supply chain due diligence legislation of the EU and other major countries and to meet our customer and investor needs for supply chain ESG management. In 2022, we identified supply chain ESG risks in reflection of key business regions and industry characteristics of our Global Business Unit, and plan to extend the scope of analysis to cover the key supply chains and the value chain of Energy Business Unit to bolster our supply chain ESG management system. We plan to introduce an ESG checklist to conduct environmental/social risk impact assessments on suppliers for regular monitoring and to make decisions in the new investment review process.

[Supply Chain ESG Management Process]



Supplier Code of Conduct

POSCO Group assists all its suppliers of products and services in fulfilling their sustainability responsibility through its Supplier Code of Conduct. The Code reflects the risks and opportunities identified along its supply chains, and consists of 22 provisions in seven categories concerning basic norms on the environment and human rights as stipulated by the UN Global Compact as well as shared growth, fair trade, safety, intellectual property protection and quality management. In 2021, POSCO International added compliance with the Modern Slavery Act and regulations on conflict mineral management to reinforce our Code of Conduct for all suppliers wishing to do business with us to abide by.

[Supplier Code of Conduct]

Respect for Employees' Fundamental Human Rights	Health & Safety	Environment
Ethics and Fair Trade	Protection of Trade Secrets and Intellectual Property	Quality Management
Win-Win Partnership & Social Contribution		

Assessing suppliers for their business criticality

As a globally integrated corporation operating across the investment, trade, and manufacturing industries, we analyzed and assessed our suppliers for their business criticality for effective supplier ESG risk management. Suppliers with high business criticality were chosen based on the five factors of sales contribution, supplier size, supplier industry, downstream, and type of transaction. As a result of this process, a total of 63 companies or nearly 5% of our suppliers with continuing business relationships were identified as key suppliers. For these identified key suppliers, we will encourage their proactive participation in our supply ESG management system by prioritizing them in gaining consent to abide by our Supplier Code of Conduct and conducting surveys with an upgraded ESG checklist. As we pursue the expansion of our value chain through investments, we will also include investment corporations in the scope of our supply chain ESG management.

[Supply Chain Business Criticality Assessment Factors]

Business Criticality	
Sales contribution	Proportion of annual purchases made
Supplier size	Listing, large/mid/small business
Supplier industry	Type of business such as manufacturing and trade
Downstream	Customer industry along the value chain, customers' supply chain ESG management, etc.
Type of transaction	Equity investment and other investment-linked transactions, MOUs, transaction cycle, etc.

* POSCO International's supply chain ESG management system and criticality assessments target suppliers who operate in the Company's upstream value chain.



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics
Climate and Environmental Impact
Employee Value Enhancement
Sustainable Supply Chain
Health & Safety
Ethics/Fair Trade
Information Security
Social Impact
ESG Issue Paper



Metrics and Targets

Appendix

Sustainable Supply Chain

Strategy 2. Pursuing Win-Win Partnerships

Win-Win Partnerships with Small/Mid-sized Enterprise and Start-ups

As a company with one of the largest global networks in Korea, we support SMEs and startups that wish to go global but lack management, quality, and production systems and capabilities. We operate the Global Marketing Portal to help promote these companies, and provide continuous support to develop new businesses and pursue win-win partnerships.

Win-Win Cooperation Funds

In October 2021, we signed an agreement with the Korea Foundation for Cooperation of Large & Small Business, Rural Affairs to contribute KRW 30 billion to the Win-win Cooperation Funds, and signed another agreement to contribute KRW 13.3 billion to the Funds in September 2022. As of the end of 2022, we provided nearly KRW 28.6 billion to 100 SMEs and startups, which helped them with technology development, facility investment, and overseas market entry to expand business opportunities with global customers. We will continue to contribute to the Funds to prioritize and support companies associated with the seven core businesses of POSCO Group and eco-friendly/low-carbon businesses.

[Key Achievements of the Win-Win Cooperation Funds]

Category	Item	Performance	Description
Technology development/ R&D	Intellectual property rights	8 cases	Structural system for post-beam connection, etc.
	Technology certification	16 cases	Security camera technology certification, etc.
	Patent	6 cases	Patent registration for smart pedestrian detection technology
Facility investment for productivity improvement	Productivity improvement	-	DONGJINMI: Improved productivity by 250% through the introduction of new laser cutting equipment
	Defect rate reduction	-	S&S INC.: Reduced defects by 33% through the introduction of automatic sorting equipment
	Sales increase	KRW 147.4 billion	Total sales rose by KRW 147.4 billion at beneficiary companies (KRW 85.1 billion aligned with POSCO International's sales)
Overseas market advancement	Counseling	157 cases	Customer counseling through attendance at the Expo Dubai and other overseas exhibitions
	Orders	KRW 723 million	Ground effect vehicle supply contract signed with a local Italian operator
	Contracts	26 cases	Specialized food category broker contract to do sales business with large retailers, etc.

Global Marketing Support Through Cooperation with External Organizations

We have signed MOUs with external organizations in Korea to scale up overseas expansion programs for promising SMEs and startups. In April 2022, we signed MOUs with the Incheon Free Economic Zone Authority and Incheon Startup Park to run the 'Smart X-Global' program to support six companies to access the market of Dubai and Vietnam. In June, we signed an MOU with the Korea SMEs and Startups Agency to host a B2B matching event in Vietnam for 12 companies, which resulted in \$11,791,000 in counseling value as well as the signing of 14 MOUs and three sample contracts. In December, we signed an MOU with the Korea Environmental Industry & Technology Institute to run an overseas market entry support program for Green Tech companies.



Korea – Vietnam B2B matching event 2022



Smart X-Global performance presentation



Woorikids awarded at the French Cosmetic 360 Awards as the first Asian company



Korea – Vietnam B2B matching event 2022



Smart X-Global performance presentation



Received the Win-Win Partnership Ball from the Ministry of SMEs and Startups in November and December of 2022



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

- Risks and Opportunities for Material Topics
- Climate and Environmental Impact
- Employee Value Enhancement
- Sustainable Supply Chain**
- Health & Safety
- Ethics/Fair Trade
- Information Security
- Social Impact
- ESG Issue Paper



Metrics and Targets

Appendix

Sustainable Supply Chain

Strategy 2. Pursuing Win-Win Partnerships

Reinforcing Practical Support

We identify the needs of SMEs and startups, and provide them with fundamental training and 1:1 competence consulting that meet their practical business needs. The SMEs and Startups Export Counseling 2022 hosted in August 2022 was attended by 18 companies. We signed an MOU with DreamHill, an educational consultancy, to support certification and ESG training for companies. Prosol and Myeongcheon Industries co. received training support from DreamHill. We also conduct the QSS(Quick Six Sigma, productivity improvement program for SMEs) program twice a year, and Yulchon and Tong-Il Boiler have benefited from this QSS program. Meanwhile, we continue to assist startups with strong growth potential in penetrating into overseas markets. We are supporting Korea Water Technology(sewage sludge dewatering/drying equipment) to enter the Philippines and Malaysia, PRIBIT Technology(cyber security solutions) to North America, CloudN(energy-saving solutions) to Thailand, and OZ Sepa(oil-water separator) to Dubai.

[Competence Consulting]



Fundamental training at Competence Strengthening event 2022



1:1 consulting at Competence Strengthening event 2022

Risk Management

Identifying Key ESG Risks by Item/Country

As our business presence spans a variety of business areas, we need to take a differentiated approach to ESG by focusing on high-risk businesses and regions. This is why we identified monitoring items and countries/regions with a focus on material issues presented by global ESG initiatives. This process intends to evaluate potential ESG risks associated with industries and countries rather than the actual ESG risks of suppliers, and ESG risks for items were screened based on key topics in the Environmental, Social, and Governance areas. Country-specific environmental and social risks include the intensity of regulations, including carbon regulations and safety regulations, in addition to overall country-level vulnerabilities. We plan to use the in-depth ESG checklist to monitor suppliers operating in high-risk industries and countries for the occurrence of actual ESG risks.

[Supply Chain Item/Country Risk Screening Results]

Level of Risk	Key Industries along Supply Chains	Proportion of Business*
High	Lithium, mineral, copper, aluminum, oil, coal	17.9%
Medium	LNG, bioplastic, steel, hydrogen, ammonia, agricultural products, automotive parts, cotton, electronic parts	81.9%
Low	Communication equipment, consulting(public procurement)	0.2%

Level of Risk	Location of Suppliers	Proportion of Business*
High	Korea, India, Vietnam, Mexico, Russia, China, Ukraine, Uzbekistan, Indonesia, and others(27 countries)	72%
Medium	Oman, Kuwait, Australia, Germany, Hungary, Saudi Arabia, and others(15 countries)	14%
Low	Singapore, Japan, Myanmar, the Netherlands, Qatar, Switzerland, United Arab Emirates	14%

* Proportion of business calculated as the number of suppliers



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics
Climate and Environmental Impact
Employee Value Enhancement
Sustainable Supply Chain
Health & Safety
Ethics/Fair Trade
Information Security
Social Impact
ESG Issue Paper



Metrics and Targets

Appendix

Sustainable Supply Chain

Risk Management

Prevention and Improvement Activities

In 2022, we developed a supplier checklist in line with international human rights norms including ILO conventions and the Modern Slavery Act as well as the GRI, the SASB, and other global disclosure standards in partnership with an external specialist organization. This checklist will help us conduct regular written surveys on suppliers chosen by identifying their potential/actual business criticality and item/country-specific ESG risks in line with our supply chain ESG management system.

[Supplier ESG Checklist Assessment Items]

Environmental	Common: Environmental management, training/risk assessment and improvement activities Advanced: GHG emissions reduction target/energy and GHG consumption/hazardous and atmospheric substances measurement/wastewater and waste reduction activities
Social	Common: Transparent employment and working conditions/compulsory labor and child labor/health & safety, etc. Advanced: Human rights due diligence/employee training/legal or regulatory non-compliance/safety incident documentation/compulsory and child labor identification, etc.
Governance	Common: Ethics management/grievance mechanism and process establishment Advanced: Ethical audits/percentage of foreign workers/gender ratio/grievance mechanism/stakeholder communication channel, etc.

Stakeholder Communication

We operate the Abuse of Power Report Center on our website for our partners and suppliers to report any unfair treatment they experienced.

[Abuse of Authority Reports Submitted and Handled in 2022]

Category	Submitted	Handled
Abuse of authority reports submitted through the website	0	0

* While zero reports were submitted on abuse of authority on the website
* One case was referred to us by POSCO and this was handled.

Conflict Minerals Management

In 2021, POSCO International established our ‘Responsible Mineral Management Guidelines’ in alignment with POSCO Group’s guidelines. We cooperate with our customers’ conflict mineral policy and support our suppliers with conflict mineral management while participating in the Group-level conflict mineral joint response council, working on multiple fronts to establish responsible mineral sourcing practices.

Responsible Mineral Management Process

We limit our business with suppliers that have adverse environmental and social impact in accordance with our Responsible Mineral Management Guidelines, and strive to avoid minerals mined in conflict areas. We define Conflict Affected and High Risk Areas(CAHRAs), and designated CAHRAs through investigation into relevant countries and regions including conflict-ridden areas in Africa. To identify conflict mineral risks that may occur early from the supplier registration phase, we examine suppliers for their management data and responsible mineral sourcing policy. Smelters and refiners aligned with these suppliers are also reviewed for their CAHRA status, and verified for their RMI1) conformance through third-party due diligence. If they are evaluated non-conformant through such due diligence process, they could be de-listed from our supplier registration system.

For registered suppliers, we request their consent to comply with our conflict minerals policy, and also request them to fill out the C(M)RT2) and verify their smelters and refiners for conformance. We assess our current suppliers for conflict mineral risks, and use assessment outcomes in classifying suppliers into the ‘high-risk’, ‘management target’ and ‘general’ categories. For high-risk suppliers, we request independent third-parties to conduct specialized due diligence to review and improve on their risks. We fully support them with improvement activities by providing training content when deemed necessary, and verify their completion within 120 days following the notice of due diligence results. In case these activities were not completed, the concerned supplier could be excluded from the registration pool.

- 1) RMI(Responsible Minerals Initiatives): A global consultation body formed to promote responsible mineral sourcing and supply chain management and to track down the origin of conflict minerals and perform monitoring and certification of producers using such minerals
2) CMRT(Conflict Mineral Report Template)/CRT(Cobalt Report Template): Standardized templates created by the RMI to identify detailed information on responsible mineral sourcing

CASE STUDY. POSCO Mobility Solution’s Supplier Assessment

POSCO Mobility Solution conducts supplier assessments across varying items spanning technology, transaction records, environment, safety, ethics, and ESG. The company grants operational incentives(+10 points) to suppliers that are certified to ISO 14001 or have introduced their environmental management system, and penalties(-10 points) for any non-compliance with ethics management to reflect non-financial performance in assessment results. Such assessment results are actively used in managing and developing suppliers for sustainable management.



At a Glance

Health & Safety

Strategic Approach and Our Commitment

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics
Climate and Environmental Impact
Employee Value Enhancement
Sustainable Supply Chain
Health & Safety
Ethics/Fair Trade
Information Security
Social Impact
ESG Issue Paper



Metrics and Targets

Appendix

Strategic Approach	Mid/long-term Goal	2023 Plan	Key Achievements in 2022
Strategy 1. Establishing the health & safety management system	Reinforce the H&S management system - Develop a safety culture assessment system - Develop a company-wide integrated H&S management system	Reinforce the H&S management system - Establish a self-directed prevention system with a focus on risk assessment - Upgraded standardization of safety performance at overseas worksites, expand ISO 45001-certified worksites	Achieved ISO 45001 at 6 worksites in Korea and overseas - HQ, Incheon LNG Combined Cycle Power Plant, Gwangyang LNG Terminal, PT.KPE, PT.BIA, and Shwe Project Reviewed our implementation of the Serious Accidents Punishment Act through an external specialist organization - Assessed our compliance with the Serious Accidents Punishment Act and the Industrial Health and Safety Act - Implemented recommended improvement measures
Strategy 2. Improving health & safety communication and capabilities	Improve the stability of H&S activities - Training H&S experts at each worksite - Introduce the BBS(Behavior Based Safety) system	Improve the stability of H&S activities - Strengthen safety audits: direct operation(monthly), overseas(annual), curtainwall construction(weekly) - Strengthen health promotion activities (no-smoking, less drinking, healthy diet, working out) - Achieve health-friendly business certification	Bolstered H&S & safety communication - Operated the subcontractor health and safety council - Held H&S exchanges with domestic/overseas investment corporations
Strategy 3. Bolstering incident prevention activities in the workplace	Bolster partner safety management - Strengthen H&S-related expense/institutional support - Add regulations to ban re-subcontract Apply smart safety technology - Diagnose and check equipment through smartphones - Share our smart safety system with partners	Bolster partner safety management - Expand the integration of safety performance assessment results in the bidding process - Facilitate the pre-work energy locking system, expand the safety help service Apply smart safety technology - Introduce Smart Ball and Smart Safety Belt across all domestic operations * Global implementation after reviewing effectiveness at domestic work sites	Tightened safety management for overseas operations - Performed precision workplace safety assessments and made improvements - Set and monitored H&S metrics Reinforced the monitoring and improvement of employee health - Followed up on those diagnosed with specific conditions through check-ups, operated a metabolic syndrome management program, and investigated musculoskeletal risk factors and strengthened the management of symptomatic employees - Operated employee mental healthcare programs and group programs for organizational vitality



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics
Climate and Environmental Impact
Employee Value Enhancement
Sustainable Supply Chain
Health & Safety
Ethics/Fair Trade
Information Security
Social Impact
ESG Issue Paper



Metrics and Targets

Appendix

Health & Safety

Health and Safety Strategy

We established a well-organized health and safety management system to achieve zero occupational injuries in 2022. To establish our health and safety management system and strengthen our execution while maintaining zero occupational injuries, we are progressing towards the key strategies of ‘establishing the health and safety management system’ ‘improving health and safety communication and capabilities’, and ‘bolstering incident prevention activities in the workplace’ in 2023.

Implementation
Strategy



Establish the health
and safety
management
system



Improve health and
safety communication
and capabilities



Strengthen incident
prevention activities
in the workplace

KPI

**Qualitative
Goal**

Develop and establish an organized health and safety
management system

**Quantitative
Target**

Goal: Achieve zero high-consequence injuries between 2023 and 2025
Achieve a y-o-y 5% reduction in LTIFR between 2023 and 2025¹⁾

Leading KPI²⁾: Achieve 100% of goals set for leading indicators (% , cases)

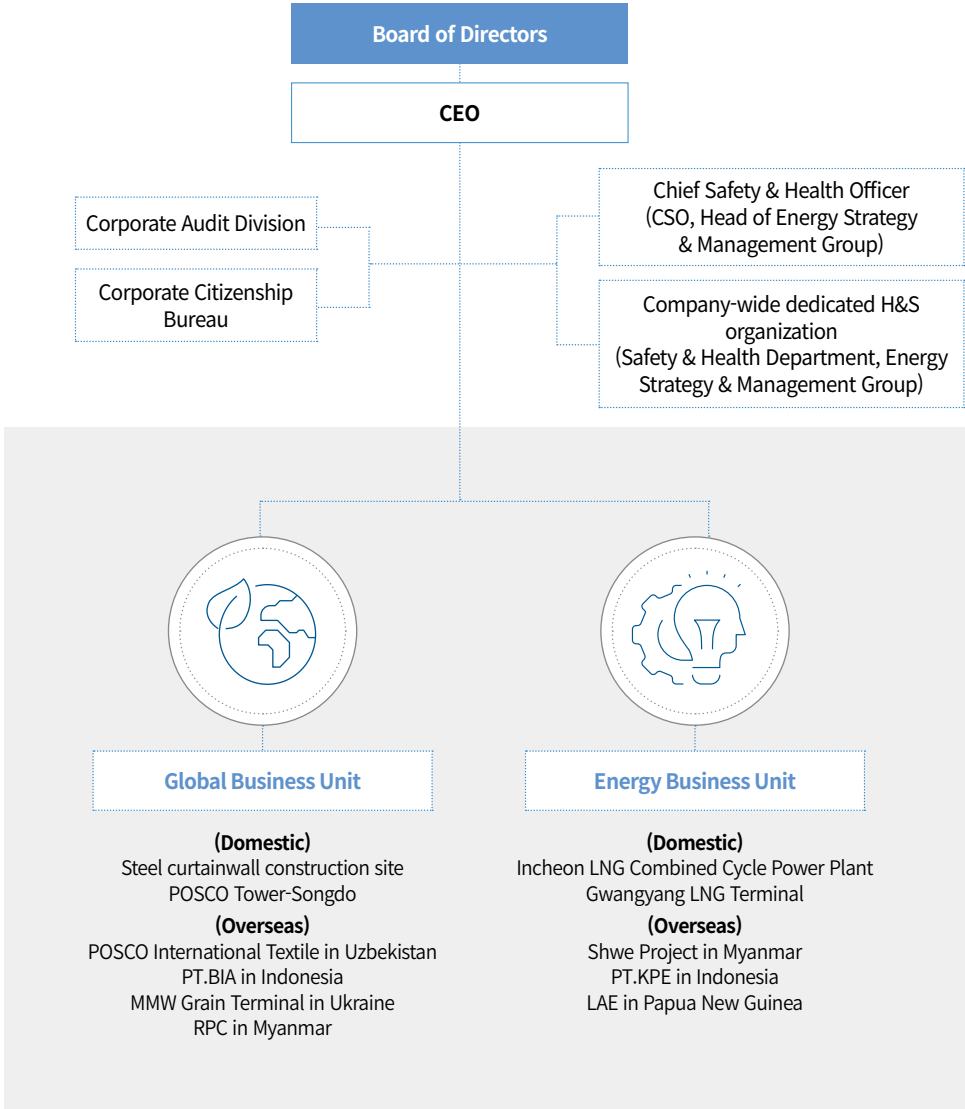
1) Our LTIFR(Lost Time Injury Frequency Rate) for 2022 was zero, and we aim to reduce our LTIFR by 5% each year to 0.51 in 2023, 0.48 in 2024, and 0.46 in 2025.

2) Leading KPI: Leading indicators including performance and records related to training, safety check, safety inspection, and communication

[Alignment with Company-wide Performance Assessment]

Alignment with Assessment	Description
KPI	- Safety incident management(No. of serious injuries, improvement in injury rate including affiliates) accounting for 10% of the Energy Business Unit's KPIs in 2022 - Including the 'No. of employees experiencing occupational injuries' in POSCO International's CEO KPIs
Safety MBO	- Mandatory safety MBO(Management by Objectives) for Energy Business Unit's field leaders(general managers/group heads in P6 and below positions) - Reflecting safety activity goals and action plans aligned with our core value of putting safety first in goal-setting(10%)

[Health & Safety Organization]





At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics
Climate and Environmental Impact
Employee Value Enhancement
Sustainable Supply Chain
Health & Safety
Ethics/Fair Trade
Information Security
Social Impact
ESG Issue Paper



Metrics and Targets

Appendix

Health & Safety

Strategy 1. Establishing the Haelth & Safety Management System

Operating the Occupational Health and Safety Committee

POSCO International convenes the Occupational Health and Safety Committee each quarter which consists of an equal number of labor and management members to deliberate and decide on key H&S issues and to hold presentations to share the outcomes at all levels. Deliberations and decisions are made in developing incident prevention plans and/or preparing H&S regulations, and other H&S-related issues and agenda items are proposed. We also operate health and safety councils, including the partner health and safety council, health and safety information exchanges with overseas worksites, and self-directed safety meetings, on a monthly or quarterly basis. We established a process to report our health and safety plan each year to the Board of Directors for approval, and reflect occupational injury metrics(No. of occupational injuries) in our CEO's KPIs. Aside from the decision-making body, we appointed the CSO(Chief Safety & Health Officer) and created a dedicated organization heading and managing our company-wide H&S operations for H&S risk management. This organization functions

as our control tower to develop H&S systems in reflection of varying business conditions in Korea and overseas and to head our incident prevention activities, inspections, and assessments. Each responsible organization at the worksites operate their H&S management system and pursue continuous improvements to create a safe workplace in line with the set H&S goals. We have a total of 76 H&S personnel across the board(CEO, CSO, 1 health and safety officer, 1 safety management deputy general manager, 8 dedicated H&S personnel, 9 health and safety managers, and 55 management supervisors), who perform their duties in compliance with the definitions set forth in the Industrial Safety and Health Act and the Urban Gas Business Act.

Following the merger in 2023, we announced new health and safety management guidelines and developed our health and safety plan accordingly.

[Key Activities of Health and Safety Councils]

Council	Cycle	Target Attendees	Activity
Occupational Health and Safety Committee	Quarterly	Equal number of 7 management and labor members	Deliberate/decide on the development of injury prevention plans or the preparation of H&S regulations, other H&S issues and agendas
Partner health and safety council	Monthly	HQ-CSO, subcontractors Worksite-safety management officers and subcontractors	Consult on implementation plans for H&S issues -risk assessments, review results, emergency responses - and collect and improve on subcontractor feedback
Health and safety information exchange with overseas operations	Monthly	HQ and 6 overseas worksites	Regularly compile and address company-wide H&S statistics, and discuss issues
			Disseminate safety laws/H&S management standards and systems
Self-initiated safety meeting	Monthly	Leaders at the Incheon LNG Combined Cycle Power Plant and the Gwangyang LNG Terminal	Share safety activities and safety risk improvement activities at the worksite level
Group-wide health and safety council and Communication Day	Monthly	14 Group affiliates	Upgrade standardization of H&S management by reviewing and sharing the H&S management system operational status of Group affiliates



At a Glance

Health & Safety

Strategy 2. Improving Health and Safety Communication and Capabilities

Key Activities in 2022

To embed health and safety management into our day-to-day routine, we provide a range of trainings and exercises to employees and partners, and operate campaigns and communication channels to build a health and safety culture across the entire value chain.

Health & Safety Trainings and Exercises

Capacity-building training	- Met H&S training obligations under the Industrial Safety and Health Act and developed training content tailored to different training targets - Produced training videos(5 languages) and provided on-site training to improve safety awareness at overseas operations in 2022 - POSCO Mobility Solution: Provided KOSHA's 'Mobile VR Service' training program at Ansan, Cheonan, and Pohang worksites for effective safety training
Emergency drill	- Conducted regular drills based on the scenarios chosen for their likelihood at all worksites in Korea and overseas - Conducted emergency drills(286 occasions), and used the results to identify improvements and continuously improve emergency preparedness
Partner safety training	- Provided safety training including safety rules to those newly given access to power plants and terminals - Supported our business partners with fire drills, CPR training, and H&S reinforcement training - Supported supervisors of HQ's business partners with safety experience training to prevent various safety incident(working at heights/working in high fire risk situations) that may occur as part of building management
Injury and incident investigation /prevention	- Established a serious injury respond process - Developed a stage-by-stage manual on how to respond from the occurrence of injury until the end of administrative action involving external organizations (Ministry of Labor, etc) - Conducted regular checks under the supervision of the worksite safety officer and the CEO

Health & Safety Culture Development

H&S campaigns and promotions	• Established a 'No-Blame Culture' to point out but not blame mistakes while encouraging rewards • Selected and awarded best safety observation cards(annual, monthly) • Exhibited winners chosen through safety slogan/safety poster contests
Safety attention program	• Put 'safety attention' stickers on the safety helmet for those diagnosed with blood pressure/health conditions as part of the pre-work H&S training • Assigned tasks in consideration of health conditions and ensured swift action would be taken in the event of an emergency

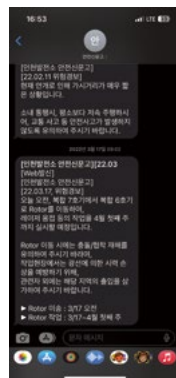
Communication Channels

Communication council	• Operated the Occupational Health and Safety Committee, partner safety meetings, H&S information exchanges with overseas investment corporations, and self-directed safety meetings at the Incheon LNG Combined Cycle Power Plant and the Gwangyang LNG Terminal • POSCO Mobility Solution - Discussed pending H&S issues through division-level safety review and analysis meetings, the occupational health and safety committee and the safety council - Held company-wide H&S meetings supervised by the CEO since 2022 • Shwe Project in Myanmar - Operated HSSE Steering Committee meetings - Held monthly workplace HSE meetings(174 occasions in 2022) - Operated the UCUA(You See You Act) safety observation card program(3,217 occasions in 2022)
Smart Safety	• Implemented QR code on safety work permit - Workers can easily check work safety standards and the actions needed to be taken in emergency situations

[Smart Safety Activities]



Communicating the safety whistleblowing channel



A risk alert message



QR permit to work



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics
Climate and Environmental Impact
Employee Value Enhancement
Sustainable Supply Chain
Health & Safety
Ethics/Fair Trade
Information Security
Social Impact
ESG Issue Paper



Metrics and Targets

Appendix

Health & Safety

Strategy 3. Reinforcing Incident Prevention Activities in the Workplace

Key Activities in 2022

We operate a range of health management programs to help employees promote their health and psychological well-being. We also provide partners with health and safety management guidelines, health and safety assessment, safety meetings, and consulting to assist them in establishing a well-organized health and safety management system.

Employee Health Management

Health check-ups and follow-up management	• Provide comprehensive health check-ups to all employees(annual) and their spouse(biennial) - All employees completed health check-ups and those with specific medical conditions received follow-up management(487 occasions) in 2022 • POSCO Mobility Solution: Provide general/comprehensive check-ups to all employees - Support special check-ups for high-risk work employees, including brain cardiovascular disease examination - Operate health promotion and hearing preservation programs based on work environment measurement results - Provided tetanus vaccination for workers that handle metal (633 persons in 2022)
Musculoskeletal disease prevention	• Regularly investigate causes of musculoskeletal strain, and assess hazards by conducting symptom surveys on employees exposed to musculoskeletal risks. Improvement is implemented with feedback from specialized organizations. • Provided musculoskeletal disease investigation results and stretch training in 2022(for 30 employees at increased risk for musculoskeletal disease and 23 employees subject to management) • POSCO Mobility Solution: Investigate causes of musculoskeletal strain to identify work-related illness and make improvements: Prevent musculoskeletal diseases at the worksite level(sports taping application training, air balance program, etc.)
Psychological counseling for employees	• Operating psychological counseling by outsourcing to licensed organizations to take care of employee stress and mental health → expanded counseling for all employees and their families in 2022 • Operate group psychological counseling programs – MBTI personality type analysis, empathy methods by type, and stress identification and coping methods to strengthen organizational capabilities • Operate the virtual video counseling program available for overseas organizations

Support for Partners

Partner health and safety management guidelines	• Highlight that POSCO International's health and safety management guidelines apply to all stakeholders including employees to preemptively identify and eliminate health and safety risks for all stakeholders, continuously improve the health and safety management system, and establish a health and safety cooperation system with partners • Operate partner health and safety management guidelines at each worksite → amend when needed by reflecting partner safety management reinforcement plans and qualified subcontractor selection processes
Safety management system operation	• Establish a safety management responsibility system in line with the size and risk of work performed by subcontractors - Mandatory safety management expenses(3%) for high-risk work through the qualified subcontractor selection program - Make sure safety accounts for 40% of the partner performance assessment(annual) conducted for contract renewal to ensure partners' safety management → Request partners who fail to meet the set internal standards based on assessment results to identify and implement improvements - Prohibit workers with medical issues specified in the contract terms and conditions → restrict bid participation as penalties for non-compliance - Conduct random inspections on safety management plan implementation for qualified partners performing high-risk work • Support safe work operations by identifying and improving work risks through joint safety inspections, itinerant inspections, and health and safety councils
Partner safety meeting operation	• Collect feedback through partner safety meetings(monthly) and Occupational Health and Safety Committee meetings(quarterly) - Made improvements based on VOC - protective glasses, COVID-19 test kits, workplace lighting replacement, first aid stations at repair sites
SME consulting support	• Support SME suppliers establish health and safety management system • Supported 6 SME suppliers in 2021(approved by the government for outstanding risk assessment performance) → supported 2 suppliers located in Incheon with consulting on how to respond to the Serious Accidents Punishment Act in 2022



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics
Climate and Environmental Impact
Employee Value Enhancement
Sustainable Supply Chain
Health & Safety
Ethics/Fair Trade
Information Security
Social Impact
ESG Issue Paper



Metrics and Targets

Appendix

Health & Safety

Risk management

Near-miss and Potential Risk Analysis

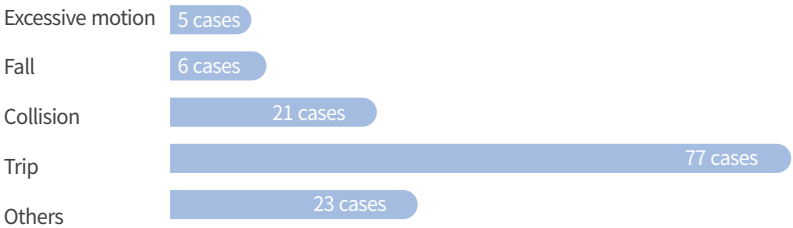
In analyzing Near-misses and potential risks, we categorize risks by type and make improvement accordingly. Our 2022 near-miss analysis identified risks such as trips, crashes, falls, being jammed, and being struck by falling objects, and revealed that trips(77 cases) and crashes(21 cases) accounted for the highest proportion. Improvements were completed for 125 out of 133 risk factors, or 94% of total. We developed 2023 improvement plants based on these results.

All our worksites follow the PDCA(identify & improve, review, and reward best practices) cycle for hazard/ risk management. We identify and improve risk factors(P,D) for all workers in our workplace through Near-miss, Risk Top 5, joint inspection, risk assessment, and the Safety Whistleblowing program. The Safety Whistleblowing program is accessible by internal/external stakeholders including partners, and received 30 cases(28 from direct operations, 2 from partners) in 2022, and 100% of them were handled. In the review(C) phase, regular inspections are made under the supervision of the health and safety supervisor of the worksite. In the final reward(A) phase, groups and/or individuals are rewarded for their best practices to motivate employees to participate in our safety activities.

POSCO Mobility Solution made year-round risk assessments on 95 near-miss cases in 2022 and is working to make necessary improvements. This includes year-round identification of 'Fatal Top' health and safety issues and their monthly updates. Issues are deleted upon their resolution while new issues are added, and improvements were being made on 63 issues as of December 2022.

[POSCO International Near-miss Analysis Results in 2022]

▶ Improvements completed for 125 out of 133 cases(94%)



Grade-based Assessment for Process Safety Management

Our Incheon LNG Combined Cycle Power Plant was rated 'P' for 8 years, the highest level in process safety management assessment. Each of the safety department at our worksites performed theme-based safety inspections to make improvements on hazards and risks. The plant fulfills its obligation for process safety management(fire, explosion, and leak prevention), and the Gwangyang LNG Terminal established the gas safety management framework to analyze and assess hazards and risks that may occur across its safety management operations while taking necessary action in advance.

[Monthly Safety Inspection Themes and Actions Taken]

Theme	Action
Inspecting earplug distributor	Supplemented earplugs
Conducting inspections/comprehensive detailed inspections on blowers used for confined area work	Conducted regular fire inspections in the first/second half
Inspecting mobile ladders/cleaning equipment	Took anti-slip, free-prevention measures

Third-party Health and Safety Risk Assessment

In 2022, we assessed our compliance with a total of 308 requirement items under the Serious Accidents Punishment Act and the Industrial Safety and Health Act with the help of an external specialized organization. The score was 73.3 points, which put us in the average range, and we made improvements by elevating our dedicated health and safety organization.

Our Incheon LNG Combined Cycle Power Plant and the Gwangyang LNG Terminal were rated good in eight out of nine key requirements under the Serious Accidents Punishment Act, and improvement was made for one recommendation identified. In addition, the Gwangyang LNG Terminal received safety management system audits: the Terminal was rated conformant under all safety management regulations, and completed improvement measures for five subitems for which it received recommendations.



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

- Risks and Opportunities for Material Topics
- Climate and Environmental Impact
- Employee Value Enhancement
- Sustainable Supply Chain
- Health & Safety
- Ethics/Fair Trade**
- Information Security
- Social Impact
- ESG Issue Paper



Metrics and Targets

Appendix

Ethics/Fair Trade

Strategic Approach and Our Commitment

Strategic Approach	Mid/long-term Goal	2023 Plan	Key Achievements in 2022
Strategy 1. Embedding ethics management into our day-to-day routine	- Establish a global top corporate culture of compliance - Establish a systemic prevention process to ban unjustified requests to raise the bar on anti-corruption - Create a Corporate Citizenship culture to pursue trust and creativity through ethical risk management	- Perform preventive audits in Korea and overseas to eliminate management risks and unethical practices - Expand on/offline training by region/job level to eliminate any ethical blind spots - Organize ethics practice councils, and embed self-initiated ethical practices into daily routines at working-level departments - Prevent ethical non-compliance by helping investee companies lacking their audit organization build ethics infrastructure and perform audits	- Conducted company-wide ethics trainings and campaigns to establish a corporate culture that respects human dignity - Operated anonymous chatrooms, the Junior Counseling Center, and ethics discussions among leaders to prevent unethical practices and strengthen ethics communications - Conducted overseas on-site checks and preventive audits on high-risk areas to eliminate potential risks
Strategy 2. Establishing a culture of fair trade	- Establish a corporate culture of compliance through reviews on subcontract transactions to advance CP operations - Establish a CP culture of compliance management and fair trade on par with global standards as a Green Energy & Global Business Pioneer	- Maintain and strengthen CP programs to disseminate a compliance culture - Continue with integrated operational manual updates (guidelines/handbooks) in reflection of regulatory amendments - Strengthen assessment and monitoring through optimizing subcontract reviews and evaluation methods - Supplement and improve by reflecting assessment feedback including top management support expansion - Expand participation in CP events, and diversify training content - Roll out compliance activities and improve CP operational personnel at overseas organizations - Work to achieve an AA rating in Fair Trade Commission assessment - Performance report submission(Apr.) → On-site assessment(Aug.) → Rating announcement(Oct.)	- Communicated price adjustments to the Fair Trade Commission and circulated the guidebook - Conducted full subcontract audits to prevent the risk of regulatory non-compliance - Provided special training on the subcontract law for high-risk departments - Distributed the CP Fair Trade Guidebook



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

- Risks and Opportunities
for Material Topics
- Climate and Environmental Impact
- Employee Value Enhancement
- Sustainable Supply Chain
- Health & Safety
- Ethics/Fair Trade**
- Information Security
- Social Impact
- ESG Issue Paper



Metrics and Targets

Appendix

Ethics/Fair Trade

Strategy 1. Embedding Ethical Management

Ethics Management System

[Core Value]



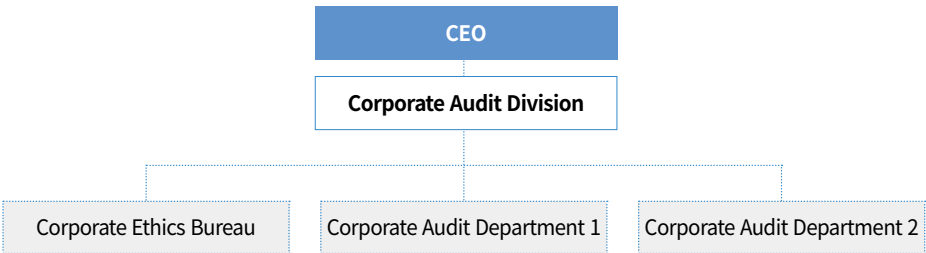
[Operational Directions]

Establish a Global Top-tier Corporate Culture of Ethics management	
Preemptive Response to Risks	- Check risks - Perform pre-work consultations - Survey on a corporate culture that respects human dignity - Offer counseling on ethical dilemmas
Shift in Employee Awareness	- Offer training on ethics - Provide tailor-made training to high-risk organizations
Cultural Dissemination	Establish a culture of compliance with ethics and fair trade

Dedicated Organization

The Corporate Audit Division, which is under the direct leadership of the CEO, is responsible for our company-wide ethics management operations. The Division consists of the Corporate Audit Department 1 and the Corporate Audit Department 2 that are tasked with business assessments, ethics management, and with work audits and internal controls respectively. To reinforce the prevention of unethical practices through a specialized ethics management organization, we separated the Ethics Management Section under the Corporate Audit Department 1 to create the Corporate Ethics Bureau.

[Governance for Corporate Audit Operations]



Operate ethics management policies and systems, conduct ethics assessments as well as audits and trainings

Code of Ethics

We believe that ethical values should be the top priority for all our employees, and stipulated our Practice Guidelines to highlight the importance of compliance for all employees. Provisions on the prevention of conflict of interest were added to establish a culture of fair competition and to encourage all employees to follow. We will keep current with the shifting conditions and preemptively include new ethical norms to reinforce our ethics management in so doing.

[Code of Ethics Pledges Signed by Employees]

Year	Pledges Signed
2022	- Pledge to practice gender equality and mutual respect completed by all employees - Corporate Citizenship Charter pledge signed by all employees
2023	- Code of Ethics pledge completed by all employees - Corporate Citizenship Charter pledge signed by all employees

Practice Guidelines

Our Practice Guidelines that set the course of action for our employees to properly comply with the Code of Ethics are made available for all our stakeholders including employees through our website and work guides. Guidelines on the prevention of sexual and workplace harassment and on the prevention of conflict of interest were added in 2018 and 2019 respectively. We inform our employees to continuously practice these guidelines and train them on specific details through e-learning.

[Specifics of Practice Guidelines]

Practice of Ethics and Compliance with Law	Work-Life Balance for Employees	Creation of Customer Value and Building Trust
Duty of Good Faith and Fair Dealings towards Investors	Building Win-Win Relationships with Business Partners	Contribution to the Country and Society
Protection of Environment and Preservation of Ecosystems	Protection of and Respect for Human Rights	<Appendix> Management and Operation of the Code of Ethics



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics
Climate and Environmental Impact
Employee Value Enhancement
Sustainable Supply Chain
Health & Safety
Ethics/Fair Trade
Information Security
Social Impact
ESG Issue Paper



Metrics and Targets

Appendix

Ethics/Fair Trade

Strategy 1. Embedding Ethical Management

Ethics Training for Domestic and Overseas Workplaces

A wide array of ethics training is provided to raise ethical awareness among employees in Korea and overseas and to prevent relevant issues from occurring. In 2022, a total of 99 courses were conducted for employees and contract workers at the Headquarters and overseas organizations. We also informed the unethical behavior reporting system across the board to eliminate any unethical behaviors across all our operations.

Ethics Management Training Provided in 2022

[Global Business Unit]			(unit: courses and persons)	
Category	Courses	Completion		
HQ	Ethics training for new hires	2	48	
	Ethics training for experienced hires	4	20	
	Ethics training for prospective expatriates	1	40	
	e-learning on business ethics	1	2,639	
	Company-wide ethics campaign	6	8,184	
	Audit capacity building seminar	1	16	
	Ethics sharing session at the business group level	6	936	
	Sexual ethics training conducted by an external instructor	1	1,107	
	Ethics training and discussion for junior employees	10	67	
	Regional sharing session	4	237	
Overseas	In-person training on ethical cases for expatriates	10	23	
	e-learning on business ethics	1	250	

[Global Business Unit]			(unit: courses and persons)	
Category	Courses	Completion		
Ethics training for experienced hires	1	5		
Ethics training for leaders	16	52		
e-learning on business ethics	1	501		
Ethics campaign for leaders	4	1,184		
Training to eliminate sexual harassment and bullying in sports for the women's table tennis team	1	7		
Training on workplace bullying for shift workers at the Energy Operation Division	5	49		
Ethics training and discussion for leaders at Korean/overseas investee companies and Busan E&E	4	67		
Ethics training and discussion for leaders supervised by the Head of the Corporate Audit Division	20	237		
Training to prevent workplace sexual harassment and bullying for vulnerable groups (dispatched/temporary workers)	2	4		

Reinforcing Communication on Ethics Management

We provide counseling to help employees cope with ethical dilemmas that may occur during work, as well as making efforts to terminate unethical practices and establishing a culture of human respect. The frequency of our ethics surveys was increased from once a year to twice a year, and the surveys were conducted for all domestic and global work places including our global staff. Necessary action is taken for relevant organizations or leaders based on the survey results. Our Ethics Counseling Center determines whether to investigate a reported case after discussing with the counselee. If the counselee does not wish his/her case to be investigated, we recommend other actions such as department transfer.

[Monitoring Performance of the Ethics Counseling Center]

Category	2020	2021	2022	
			Global Business Unit	Energy Business Unit
Code of Ethics	34	23	22	3
Fair trade	12	4	2	1
Korea's Anti-graft Act	1	3	0	-
FCPA*	1	3	2	-
Others(workplace bullying, etc.)	4	4	9	2

* Foreign Corrupt Practices Act

Operating the Junior Counseling Center

We opened the Junior Counseling Center to prevent unethical practices and disseminate a culture of ethics. The center serves to listen to and counsel on workplace-related grievances and ethical dilemmas, explain our ethics-related internal regulations and guidelines, and guide applicable how-to's and the investigation process. All counseling details remain strictly confidential, and the identity of the counselees and those who help these counselees is thoroughly protected.

Ethics/Fair Trade

Strategy 2. Establishing a Culture of Fair Trade

Compliance Program

We endeavor to comply with the Fair Trade Commission's fair trade compliance regulations. Our independent compliance program has been developed and operated since 2011, and we post the CP Fair Trade Guidebook and the Subcontractor Handbook on our website.

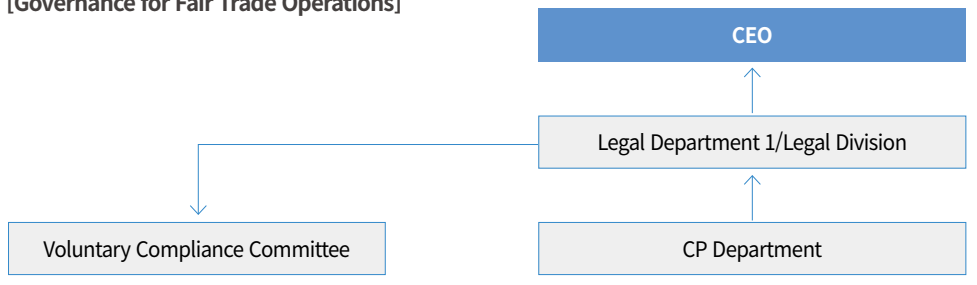
In 2022, CP(Compliance Program) operations were transferred from the Corporate Audit Division to the Legal Division to create the CP Department as a dedicated CP organization under the Legal Department 1. The department is responsible for the operations of the compliance officer and fair trade compliance, and revised our existing handbooks into the CP Fair Trade Guidebook by including compliance management and other varying compliance issues. This Guidebook is made available for all employees through our enterprise portal and mobile platforms, and reflects regulatory amendments. We also reorganized our existing online training and notified all employees to attend online training while encouraging all employees at designated high-risk departments to complete such training. In the second half of 2022, CP reviews and effectiveness assessments were made and special training was conducted on the subcontract law for high-risk departments to improve their understanding.

We were rated AA, the highest rating, in the Fair Trade Commission's compliance program operational assessments in 2021(valid until 2023). Such assessments aim to evaluate companies for their compliance with the principle of fair trade and for training and oversight. Our rating in 2017 and 2018 was A. The 2021 assessment highly recognized our achievements in engaging in fair trade pre-work consultations with responsible departments in the subcontracting process, making it easier for all our employees to receive training, and establishing an internal audit system by appointing the CP manager and council members at respective business groups.

Voluntary Compliance Committee

Our Voluntary Compliance Committee meets regularly to share matters concerning our CP operations among members. Committee members were appointed by the voluntary compliance manager and key CP plans for 2022 were shared along with training at the committee meeting convened in April 2022. The council shared cases of compliance violation and collected grievances in June, and shared the results of its activities for 2022 and awarded departments and practicing leaders for their outstanding fair trade compliance in December of 2022.

[Governance for Fair Trade Operations]



Fair trade e-learning



Special training on the subcontract law in 2022



Fair Trade Compliance Council awarding outstanding departments and practicing leaders

Material Sustainability Topics

Materiality Assessment

Governance

Strategy and Risk Management

- Risks and Opportunities for Material Topics
- Climate and Environmental Impact
- Employee Value Enhancement
- Sustainable Supply Chain
- Health & Safety
- Ethics/Fair Trade**
- Information Security
- Social Impact
- ESG Issue Paper

Metrics and Targets

Appendix



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics
Climate and Environmental Impact
Employee Value Enhancement
Sustainable Supply Chain
Health & Safety
Ethics/Fair Trade
Information Security
Social Impact
ESG Issue Paper



Metrics and Targets

Appendix

Ethics/Fair Trade

Strategy 2. Establishing a Culture of Fair Trade

Fair Trade Training Curriculum

Operate online mandatory training for high-risk and relevant departments	• Provide mandatory CP training for high-risk departments, committee members and fair trade leaders to increase voluntary participation at all job levels and raise awareness on fair trade compliance
Develop and implement job level specific training	• Provide the appropriate CP training for different job levels and situations for new hires, experienced hires, returning/newly-appointed expatriates, and global staff at overseas organizations • Included fair trade in the ethics management category of the comprehensive competency test required for promotion in 2023 • Invite external experts to provide foreign exchange law seminars in consideration of potential non-compliance with foreign exchange regulations in conducting direct overseas investment operations due to our inherent business characteristics
Provide video training to global staff at domestic/overseas organizations	• Create training videos on overseas anti-corruption and Modern Slavey Act compliance, share them through the company's VOD platform

[Fair Trade Training Provided in 2022]

Category	Training Content(Method)	Target	Completion (No. of persons)
Job level specific training	Fair trade policy and our response in the ESG era (offline training, Jun. 2022)	Executives	258
	Our way forward in the era of ESG management and fair trade CP(offline training, Oct. 2022)		
	Special subcontract training(offline training, Nov. 2022)	High-risk departments	40
	Fair trade training(online training, Jun.~Sep. 2022)	High-risk departments	105
Comprehensive competency test	Ethics/fair trade subjects(offline training, year-round)	Promotion candidates	82
Training-related activities	Disclosure training(online, year-round)	Disclosure and verification person-in-charge	2
	POSCO Compliance Academy(offline training, Q2)	CP personnel at Group affiliates	2

Fair Trade Consulting Support for Partners

We endeavor to establish a culture of fair trade with Group affiliates and partners. We share our know-how with partners including fair trade-related rules, training, oversight, and other operational plans, and support them in receiving fair trade consulting.

[Fair Trade Consulting Provided to Partners in 2022]

Group Affiliate	Description of Consulting Provided
POSCO Holdings	Expanded the partner CP certification program, provided support in achieving CP ratings, created a training program pool
POSCO E&C, POSCO PLANTEC	Prepared CP ratings assessment report and shared 2022 on-site assessment results.
POSCO Future M	Opened quizzes and shared FCPA materials
eNtoB	Shared relevant materials and know-how on CP assessments



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics
Climate and Environmental Impact
Employee Value Enhancement
Sustainable Supply Chain
Health & Safety
Ethics/Fair Trade
Information Security
Social Impact
ESG Issue Paper



Metrics and Targets

Appendix

Ethics/Fair Trade

Risk Management

Clean POSCO International System

Our Clean POSCO International System documents and manages recommendations and solicitations to establish a corporate culture of integrity and fairness. When an employee registers the received solicitation request on the system, we provide guidelines on how to refuse the request, and follow set step-by-step procedures to investigate the case thoroughly. This system encourages employees to voluntarily report solicitations, and serves as a primary mechanism in establishing a fair trade culture. To create a transparent and ethical culture, we are also strengthening our internal whistleblowing mechanisms. In accordance with provisions on the prevention of conflicts of interest, former POSCO International employee data is uploaded on the system and decision makers are re-alerted before granting approval on business with these entities. Through such endeavors, we plan to become a trustworthy company for our stakeholders as a corporate citizen.

[Protection of Whistleblowers]

Identity Protection	If whistleblowers or other participants of investigation are believed to suffer any disadvantage on HR or other matters, they are eligible for change in positions or assignments.
Confidentiality	Even if whistleblowing is discovered due to business conduct or by chance, information on whistleblowers and other participants of investigation should remain strictly confidential.
Protection against Reprisals	Any work-related retaliatory actions against whistleblowers and participants of investigation are prohibited, and such actions are reprimanded in accordance with applicable regulations.

[Operational Procedures]

STEP 1	Register the details of solicitation on the system
STEP 2	Verify the details by the Corporate Audit Division
STEP 3	Notify the applicant
STEP 4	Investigation and proper measures taken by the Corporate Audit Division if needed

Internal Control

The Corporate Ethics Bureau under the Corporate Audit Division constantly monitors any non-compliance with applicable regulations and guidelines at the Headquarters and across all our domestic and overseas operations through our unethical practice and workplace harassment reporting system. The Corporate Audit Department 1 also conducts domestic/overseas work assessments. The Corporate Audit Department 2 engages in internal control operations to establish internal control policies in relation to legal compliance required for business conduct, the presentation of financial statements, and the appropriateness of the internal accounting control system. Audit results including the above-mentioned process are reported to the Audit Committee.

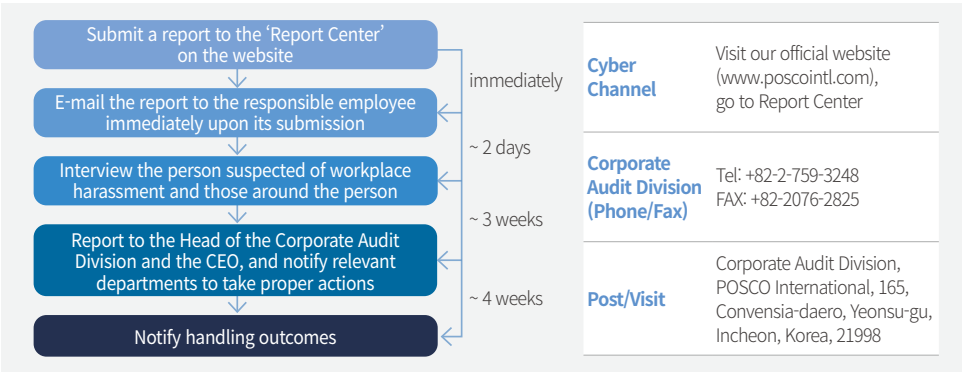
Ethics Audit

We conduct ethics audit by surveying our domestic and overseas workplaces every year. Ethics audits and audits on submitted reports are regularly conducted, and special audits are made on an as-needed basis. Work audits are performed every three to four years.

Abuse of Authority Report Center

We operate the Abuse of authority Report Center for all stakeholders, including employees of our business partners, to report any unreasonable treatment they experienced due to workplace harassment related to POSCO International. When a submitted report is confirmed to be valid, this is briefed to the Head of the Corporate Audit Division and the CEO in principle, and the whistleblower may receive its handling outcomes if he/she wishes to do so. While it typically takes one month to handle such cases, this is shorted to 14 days for special issues such as sexual harassment, and we ensure that the offender signs the confidentiality and non-retaliation agreements following the notification of handling outcomes.

[Handling Procedures]



[Partner Grievances Submitted and Handled in 2022]

Report Center	Cases Submitted	Cases Handled
Unethical behavior	0	0
Abuse of authority	0	0

* While Energy Business Unit received one report on ethical non-compliance in 2022, this was referred to POSCO for its relevance to the company.
** While zero reports on workplace harassment were submitted through our website, one report referred to by POSCO was handled according to our internal process.



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics
Climate and Environmental Impact
Employee Value Enhancement
Sustainable Supply Chain
Health & Safety
Ethics/Fair Trade
Information Security
Social Impact
ESG Issue Paper



Metrics and Targets

Appendix

Ethics/Fair Trade

Risk Management

Proactive Fair Trade Risk Reviews and Audits

We prevent unethical practices in fair trade and subcontracting by engaging in pre-discussions with employees who may potentially face ethical dilemma during work. Our Fair Trade Consultation Office helps employees with decision making in actual work situations. The CP Department establishes CP risk assessment criteria to preemptively assess risks and follow up on high-risk departments.

Risk Review Activities

Analyze fair trade risks by business unit	- Analyze departments, business, and cases that may potentially lead to fair trade non-compliance - Identify the potential risk of violating major fair trade regulations and review high-risk departments - Analyze fair trade laws, regulations and conditions based on the previous risk map, complete the company-wide risk assessment table for non-compliance with fair trade/subcontract laws, and manage through self-checks and full contract audits - Develop and implement risk mitigation measures based on assessment results, develop residual risk mitigation plans for high-risk departments and continuously manage them - Perform subcontract reviews, private contract audits(regularly), and preliminary reviews on agent appointment as risk mitigation activities in 2022
Take stock of and audit fair trade operations	- Perform full contract audits with a focus on identified vulnerabilities and high-risk groups following self reviews, and guide the use of the standard contract form - Examine our regulatory compliance in line with the Fair Trade Commissions' large enterprise policy, and perform audits on fair trade risks through reports submitted or our own monitoring - Prevent regulatory non-compliance through the supervision system* No disciplinary actions taken in 2022

[Fair Trade Self-check Risk Controls Performed by Department]

Organization	Relevant Work	Level of Risk	Risk Controls and Outcomes
Public project	Machinery import/export, defense industry, public procurement, IT healthcare, bio	Medium	Perform full contract audits, distribute the standard subcontract form, and provide special subcontract training during the second half of the year
Automotive parts	EV traction, motor electronic section, automotive parts shipping	Medium	
Human Relations Department	Benefits, wage management	Low	Prepare the checklist on changes occurring at POSCO Group(monthly), and send the list to POSCO's legal affairs division each month for approval

[Subcontract Transaction Reviews Made in 2022]

Date	Division of Work	Key Review Items
Jun. 2022	Counting number of subcontracts according to the amount ranges	Check subcontract payment ranges
Jun. 2022	Self-review the status of subcontracts	Subcontract non-payment/delayed payment Non-compliance with the requirement to open an in-country letter of credit
Aug. 2022	Perform full subcontract audits	Identify any omission of material terms within a contract Distribute the standard contract form

CP Effectiveness Assessments and Improvement Measures

Following the year-end Fair Trade Compliance Council meeting, we performed CP operational effectiveness assessments on the council members and fair trade practice leaders. We collected improvement suggestions from surveying employees subject to online and offline special training(response rate 69%), and implement the suggestions into our CP operation in 2023. We also grant fair trade awards to encourage employee participation and embed a culture of fair trade. In 2022, the council awarded three outstanding groups and fair trade practice leaders, and launched three fair trade campaigns including quiz prizes to 30 employees in total.

[CP Operational Effectiveness Survey Results]

Survey Part	Survey Responses
CP establishment and organization	- Participants have understood CP's operational objective and details - Participants have understood the role and responsibility of the CEO - Participants have understood the job and role of CP
Handbook and training	- Participants recognized the utility and convenience of mobile CP - Participants have shared feedback that the handbook has well reflected the characteristics of sales organizations (offline training led by the Legal Division 45%, VOD-based video training 35%)
Monitoring and pre-work consultation	- Participants have recognized the purpose of subcontract reviews to a certain extent - Participants have understood the operation of monitoring and pre-work consultation
Disciplinary action and incentives	- Participants have understood the incentive mechanism
Other opinions	- Request for a function for specifying a company that belongs to the subcontract category on the ERP system - Need training and rules that take the characteristics of Energy/Global business unit into account

Information Security

Strategic Approach and Our Commitment

Strategic Approach	Mid/long-term Goal	2023 Plan	Key Achievements in 2022
Information security	- ISO 27001 international information security certification - Maintain the certification at the HQ - Achieve certifications for the Shwe Project in Myanmar(2023) and eSTEEL4U(2024) - Establish a response system against increasingly intelligent, sophisticated security threats - Assist subsidiaries in improving their information security as an intermediary holding company	- Maintain ISO 27001 at the HQ - Reach 100% in taking legal compliance action pursuant to the Personal Information Protection Act - Separate the network of the process control system - Strengthen the detection of ransomware and other malicious codes within the PC environment - Establish an AI-based cyber attack defense system - Participate in the public-private cyber crisis response drill - Reach 100% in progress rate for information security management system integration - Establish an integrated security cloud system for key overseas corporations - Assess key investment corporations for their information security performance - Target: Shwe Project in Myanmar, PT.BIA(2 locations) - Join Group-level information security exchange meetings	- Achieved ISO 27001 at the HQ - Cleared the surveillance audit of the Korean ISMS - Made information security disclosures pursuant to the Information Security Industry Act - Improved the stability of HQ's information security management system - Assessed website vulnerabilities and took action - Joined the industry-public cyber crisis response drill - Reached 40% in progress rate for information security management system integration - Bolstered the information security management system of overseas corporations - Reinforced online security for overseas corporations when accessing the internal system - Established an e-mail money transfer fraud prevention system - Assessed the information security operations at Shwe Project in Myanmar and provided recommendations for improvement



At a Glance



Material Sustainability Topics



Materiality Assessment



Governance

Strategy and Risk Management

Risks and Opportunities for Material Topics

Climate and Environmental Impact

Employee Value Enhancement

Sustainable Supply Chain

Health & Safety

Ethics/Fair Trade

Information Security

Social Impact

ESG Issue Paper



Metrics and Targets

Appendix

At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities for Material Topics

Climate and Environmental Impact

Employee Value Enhancement

Sustainable Supply Chain

Health & Safety

Ethics/Fair Trade

Information Security

Social Impact

ESG Issue Paper



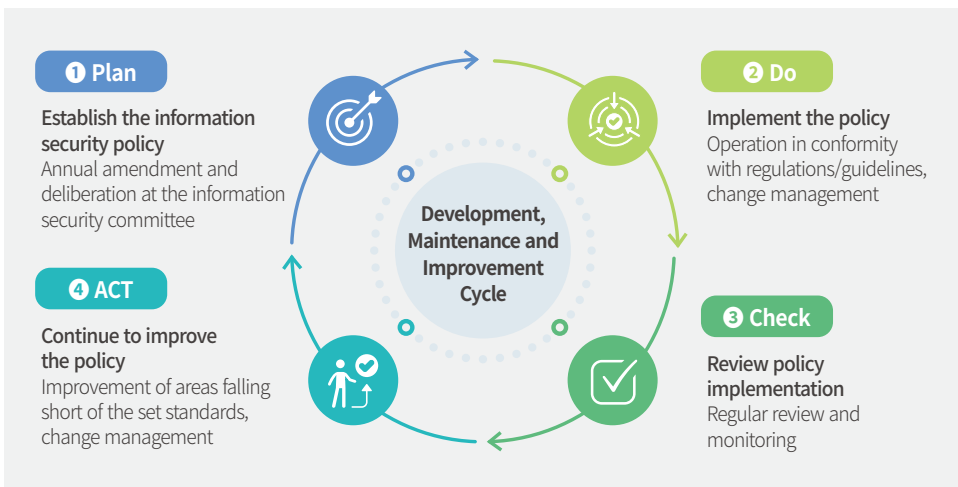
Metrics and Targets

Appendix

We defined three information security strategies of reinforcing the global standard information security management system', 'improving the stability of the information security management system', and 'upgrading the information security performance of domestic/overseas investee companies'. The activities that we undertake as an intermediary holding company intend to improve the information security operations of investee companies in Korea and abroad while ensuring the quality of our information security management system at the Headquarters. We also seek help from external security experts each year to review our information security management system and identify vulnerabilities, which are then addressed through improvement measures to reinforce the system at the HQ level.

Going forward, we will perform information security assessments tailored to overseas corporations and establish a monitoring system to immediately respond to cyber attacks. In 2023, we plan to develop and implement review/improvement plans along the personal data lifecycle from generation to use and disposal in reflection of the amendments made to the Personal Information Protection Act. In line with the growing stakeholder needs for information security, we will promptly respond to the information security requirements of domestic and international ESG assessment organizations. We aim to establish an integrated information security management system spanning servers, networks, and DBs by the end of 2023.

[Strategic Key to Information Security (PDCA, Plan – Do – Check – Ac)]



We are improving the information security management of our overseas operations through standardized company-wide information security management. To this end, standard information security management guidelines are developed for overseas worksites, and information security management metrics are reviewed continuously.

We employed two factor authentication for employees at our overseas operations to access the HQ work system, and developed a network of nine cloud locations to ensure prompt access to the HQ system. In response to the surge in trade payment fraud committed through e-mail hacking, we also deployed a scam e-mail blocking system.

In 2023, we aim to establish integrated security cloud and security control systems across our key overseas operations and to perform information security assessments at the Shwe Project in Myanmar, PT.BIA and other major overseas corporations to improve the information security performance of our employees. For domestic investee companies(eSTEEL4U, Korea Fuel Cell), we plan to hold information security discussions and help them achieve information security information system certification.

Bolstering the Global Standard Information Security Management System

The aggravating cyber security threats and the continued occurrence of security breaches result in the growing stakeholder demand for information security. We appointed an executive-level CISO(Chief Information Security Officer) and operate a dedicated company-wide information security organization under the CISO to beef up our information security management system.

In September 2022, we achieved the ISO 27001 international information security certification in recognition of our globally-competitive information security capabilities, and we plan to safeguard our information assets through our systemic information security management system.

To underscore the importance of information security among employees, we have added information security items in the organizational assessment aligned with performance-based pay since 2022, and review respective departments for their response to phishing e-mails and any violation of daily security rules.



ISO 27001

Information Security



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

- Risks and Opportunities for Material Topics
- Climate and Environmental Impact
- Employee Value Enhancement
- Sustainable Supply Chain
- Health & Safety
- Ethics/Fair Trade
- Information Security**
- Social Impact
- ESG Issue Paper



Metrics and Targets

Appendix

Information Security Audits

Internal information security audits are performed on our information security system and operations each year under the leadership of the security audit team. The team consists of external organizations with proven independence and expertise and internal information security personnel. Audits are conducted through document reviews, interviews, and due diligence in accordance with fair procedures. Audit results including identified issues and improvement plans are reported to the CISO for approval.

Information Security Risk Management and Review

Each year, internal information security audits are performed to improve our information security management system on an on-going basis. Audit findings are reported to the Information Security Executive Committee and the Information Security Working Committee, with the Working Committee developing improvement plans and taking necessary measures. We also establish the objectivity of our internal information security management system through the ISMS(Information Security Management System) audits supervised by the Korea Internet & Security Agency(KISA).

Information Security Awareness Training

We provide information security training to raise information security awareness of our employees and partner employees and to prevent information security breaches. All our employees are mandated to complete annual online information security training, and offline training is also offered to new hires and returning expatriates. Partner employees are trained on necessary precautions to take for information security each year, and computer system developers are provided with secure coding courses recommended by KISA. To keep our employees updated on the latest information security trends and concerns, we regularly publish information security letters. Phishing e-mail and daily security reviews are made each quarter to prevent cyber security breaches committed through e-mails. Those who failed to comply with applicable regulations receive separate training and information security penalties as part of the follow-up measures to elevate employees' information security awareness.



Information security training for employees

E-mail	Newsletter on the latest security trends, case study, security instructions
Groupware pop-up	Campaign to prevent data leaks and breaches, security practice guides
Company-wide posting	Amendments made to security systems, precautions for employees
Training	e-learning and offline training for security issues that require employees' compliance
Dm letter	Webtoon-format guidance on security precautions and practice rules

Information security training content

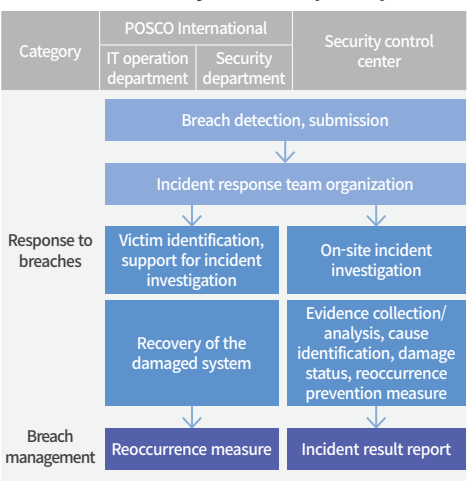
Preventing and Responding to Information Security Breaches

We have established response procedures to prevent information security breaches and swiftly respond to such incidents once they occur. We formulate optimal response strategies for respective incident situations by creating a response organization joined by internal/ external experts, phased-in response manuals, and countermeasures by incident type and grade. We also attend the annual cyber crisis response drills supervised by the Ministry of Science and ICT to prepare for actual breach incidents. In so doing, we review our inter-organizational cooperation system and response procedures and make necessary improvements on an on-going basis.

Damage Report and Handling

Our privacy policy is disclosed on our website and outlines the customers' rights concerning all personal information related inquiries, complaints, damage relief, and access. Any harm done in relation to information security can be reported through our personal information department or personnel, and we take immediate action against all reported matters. In case of internal security breach, our dedicated information security department instantly responds to such occurrences according to our information security regulations. In 2022, zero cases of non-compliance with data privacy regulations occurred.

[Information security breach response process]



Strengthened response to cyber attacks

In response to the cyber attacks that increase each year, we deployed cyber attack detection and prevention systems to operate an integrated security control center capable of performing 24/365 monitoring and taking appropriate action. For the year of 2022, nearly 130,000 cyber attacks were detected and blocked.

We organized a cyber attack emergency response team to respond to hacker attacks, and created a cyber shelter as a preemptive response to DDoS attacks which generate a large amount of traffic to paralyze a company's systems and networks, along with a scam e-mail blocking system to prevent e-mail money transfer fraud that often occurs in trade transactions. We will also establish a machine learning-based cyber attack detection system to keep an eye on unknown cyber threats.

Social Impact

Strategic Approach and Our Commitment

Strategic Approach	Mid/long-term Goal	2023 Plan	Key Achievements in 2022
Future Generation	Undertake various support programs for 200 teenagers and young adults by 2028	- Provide 1:1 learning mentoring program to 16 children at local children's centers in Seo-gu, Incheon, through university student volunteers - Provide career coaching to 15 vulnerable children - Undertake economic self-sufficiency program to support 30 young painters with disabilities	- Operated university student volunteer programs for underprivileged children - Provided 1:1 learning mentoring and extracurricular activities for vulnerable children in Seo-gu, Incheon - Provided trade and economy education to children at local children's centers in Yeonsu-gu, Incheon
Green Planet	- Undertake energy efficiency improvement projects to support more than 20 energy-poor households by 2030 - Undertake 6 local environmental conservation projects to promote biodiversity by 2025	- Improve energy efficiency for 3 energy-poor households near our worksites and support 2 welfare facilities to install solar PV power generators - Create 2 community forests and protect flagship species in Incheon to promote biodiversity	- Created eco-friendly forests near our worksites - Created eco-friendly forests at an elementary school to provide green learning spaces - Created Urban Forest No.3 to reduce fine air particulate matter(PM) - Supported energy efficiency improvement and solar PV power generation installation - Improved energy efficiency for 3 energy-poor households - Supported solar PV power installation for 3 welfare facilities - Biodiversity conservation - Improved the environment for the Black-faced Spoonbill Eco Center in Incheon - Sponsored research on endangered silvery gibbons in Java, Indonesia
Global Community	- Undertake 10 global social impact project customized to meet the needs of local communities where our overseas operations are located by 2025 - Undertake 6 multicultural family support projects by 2025 considering the high proportion of such families in Incheon	- Provide healthcare services to over 2,000 patients by supporting community healthcare near our Indonesian palm plantation - Conduct foreign language education program for enhancing employability skills to 100 young adults in Fergana, Uzbekistan - Support language learning for 700 school age children from multicultural families - Support 20 immigrant teenagers in Incheon to provide program to settle in Korea	- Improved the basic healthcare environment for community members near our Indonesian palm plantation - Provided health check-ups and treatment to 1,869 community members - Supported foreign language learning for future generations in Uzbekistan - Supported free-of-charge video English learning for teenagers and young adults(aged 17-24)



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities for Material Topics

Climate and Environmental Impact

Employee Value Enhancement

Sustainable Supply Chain

Health & Safety

Ethics/Fair Trade

Information Security

Social Impact

ESG Issue Paper



Metrics and Targets

Appendix

< ⌂ ↺ ≡ > 64

Social Impact

Our Approach

Inter ACT Together

Mission

POSCO INTERNATIONAL acts together for a sustainable future

Strategies



**Green
Planet**



**Global
Community**



**Future
Generation**



**Employee
Volunteering**

Goals

ACT to protect

ACT to connect

ACT to direct

ACT for impact

Fields of activities

**Improving
energy efficiency**

**Biodiversity
conservation**

**Support for
domestic
multicultural
families**

**Overseas social
responsibility
activities**

**Children and
adolescents
educational
support**

**Promoting
independence
for young adults
with disabilities**

**Skill-based
volunteering**

**Employee
volunteering
for local
communities**

Employee Volunteering

Pro Bono

- Matched employees with social enterprises since 2020 to share professional expertise in finance, business strategy, law, and sales to resolve problems and pursue shared growth
- Launched the 3rd volunteer group in 2022 to match 10 volunteer members with 5 companies to provide 168 hours of mentoring such as law/finance counseling, marketing proposal preparation, and etc.
- Continuously shared activity outcomes to ensure matched companies produce practical outcomes

Change My Town

- Conducted Social Impact activities directed by employees to resolve community issues
- Held twice in 2022 and joined by total 55 employees of 8 volunteer teams from domestic and overseas
- Domestic(Seoul, Incheon, Pyeongtaek): Offered baking classes for marriage migrants, visited households with limited mobility to donate convenience foods, supported to open afterschool program, donated briquette for heating fuel to energy poverty
- Overseas(Singapore): Donated relief supplies to low-income seniors living alone through social welfare foundation

Saturday Volunteering Program

- Participated in various volunteer activities on Saturdays such as Clean-up for Yangjae stream in Seoul, facility maintenance for the Seoul National Cemetery, Tending the Jungrang stream, caring for abandoned animals, and etc

Blood Drive to Save Lives

- Launched Blood Drives with POSCO A&C since 2016
- Launched monthly Blood Drives joined by 300 employees to donate 209 blood donation certificates to Inha University Hospital in 2022
- São Paulo Branch in Brazil and PT.BIA in Indonesia joined Blood Drives in 2022

Employee Talent Donation

- Baseball Club: Held a baseball class for local children's centers in Seo-gu, Incheon
- Scuba Diving Club: Engaged in marine clean-up
- Photography Club: Took photos of seniors for their longevity
- Performed diverse volunteer work
 - (Upcycling) Made leather pencil cases and sanitary pouches out of leather waste, made dolls out of used PET bottles
 - (Others) Made PV-powered lanterns, scarves, glow-in-the-dark dolls, and handkerchiefs to donate to underprivileged groups in Korea and abroad

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics
Climate and Environmental Impact
Employee Value Enhancement
Sustainable Supply Chain
Health & Safety
Ethics/Fair Trade
Information Security
Social Impact
ESG Issue Paper



Metrics and Targets

Appendix



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

- Risks and Opportunities for Material Topics
- Climate and Environmental Impact
- Employee Value Enhancement
- Sustainable Supply Chain
- Health & Safety
- Ethics/Fair Trade
- Information Security
- Social Impact**
- ESG Issue Paper



Metrics and Targets

Appendix

Social Impact

Green Planet

Energy Efficiency Improvement

POSCO International aims to expand Social Impact programs that bring lasting contribution to achieving net zero emissions. Since 2012 we have been assisting energy-poor groups and welfare facilities to improve energy efficiency. To help socially-underprivileged individuals reduce their energy purchase costs and live in a pleasant environment, we replaced or repaired old heating devices and windows, and replaced low-efficiency lights with LED ones to increase energy efficiency.

In 2022 we performed interior insulation work, replaced lighting devices and windows for three energy-poor households and supported three welfare facilities by installing solar PV power generators. Continuously, we will expand our support for energy efficiency improvement and solar PV power generation with a focus on energy-poor groups and welfare facilities to reduce energy costs and carbon emissions.

Biodiversity Preservation

We signed an MOU with Incheon City in 2022 to 'promote local biodiversity'. Under this partnership, both parties will identify and pursue biodiversity projects for the next three years to preserve the flagship species¹⁾ of Incheon, a city known for its diverse ecological environment.

The first project initiated under this partnership was to support the Black-faced Spoonbill Eco Center in Incheon to raise future generations' awareness on black-faced spoonbills. This allowed observers to cherish this endangered species in a safer and more pleasant environment while highlighting the importance of respect for life and the preservation of endangered species. From the viewpoint of black-faced spoonbills, this also contributes to mitigating the intimidating stress caused by human presence.

Since 2021, we have been sponsoring the Department of EcoScience, Ewha Womans University research

team on silvery gibbons, an endangered monkey species in Java, Indonesia. This sponsorship planned until 2024 is expected to help protect its habitat, increase its population, and bring other positive results. This is also significant for its contribution to preserving biodiversity in Indonesia where we operate.

1) Flagship species: Animals and/or plants selected to represent a specific ecological region

Forestation

We create forests to reduce PM(particulate matter) emissions mainly around urban parks in Seo-gu, Incheon where the Incheon LNG Combined Cycle Power Plant is located to help community members live a healthy life. In 2022, PM Mitigation Forest No.3 was created in the Yongmeori Park in Seo-gu, Incheon: Yedoensis trees, maple trees, and pine trees known for exceptional benefits in reducing PM levels were planted, along with trails to beautify the park landscape. This forest accommodates 1,023 trees and is expected to mitigate nearly 102kg of CO2 emissions and 36kg of PMs²⁾ per year.

We have created net zero forests since 2020 to communicate with the communities where we operate and respond to climate change, leading the charge to reducing CO2 emissions. In 2022, we created the 'carbon mitigation eco-friendly school forest' to provide a green learning environment near the Jeongra Elementary School in Samcheok. Our aim is to develop forests for future generations in this region where Samcheok Blue Power, our Group affiliate, is building a power plant. This forest was filled with bamboo trees and birch trees that serve as an excellent carbon sink as well as a rose gate made of rose flowers, providing a walking trail for community members while improving the learning environment for students.

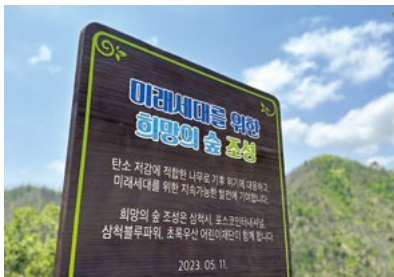
2) Calculated based on the carbon mitigation criteria by tree species from the National Institute of Forest Science and the Korean Institute of Landscape Architecture



Improving energy efficiency



Reducing ocean litter near the Namdong reservoir



Creating Forest of Hope for future generations in Samcheok



Social Impact

Global Community

Implementing Healthcare Program in Papua, Indonesia for Enhancing Primary Healthcare for Local Communities

Since 2017, we have undertaken the Social Impact program to improve the healthcare environment in Papua, Indonesia. Even during the pandemic when physical visits were limited, we donated medical equipment and supplies at the request of local healthcare professionals, and resumed this project in 2022 to provide health check-ups and treatment to 1,869 local people. In 2022, we brought in dental practitioners for the first time to perform dental check-ups, and separately provided oral hygiene, respiratory disease prevention, and sex education to help community members take care of themselves in line with local healthcare conditions. We will remain committed to creating sustainable healthcare environment for local people in Papua.

Education Support Program ‘Speak for Success’ for the Future Generations of Uzbekistan

In 2022, we have constructed an education center in Fergana, Uzbekistan and have carried out a program called ‘Speak for Success.’ It aims for enhancing the employability skills of young adults in Fergana. The education center, located near POSCO International Textile, has study halls, classrooms, study café, and other learning spaces inside. Also, it is equipped with computers, cameras and other educational devices to create learning environment able to accommodate up to 100 students at a time. Furthermore, group and private online English lessons were provided by YBMNET and RINGLE, Korea’s professional language institutions, to 20 local young adults, trying to enhance their employability skills. In 2023, we will provide a more structured version of this educational program to benefit more local young adults build their employment capacity.

Support for Domestic Multicultural Families and Immigrant Teenagers

Considering the significant population growth of multicultural families and foreigners in Incheon, we have been sponsoring New Dream School, an alternative school for teenagers from immigrant backgrounds, since 2015. Specifically, we support Korean language education, cultural assimilation, psychological well-being, and nutrition & meals to facilitate immigrant teenager’s adaptation to Korean society. In 2022, we focused on the programs designed to help them better understand Korea by taking into account their age and Korean language skills. We also exhibit the art works created by these students at the lobby of our Headquarters and invite them to the Company to raise awareness on immigrant youth among our employees and community members.

Language Learning Support for Children from Multicultural Families

‘Interstellar’, our voice donation volunteer group, has been recording the voices of employees to supplement language education for multicultural families and support the verbal development of school-age multicultural children. A total of 120 employees joined this activity on four occasions between May and October 2022. The recordings made as such were put into 26 reading devices and were donated to nine local children's center in Incheon along with 300 copies of children’s books to benefit nearly 700 children from multicultural families.



Improving the basic healthcare environment for local patients near the Indonesian palm plantation



Education support project to help future generations in Uzbekistan with employment capacity-building



Supporting domestic multicultural families and immigrant teenagers



Interstellar voice donation volunteers

At a Glance

Material Sustainability Topics

Materiality Assessment

Governance

Strategy and Risk Management

Risks and Opportunities for Material Topics

Climate and Environmental Impact

Employee Value Enhancement

Sustainable Supply Chain

Health & Safety

Ethics/Fair Trade

Information Security

Social Impact

ESG Issue Paper

Metrics and Targets

Appendix

Social Impact

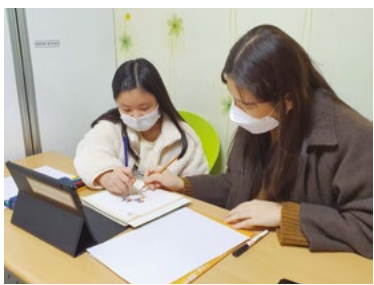
Future Generation

Children and Adolescents Educational Support

Our 'Hope Energy' university student volunteer group, since 2013, has been providing individual academic tutoring and mentoring sessions to disadvantaged children in areas near our power plant located in Seo-gu, Incheon. They have visited underprivileged children in Seo-gu, Incheon and provided 1:1 mentoring sessions. Since May 2022, these young volunteers helped 30 children at five local children's centers in this area, to engage in curriculum activities with varying learning content. They also supported a range of extracurricular activities including making a bucket list, creating glass deco works, along with day-care mentoring to promote the psychological well-being of these children. In particular, various environmental activities were undertaken, such as making wind power generator models, sorting out waste, and plogging, to help better understand ESG in their daily lives.

Since 2021, our 'POINT Classroom (POSCO INTERNATIONAL Trading Classroom)' has been offering educational support to underprivileged children in Yeonsu-gu, Incheon. Participating employees offered employment related mentoring sessions along with trading-related lessons to undergraduate students. Then, these undergraduate volunteers provided children at local children's centers with trade and economy educations. The volunteer program benefited 182 children with 2,730 hours of education at 15 local children's centers in the Seoul metropolitan region and was positively received by participants. With 100% satisfaction score given by the participating organization and 83% satisfaction given by participating children.

As for our future plan, our university student volunteer group will focus on giving mentoring sessions to underprivileged children, and POINT Volunteer Group will help children map their own future course ahead by providing constructive educational contents.



Mentoring support to bridge the learning gap



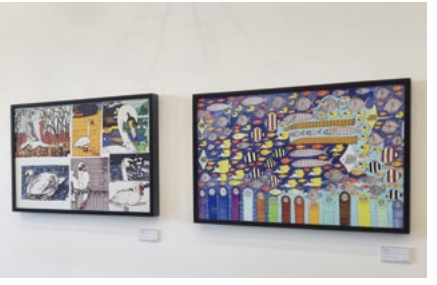
POINT volunteers providing learning support at a local children's center

Supporting the 'Painter's Dream' for Young Disabled Artists

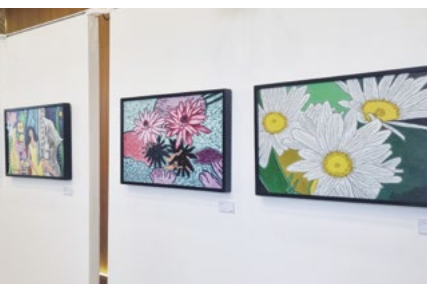
'Painter's Dream' program aims to showcase the artwork of talented artists with disabilities and foster a more inclusive understanding of disability in society. In 2021, we partnered with NAPAL, an interior speaker manufacturer, to create unique artistic speakers in the form of picture frames using POSCO Steel's PosMAC color steel plates. These speakers featured the artwork of 17 artists with developmental disabilities. The newly made speakers were donated to local schools and organizations dedicated to supporting individuals with disabilities.

In 2022, we organized the 'Painter's Dream Exhibition' at POSCO's 'The Sharp Gallery' in Gangnam, Seoul. This exhibition not only promoted the artwork of disabled artists but also featured an auction event of the speakers with original artworks painted by the artists themselves. Additionally, the exhibition included online sales to reach a wider audience.

As we continue our efforts, we remain committed to raising public awareness about the lives and artistic contributions of people with disabilities, with a focus on future generations.



Supporting the 'Painter's Dream' for Young Disabled Artists



2022 Painter's Dream Exhibition

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

- Risks and Opportunities for Material Topics
- Climate and Environmental Impact
- Employee Value Enhancement
- Sustainable Supply Chain
- Health & Safety
- Ethics/Fair Trade
- Information Security
- Social Impact**
- ESG Issue Paper



Metrics and Targets

Appendix



At a Glance

ESG ISSUE PAPER 1

Shwe Project in Myanmar

Overview of the Shwe Project in Myanmar

The Shwe Project, a gas field project of POSCO International, was initiated in 2000 pursuant to the Production Sharing Contract(PSC) concluded between foreign investors and Myanmar Oil & Gas Enterprise(MOGE), a state-owned company under the Myanmar Ministry of Energy(MOE), and has since been undertaken consistently for the past 23 years regardless of any change in government in Myanmar. Even amid the sustained challenging situation since the state of emergency was declared in the country in February 2021, POSCO International intends to transparently disclose our business operations in Myanmar to pursue genuine, trust-based communication with all our stakeholders.

Power Supply in Myanmar

Myanmar has one of the most underdeveloped power infrastructures among emerging ASEAN member countries. Power generation falls short of its power needs to give rise to frequent and prolonged power outages across the country, and many regions outside urban areas often lack access to power supply. Rural and non-urban areas with run-down power infrastructure can't benefit from the national power grid and mostly depend on stand-alone power grids. The Rakhine State where the Shwe Project is based also meets nearly 67% of its power needs through such off-grid electricity, and is one of the regions suffering the most severe power shortages.

The Shwe Project serves as a main source of gas supply in the central northern region of Myanmar, and any disruption to its project execution leads to the suspension of fuel supply to multiple gas-fired power plants in Myanmar. This will significantly reduce the supply of electricity for the private-sector which is already under severe strain to cause direct damage to people's livelihoods. Moreover, job losses for local people and the ensuing economic contraction will eventually wreak havoc on the lives of Myanmar people. This is precisely why POSCO International is clearly confident that the reliable operation of the Shwe Project is directly linked with the stable livelihoods of people in the country, and is the best possible way for us to protect people and communities in Myanmar from any further harm.

Issues with the Payment Structure

The Shwe Project is structured as an Unincorporated Joint Venture under which ownership and liability for gas production is separated among investment partners. As such, each party has rights and responsibilities over the jointly controlled assets in proportion to the percentage of their respective shareholding pursuant to the contract, and the proceeds they receive from the sale of gas are proportional to their share of ownership as an independent gas seller.

The onshore pipeline that connects the offshore gas terminal to the Chinese border region is operated by the joint venture SEAGP(South-East Asia Gas Pipeline). SEAGP is owned by CNPC-SEAP(China National Petroleum Corporation-South East Asia Pipeline Company Limited) which is the largest shareholder with a 50.9% stake and has the operating rights. POSCO International, a non-controlling shareholder with a 25.04% stake, is not in a position to unilaterally decide or crucially influence decision on, the suspension of dividend payments.

Sanctions by Major National Authorities

On June 21, 2023, the Office of Foreign Assets Control(OFAC) under the US Ministry of Defense added the Myanmar Ministry of National Defense and the two state-owned financial institutions(Myanmar Foreign Trade Bank, Myanmar Investment and Commercial Bank) to the Specially Designated Nationals(SDN) List pursuant to 31 CFR Part 525(Burma Sanctions Regulations) under the Burma Act while freezing the assets of these sanctioned entities within the US and banning any transactions with them. POSCO International is paying particular attention to ensure that no violations occur in this regard in our future business operations.

Human Rights Protection for Employees

As a foreign company operating in Myanmar, we abide by international human rights norms and Myanmar's labor laws, and remain fully committed to building a corporate culture that respects human rights and provides a safe workplace for all employees working for the Shwe Project. We also established a human rights management process in line with the OECD Due Diligence Guidance to review our internal human rights management practices and take immediate action pursuant to our internal regulations in the event of human rights violation in an aim to protect the human rights of our employees. We teamed up with external professional consultants to draft the due diligence checklist fit for on-site employees by taking into account the unique organizational culture which accommodates employees of different nationalities as well as our HSE management policy specialized for offshore platform operations. In December 2022 when COVID-19 subsided, we resumed paper-based due diligence. For details on due diligence findings, please see p. 41 of this report.

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

- Risks and Opportunities for Material Topics
- Climate and Environmental Impact
- Employee Value Enhancement
- Sustainable Supply Chain
- Health & Safety
- Ethics/Fair Trade
- Information Security
- Social Impact
- ESG Issue Paper



Metrics and Targets

Appendix

ESG ISSUE PAPER 2

Palm Oil Business in Indonesia

Overview of Our Palm Oil Business in Indonesia

PT.BIA, a subsidiary of POSCO International in Indonesia, strives to minimize the environmental and social impact of its palm oil business under the vision of ‘Building a Sustainable Palm Business That Contributes to Society’. In March 2020, we announced the NDPE(No Deforestation, No Peat, No Exploitation) policy, making us the first Korean company to do so, and achieved RSPO(Roundtable on Sustainable Palm Oil) certification in September 2021, ensuring that our palm oil business complies with global standards, taking into consideration both the environment and the communities where we operate.

[Key Sustainability Metrics]

(As of Dec. 2022)

Planted areas	21,166 ha
HCV(High Conservation Value) areas	6,718 ha
Plasma(plantations jointly operated by community members) areas	6,867 ha
Peat areas	0 ha
FFB(Fresh Fruit Bunch) supply chain traceability	100%

Protecting Forests and Biodiversity

In 2007 prior to initiating its business, PT.BIA was granted a Location Permit for the 39,900ha land by government, and conducted environmental impact assessments pursuant to applicable Indonesian laws. The assessment report confirmed that the farm site primarily consisted of bushes, reeds, and secondary forests, categorizing it as a Convertible Production Forest. In 2009, PT.BIA earned land use rights for 34,195ha under the condition of development pursuant to Indonesian laws. This excluded 3,500ha of wildlife protection areas and 2,205ha of swamps, waterways and other areas requiring protection, essentially allowing farm development. Subsequently PT.BIA voluntarily excluded an additional 6,454ha with high conservation value from the development scope proceeding with development on 27,741ha. During the development process, PT.BIA opted for appropriate land-clearing methods, mobilizing its owned equipment and personnel rather than relying on slash-and-burn practices. PT.BIA established an internal fire response system equipped to safeguard its palm farm, employees and community members from slash-and-burn practices traditionally used by indigenous peoples in the vicinity of its operational site as well as natural fires in the dry season. The company also conducts regular fire prevention and response drills for community members and employees.

Protecting Water Quality

When selecting and operating its farm site, PT.BIA is committed to minimizing its impact on nearby rivers and underground water. The farm site is situated more than 100 meters away from any river and over 5 meters away from tributaries, ensuring compliance with applicable Indonesian laws. Adhering to ISPO standards, PT.BIA does not use fertilizers nor agricultural chemicals near rivers. Water drawn from the reservoir for its CPO mills, where FFBs(Fresh Fruit Bunch) are

steamed, undergoes treatment through seven artificial ponds as a microorganism-assisted natural purification system. This treated water is subsequently reused for farm operations(Land Application). In accordance with the regulations and technical guidelines set by the Indonesian Ministry of Environment and Forestry, PT.BIA conducts regular analysis and monitoring of river water quality, reporting analysis results to the Environmental Department of Merauke. Since 2019, indigenous people have actively participated in water quality inspections to enhance the credibility of inspection results. Public consultations are conducted in residential areas of indigenous communities to transparently disclose the results of water quality analysis.

Protecting the Human Rights of Indigenous Peoples

In operating the palm oil business, PT.BIA has proactively provided comprehensive information about its palm oil operations in advance as well as compensation, employment, and education in full compliance with the FPIC(Free Prior and Informed Consent) principle. This FPIC process encompassed indigenous people residing both within the operational site and under the business influence, as well as those outside these categories. Since the initial public consultation with indigenous people in January 2007, multiple public consultations and business presentations have followed before site development in 2012, ensuring continuous communication with indigenous communities. All meetings were conducted in the Indonesian language, open to stakeholders, facilitating free interaction. The FPIC principle was equally upheld during the construction of CPO mills. Before commencing construction, PT.BIA presented construction plans and potential impacts to indigenous people, obtaining FPIC from the indigenous people’s representatives pursuant to their customary laws. Furthermore, the company received confirmation from the representative of the indigenous people that their requirements were adequately addressed in relation to its business execution, along with a letter of support for its business execution, faithfully implementing the FPIC process for the construction of CPO mills.

Objections Raised in Line with the OECD Guidelines for Multinational Enterprises

On December 19, 2019, civic organizations in Korea and Indonesia raised concerns with the Korean NCP, alleging that POSCO International’s palm farm business in Indonesia violated the OECD Guidelines for Multinational Enterprises, resulting in human rights violation and environmental destruction. We actively participated in the mediation process arranged by the KNCP, genuinely explaining that we did not violate the Guidelines in conducting palm oil business. We assured the full implementation of our environmental and social policies, including the NDPE policy. After three rounds of mediation meetings, the KNCP issued its final statement on January 13, 2022, affirming that POSCO International adhered to the best practices of the Guidelines, encompassing its SOP, FPIC, and NDPE policy, and that further mediation efforts were deemed impractical. Following this announcement, POSCO International submitted additional performance reports, encompassing overall ESG operations, including NDPE policy implementation. Going forward, we are committed to enhancing understanding among concerned parties and will proactively implement our environmental and social policies while closely engaging with stakeholders.

KNCP’s final statement(Jan. 18, 2022)

At a Glance

Material Sustainability Topics

Materiality Assessment

Governance

Strategy and Risk Management

Risks and Opportunities
for Material Topics

Climate and Environmental Impact

Employee Value Enhancement

Sustainable Supply Chain

Health & Safety

Ethics/Fair Trade

Information Security

Social Impact

ESG Issue Paper

Metrics and Targets

Appendix



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management

Risks and Opportunities
for Material Topics
Climate and Environmental Impact
Employee Value Enhancement
Sustainable Supply Chain
Health & Safety
Ethics/Fair Trade
Information Security
Social Impact
ESG Issue Paper



Metrics and Targets

Appendix

ESG ISSUE PAPER 2

Palm Oil Business in Indonesia

NDPE Policy Implementation Progress and Plan

In March 2020, POSCO International was the first Korean enterprise to declare the NDPE policy for sustainable palm oil business, and has sincerely and continuously implemented this policy. The NDPE policy applies to POSCO International's subsidiaries, joint ventures and all other corporations over which the Company has management rights operating in relation to palm oil production and trading. The policy also applies to all third-party suppliers at group level who provide us with FFB(Fresh Fruit Bunches), CPO(Crude Palm Oil) and refined oil. We set our implementation plan each year to systematically execute our NDPE policy, and fully disclose our progress made to all stakeholders.

2022 NDPE Implementation Progress Summary

Category	Key Activities
Policy, Systems and Management	In February 2022, PT.BIA implemented the socialization program on its NDPE policy and its personnel, environmental, and safety management policies. A total of 1,073 persons attended including employees, suppliers, and community members to promote their understanding. In September that year, an employee workshop was held in relation to RSPO regulations, and this was even more meaningful as the event was joined by RSPO Indonesia. In October 2022, the company amended the NDPE policy to extend its scope of application and disclosed this on its website.
Environmental Conservation and Management	The company applies RSPO's Best Management Practices(BMP), completely bans the spraying of WHO Class 1 chemicals over plantations, and installs signage along riverbanks to strictly ban the application of agricultural chemicals. To preserve HCV areas within forests, the company organized an HCV team of experts. The HCV team engages in monitoring activities to prevent any damage to HCV areas and observe wildlife.
Protection of and Respect for Human Rights	PT.BIA operated a total of 46 diverse training programs(safety, health, environmental management, etc.) to assist employees with capacity building. The company also achieved ISO 45001 for systemic health and safety management. Such efforts to conduct a range of occupational health and safety activities and trainings allowed the company to achieve zero incidents for the year 2022. PT.BIA implements economic self-reliance promotion programs by supporting local women to manufacture noken, a handcrafted bag listed as an intangible cultural heritage by UNESCO, and sell them on online platforms.
Stakeholder Communication	Grievances are collected from internal/external stakeholders and community members on an on-going basis, and are handled immediately upon their receipt. The VMT(Village Monitoring Team) of 22 community members is operates to minimize any adverse environmental and human rights impact.

2023 NDPE Implementation Plan

Category	Activities	1Q	2Q	3Q	4Q
Policy, System, and Management	Release Implementation Plan for the year 2023		●		
	Pursue continuous awareness-raising activities to ensure compliance with NDPE policy among plasma smallholders and outgrowers. - Update the supply chain check list and monitor external supply chains	●	●	●	●
	Establish direction for implementing NDPE policy from a mid-to long-term perspective				●
Environmental Conservation and Management	Continue compliance with RSPO Best Management Practices (BMP) for sustainable agriculture management and prohibition of chemical usage in riparian zones	●	●	●	●
	Strengthen conservation efforts for biodiversity in the 6,718 hectares of High Conservation Value (HCV) areas within the concession	●	●	●	●
	Continue implementing environmental conservation program beyond the concession	●	●	●	●
	Establish a systematic water management system - Periodic water quality inspections and audits, and disclose the results to stakeholders - Disclose and monitor POME treatment process and palm-oil related water usage		●	●	●
Protection of and Respect for Human Rights	Strengthen pre-emptive measures such as employee and community education/ training to prevent fire incidents		●	●	●
	Continue providing training programs to enhance the capacity of employees	●	●	●	●
	Continue communication activities aimed at providing local communities information on environmental conservation programs beyond the concession area	●	●	●	●
	Enhance the industrial safety and health management team competency and maintain ISO 45001 certification			●	●
	Implement community programs aimed at improving the quality of life of local residents		●	●	●
Stakeholder Communication	Encourage women's participation in various committees to establish a culture of social equality and respect for diversity		●	●	●
	Actively respond to registered grievances and disclose the resolution progress	●	●	●	●
	Continue to strengthen collaboration with stakeholders to minimize negative environmental or social impacts of palm oil production - Implement programs to enhance economic self-sufficiency among local communities	●	●	●	●
	Publish an annual activity report that includes the progress on NDPE implementation, and increase the accessibility of information to stakeholders		●		



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

05 Metrics and Targets

73 ESG Factbook

85 Financial Performance



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

ESG Factbook

Financial Performance

Appendix

ESG Factbook

Performance data for POSCO International (non-consolidated basis) refer to the three-year data(2020~2022) of the present Global Business Unit(scope of operational sites - ① POSCO Tower – Songdo: GHG/energy, water, waste, ② Seoul/Yeoksam offices: GHG/energy), and performance data for Energy Business Unit include POSCO Energy’s headquarters and domestic operational sites(Incheon LNG Combined Cycle Power Plant, Gwangyang LNG Terminal) as of 2022. POSCO International aims to extend our reporting boundary to align the scope of our sustainability reporting with that of our consolidated business reports. Starting from this year’s sustainability report, we disclose three-year data for our key subsidiaries of POSCO Mobility Solution, PT.BIA, and POSCO International Textile, along the Shwe Project, our major overseas operational site.

Metric		Unit	POSCO International (non-consolidated)				Shwe Project and major subsidiaries (P-Mobility Solution, PT.BIA, POSCO International Textile)		
			2020	2021	2022	Energy Business Unit	2020	2021	2022
Climate and Environmental Impact(1)									
GHG ¹⁾	Total	tCO ₂ e	10,151	3,560	1,917 ²⁾	4,187,901	651,446 ⁴⁾	792,484 ⁴⁾	848,074 ⁴⁾
	Direct GHG emis- sion (Scope 1)	tCO ₂ e	624	469	316	4,127,319	616,882	751,977	800,313
	Indirect GHG emission (Scope 2)	tCO ₂ e	9,527	3,091.1	1,602	60,590	34,564	40,507	47,761
	GHG emission intensity ³⁾	tCO ₂ e/KRW 100million	0.05	0.01	0.01	116.14	31.32	23.77	28.17
Energy ¹⁾	Total consumption	GJ	224,731	77,375	43,941	83,178,806	3,777,416	3,838,247	3,876,377
	Energy intensity ³⁾	GJ/KRW 100million	1.17	0.25	0.13	2,306.68	170.95	108.91	122.03
Direct Energy	Total consumption	GJ	10,185	7,512	4,679	81,897,607	3,074,198	2,990,615	2,942,114
	Natural gas consumption	GJ	3,789	2,269	0	81,817,607	2,797,384	2,716,791	2,676,017
	Gasoline consumption	GJ	5,463	4,482	1,840	975	3,636	3,743	4,643
	Diesel consumption	GJ	934	761	2,839	78,227	271,157	267,895	259,991
	LPG consumption	GJ	0	0	0	798	472	499	178
Indirect Energy	Total consumption	GJ	214,546	69,863	39,262	1,281,199	703,218	847,633	934,263
	Electricity(power) consumption	GJ	170,595	57,500	26,471	1,255,138	621,447	760,684	834,677
	Steam consumption	GJ	43,951	12,363	12,791	26,061	81,771	86,949	99,586
	Percentage of power consumption	%	76	74	60	2	16	20	22
Sale of electricity ⁵⁾	Total sales	GJ	N/A	N/A	N/A	39,424,130	N/A	N/A	N/A

1) Emissions were calculated in accordance with the Guidelines for the Reporting and Verification of Emissions under the GHG Emissions Trading System.

2) Our Headquarters in Songdo is owned by a joint venture established by POSCO affiliates(separate corporation), and only those areas leased by POSCO International were included in the organizational boundary and were reported accordingly, in conformity with the Guidelines for the Reporting and Verification of Emissions under the GHG Emissions Trading System [Attachment 21] and Article 4 of the Emissions Trading System Specification Preparation Guidelines.

3) Intensity was calculated based on non-consolidated sales (KRW 100 million) for the pertinent year.

4) This is the sum of the three-year GHG emissions data(2020~2022, Scope 1 + 2) of the Shwe Project and key subsidiaries(POSCO Mobility Solution, PT.BIA), and GHG emissions from POSCO International Textile are not calculated.

5) Sales of electricity only refers to Energy Business Unit’s Incheon LNG Combined Cycle Power Plant in conformity with the reporting scope of this year’s report.



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

ESG Factbook

Financial Performance

Appendix

ESG Factbook

Metric		Unit	POSCO International (non-consolidated)				Shwe Project and major subsidiaries (P-Mobility Solution, PT.BIA, POSCO International Textile)		
			2020	2021	2022	Energy Business Unit	2020	2021	2022
Climate and Environmental Impact(2)									
Green investment	Environmental investment expenses	KRW million	81.7	67.3	80.4	1,240.0	54.4	56.6	105.1
Environmental management system (ISO 14001)	Sites to be certified	sites	1	1	1	2	6	6	6
	Sites certified	sites	0	0	0	2	4	4	4
Air pollutants	Total	ton	0	0	0	541	1,574	924	385
	NOx	ton	0	0	0	540	65	355	310
	SOx	ton	0	0	0	1	274	54	2
	Dust	ton	0	0	0	0	1,235	515	72
Hazardous chemicals	Total consumption	ton	0	0	0	4,737	1,780	2,040	N/A ³⁾
	Total discharge	ton	0	0	0	61.8	1.3	4.9	N/A ³⁾
Non-compliance with environmental regulations	Total incidences of non-compliance	cases	0	0	0	0	0	0	0
Water withdrawal	Total withdrawal ¹⁾	ton	146,260	149,798	166,760	1,015,177	787,373	1,807,008	1,941,450
	Tap water	ton	146,260	149,798	166,760	1,015,177	320,588	351,525	392,693
	Surface water	ton	0	0	0	0	0	865,806	956,327
	Underground water	ton	0	0	0	0	466,785	589,677	592,430
	‘High’ water stress areas	%	0	0	0	0	0	0	0
	‘Extremely High’ water stress areas ²⁾	%	0	0	0	0	57.9	30.4	28.8
Water consumption	Total consumption	ton	146,260	149,798	166,760	711,833	464,861	491,706	667,215
Wastewater discharge	Total discharge(wastewater treated)	ton	0	0	0	303,344	887,088	1,341,312	1,303,835
Water reuse	Recycled water	ton	0	0	0	0	0	0	0
	Reused water	ton	0	0	0	293,356	0	0	0
	Total water reused	%	0	0	0	41.2	0	0	0

1) Water withdrawal for 2020 only refers to POSCO Mobility Solution and POSCO International Textile in Uzbekistan, and the Shwe Project in Myanmar and PT.BIA have been included since 2021.

2) According to the criteria set by the WRI Aqueduct Water Risk Atlas, POSCO International Textile is located in an area with ‘Extremely High’ water stress.

3) POSCO Mobility Solution’s hazardous chemical substances data will be collected in July 2023.



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

ESG Factbook

Financial Performance

Appendix

ESG Factbook

Metric		Unit	POSCO International (non-consolidated)				Shwe Project and major subsidiaries (P-Mobility Solution, PT.BIA, POSCO International Textile)			
			2020	2021	2022	Energy Business Unit	2020	2021	2022	
Climate and Environmental Impact(3)										
Total waste	Generation	Total	ton	305	250	322	569	285,318	654,869	648,342
	Total waste generation intensity		ton/KRW 100million	0.0016	0.0008	0.001	0.0158	12.91	18.58	20.41
	Disposal	Recycling	ton	305	250	322	381	2,592	3,510	3,548
		Incineration	ton	0	0	0	91	321	401	400
		Landfill	ton	0	0	0	97	114	124	22
		Other	ton	0	0	0	0	282,295	650,833	644,358
		Recycling rate	%	100	100	100	67	1	1	1
Designated waste	Generation	Total	ton	0	0	0	52	283,023	651,388	644,682
	Disposal	Recycling	ton	0	0	0	40	600	481	243
		Incineration	ton	0	0	0	13	36	61	75
		Landfill	ton	0	0	0	0	92	14	6
		Other ¹⁾	ton	0	0	0	0	282,295	650,833	644,358
General waste	Generation	Total	ton	305	250	322	516	2,295	3,481	3,659
	Disposal	Recycling	ton	305	250	322	341	1,992	3,030	3,305
		Incineration	ton	0	0	0	78	284	340	325
		Landfill	ton	0	0	0	97	22	111	16
		Other	ton	0	0	0	0	0	0	0

1) The 'other' treated designated waste exclusively refers to Palm Oil Mill Effluents (POME), byproducts generated from the CPO extraction process at PT.BIA. PT.BIA has established a closed-loop Land Application process to purify POMEs in the reservoir and feed their organic substances back into the plantation for reuse.



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

ESG Factbook

Financial Performance

Appendix

ESG Factbook

Metric		Unit	POSCO International (non-consolidated)				Shwe Project and major subsidiaries (P-Mobility Solution, PT.BIA, POSCO International Textile)			
			2020	2021	2022	Energy Business Unit	2020	2021	2022	
Employee Value Enhancement(1)										
Employees	Total Employees	persons	1,278	1,270	1,227	514	6,542	7,274	7,775	
	Total(registered)	persons	25(7)	24(6)	25(7)	7(3)	8	10	9	
	Executives ¹⁾	Male	persons	23	23	24	7	8	10	9
		Female	persons	2	1	1	0	0	0	0
		Percentage of females	%	8	4	4	0	0	0	0
		Under 30	persons	0	0	0	0	0	0	0
		30~50	persons	0	0	0	0	0	0	0
		Over 50	persons	25	24	25	7	8	10	9
		Rank-and-file	Total	persons	1,253	1,246	1,202	507	6,534	7,264
	Male		persons	905	885	856	432	4,134	4,967	5,496
	Female		persons	348	361	346	75	2,400	2,297	2,270
	Percentage of females		%	28	29	29	15	37	32	29
	Under 30		persons	218	214	214	38	1,770	1,969	2,035
	30~50		persons	914	892	840	346	4,268	4,755	5,073
	Over 50		persons	121	140	148	123	496	529	658
	Manager positions ²⁾	Total	persons	257	263	254	132	335	364	390
		Male	persons	247	253	241	128	322	350	372
		Female	persons	10	10	13	4	13	14	18
		Percentage of females	%	4	4	5	3	4	4	5
		Under 30	persons	0	0	0	0	3	0	1
		30~50	persons	188	172	174	68	247	270	279
		Over 50	persons	69	91	80	64	85	94	110

1) This metric shows employee data on a non-consolidated basis and only includes registered and non-registered executives who are currently employed in Korea.

2) Manager position: Managers in leader and above positions who receive allowances granted to leaders/managers as part of their wage.



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

ESG Factbook

Financial Performance

Appendix

ESG Factbook

		Metric	Unit	POSCO International (non-consolidated)				Shwe Project and major subsidiaries (P-Mobility Solution, PT.BIA, POSCO International Textile)		
				2020	2021	2022	Energy Business Unit	2020	2021	2022
Employee Value Enhancement(2)										
Overview of employees	Permanent employees (indefinite) ¹⁾	Total	persons	1,225	1,210	1,176	470	5,292	7,019	7,565
		Male	persons	890	868	841	403	2,950	4,727	5,148
		Female	persons	335	342	335	67	2,342	2,292	2,417
		Percentage of females	%	27	28	28	14	44	33	32
		Percentage of permanent employees	%	96	95	96	91	81	96	97
	Contract employees (fixed-term employment)	Total	persons	28	36	26	37	1,217	249	203
		Male	persons	15	17	15	29	1,175	240	179
		Female	persons	13	19	11	8	42	9	24
		Percentage of females	%	46	53	42	22	3	4	12
		Percentage of contract employees	%	2	3	2	7	19	3	3
Recruitment	New hires	persons	101	95	77	36	2,198	3,151	2,894	
	Male	persons	66	59	58	29	1,048	1,910	1,982	
	Female	persons	35	36	19	7	1,150	1,241	912	
	Percentage of females	%	35	38	25	19	52	39	32	
	Under 30	persons	85	68	52	10	1,174	1,560	1,416	
	30~50	persons	8	23	20	21	996	1,546	1,379	
	Over 50	persons	8	4	5	5	28	45	99	
Turnover・retirement	Total turnover	persons	35	54	61	19	1,651	2,404	2,594	
	Turnover rate	%	1.77	4.23	4.80	3.48	N/A	36.75	35.66	
	Voluntary turnover ²⁾	persons	24	39	52	11	1,605	2,345	2,457	
	Voluntary turnover rate	%	1.22	3.05	4.09	2.01	N/A	35.85	33.78	
	Non-voluntary turnover ³⁾	Total	persons	11	15	9	8	46	59	137
		Retirement	persons	1	1	2	3	34	26	27
		Layoff	persons	0	0	0	0	5	20	10
		Other	persons	10	14	7	5	7	13	100

1) Calculated by excluding non-registered executives currently employed in Korea from the number of workers with an undefined term based on our business report.

2) Voluntary turnover: Refer to employees who leave the organization on their own individual initiative, irrespective of the organization's intention, and include job transfers and resignations among others

3) Non-voluntary turnover: Refer to the organization-initiated termination of employment relationships, and include employment adjustment, retirement, non-renewal of contracts while excluding executives



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

ESG Factbook

Financial Performance

Appendix

Material Sustainability Topics | Metrics and Targets

ESG Factbook

			POSCO International (non-consolidated)				Shwe Project and major subsidiaries (P-Mobility Solution, PT.BIA, POSCO International Textile)		
Metric		Unit	2020	2021	2022	Energy Business Unit	2020	2021	2022
Employee Value Enhancement(3)									
Training hour	Total training hour ³⁾	hours	76,749	53,110	58,450	41,070	6,090	50,707	63,796
	Permanent employees	hours	76,442	52,697	58,095	40,280	N/A	N/A	N/A
	Contract employees	hours	307	413	355	790	N/A	N/A	N/A
	Rank-and-file	hours	59,494	30,975	39,973	33,360	N/A	N/A	N/A
	Manager	hours	15,681	19,597	16,636	7,474	N/A	N/A	N/A
	Executive	hours	1,574	2,538	1,841	236	N/A	N/A	N/A
	Training hour per person	hours/persons	60.1	41.8	47.6	79.9	1.7	7.0	8.2
Training expenses	Total training expenses	KRW million	1,802	1,746	1,899	624	127	133	204
	Training expenses per person	KRW million	1.41	1.37	1.55	1.21	0.02	0.02	0.03
Training program ¹⁾	Total	courses	2,778	3,866	5,257	2,408	N/A	N/A	N/A
	Offline courses	courses	103	108	240	106	N/A	N/A	N/A
	E-learning courses	courses	1,031	1,963	5,017	2,302	N/A	N/A	N/A
Global Staff training ¹⁾	Total training hours	hours	1,328	1,427	1,836	N/A	N/A	N/A	N/A
	Offline training participants	persons	290	313	1,682	N/A	N/A	N/A	N/A
	E-learning content development(cumulative)	units	26	55	84	N/A	N/A	N/A	N/A
Regular performance ²⁾	Employees who received regular performance assessment (excluding executives)	persons	1,338	1,331	1,288	469	1,576	2,008	1,958
	Male (percentage)	persons (%)	1,006 (75)	996 (75)	951 (74)	407 (87)	647 (41)	784 (39)	780 (40)
	Female (percentage)	persons (%)	332 (25)	335 (25)	337 (26)	62 (13)	929 (59)	1,224 (61)	1,178 (60)
	Permanent employees	persons	1,338	1,331	1,288	457	1,562	1,990	1,828
	Contract employees	persons	0	0	0	12	14	18	130

1) Offline training data are collected from the Headquarters only, and e-learning training data are calculated by integrating data from the Shwe Project and other key subsidiaries.

2) Regular performance assessment: Assessments conducted in accordance with the standards known to employees and their superior

- Reference 1. Assessed at least once a year with the employee's knowing

- Reference 2. May include the assessments made by employees' direct boss, colleagues, or other employees and the HR department

3) As to training hours for the Shwe Project and other key subsidiaries, 2020 data include the Shwe Project and POSCO International Textile only, and 2021-2022 data include PT.BIA and POSCO Mobility Solution as well. Training hours by type of employment were not collected



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

ESG Factbook

Financial Performance

Appendix

ESG Factbook

Metric		Unit	POSCO International (non-consolidated)				Shwe Project and major subsidiaries (P-Mobility Solution, PT.BIA, POSCO International Textile)			
			2020	2021	2022	Energy Business Unit	2020	2021	2022	
Employee Value Enhancement(4)										
Labor relations	Employees subject to the collective agreement	%	0	0	0	100	96	97	97	
	Work stoppages due to strikes	occasions	0	0	0	0	0	0	0	
Flexible work hours	Employees who used flexible work hours	persons	146	148	217	81	0	0	23	
Parental leave ^{1),2)}	Employees who took parental leave ¹⁾	Total	persons	39	36	50	7	40	34	24
		Male	persons	13	28	15	4	30	23	13
		Female	persons	26	8	35	3	10	11	11
	Employees who returned after parental leave ¹⁾	Male	persons	4	7	4	2	27	18	13
		Female	persons	14	19	13	5	12	7	9
	Employees who returned after parental leave ¹⁾	Male	%	100	100	100	100	100	90	87
		Female	%	100	100	100	83	100	100	100
	Employees who returned after parental leave and worked 12 months or longer ²⁾	Male	persons	6	4	5	1	2	4	5
		Female	persons	12	13	19	4	3	2	0
	Employees who returned after parental leave and worked 12 months or longer ²⁾	Male	%	100	100	71	100	100	100	71
		Female	%	100	93	100	100	75	100	0
Fertility treatment leave	Employees who took fertility treatment leave	persons	5	5	6	1	0	0	0	
DB retirement pension plan ³⁾	Present value of defined benefit obligations KRW million	KRW million	143,273	138,059	125,925	38,417	38,385	41,033	38,933	
	Fair value of plan assets	KRW million	-140,583	-145,737	-159,378	38,417	-50,560	-42,407	-35,343	
	Liability recognition for the defined benefit plan	KRW million	2,735	-7,678	-32,453	0	-12,174	-1,374	3,649	

1) The metric on parental leave is calculated only for domestic operations(non-consolidated basis for POSCO International, POSCO Mobility Solution) and PT.BIA.
2) The metric on employees who returned to work after parental leave and worked 12 months and longer is calculated for domestic operations only(non-consolidated basis for POSCO International, POSCO Mobility Solution).
3) DB(Defined Benefit): The defined benefit pension plan pays a pre-determined amount of benefits after retirement, and the data are collected only for domestic operations(non-consolidated basis for POSCO International, POSCO Mobility Solution).



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

ESG Factbook

Financial Performance

Appendix

ESG Factbook

Metric		Unit	POSCO International (non-consolidated)				Shwe Project and major subsidiaries (P-Mobility Solution, PT.BIA, POSCO International Textile)			
			2020	2021	2022	Energy Business Unit	2020	2021	2022	
Employee Value Enhancement(5)										
Diversity	People with disabilities	Employees with disabilities	persons	37	42	41	11	26	27	26
		Ratio of Employees with disabilities	%	2.9	3.3	3.3	2.1	0.4	0.4	0.3
	Men of national merit	Employees of national merit	persons	21	21	19	18	9	9	9
Sustainable Supply Chain										
Supply chain management	Transaction assessment on supplier ¹⁾	Suppliers	Companies	N/A	N/A	N/A	N/A	486	510	508
		Suppliers who receive assessment	Companies	0	0	0	0	142	156	151
		Ratio of suppliers who receive assessment	%	0	0	0	0	29	31	30

1) This refers to suppliers(raw material/resource/equipment suppliers) except for partners and subcontractors, and supplier transaction assessments are made on POSCO Mobility Solution only which currently engages in manufacturing.



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

ESG Factbook

Financial Performance

Appendix

ESG Factbook

POSCO International (non-consolidated)								Shwe Project and major subsidiaries (P-Mobility Solution, PT.BIA, POSCO International Textile)		
Metric		Unit	2020	2021	2022	Energy Business Unit		2020	2021	2022
Health and Safety(1)										
Safety management	Health and safety management system certification ¹⁾	Sites to be certified ²	sites	1	1	1	2	6	6	6
		Sites certified	sites	0	0	1	2	2	3	6
		Certification rate	%	0	0	100	100	33	50	100
Occupational safety training ²⁾	Training hour	Total	hours	N/A	N/A	1,302	514	N/A	753	841
		Permanent employees	persons	N/A	N/A	1,256	477	N/A	753	841
		Contract employees	persons	N/A	N/A	24	37	N/A	0	0
		Partners	persons	N/A	N/A	22	0	N/A	0	0
	Training hours per person		hours	N/A	N/A	1.0	1.0	N/A	1.0	1.0
Work-related injuries	LTIR ³⁾	Total	cases/ 200,000 hours	0	0	0	0	0.02	0.12	0.08
		Employees		0	0	0	0	0.02	0.11	0.08
		Partners		0	0	0	0	0	0.17	0.13
	LTIFR ³⁾	Total	cases/ 1 million hours	0	0	0	0	0.08	0.61	0.42
		Employees		0	0	0	0	0.11	0.57	0.38
		Partners		0	0	0	0	0	0.86	0.63
	TRIR ⁴⁾	Total	cases/ 200,000 hours	0	0	0.07	0	0.90	0.52	0.48
		Employees		0	0	0.08	0	0.62	0.45	0.50
		Partners		0	0	0	0	1.71	0.94	0.31
	TRIFR ⁴⁾	Total	cases/ 1 million hours	0	0	0.36	0	4.49	2.62	2.38
		Employees		0	0	0.41	0	3.08	2.27	2.52
		Partners		0	0	0	0	8.57	4.72	1.57

1) ISO 45001, OHSAS 18001, and KOSHA-MS

2) This includes both in-house mandatory training and other internal training. POSCO International has compiled and disclosed its occupational safety training data since 2022, and among key subsidiaries, POSCO Mobility Solution has compiled and disclosed its data since 2021.

3) LTIR(Lost Time Injury Rate): Number of incidents and injuries that occur every 200,000 hours, LTIFR(Lost Time Injury Frequency Rate): Number of incidents and injuries that occur every 1 million hours

4) TRIR(Total Recorded Incidents Rate): Total recorded incidents that occur every 200,000 hours, TRIFR(Total Recorded Incidents Frequency Rate): Total recorded incidents that occur every 1 million hours



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

ESG Factbook

Financial Performance

Appendix

Material Sustainability Topics | Metrics and Targets

ESG Factbook

POSCO International (non-consolidated)							Shwe Project and major subsidiaries (P-Mobility Solution, PT.BIA, POSCO International Textile)			
Metric			Unit	2020	2021	2022	Energy Business Unit	2020	2021	2022
Health and Safety(2)										
Work-related injuries	Occupational injury rate	Total		0	0.07	0	0	0	0.09	0.05
		Employees	%	0	0	0	0	0	0.07	0.04
		Partners		0	0.59	0	0	0	0.27	0.10
	Fatalities	Total		0	0	0	0	0	0	0
		Employees	%	0	0	0	0	0	0	0
		Partners		0	0	0	0	0	0	0
Employee injuries	Lost-time injuries	cases	0	0	0	0	1	8	7	
	TRI ⁽¹⁾	cases	0	0	1	0	28	32	46	
	Hours worked per year ⁽²⁾	hours	2,556,000	2,540,000	2,454,000	598,000	9,102,180	14,075,804	18,285,175	
	Fatalities	persons	0	0	0	0	0	0	0	
	Injuries	persons	0	0	0	0	0	5	3	
	Injuries	cases	0	0	0	0	0	5	3	
	High-consequence injuries	cases	0	0	0	0	0	0	0	
	LTI ⁽³⁾	persons	0	0	0	0	0	2	0	
	Near-misses	cases	0	0	1	138	9	28	114	
	NMFR ⁽⁴⁾	cases/200,000 hours	0	0	0.08	46.15	0.20	0.40	1.25	
Partner injuries	Lost-time injuries	cases	0	0	0	0	0	2	2	
	TRI	cases	0	0	0	0	27	11	5	
	Hours worked per year ⁽²⁾	hours	326,000	338,000	287,680	262,000	3,150,708	2,328,680	3,178,678	
	Employees	persons	163	169	169	131	1,172	742	977	
	Fatalities	persons	0	0	0	0	0	0	0	
	Injuries	persons	0	1	0	0	0	2	1	
	Injuries	cases	0	1	0	0	0	2	1	
	LTI	persons	0	1	0	0	0	2	2	
	Near-misses	cases	0	0	0	0	0	0	5	

1) TRI(Total Recorded Incidents): Indicate the number of incidents that require recording, and include FAT(Fatality), LWC(Lost Workday Case), and MTC(Medical Treatment Case)

2) Hours worked per year is the sum of hours worked per month available on the system since 2022, and data between 2020 and 2021 were calculated based on the working hour calculation formula (number of employees/number of cooperators X 40 hours/week X 50 weeks).

3) LTI(Lost Time Incidents): Refer to cases when work could not be performed due to work-related fatalities, incidents that caused permanent disabilities, and incidents that prevent workers from performing their duty for one day or longer

4) NMFR(Near-Miss Frequency Rate): Frequency of near-misses occurring every 200,000 hours



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

ESG Factbook
Financial Performance

Appendix

Material Sustainability Topics | Metrics and Targets

ESG Factbook

Metric		Unit	POSCO International (non-consolidated)				Shwe Project and major subsidiaries (P-Mobility Solution, PT.BIA, POSCO International Textile)			
			2020	2021	2022	Energy Business Unit	2020	2021	2022	
Ethics/Fair Trade										
Ethical concerns raised	Ethical concerns submitted	Total	cases	2	3	5	2	45	83	71
		Corruption	cases	0	1	1	0	0	1	1
		No respect for human rights	cases	0	0	1	1	0	3	3
		Abuse of authority	cases	0	0	0	1	0	21	6
		Other ¹⁾	cases	2	2	3	0	45	58	61
	Action taken for ethical concerns submitted ²⁾	cases	2	3	5	2	0	5	6	
Ethics training	Ethics training	Hours completed	hours	3,045	1,274	2,889	1,246	1,494	1,518	1,758
	Employees subject to mandatory ethics	Permanent employees	persons	1,012	1,259	1,277	464	732	681	865
		Temporary employees	persons	3	15	38	37	15	78	14
Fair trade ³⁾	Fair trade training	Hours completed	hours	15,194	9	1,708	1,799	0	86	688
		Employees who completed	persons	951	28	246	514	0	43	172
	Penalties for non-compliance ⁴⁾ with fair trade regulations	Total	cases	0	0	0	0	0	0	0
		Pending	cases	0	0	0	0	0	0	0
		Termination	cases	0	0	0	0	0	0	0
	Non-monetary sanction on non-compliance with fair trade regulations	Total	cases	0	0	0	0	0	0	0
		Pending	cases	0	0	0	0	0	0	0
		Termination	cases	0	0	0	0	0	0	0
		Total penalties	KRW	0	0	0	0	0	0	0
Anti-corruption	Anti-corruption training	Hours completed	hours	3,045	1,274	2,889	1,246	0	0	0
		Employees who completed	persons	1,015	1,274	1,315	501	0	0	0

1) The majority of the ethical concerns submitted and fell into the 'other' category at the Shwe Project, and other key subsidiaries were submitted through PT.BIA's grievance channels. While they include general complaints concerning community donations and requests for living subsidies, these complaints were included in the category in an effort to transparently disclose all cases submitted through our grievance channels. Continuous efforts will be made to ensure ethics whistleblowing channels are operated in a way that fulfills their intended purpose.

2) This does not include the actions taken for cases submitted and classified into the 'other' category at the Shwe Project in Myanmar and other key subsidiaries.

3) This metric concerned domestic operations only.

4) Anti-competitive behaviors and non-compliance with fair trade regulations



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

ESG Factbook

Financial Performance

Appendix

ESG Factbook

Metric		Unit	POSCO International (non-consolidated)					Shwe Project and major subsidiaries (P-Mobility Solution, PT.BIA, POSCO International Textile)		
			2020	2021	2022	Energy Business Unit	2020	2021	2022	
Information Security										
Information security training	Total training hours	Total	hours	3,741	2,620	4,192	1,542	2,025	1,614	2,631
	Employees who completed training	Total	persons	1,247	1,310	1,323	514	675	807	877
		Permanent employees	persons	1,217	1,288	1,292	477	645	741	869
		Contract employees	persons	30	22	31	37	30	66	8
CSR										
CSR	Employee volunteering	Volunteers hours	hours	21,978	2,388	18,151	9,444	5,340	4,457	16,369
		Volunteers	persons	1,046	169	1,143	409	356	265	505
		Volunteer hours per person	hours	21.0	14.1	15.9	23.1	15.0	16.8	32.4
		Employee participation	%	82	13	93	80	5	4	6
	CSR expenses	Total	KRW	1,729,117,472	2,155,097,479	2,162,848,085	1,386,842,591	1,230,467,336	843,835,360	1,166,800,256
		Donations	KRW	1,694,646,016	2,120,549,000	2,078,463,100	1,326,682,936	640,232,499	597,216,296	1,000,607,961
		Community	KRW	0	0	0	0	190,295,515	130,655,779	153,573,196
		Other ¹⁾	KRW	34,471,456	34,548,479	84,384,985	60,159,655	399,939,322	115,963,285	12,619,099

1) CSR expenses that fall into the 'other' category are volunteer activity expenses and CSR advertising expenses.



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

ESG Factbook

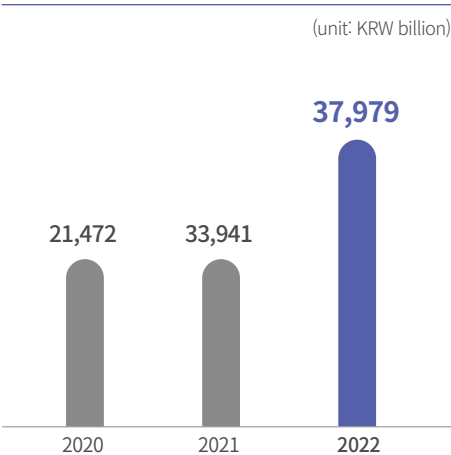
Financial Performance

Appendix

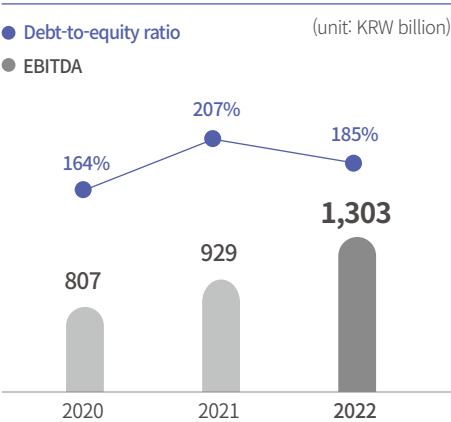
Financial Performance

In 2022, our operating profit and EBITDA rose by KRW 317.1 billion and KRW 373.8 billion year-over-year to reach KRW 902.5 billion and KRW 1.3031 trillion respectively on a consolidated basis, which is attributable to the strong performance of our trading business, increases in gas sales prices amid rising oil prices, and operational stabilization at key investment corporations and the resulting improvement in performance. To enhance the efficiency of invested capital, we reduced our capital investment in low-profitability business as well as net working capital expenses in trading business, which drove our ROE, a measure of profitability, to increase by 3.6% from the previous year.

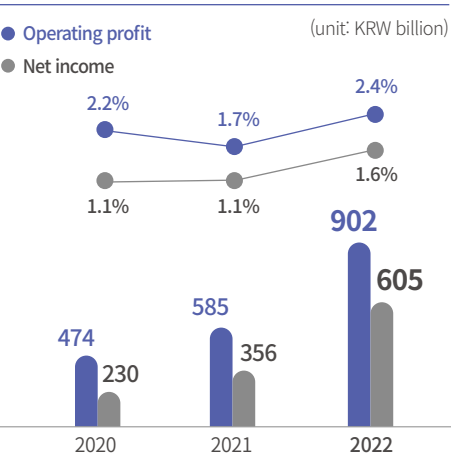
Sales



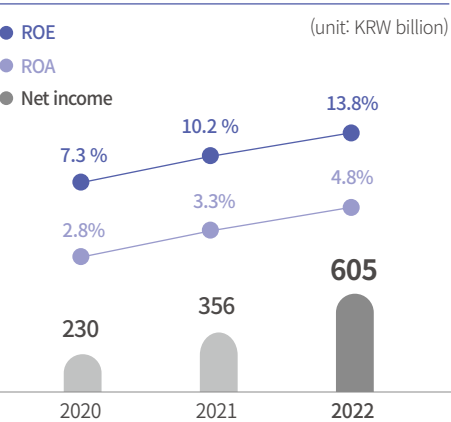
EBITDA and debt-to-equity ratio



Operating profit and net income distribution



ROE and ROA



Distribution of Economic Value

(As of 31 Dec. 2022, Consolidated, Unit: KRW million)

Stakeholders	Category	2020	2021	2022
Shareholders and investors	Total cash dividends	86,362	98,700	123,354
	Interest expenses	98,488	82,451	145,707
Government	Income tax expenses	97,645	132,212	137,234
Community	Donations	1,836	32,503	15,658
Supplier	Cost of goods sold	19,154,607	30,968,559	33,882,403
Employees	Employee wages	270,747	325,511	389,342



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

06 Appendix

87	ESG Policy Book
96	GRI Standards Index
99	SASB Index
103	Financial Statement
109	About POSCO International
110	Total Impact Measurement and Management(TIMM)
112	Certifications & Trademarks/Memberships
113	Independent Assurance Statement



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

ESG Policy Book

GRI Standards Index

SASB Index

Financial Statement

About POSCO International

Total Impact Measurement and Management (TIMM)

Certifications & Trademarks /Memberships

Independent Assurance Statement

Appendix

Environmental Policy

Purpose

The purpose of this policy is to establish a sustainable management and environmental management system that can fully realize the company’s business philosophy of “Corporate Citizenship: Building a Better Future Together”, improve its ability to respond to environmental risks, and contribute to protecting the environment and overcoming climate crisis through cooperation among POSCO International and POSCO International’s all affiliates and stakeholders.

Scope of Application

This policy applies to POSCO International. POSCO International shall encourage all of POSCO International’s affiliates and partners to comply with this policy or establish an equivalent policy.

Basic Principles

1. Compliance with Environmental Laws and Mitigation of Environmental Impacts

- We shall comply with international conventions and applicable laws on the environment and energy and endeavor to mitigate environmental impact throughout our entire process of development, production, use, and disposal of products.
- We shall minimize emissions of pollutants by implementing eco-friendly production methods and the best available technology.

2. Response to Climate Change

- We shall establish a risk self-assessment framework in response to climate change, set achievable goals, and self-evaluate performance.
- We shall endeavor to reduce greenhouse gas emissions by reducing our dependence on fossil fuels and fossil raw materials, improving energy efficiency, and developing and using renewable energy.

3. Protection of Biodiversity and Restoration of the Natural Environment

- We shall endeavor to restore the natural ecosystem and protect biodiversity by using natural resources and by-products in an efficient manner.
- In order to minimize damage to the environment, including green areas, forests, wetlands, and oceans, we shall conduct risk assessments when constructing or expanding workplaces and endeavor to restore the existing natural environment through reforestation and afforestation efforts when withdrawing from work sites.

4. Raw and Subsidiary Materials and Water

- We shall take into account the amount of resources used to manufacture finished products and endeavor to replace traditional materials with eco-friendly ones, such as raw materials that are renewable or with fewer impurities. We shall also endeavor to reduce the amount of resources used in production activities by adopting new facilities that consume less resources, such as water saving machines, and by implementing clean technologies.

5. Waste and Wastewater

- We shall minimize waste and wastewater generated during the production process and recycle inevitably generated waste and wastewater as much as possible. We shall also establish waste management and/or water treatment facilities required to minimize the impact that waste and wastewater from our workplaces may have on the environment.

6. Hazardous Chemicals

- We shall systematically manage hazardous chemicals to prevent chemical accidents, such as chemical leaks or spills, and endeavor to use and release less hazardous chemicals.

Action Plans

1. Establishment of Environmental Management System

- We shall establish an environmental management system (“EMS”) to assess and respond to environmental risks unique to our business activities, set specific environmental performance targets, and continually improve such targets.
- The Board of directors and the executive management shall actively participate in the decision-making and management/supervision of the EMS and provide ample support in both human and material resources, such as assigning dedicated working-level employees, to ensure that EMS is fully installed and operated.
- For the operation of the EMS, we shall incorporate environment-related factors in existing policies with specific consideration of each company’s business situation and, if necessary, establish and comply with specific policies, guidelines, and bylaws on specific environmental concerns such as biodiversity, forest, wetland, and climate risk.
- We shall discuss the importance of environmental protection and response to climate change with stakeholders, such as contractors, suppliers, and counterparties, and provide support so that they can establish their own EMS.
- The officers and department heads shall provide training to the officers/employees under their supervision so that they can recognize the importance of environmental management and comprehend the EMS.



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

ESG Policy Book

GRI Standards Index

SASB Index

Financial Statement

About POSCO International

Total Impact Measurement and
Management(TIMM)

Certifications & Trademarks
/Memberships

Independent Assurance Statement

Appendix

Environmental Policy

2. Response to Climate Change

- We shall integrate transition and physical risk related to climate change into company-wide risk assessments and business strategies and document and manage such risk.
- We shall ensure that risks, strategies, and assessments related to climate change are properly reported to the board of directors and executive management.
- We shall establish and implement concrete and feasible plans to mitigate greenhouse gas emissions and achieve carbon neutral goals.
- We shall apply environmental certification and disclosure frameworks related to climate change (e.g. the TCFD), or establish a comparable reporting framework to disclose to a reasonable extent our ongoing efforts and achievements in responding to climate change.

3. Management of Production and Workplace Environment

- We shall ensure that the production and workplace environment is properly managed through processes including KPIs and other performance management indicators, education/training, establishment and management of guidelines, internal inspections, etc.
- We shall apply eco-friendly production processes and the best available technology to minimize the amount of pollutants and the impact of pollutants on the environment.
- We shall establish and operate environmental management manuals tailored to the specific needs of production facilities and workplaces and continually monitor and strive to improve the environmental impact of our operating facilities.
- We shall endeavor to thoroughly assess risks and achieve a zero net environmental impact in order to protect the ecosystem and the environment when building, expanding, and closing down our workplaces. We shall not engage in business activities that destroy forests and wetlands but pursue and implement the best available measures to mitigate the impact on the ecosystem, e.g. through engaging in forest and wetland restoration activities.

4. Development and Distribution of Products and Services

- We shall identify the challenges and opportunities in the process of transitioning to a low-carbon economy, increase the supply of eco-friendly products and by-products, and assess environmental risks in the transportation and logistics process. By doing so, we shall minimize the environmental impact throughout the entire process of developing and providing goods and services.
- We shall enhance our competitiveness by developing low-carbon, eco-friendly, and new and renewable energy products.

5. Supply Chain Management, and Selection and Evaluation of Suppliers

- When selecting our partners (suppliers, contractors, service providers, etc.), we shall evaluate their level of environmental management to minimize environmental impact.
- We shall provide support to suppliers and contractors so that they can establish their own EMS at a superior level and preemptively manage environmental risks throughout the entire supply chain by conducting performance evaluations regarding suppliers' environmental management levels.
- We shall procure materials and equipment in compliance with the green procurement policy.

6. New Projects and M&A

- We shall review environmental management plans and environmental impact assessments when reviewing new projects/investments to minimize environmental risks that may arise from projects.
- We shall conduct due diligence when reviewing potential M&As to identify and respond to environmental risks in advance.



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

ESG Policy Book

GRI Standards Index

SASB Index

Financial Statement

About POSCO International

Total Impact Measurement and
Management(TIMM)

Certifications & Trademarks
/Memberships

Independent Assurance Statement

Appendix

Biodiversity Policy

Purpose

The purpose of this policy is to establish a system whereby POSCO International can protect and promote biodiversity while performing its business activities and establish a code of conduct and action plans in order to develop a business model that can promote sustainable growth with the natural environment.

Scope of Application

This policy applies to POSCO International. POSCO International shall encourage all of POSCO International's affiliates and partners to comply with this policy or establish an equivalent policy.

Code of Conduct

1. We shall shift away from a linear economy where we exploit resources to produce and use products only to eventually discard them, and move instead toward a business model based on a circular economy which is decoupled from the consumption of finite resources and promotes recycling and sustainability.
2. We shall identify the potential impact on biodiversity at each stage of our business, endeavor to prevent or minimize such impact, and in cases of damages to biodiversity, strive to recover previous levels of biodiversity through restoration, closure, etc. of affected habitats and land areas.
3. When the loss of biodiversity is inevitable, we shall endeavor to minimize the loss of biodiversity, such as creating alternative habitats in other places, and shall not operate in areas of high biodiversity value.
4. We shall designate areas where our business activities directly or indirectly affect biodiversity, monitor designated reservation areas inside and outside of workplaces and other areas of high biodiversity value, and evaluate and manage the impact on biodiversity
5. We shall identify factors that may threaten endangered animals and plants discovered in our workplaces as well as partners' workplaces and develop strategies to protect such species.

6. We shall carry out ecosystem restoration projects in areas where our business activities directly or indirectly affect the biodiversity and disclose the process of establishing and implementing plans, local communities' participation efforts, and the results of the projects.
7. We shall actively participate in research and development using biological resources, projects to promote biodiversity and protect animals, and international initiatives related to biodiversity.

Action Plans

1. We shall establish procedures and governance where biodiversity issues are considered in our business strategies, decision-making process, and long-term risk analysis, and the board of directors shall monitor the above.
2. We shall integrate biodiversity management into the Group's EMS and set goals and standards to control and monitor the EMS.



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

ESG Policy Book

GRI Standards Index

SASB Index

Financial Statement

About POSCO International

Total Impact Measurement and Management (TIMM)

Certifications & Trademarks
/Memberships

Independent Assurance Statement

Appendix

Human Rights Management Policy

Purpose

This policy aims to ensure that POSCO International complies with international human rights standards such as UN Guiding Principles on Business and Human Rights, UN Global Compact, Universal Declaration of Human Rights, and OECD Guidelines for Multinational Enterprises and implements human rights management based on respect for labor principles recommended by the International Labor Organization and ratified by the government.

Scope of Application

This policy applies to POSCO International and its officers/employees. POSCO International shall encourage all of POSCO International's affiliates and its officers/employees as well as its partners and their officers/employees to comply with this policy or establish an equivalent policy.

Code of Conduct

1. General Principles

- We shall respect the UN Guiding Principles on Business and Human Rights and acknowledge that all human beings have the right to dignity, including the following related rights: right to life and physical safety; freedom of thought, expression, and religion; freedom of association; freedom of family life and privacy; right to food and water; freedom from torture, slavery, or forced labor; right to fair and decent working conditions; and anti-discrimination.
- To this end, we shall prevent infringement on the human rights of others and take appropriate measures to prevent and address negative impacts on human rights that may occur in the course of our business activities.
- To meet the expectations of stakeholders by fulfilling our responsibility to respect human rights, our officers/employees shall comply with the following recommendations regarding human rights management:
 - ① We shall comply with applicable laws and internationally recognized global human rights standards wherever we operate our business;
 - ② When faced with conflicts with local regulations, we shall pursue ways to comply with global human rights standards; and
 - ③ We shall treat the risk of serious human rights violations as an important management issue of the company.

2. Major Human Rights Issues

- We shall manage human rights risks that may occur in the following areas of human rights at the company-wide level and fulfill its responsibility to respect human rights.

① Anti-discrimination

We shall not discriminate or harass anyone on the ground of race, nationality, gender, age, educational background, religion, region, disability, marital status, gender identity, etc. We shall provide equal employment opportunities to those with appropriate qualifications and abilities to perform the duties assigned to them and respect cultural diversity. We shall not discriminate against people on the ground of gender and employment type. We shall provide equal wages to workers for equal work to prevent disparities in wages and working conditions without reasonable reasons. We shall fairly evaluate officers/employees' individual capabilities and performance and systematically reflect the evaluation results to provide appropriate compensation.

② Prohibition of Forced Labor and Child Labor

We shall not coerce anyone to work against his/her free will by means including human trafficking, intimidation, confinement, and other unreasonable restriction of mental or physical liberties. We shall not sign a labor contract that requires the other party to pay a penalty if he/she fails to perform the labor contract. In addition, we shall prohibit child labor and comply with labor conditions for minors and minimum working age standards under national labor laws and international standards.

③ Guarantee of Freedom of Association and Collective Bargaining

In accordance with the basic labor rights under domestic laws and regulations and as defined by the International Labor Organization, we shall recognize workers' freedom of association and membership, including the freedom to unionize. We shall not penalize workers for joining labor unions or engaging in union activities. In addition, we shall not reject collective bargaining without reasonable grounds and shall respect and fully implement the results of collective bargaining.

④ Guarantee of Occupational Safety

Under the principle that all kinds of accidents and work-related diseases must be prevented, we shall establish a company-wide health and safety policy, fully comply with international safety rules and regulations, and take appropriate measures for any identified occupational hazards.



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

ESG Policy Book

GRI Standards Index

SASB Index

Financial Statement

About POSCO International

Total Impact Measurement and
Management(TIMM)

Certifications & Trademarks
/Memberships

Independent Assurance Statement

Appendix

Human Rights Management Policy

⑤ **Prevention of Workplace Harassment**

We shall strive to strictly prevent any cases of employees taking advantage of their positions or relationships at work to cause unwarranted physical or mental distress to another employee or cause harm to the work environment. We shall prevent any employee from violating the human rights of others or engaging in verbal, physical, or visual behavior that is offensive to others, including sexual harassment, and create a workplace culture in which everyone is respected.

⑥ **Responsible Supply Chain Management**

In order to monitor and manage forced labor and violations of children's rights in our supply chain, we shall manage human rights risks of our suppliers, subcontractors, subsidiaries, and other key partners under our influence. In addition, we shall ensure fair trade with our partners based on mutual respect and equality and support partners to comply with fair trade laws and regulations.

⑦ **Anti-corruption and Anti-bribery**

In order to maintain fair trade in all areas, we shall comply with all domestic and international anti-bribery and anti-corruption laws and regulations, including the Improper Solicitation and Graft Act, the UN Convention against Corruption, the Foreign Corrupt Practices Act, and the Act on Combating Bribery of Foreign Public Officials in International Business Transactions.

⑧ **Guarantee of Environmental Rights**

We shall endeavor to reduce greenhouse gas emissions by reducing the use of fossil fuel and fossil fuel-derived raw materials and improving energy efficiency. We shall strive to restore the natural ecosystem and protect the biodiversity by using natural resources and by-products in an efficient manner. In addition, we shall establish an EMS, improve our ability to respond to environmental risks, and conduct eco-friendly management through open communication.

⑨ **Protection of Human Rights of Local Residents**

If a human rights violation occurs in the local community due to the company's business activities, we shall collect opinions and endeavor to resolve such human rights issues. In addition, we shall minimize and prevent human rights risks as we may have a social and environmental impact on local residents and the region in the process of running our business. We shall also evaluate the impacts on the safety, health, food, and economic activities of the local environment and local residents and take into account protection of the local culture and biodiversity issues in the region.

⑩ **Protection of Human Rights of Consumers**

We shall operate a customer-centric business in which we listen to and respect our customers. We shall actively accept customers' legitimate requests and reasonable suggestions. We shall

not provide products and services that threaten their safety and health based on considerations for the safety and health of customers in our business activities. We shall also protect customer-related information.

3. **Establishment of Policies and Procedures**

- We shall prepare the following policies and procedures to fulfill our responsibility to respect human rights.
 - ① Implementation of appropriate policy regimes, including enactment of rules containing the company's responsibility to respect human rights
 - ② Human rights due diligence procedures to identify, prevent, and mitigate any negative impact on human rights and inspect and investigate any activities that affect human rights
 - ③ Procedures to remedy the negative impact on human rights that the company has had

Action Plans

1. **Human Rights Management Governance**

The ESG Committee, an expert committee under the board of directors, shall set overall policies and directions related to human rights management and monitor the implementation of such human rights management. The Corporate Citizenship Bureau shall support the ESG committee to facilitate the performance of duties and provide human rights training, disclose information, conduct human rights due diligence, and provide relief to victims.

2. **Human Rights Due Diligence**

A. **Key Considerations**

- Officers/employees shall identify, prevent, and mitigate any negative impact on human rights and conduct human rights due diligence when considered necessary to fulfill their responsibilities. Such due diligence shall include identifying and evaluating any actual and potential impact on human rights, responding to problems identified, recording response activities, and communicating with stakeholders. Human rights due diligence shall consider the following:
 - ① Include negative impacts on human rights that may be directly or indirectly triggered in the course of the company's business activities;
 - ② Consider the location and size of workplaces, human rights risk exposure, characteristics and features of business, and other various matters depending on the political and economic conditions and characteristics of the host country; and
 - ③ Recognize that human rights risks gradually change as the company's activities and business environment change, and continue to conduct due diligence.



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

ESG Policy Book

GRI Standards Index

SASB Index

Financial Statement

About POSCO International

Total Impact Measurement and
Management(TIMM)

Certifications & Trademarks
/Memberships

Independent Assurance Statement

Appendix

Human Rights Management Policy

B. How to Conduct Due Diligence

- We shall endeavor to identify and inspect any actual and potential negative impact on human rights related to their business activities at home and abroad according to the following process.
 - ① If human rights risks are identified in major domestic and foreign workplaces, we shall conduct human rights due diligence, analyze the situation, and make improvement plans;
 - ② In principle, due diligence shall be carried out by internal experts, and if necessary, it may be conducted with the support from external experts;
 - ③ In some cases, groups and stakeholders who may be potentially affected may be interviewed;
 - ④ We shall identify any potential and actual impact during due diligence, share the evaluation results at the company-wide level regarding the potential impact, take measures to prevent or mitigate such impact by carrying out relevant procedures, and endeavor to remediate and resolve any existing impact; and
 - ⑤ We shall conduct due diligence using a checklist that identifies key elements related to human rights management.

C. Response and Follow-up

- We shall endeavor to identify and inspect any actual and potential negative impact on human rights related to their business activities at home and abroad according to the following process.
 - ① Establishment of Internal Response System
 - i. We shall clarify roles and responsibilities with relevant departments to solve identified problems.
 - ii. We shall apply internal decision-making, budget allocation, and monitoring procedures to effectively respond to the above impact.
 - iii. We shall accurately explain the problems identified through human rights due diligence to the relevant departments and respond to the problems by managing them as important issues.
 - ② Follow-up and Remedies
 - i. We shall take the necessary steps to prevent or mitigate any potential or existing adverse impact on human rights.
 - ii. In cases of unexpected negative impact on human rights despite our best policies and procedures, we, alone or in collaboration with other entities, shall endeavor to address such negative impact.
 - iii. When we have not directly contributed to negative impacts on human rights but the negative results are related in a complex way to our operations, production, and services through our relationship with other entities (e.g., suppliers), while we are not directly responsible for devising plans for systematic improvement, but we shall play a certain role.
 - iv. We shall use the influence that the company has to prevent or mitigate the negative impact on human rights, and otherwise may strive to strengthen our influence by collaborating with the relevant entities to protect human rights.
 - v. We shall operate a grievance mechanism that shall serve as an effective remedy for potentially affected stakeholders.

D. Communication with Stakeholders

- When stakeholders raise concerns about human rights impacts, we shall take responsibility in communicating with them.
 - ① We shall communicate responsibly and transparently with our stakeholders, including affected groups, individuals, and investors. To facilitate stakeholders' access to information, we may consider various forms of communication, such as face-to-face meetings, publication of official reports, and online channels (e.g., the company's official website and Helpline).
 - ② We shall include actual and potential negative impacts in the official reports we publish and may consider independent verification procedures to enhance the credibility of the reports.
 - ③ We shall provide stakeholders with information so that they can better assess whether the company is responding appropriately to specific human rights impacts.

E. Internalization and Program Improvement

- Based on the results of human rights due diligence, we shall contribute to the actual improvement of human rights management through internalization of organizational culture and activities for improving programs.
 - ① We shall carry out activities to internalize human rights management into the organizational culture by providing training on rapport-building and human rights management norms to all officers/employees and sharing successes and failures.
 - ② We shall continue to improve the human rights management system by consulting with experts, communicating with stakeholders, and discovering areas for improvement through implementing programs.

3. Grievance Mechanism

A. Key Considerations

- We shall operate a grievance mechanism for negatively affected individuals and communities so that their grievances can be promptly discussed and addressed.
- We shall endeavor to address grievances swiftly and reasonably by using existing methods such as the Ethics Counseling Center (Helpline) and the Unethical Conduct Reporting Center (Hotline). We shall not penalize those who file a complaint, victims, and cooperators on the ground that they apply for counseling or investigation and provide cooperation.
- The grievance mechanism shall perform the following important functions in relation to the company's responsibility to respect human rights:
 - ① Facilitation of the identification of negative impacts on human rights and acceptance of concerns raised by those directly affected or likely to be affected. Affected persons may report their human rights concerns to the Corporate Citizenship Bureau in person, by mail, by phone, or by email and apply for grievance handling;
 - ② Collection of grievances and provision of early relief to victims in order to prevent the spread of human rights violations; and
 - ③ Analysis of operations progress to identify and solve problems in human rights policies and procedures.



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

ESG Policy Book

GRI Standards Index

SASB Index

Financial Statement

About POSCO International

Total Impact Measurement and
Management(TIMM)

Certifications & Trademarks
/Memberships

Independent Assurance Statement

Appendix

Responsible Minerals Policy

Purpose

This policy prohibits the use of conflict minerals such as tin, tantalum, tungsten, and gold (“3TGs”) that have been used to fund warlords and rebel groups in African countries affected by civil wars such as the Democratic Republic of Congo and other minerals such as cobalt that are linked to human rights abuses and environmental issues during the mining process. This policy outlines POSCO International’s commitment to using only “responsible minerals” mined in a way that respects human rights and protects the environment without financing armed conflict and sets out the code of conduct and action plans for achieving the above goal.

Scope of Application

This policy applies to POSCO International. POSCO International shall encourage all of POSCO International’s affiliates and partners to comply with this policy or establish an equivalent policy. Furthermore, POSCO International expects partners to encourage their partners to comply with this policy as well.

Code of Conduct

1. We shall endeavor to prevent negative impact on society and the environment by preventing human rights violations such as child labor and forced labor in the mining process and minimizing environmental destruction.
2. We shall disclose information on partners using minerals that cause conflict, including 3TGs and cobalt, in the Democratic Republic of Congo and neighboring countries.
3. We shall comply with regulations related to conflict minerals, including the Dodd-Frank Act of the United States and the Conflict Minerals Regulation of the EU. We shall endeavor to ensure that due diligence is conducted in accordance with the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (“OECD Due Diligence Guidance”), which provides a framework for detailed due diligence to identify and mitigate risks in the supply chains for 3TG and cobalt.
4. We shall require our partners to purchase 3TG and cobalt from smelters that meet the Responsible Minerals Assurance Process (“RMAP”) standards under the Responsible Minerals

Initiative (“RMI”) or any other similar standards. We shall also require smelters included in POSCO Group’s supply chains that have failed to meet the RMAP standards to meet the above standards

Action Plans

Based on the five-step framework recommended by the OECD Due Diligence Guidelines for responsible resource procurement in consideration of human rights protection and conflict risk, we shall manage as follows so that minerals can be mined in a way that respects human rights and protects the environment:

1. Establish an internal management system to manage risks related to minerals mined in conflict-affected and high-risk areas;
2. Identify and evaluate risks that may arise from mining, trading, and exporting minerals in conflict-affected and high-risk areas;
3. Establish and implement a risk management system and strategy to manage and respond to identified risks, monitor implementation performance and improve the management system and strategy on an ongoing basis;
4. Conduct due diligence on smelters in the supply chains in conflict-affected and high-risk areas and plan and conduct independent audit, if necessary; and
5. When identifying any supply chain risks or necessary improvements through due diligence, we request that suppliers take action accordingly while verify the improvements made by suppliers so that they could participate in our sourcing pool on the condition that such risks were mitigated.



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

ESG Policy Book

GRI Standards Index
SASB Index
Financial Statement
About POSCO International
Total Impact Measurement and
Management(TIMM)
Certifications & Trademarks
/Memberships
Independent Assurance Statement

Appendix

Supply Chain Policy

Purpose

This policy enables POSCO International to promote fair trade based on mutual trust with its supply chain and partners, build a sustainable supply chain, and ultimately create an inclusive business environment where POSCO International can coexist and grow together with its stakeholders.

Scope of Application

This policy applies to POSCO International. POSCO International shall encourage all of POSCO International’s affiliates and officers/employees as well as suppliers and partners (collectively “partners”) and their officers/employees to comply with this policy or establish an equivalent policy. Furthermore, POSCO International expects partners that deal directly with POSCO International to encourage their partners to comply with this policy as well.

Partner Code of Conduct

1. Human Rights

Partners shall not tolerate unlawful child labor, human trafficking, or any other form of forced labor under the UN Guiding Principles on Business and Human Rights and the International Labor Standards of the International Labor Organization. Partners shall endeavor to respect and protect the human rights, working hours, and freedom of association and collective bargaining of all workers. In addition, partners shall not discriminate against workers on the ground of race, nationality, gender, age, educational background, religion, region, disability, marital status, or gender identity.

2. Environment

Partners shall not only comply with environmental regulations and laws but also evaluate the impact that their business activities may have on the environment and the risk that their business activities may pose to the environment. Partners shall establish an EMS to systematically manage/ analyze environmental management performance throughout the entire process from product development and production to use. Partners shall endeavor to reduce greenhouse gas emissions by using less fossil fuels and fossil raw materials and improving energy efficiency and to restore the natural ecosystem and protect biodiversity by using natural resources and by-products in an efficient manner.

3. Health and Safety

Partners shall establish a company-wide health and safety policy and fully comply with safety rules at international level. Partners shall take appropriate measures to prevent deaths, injuries, and illnesses in the workplace so that they can ensure that all officers/employees are protected from accidents and work-related diseases and work in a safe and healthy environment. Partners shall place top priority on consumer safety when manufacturing products.

4. Anti-corruption

Partners shall neither engage in nor tolerate any form of corruption, graft, or improper solicitation. Partners shall comply with domestic and international anti-bribery and anti-corruption laws and regulations, stick to the basics and adhere to the principles over the course of their business activities, and endeavor to establish an ethical corporate culture.

5. Fair Trade

Partners shall comply with international standards and national fair trade laws and shall not engage in unfair cartel activities with competitors, such as collusion on production, price, bidding, and market division, and unfair trade practices that may undermine fair trade. Partners shall respect the rights and properties of others, including intellectual property rights, and shall not operate business or take profits while infringing on the intellectual property rights of others. Partners shall obtain and use information of other companies, including their competitors, only through legitimate means.

6. Prevention of Money Laundering and Tax Evasion

Partners shall comply with laws for the prevention of domestic and international illegal money laundering, tax evasion, and financing of terrorism and weapons of mass destruction.

7. Avoiding Conflicts of Interest

Partners shall avoid situations that may conflict with or likely to conflict with the company’s interests. Partners shall not disclose or improperly use any confidential or non-public information that they have obtained while doing business with the company.



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

ESG Policy Book

GRI Standards Index
SASB Index
Financial Statement
About POSCO International
Total Impact Measurement and Management(TIMM)
Certifications & Trademarks /Memberships
Independent Assurance Statement

Appendix

Supply Chain Policy

8. Whistleblower Program

Partners shall prepare and operate a whistleblowing program that allows workers to anonymously report unethical behavior or potential violations. Partners shall investigate any report filed and take appropriate action to address any concerns.

9. Wage

Partners shall comply with all laws related to wage including minimum wage, salary, overtime work pay and deduction from salary.

Code of Conduct

1. Risk Management and Due Diligence of Supply Chain

- We shall identify partners' failure to comply with the basic principles of this policy and resultant risks that may undermine sustainability in the supply chain and prepare a system to manage and monitor the above risks in order to minimize any negative impacts.
- When selecting a partner, we shall check whether the candidates are complying with the Partner Code of Conduct in this policy.
- When entering into contracts with a partner in the supply chain, it shall be clearly stated in the contract that the partner shall comply with this policy and ensure that the partner includes a similar clause in its contract with its own partners.
- We may identify negative impacts on human rights, the environment, and product safety in the process of managing supply chain risks. We may conduct supply chain due diligence to the extent permitted by law, as is necessary to prevent or mitigate such risks.
- Supply chain due diligence shall include identification and evaluation of actual or potential negative impacts on the supply chain, preparation and implementation of action plans to prevent/mitigate/address negative impacts, communication with stakeholders about the process and results of due diligence, and procedures through which stakeholders can express their grievance.
- We may determine the scope of the supply chain subject to due diligence at our own discretion in consideration of expected group-wide effects. Depending on the situation, the scope of due diligence may be limited to direct contractors or be expanded to include entities further up/down the supply chain.

- We may evaluate a partner's level of implementation of this policy through supply chain risk management and due diligence. Based on the evaluation results, we may request the partner to establish and implement a plan to address and mitigate negative impacts caused by the partner's business activities. Regardless of the above, if it is determined that such negative impacts is unlikely to be mitigated due to the partner's insufficient efforts, we may suspend business with the partner.

2. Co-prosperity with Partners and Establishment of Mutually Beneficial Relationship

We shall endeavor to promote fair trade based on mutual trust with its partners and create an inclusive business environment where we can coexist and grow together with its partners.

- We shall respect the rights of its partners (intellectual property rights, property rights, etc.) and endeavor to ensure fair trade with partners based on mutual respect and equality.
- We shall share achievements with partners and pursue mutual benefits. We shall further ensure smooth communication and mutual cooperation with partners so that the latter can provide high-quality products and services.
- We shall endeavor to improve payment procedures for partners and to establish a stable supply chain by providing technical and financial support. We shall also support partners to help comply with fair trade laws and regulations.
- We shall continue to expand the scope of partners subject to our co-prosperity efforts for the promotion of mutually advantageous coexistence in the business ecosystem.



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

[Appendix](#)

ESG Policy Book

GRI Standards Index

SASB Index

Financial Statement

About POSCO International

Total Impact Measurement and
Management(TIMM)

Certifications & Trademarks
/Memberships

Independent Assurance Statement

GRI Standards Index

GRI Standards	Disclosures		Page	Note
GRI 2: General Disclosures				
GRI 2: The organization and its reporting practices (2021)	2-1	Organizational details	2, 10, 17, 109	
	2-2	Entities included in the organization's sustainability reporting	2	Please refer to page 54 of the 2022 POSCO International Business Report
	2-3	Reporting period, frequency and contact point	2	
	2-4	Restatements of information	73-84	Annotations were made when deemed necessary
	2-5	External assurance	113-114	
GRI 2: Activities and workers (2021)	2-6	Activities, value chain and other business relationships	2, 7-9	
	2-7	Employees	76-77	Employees breakdown by region at the end of 2022 - Korea 1,748 persons, Asia(excluding Korea and China) 8,073 persons, China 444 persons, Europe 366 persons, North America 112 persons, Other 268 persons
	2-8	Workers who are not employees	-	Please refer to page 365 of the 2022 POSCO International Business Report
GRI 2: Governance (2021)	2-9	Governance structure and composition	15-16	
	2-10	Nomination and selection of the highest governance body	15-16	
	2-11	Chair of the highest governance body	15	
	2-12	Role of the highest governance body in overseeing the management of impacts	20-21	
	2-13	Delegation of responsibility for managing impacts	20	
	2-14	Role of the highest governance body in sustainability reporting	15	
	2-15	Conflicts of interest	-	Directors are appointed in conformity with Article 382 of the Commercial Act
	2-16	Communication of critical concerns	20-21	
	2-17	Collective knowledge of the highest governance body	-	Please refer to page 40 of the 2022 POSCO International Corporate Governance Report
	2-18	Evaluation of the performance of the highest governance body	-	Please refer to page 41 of the 2022 POSCO International Corporate Governance Report
	2-19	Remuneration policies	-	Please refer to page 365-372 of the 2022 POSCO International Business Report
	2-20	Process to determine remuneration	-	Please refer to Article 30 of Chapter 5 of the Articles of Incorporation
	2-21	Annual total compensation ratio	-	Please refer to page 365 and 367 of the 2022 POSCO International Business Report
GRI 2: Strategy, policies and practices (2021)	2-22	Statement on sustainable development strategy	4	
	2-23	Policy commitments	44, 55-56	
	2-24	Embedding policy commitments	44, 55-56	
	2-25	Processes to remediate negative impacts	40-41, 59	
	2-26	Mechanisms for seeking advice and raising concerns	59	
	2-27	Compliance with laws and regulations	-	No relevant regulatory actions taken
	2-28	Membership associations	113	
GRI 2: Stakeholder engagement (2021)	2-29	Approach to stakeholder engagement	18-19	
	2-30	Collective bargaining agreements	38, 79	



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

[Appendix](#)

ESG Policy Book

GRI Standards Index

SASB Index

Financial Statement

About POSCO International

Total Impact Measurement and
Management(TIMM)

Certifications & Trademarks
/Memberships

Independent Assurance Statement

GRI Standards Index

GRI Standards	Disclosures	Page	Note
GRI 3: Material Topics			
GRI 3: Material topics (2021)	3-1	Process to determine material topics	12
	3-2	List of material topics	13
	3-3	Management of material topics	13, 24-34, 35-37, 40-41, 43-44, 46-57, 59-60
GRI 200 Economic Standards			
GRI 201: Economic Performance (2016)	201-1	Direct economic value generated and distributed	85
	201-2	Financial implications and other risks and opportunities due to climate change	25-31
	201-3	Defined benefit plan obligations and other retirement plans	79
	201-4	Financial assistance received from government	98
GRI 203: Indirect Economic Impacts (2016)	203-1	Infrastructure investments and services supported	65-68
GRI 205: Anti-corruption (2016)	205-1	Operations assessed for risks related to corruption	59-60
	205-2	Communication and training about anti-corruption policies and procedures	55-56, 83
GRI 206: Anti-competitive Behavior (2016)	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	- No relevant regulatory actions taken
GRI 300 Environmental Standards			
GRI 301: Materials (2016)	301-2	Recycled input materials used	34
	302-1	Energy consumption within the organization	73
GRI 302: Energy (2016)	302-3	Energy intensity	73
	302-4	Reduction of energy consumption	34
GRI 303:Water and Effluents (2018)	303-2	Management of water discharge-related impacts	34
	303-3	Water withdrawal	74
	303-4	Water discharge	74
	303-5	Water consumption	74
	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	70-71
GRI 304: Biodiversity (2016)	304-3	Habitats protected or restored	70-71
	305-1	Direct (Scope 1) GHG emissions	73
GRI 305: Emissions (2016)	305-2	Energy indirect (Scope 2) GHG emissions	73
	305-4	GHG emissions intensity	73
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	74
	306-3	Waste generated	75
GRI 306: Waste (2020)	306-4	Waste diverted from disposal	75
	306-5	Waste directed to disposal	75
GRI 308: Supplier Environmental Assessment (2016)	308-2	Negative environmental impacts in the supply chain and actions taken	46-47



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

ESG Policy Book
GRI Standards Index
SASB Index
Financial Statement
About POSCO International
Total Impact Measurement and
Management(TIMM)
Certifications & Trademarks
/Memberships
Independent Assurance Statement

GRI Standards Index

GRI Standards	Disclosures	Page	Note
GRI 400 Social Standards			
GRI 401: Employment (2016)	401-1 New employee hires and employee turnover	77	
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	36-39	
	401-3 Parental leave	39, 79	
GRI 403: Occupational Health and Safety (2018)	403-1 Occupational health and safety management system	49-50	
	403-2 Hazard identification, risk assessment, and incident investigation	53	
	403-3 Occupational health services	52	
	403-4 Worker participation, consultation, and communication on occupational health and safety	51	
	403-5 Worker training on occupational health and safety	51	
	403-6 Promotion of worker health	52	
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	52-53	
GRI 404: Training and Education (2016)	403-9 Work-related injuries	81-82	
	404-1 Average hours of training per year per employee	78	Trainings are provided equally regardless of gender
	404-2 Programs for upgrading employee skills and transition assistance programs	36-37	
GRI 405: Diversity and Equal Opportunity (2016)	404-3 Percentage of employees receiving regular performance and career development reviews	78	
	405-1 Diversity of governance bodies and employees	15, 76-77, 80	
	GRI 406: Non-discrimination (2016)	406-1 Incidents of discrimination and corrective actions taken	- No incidents of discrimination
GRI 407: Freedom of Association and Collective Bargaining (2016)	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	40-41	
GRI 408: Child Labor (2016)	408-1 Operations and suppliers at significant risk for incidents of child labor	-	No such operations or suppliers
GRI 409: Forced or Compulsory Labor (2016)	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	-	No such operations or suppliers
GRI 411: Rights of Indigenous Peoples (2016)	411-1 Incidents of violations involving rights of indigenous peoples	-	No such violations
GRI 413: Local Communities (2016)	413-1 Operations with local community engagement, impact assessments, and development programs	40-41, 65-68, 70-71	
GRI 414: Supplier Social Assessment (2016)	414-1 New suppliers that were screened using social criteria	44, 46-47, 52, 95	
GRI 416: Customer Health and Safety (2016)	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	-	No relevant regulatory actions taken
GRI 418: Customer Privacy (2016)	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	-	No substantiated complaints

Other Data

Employee Data

As of December 2022, POSCO International hired a total of 11,011 employees, including 1,748 at the Headquarters in Korea and 9,263 at overseas operations. This includes employees in Energy Business Unit following the merger.

Government Grants

Government grants are recognized only when we comply with the attached conditions and are reasonably assured of receiving the grants. When such grants relate to profit, they are recognized as profit in accordance with systemic criteria over the periods that correspond to the relevant costs to be compensated through grants. When such grants are related to assets, they are recognized as deferred profit and recognized as profit at identical value each year over the durable years of the concerned assets. In 2022, the remaining balance of government grants out of POSCO International’s tangible assets(on a consolidated basis) amounted to KRW 13 million. For further details, please refer to ‘10. Tangible Assets’ on page 115 of the 2022 POSCO International Business Report.

Supply Chain

Trading business is to identify the needs of the buyer and choose the appropriate supplier to deliver products that cater to such needs. POSCO International’s supply chain covers companies who manufacture and/or produce products that meet buyer’s needs. Our supply chain may also include shipment and transportation service companies as they are the ones who deliver products to our customers. With the merger of POSCO P&S in 2017, suppliers of scraps, nickel, chrome, and steel sheets used for manufacturing have become part of our supply chain. For the year of 2022, the cost of goods purchased from our supply chain amounted to KRW 33.882403 trillion.



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

ESG Policy Book
GRI Standards Index
SASB Index
Financial Statement
About POSCO International
Total Impact Measurement and Management(TIMM)
Certifications & Trademarks /Memberships
Independent Assurance Statement

SASB Index

As we engage in wide-ranging businesses such as trading sales in addition to energy, resource development, production & processing, and infrastructure development & operation, we aim to report against multiple industry standards that correspond to our major businesses so that we increase the breath of information that we share with stakeholders. While we primarily report based on the Iron & Steel Producers Standards in the Extractives & Minerals Processing sector in accordance with the Sustainable Industry Classification System(SICS) of the SASB, we also voluntarily report on the Oil & Gas – Exploration & Production Standards in the sector as well as the Industrial Machinery & Goods Standards in the Resource Transformation sector. As to the Oil & Gas – Exploration & Production Standards, we have set the scope of reporting as the Shwe Project of which development has been completed and which is currently under operation. As to accounting metrics, we added metrics for which reporting is available in this year’s report following our merger, from the Electric Utilities & Power Generators Standards in the Infrastructure Sector that is associated with energy business.

Iron & Steel Producers/Industrial Machinery & Goods/Electric Utilities & Power Generators Accounting Metric

The reporting scope of 2022 includes POSCO International’s Headquarters and domestic operations as well as our wholly owned subsidiary POSCO Mobility Solution. We plan to extend this scope to include overseas subsidiaries to report on a consolidated basis. The reporting scope of POSCO International’s Headquarters and domestic operations includes the 2022 data of our energy division.

Greenhouse Gas Emissions & Energy Resource Planning

Code	Metric	Reference
EM-IS-110a.1/ IF-EU-110a.1	SGross global Scope 1 emissions, percentage covered under emissions-limiting regulations ¹⁾	p.73, p.33, 100%
EM-IS-110a.2	Greenhouse gas (GHG) emissions associated with power deliveries	4,151,754tCO ₂ eq. ²⁾
EM-IS-110a.2/ EM-EP-110a.3	Discussion of long- and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	p.32 Net Zero Commitment
IF-EU-110a.4	Percentage fulfillment of Renewable Portfolio Standard(RPS) target	p.26, 100%

1) POSCO International has been subject the allowance allocation scheme under the GHG Emissions Trading System since January 1, 2023 following our merger with POSCO Energy.
2) Scope 1 + 2 emissions from the Incheon LNG Combined Cycle Power Plant.

Air Emissions

Code	Metric	Reference
EM-IS-120a.1/ EM-EP-120a.1/ IF-EU-120a.1	Air emissions of the following pollutants: (1) NOx (excluding N2O) (2) SOx (3) Particulate matter (PM10)	p.74 We report on NOx, SOx, and PM considering our inherent business characteristics.

Energy Management

Code	Metric	Reference
EM-IS-130a.1/ RT-IG-130a.1	(1) Total energy consumed (2) Percentage grid electricity (3) Percentage renewable	(1) p.73 (2) POSCO International- 1.5% POSCO Mobility Solution- 69.5% (3) 0%
EM-IS-130a.2	(1) Total fuel consumed (2) Percentage coal (3) Percentage natural gas (4) Percentage renewable	(1) p.73 (2) 0% (3) POSCO International- 98.3% POSCO Mobility Solution- 69.5% (4) 0%

Water Management

Code	Metric	Reference
EM-IS-140a.1/ IF-EU-140a.1	(1) Total water withdrawn (2) Total water consumed (3) Percentage of each in regions with High or Extremely High Baseline Water Stress	(1) p.74 (2) p.74 (3) p.74
IF-EU-140a.2	Number of incidents of non-compliance associated with water quality permits, standards and regulations	No such incidents



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

ESG Policy Book
GRI Standards Index
SASB Index
Financial Statement
About POSCO International
Total Impact Measurement and Management(TIMM)
Certifications & Trademarks /Memberships
Independent Assurance Statement

SASB Index

Waste Management

Code	Metric	Reference
EM-IS-150a.1	(1) Amount of waste generated	(1) p.75
	(2) Percentage hazardous	(2) p.75, 0%
	(3) Percentage recycled	(3) p.75, POSCO International 79% POSCO Mobility Solution 87%

Workforce Health & Safety

Code	Metric	Reference
EM-IS-320a.1/ RT-IG-320a.1/ IF-EU-320a.1	For full-time employees and contract employees, (1) Total recordable incident rate (TRIR) (2) Fatality rate (3) Near miss frequency rate (NMFR)	(1) p.81 (2) p.82 (3) p.82

Supply Chain Management

Code	Metric	Reference
EM-IS-430a.1	Discussion of the process for managing iron ore or coking coal sourcing risks arising from environmental and social issues	p.47, 93 Responsible minerals management process and policy
RT-IG-440a.1	Description of the management of risks associated with the use of critical materials	p.47

Activity Metrics

Code	Metric	Reference
EM-IS-000.A	Raw steel production, percentage from: (1) basic oxygen furnace processes, (2) electric arc furnace processes	As a globally integrated corporation, POSCO International does not own any mines nor directly produce steel, but engages in the processing and sales of steel, which means our business does not correspond to the activity metrics of the EMIS Industry Standards.
EM-EP-000.B	Total iron ore production	
EM-IS-000.C	Total coking coal production	
RT-IG-000.A	Number of units produced by product category	p.8, Production from the key operations of POSCO Mobility Solution
RT-IG-000.B	Number of employees	p.76

Oil & Gas-Exploration & Production Industry

Accounting Metric

We report on the Shwe Project operated by our Energy Business Unit at the Headquarters in accordance with the Oil & Gas Standards. The reporting period for such data spans from January 1 to December 31 of 2022.

GHG Emission

Code	Metric	Reference
EM-EP-110a.1	(1) Gross global Scope 1 emissions,	(1) 272,054.30 tCO ₂ e
	(2) Percentage methane	(2) 2.2%
	(3) Percentage covered under emissions-limiting regulations	(3) Not applicable
EM-EP-110a.2	Amount of gross global Scope 1 emissions from:	
	(1) Flared hydrocarbons	(1) 2,112.22 tCO ₂ e
	(2) Other combustion	(2) 60,946.81 tCO ₂ e
	(3) Process emissions	(3) Not applicable
	(4) Other vented emissions	(4) 85.54 tCO ₂ e
	(5) Fugitive emissions	(5) 31,874.31 tCO ₂ e
EM-EP-110a.3	Discussion of long- and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	p.32 Net Zero Commitment

Air Quality

Code	Metric	Reference
EM-EP-120a.1	Air emissions of the following pollutants: (1) NOx (excluding N2O)	(1) NOx: 267.26 ton
	(2) SOx	(2) SOx: 0.72 ton
	(3) Volatile organic compounds (VOCs)	(3) VOCs: -
	(4) Particulate matter (PM10)	(4) PM10: 8.22 ton



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

ESG Policy Book
GRI Standards Index
SASB Index
Financial Statement
About POSCO International
Total Impact Measurement and Management(TIMM)
Certifications & Trademarks /Memberships
Independent Assurance Statement

SASB Index

Water Management

Code	Metric	Reference
EM-EP-140a.1	(1) Total water withdrawn	34.00(Unit: 1,000m ³)
	(2) Total water consumed	34.10(Unit: 1,000m ³)
	(3) Percentage of each in regions with High or Extremely High Baseline Water Stress	Not applicable
EM-EP-140a.2	Volume of produced water and flowback generated; percentage	
	(1) Discharged	(1) 29.50(Unit: 1,000m ³) (2) Not applicable
	(2) Injected	(3) Not applicable
	(3) Recycled	(4) Not reported
	(4) Hydrocarbon content in discharged water	

Workforce Health & Safety

Code	Metric	Reference
EM-EP-320a.1	For full-time employees, contract employees, and short-service employees,	(1) p.81
	(1) Total recordable incident rate (TRIR)	(2) p.82
	(2) Fatality rate	(3) p.82, 4.25
	(3) Near miss frequency rate (NMFR)	(4) Emergency evacuation and scenario drills were conducted on 111 occasions, with each occasion counting as one hour.
	(4) Average hours of health, safety, and emergency response training	
EM-EP-320a.2	Discussion of management systems used to integrate a culture of safety throughout the exploration and production lifecycle	p.49-53

Biodiversity Impacts

Code	Metric	Reference
EM-EP-160a.1	Description of environmental management policies and practices for active sites	p. 33 Environmental Impact Monitoring for the Shwe Project
EM-EP-160a.2	Number and aggregate volume of hydrocarbon spills, volume in Arctic, volume impacting shorelines with ESI rankings 8-10, and volume recovered	Do not report on this metric as the Company does not conduct business in Artic locations or shoreline locations ranked high in the ESI
EM-EP-160a.3	Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat	Not applicable



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

ESG Policy Book
GRI Standards Index
SASB Index
Financial Statement
About POSCO International
Total Impact Measurement and
Management(TIMM)
Certifications & Trademarks
/Memberships
Independent Assurance Statement

SASB Index

Security, Human Rights & Rights of Indigenous peoples

Code	Metric	Reference
EM-EP-210a.1	Percentage of (1) proved and (2) probable reserves in or near areas of conflict	Not applicable
EM-EP-210a.2	Percentage of (1) proved and (2) probable reserves in or near indigenous land	Not applicable
EM-EP-210a.3	Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict	ESG Controversies https://www.poscointl.com/eng/esg/controversies.do

Community Relations

Code	Metric	Reference
EM-EP-210b.1	Discussion of process to manage risks and opportunities associated with community rights and interests	Environmental and Social Impact Assessment (ESIA) Report for Shwe Project https://www.poscointl.com/eng/esg/myanmarReport.do
EM-EP-210b.2	Number and duration of non-technical delays	Not applicable

Business Ethics & Transparency

Code	Metric	Reference
EM-EP-510a.1	Percentage of (1) proved and (2) probable reserves in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	Not applicable
EM-EP-510a.2	Description of the management system for prevention of corruption and bribery throughout the value chain	p.47, p.55

Management of the Legal & Regulatory Environment

Code	Metric	Reference
EM-EP-530a.1	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	p.69

Critical Incident Risk Management

Code	Metric	Reference
EM-EP-540a.1	Process Safety Event (PSE) rates for Loss of Primary Containment (LOPC ¹⁾) of greater consequence (Tier 1 ²⁾)	0 %
EM-EP-540a.2	Description of management systems used to identify and mitigate catastrophic and tail-end risks	p.49-53

- 1) LOPC(Loss of Primary Containment): An unplanned or uncontrolled release of materials from primary containment, including non-toxic and non-flammable materials(e.g., steam, hot condensate, nitrogen, compressed CO2 or compressed air)
- 2) Tier 1: LTI(Lost Time Injuries) caused by process leak events, fire/explosion damages of USD 100,000 or more, flammable/ toxic materials leaked above the Tier-1 threshold

Activity Metrics

Code	Metric	Reference
EM-EP-000.A	Production of natural gas	267.76 MMscf/day
EM-EP-000.B	Number of offshore sites	1
EM-EP-000.C	Number of terrestrial sites	0



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

ESG Policy Book
GRI Standards Index
SASB Index

Financial Statement

About POSCO International
Total Impact Measurement and
Management(TIMM)
Certifications & Trademarks
/Memberships
Independent Assurance Statement

Financial Statement

Consolidated Statement of Financial Position

FY 2022 : as of Dec. 31, 2022
FY 2021 : as of Dec. 31, 2021
FY 2020 : as of Dec. 31, 2020

(Unit: KRW 1,000)

	FY 2022	FY 2021	FY 2020
Assets			
Current assets	7,319,472,229	7,155,183,542	4,764,575,099
Cash and cash equivalents	1,297,706,346	521,159,587	679,304,336
Trade and other receivables, net	3,777,380,393	4,358,489,049	2,894,352,121
Other current financial assets	228,380,197	80,977,785	18,708,121
Derivative financial assets	52,832,322	61,539,209	113,410,566
Other current assets	204,934,361	228,838,961	129,394,050
Inventories, net	1,758,238,610	1,904,178,951	929,405,905
Non-current assets	5,196,864,702	3,615,550,605	3,563,463,637
Trade and other receivables, net	111,976,441	144,645,619	230,798,203
Other non-current financial assets	49,624,788	64,483,565	29,538,903
Long-term derivative financial assets	1,172,439		
Investments in associates	434,167,408	359,633,958	342,795,420
Property, plant and equipment, net	1,560,751,963	1,353,149,166	1,325,419,228
Right-of-use assets, net	259,358,305	91,180,173	91,592,421
Intangible assets, net	2,236,253,436	1,189,368,831	1,129,384,946
Investment properties, net	140,148,627	142,991,276	147,593,929
Net defined benefit assets	45,215,440	9,052,353	
Other non-current assets	3,026,549	1,459,342	65,331
Deferred tax assets	348,405,776	254,864,747	264,796,301
Current tax assets	6,763,530	4,721,575	1,478,955
Total assets	12,516,336,931	10,770,734,147	8,328,038,736



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

ESG Policy Book
GRI Standards Index
SASB Index

Financial Statement

About POSCO International
Total Impact Measurement and
Management(TIMM)
Certifications & Trademarks
/Memberships
Independent Assurance Statement

Financial Statement

Consolidated Statement of Financial Position

FY 2022 : as of Dec. 31, 2022

FY 2021 : as of Dec. 31, 2021

FY 2020 : as of Dec. 31, 2020

(Unit: KRW 1,000)

	FY 2022	FY 2021	FY 2020
Liabilities			
Current liabilities	5,487,439,570	5,669,339,170	3,397,363,219
Trade and other payables	2,646,663,164	2,913,929,277	1,774,106,704
Borrowings	1,998,369,619	1,894,385,381	796,037,935
Current portion of bonds	399,841,387	408,876,623	417,041,988
Derivative financial liabilities	57,587,283	76,303,460	90,254,613
Current provisions	33,208,369	24,342,911	13,082,742
Other current liabilities	248,904,478	261,808,955	213,755,045
Current tax liabilities	102,865,270	89,692,563	93,084,192
Non-current liabilities	2,630,770,283	1,589,255,049	1,769,801,784
Trade and other payables	252,026,447	105,154,517	176,540,718
Borrowings	792,556,467	246,111,217	379,347,256
Bonds	1,363,593,350	1,143,577,708	1,107,419,955
Long-term derivative financial liabilities	2,116,681		
Other non-current liabilities	95,542,128	1,537,757	703,693
Net defined benefit liabilities	7,902,603	5,410,822	11,254,205
Provisions	95,955,862	64,032,944	72,307,753
Deferred tax liabilities	21,076,745	23,430,084	22,228,204
Total liabilities	8,118,209,853	7,258,594,219	5,167,165,003
Equity			
Equity attributable to owners of the parent	3,982,863,469	3,486,401,390	3,158,096,077
Issued capital	616,875,745	616,875,745	616,875,745
Capital surplus	540,526,820	558,241,696	558,027,142
Other components of equity	382,492	(7,762)	(7,762)
Accumulated other comprehensive income	16,973,734	18,775,100	(25,032,286)
Retained earnings	2,808,104,678	2,292,516,611	2,008,233,238
Equity attributable to equity holders of the parent	415,263,609	25,738,538	2,777,656
Total equity	4,398,127,078	3,512,139,928	3,160,873,733
Total liabilities and equity	12,516,336,931	10,770,734,147	8,328,038,736



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

ESG Policy Book

GRI Standards Index

SASB Index

Financial Statement

About POSCO International

Total Impact Measurement and
Management(TIMM)

Certifications & Trademarks
/Memberships

Independent Assurance Statement

Financial Statement

Consolidated Statement of Comprehensive Income

FY 2022 :
From January 1 to December 31 of 2022

FY 2021 :
From January 1 to December 31 of 2021

2021FY 2020 :
From January 1 to December 31 of 2020

(Unit: KRW 1,000)

	FY 2022	FY 2021	FY 2020
Sales	37,989,588,330	33,948,864,785	21,472,386,358
Cost of sales	36,421,950,442	32,814,145,555	20,547,321,165
Gross profit	1,567,637,888	1,134,719,230	925,065,193
Selling and administrative expenses	665,130,879	549,333,423	450,586,904
Operating profit	902,507,009	585,385,807	474,478,289
Share of profit in associates	77,679,876	69,361,497	58,989,188
Share of loss in associates	2,767,249	9,263,819	40,191,213
Financial income	2,405,334,622	1,243,727,111	1,176,348,953
Financial costs	2,572,002,827	1,319,081,694	1,260,551,660
Other income	19,002,305	86,047,547	17,592,608
Other expenses	87,607,152	167,476,083	99,496,937
Profit for the year before tax	742,146,584	488,700,366	327,169,228
Income tax expenses	137,234,204	132,212,404	97,645,019
Profit for the year	604,912,380	356,487,962	229,524,209
Other comprehensive income (loss):	(6,690,339)	51,965,768	(40,668,808)
Other comprehensive income (loss) to be reclassified to profit or loss in subsequent periods:	6,501,733	51,555,289	(32,189,151)
Equity adjustments in equity method	15,572,510	13,628,538	(7,798,608)
Loss on equity adjustments in equity method	524,549	2,869,208	(1,534,133)
Exchange difference on translation of foreign operations	(10,414,437)	34,944,955	(22,771,969)
Gain on valuation of derivatives	819,111	112,588	(84,441)
Other comprehensive income (loss) not to be reclassified to profit or loss in subsequent periods:	(13,192,072)	410,479	(8,479,657)
Gain on valuation of equity instruments at FVOCI	2,093,152	27,716	(6,041,661)
Equity adjustments in equity method	(3,168,133)	(8,511,682)	(3,224,674)
Re-measurement loss on defined benefit liabilities	17,759,863	8,913,085	(551,064)
Exchange differences on translation of foreign operations	(29,876,954)	(18,640)	1,337,742
Total comprehensive income for the year, net of tax	598,222,041	408,453,730	188,855,401
Profit for the year attributable to:			
Owners of the parent	589,749,886	360,789,119	238,556,764
Non-controlling interests	15,162,494	(4,301,157)	(9,032,555)
Total comprehensive income attributable to:			
Owners of the parent	612,486,614	412,758,252	196,462,436
Non-controlling interests	(14,264,573)	(4,304,522)	(7,607,035)
Earnings per share:			
Basic earnings(loss) per share(unit: KRW)	4,780	2,924	1,934
Basic earnings(loss) per share for income from continuing operation(unit: KRW)	4,780	2,924	1,934
Diluted earnings(loss) per share(unit: KRW)	4,780	2,924	1,934
Diluted earnings(loss) per share for income from continuing operation(unit: KRW)	4,780	2,924	1,934



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

ESG Policy Book

GRI Standards Index

SASB Index

Financial Statement

About POSCO International

Total Impact Measurement and
Management(TIMM)

Certifications & Trademarks
/Memberships

Independent Assurance Statement

Financial Statement

(Unit: KRW 1,000)

Statement of Financial Position

FY 2022 : as of Dec. 31, 2022

FY 2021 : as of Dec. 31, 2021

FY 2020 : as of Dec. 31, 2020

	FY 2022	FY 2021	FY 2020
Assets			
Current assets	5,235,843,158	5,938,546,200	3,925,547,955
Cash and cash equivalents	806,960,006	286,335,171	495,509,424
Trade and other receivables, net	3,589,726,265	4,605,186,508	2,800,559,212
Other current financial assets	158,150,683	32,611,691	
Derivative financial assets	52,105,381	61,491,510	113,384,542
Other current assets	151,102,757	146,819,220	97,201,111
Inventories, net	477,798,066	806,102,100	418,893,666
Non-current assets	3,954,898,061	3,205,968,394	3,280,402,945
Trade and other receivables, net	224,997,531	155,415,858	262,956,981
Other non-current financial assets	43,057,200	58,063,668	24,663,274
Investments in associates	1,679,976,918	1,109,110,438	1,184,986,310
Property, plant and equipment, net	256,397,096	266,412,095	272,111,459
Right-of-use assets, net	16,265,379	31,117,785	40,279,695
Intangible assets, net	1,211,897,692	1,119,606,278	1,040,537,093
Investment properties, net	140,148,627	142,991,276	147,593,929
Net defined benefit assets	32,452,828	7,678,232	
Deferred tax assets	342,941,260	310,851,189	305,795,249
Current tax assets	6,763,530	4,721,575	1,478,955
Total assets	9,190,741,219	9,144,514,594	7,205,950,900



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

ESG Policy Book
GRI Standards Index
SASB Index
Financial Statement
About POSCO International
Total Impact Measurement and
Management(TIMM)
Certifications & Trademarks
/Memberships
Independent Assurance Statement

Financial Statement

Statement of Financial Position

FY 2022 : as of Dec. 31, 2022
FY 2021 : as of Dec. 31, 2021
FY 2020 : as of Dec. 31, 2020

(Unit: KRW 1,000)

	FY 2022	FY 2021	FY 2020
Liabilities			
Current liabilities	3,830,745,057	4,585,521,958	2,646,442,369
Trade and other payables	2,057,317,321	2,553,885,475	1,545,377,674
Borrowings	1,109,985,529	1,300,579,557	347,566,270
Current portion of bonds	399,841,387	408,876,623	417,041,988
Derivative financial liabilities	54,818,566	75,724,743	90,144,661
Current provisions	28,765,199	21,595,709	10,649,615
Other current liabilities	140,092,793	179,741,355	153,992,120
Current tax liabilities	39,924,262	45,118,496	81,670,041
Non-current liabilities	2,010,596,256	1,416,241,048	1,537,795,079
Trade and other payables	31,670,132	64,182,834	138,148,709
Borrowings	508,552,582	145,721,117	218,847,713
Bonds	1,363,593,350	1,143,577,708	1,107,419,955
Other non-current liabilities	38,847,328	1,537,757	703,694
Net defined benefit liabilities			2,735,075
Long-term derivative financial liabilities	2,116,681		
Provisions	65,816,183	61,221,632	69,939,933
Total liabilities	5,841,341,313	6,001,763,006	4,184,237,448
Equity			
Issued capital	616,875,745	616,875,745	616,875,745
Capital surplus	544,002,741	544,002,741	544,002,741
Other components of equity	384,139	(6,115)	(6,115)
Accumulated other comprehensive income	(13,106,651)	(8,380,422)	(7,110,068)
Retained earnings	2,201,243,932	1,990,259,639	1,867,951,149
Total equity	3,349,399,906	3,142,751,588	3,021,713,452
Total liabilities and equity	9,190,741,219	9,144,514,594	7,205,950,900



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

[Appendix](#)

ESG Policy Book
GRI Standards Index
SASB Index
Financial Statement
About POSCO International
Total Impact Measurement and
Management(TIMM)
Certifications & Trademarks
/Memberships
Independent Assurance Statement

Financial Statement

Statement of Comprehensive Income

FY 2022 :
From January 1 to December 31 of 2022

FY 2021 :
From January 1 to December 31 of 2021

2021FY 2020 :
From January 1 to December 31 of 2020

(Unit: KRW 1,000)

	FY 2022	FY 2021	FY 2020
Sales	32,566,135,142	30,527,682,713	19,224,845,261
Cost of sales	31,587,436,956	29,748,120,055	18,457,485,547
Gross profit	978,698,186	779,562,658	767,359,714
Selling and administrative expenses	474,048,371	413,999,007	342,806,208
Operating profit	504,649,815	365,563,651	424,553,506
Financial income	2,380,046,350	1,227,565,013	1,182,984,339
Financial costs	2,407,278,011	1,231,574,460	1,158,167,974
Other income	15,985,866	83,230,212	10,661,057
Other expenses	99,274,025	169,147,026	175,061,834
Profit for the year before tax	394,129,995	275,637,390	284,969,094
Income tax expenses	104,657,625	74,406,889	80,993,703
Profit for the year	289,472,370	201,230,501	203,975,391
Other comprehensive income (loss):	15,485,606	6,170,059	(5,018,703)
Other comprehensive income (loss) not to be reclassified to profit or loss in subsequent periods:	15,485,606	6,170,059	(5,018,703)
Gain on valuation of equity instruments at FVOCI	2,093,152	(1,227,878)	(6,041,660)
Re-measurement gain(loss) on defined benefit liabilities	13,392,454	7,397,937	1,022,957
Total comprehensive income for the year, net of tax	304,957,976	207,400,560	198,956,688
Earnings per share			
Basic earnings(loss) per share(unit: KRW)	2,346	1,631	1,653
Basic earnings(loss) per share for income from continuing operation(unit: KRW)	2,346	1,631	1,653
Diluted earnings(loss) per share(unit: KRW)	2,346	1,631	1,653
Diluted earnings(loss) per share for income from continuing operation(unit: KRW)	2,346	1,631	1,653



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

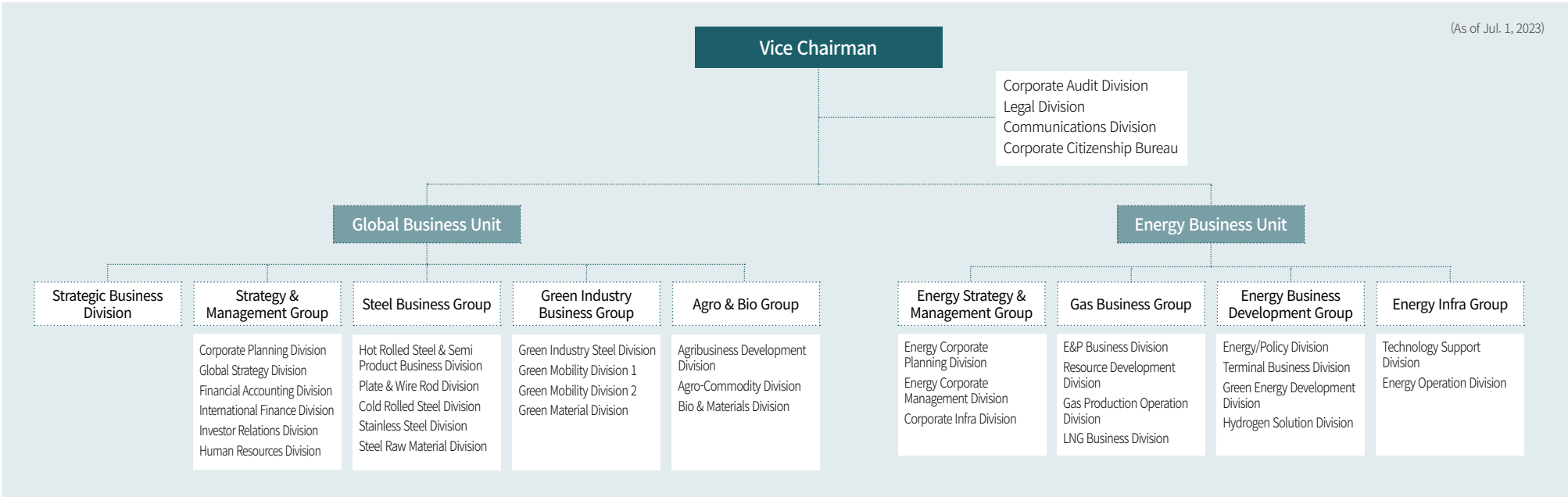
Appendix

ESG Policy Book
GRI Standards Index
SASB Index
Financial Statement
About POSCO International
Total Impact Measurement and Management(TIMM)
Certifications & Trademarks /Memberships
Independent Assurance Statement

About POSCO International

Organizational Chart

POSCO International’s operations are anchored on Corporate Audit, Legal, and Communications Division as well as the Corporate Citizenship Bureau that are all under the direct leadership of the Vice Chairman, along with two business units(Global Business Unit, Energy Business Unit). Global Business Unit and Energy Business Unit each consist of one management group and three sales and business operation groups.



Key Milestones

2023	Jan.	Merged with POSCO Energy	2020	Feb.	Discovered new deep-water gas reserves in Block A-3, offshore Myanmar	2016	Jan.	Became a member of the Federation of Oils, Seeds and Fats Association (FOSFA)
2022	Jan.	Achieved ISO 45001 as the first Korean trading company		Mar.	Became the first Korean business to announce the sustainable palm oil business policy (NDPE policy)		Mar.	Changed the company name to POSCO DAEWOO
	Mar.	Acquired Senex Energy of Australia		Apr.	Split off POSCO SPS as a subsidiary	2015	Jul.	Became a member of the Grain and Feed Trade Association (GAFTA) in London, the UK
	Apr.	Incorporated eSteel4U as an online steel product sales company		Oct.	Received the Grand Prize in the Best ESG Companies category by the Korea Corporate Governance Service for 2 consecutive years	2014	Sep.	Achieved the highest level of AAA under the Strategic Materials Trader Compliance Program
2021	Mar.	Recognized for excellence in the anti-corruption area by the UN Global Compact	2019	Mar.	Changed the company name to POSCO INTERNATIONAL	2013	Jun.	Initiated production under the Shwe Project in Myanmar
	Sep.	Achieved Roundtable on Sustainable Palm Oil(RSPO)		May	Completed Factory 2 of the Rice Processing Complex in Myanmar	2011	Sep.	Launched palm oil plantation business in Indonesia
	Nov.	Signed a Production Sharing Contract(PSC) for a Malaysian offshore block		Sep.	Completed a grain terminal in Ukraine	2010	Nov.	Incorporated into POSCO Group
	Dec.	Rated AA under the Fair Trade Compliance Program	2017	Mar.	Launched POSCO DAEWOO as a consolidated company (merger with POSCO P&S)			



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

ESG Policy Book
GRI Standards Index
SASB Index
Financial Statement
About POSCO International
Total Impact Measurement and Management(TIMM)
Certifications & Trademarks /Memberships
Independent Assurance Statement

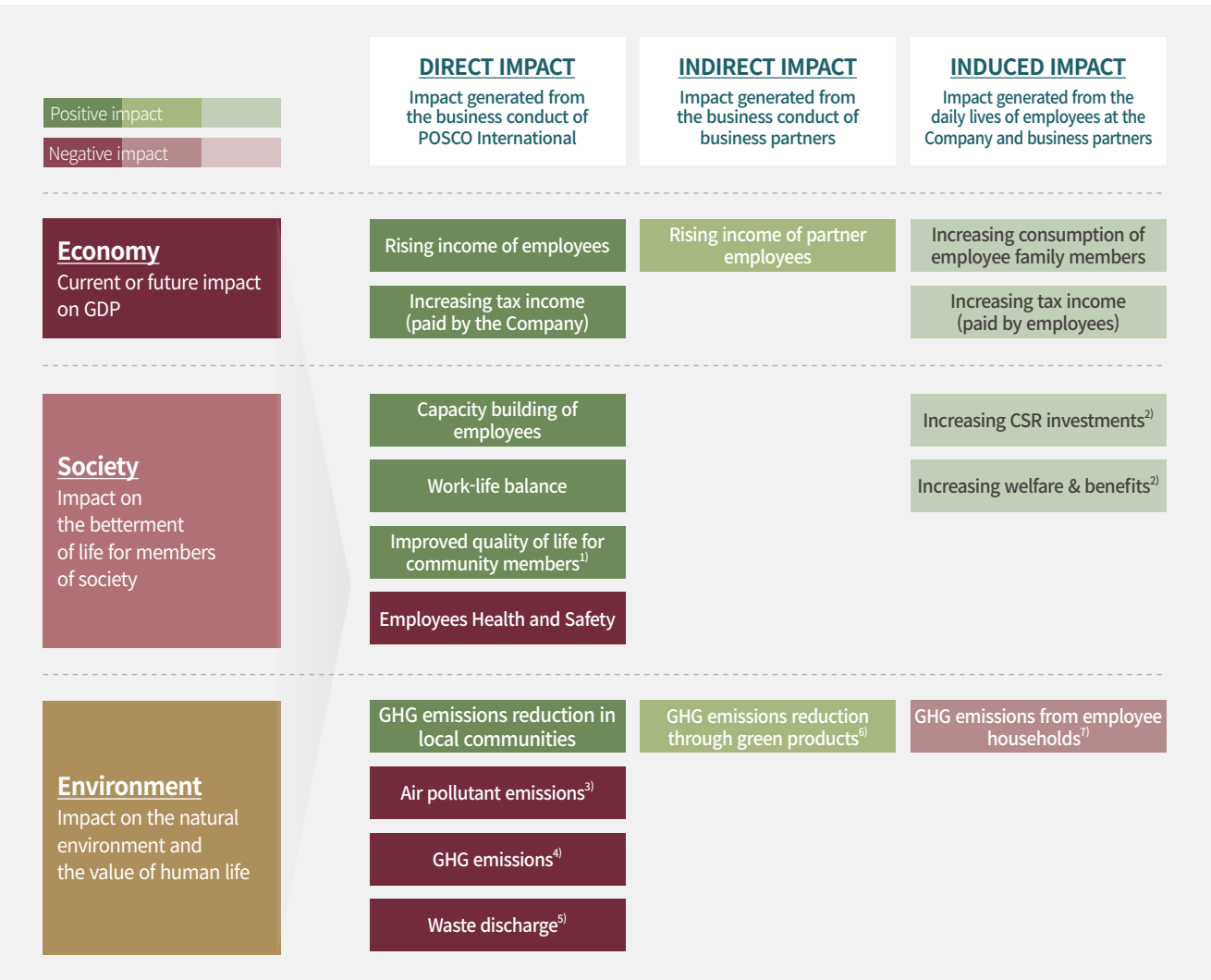
Total Impact Measurement and Management(TIMM)

As a corporate citizen, POSCO International endeavors to recognize its positive or negative social and environmental impact in addition to attaining its business goals, and to consider such impact in its business conduct and decision-making process. We adopted PwC’s Total Impact Measurement and Management(TIMM) methodology to evaluate the impact generated from our financial and non-financial performance during the year 2022.

Impact Measurement Framework

‘Impact’ refers to either positive or negative change brought to a company or society as a result of performance(outcomes, corporate or social change concerning activities). Impact assessments are conducted either on business outcomes from the company-wide perspective or outcomes of a single program in the case of such specific areas as CSR. To perform such impact assessments, we used the disclosures published by the Company based on applicable laws and regulations, statistics from governmental/international organizations, and domestic/overseas research findings. Relevant evidence was separately presented in detail to ensure the credibility and objectivity of the assessment process and its results. POSCO International will strive to evaluate its social impact in a more refined manner to consider such impact in its entire business conduct and decision-making process.

- 1) Myanmar Stoves Campaign VPA 002 Monitoring Report, February 2018
- 2) Inter-industry Relations Table, Bank of Korea(2019)
- 3) W. Kip Viscusi and Clayton J. Masterman, 2017, “Income Elasticities and Global Values of a Statistical Life”, 『J. Benefit Cost Anal.』, 8(2):226-250 / PwC methodology document, Valuing corporate environmental impacts(2015) / National Air Emission Inventory and Research Center, Ministry of Environment(2019) / OECD Environmental Performance Reviews: Korea 2017
- 4) PwC methodology document, Valuing corporate environmental impacts(2015) / ETS Market Information Platform, KRX
- 5) W. Kip Viscusi and Clayton J. Masterman, 2017, “Income Elasticities and Global Values of a Statistical Life”, 『J. Benefit Cost Anal.』, 8(2):226-250 / PwC methodology document, Valuing corporate environmental impacts(2015)
- 6) CO2 Emissions From cars, Korea Energy Agency / Automobile Registration Status Report, Ministry of Land, Infrastructure, and Transport(2020) / Automobile Mileage Statistics, Korea Transportation Safety Authority(2020)
- 7) Air Emissions in the Household Sector(GHG, 2015), Korean Statistical Information Service





At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

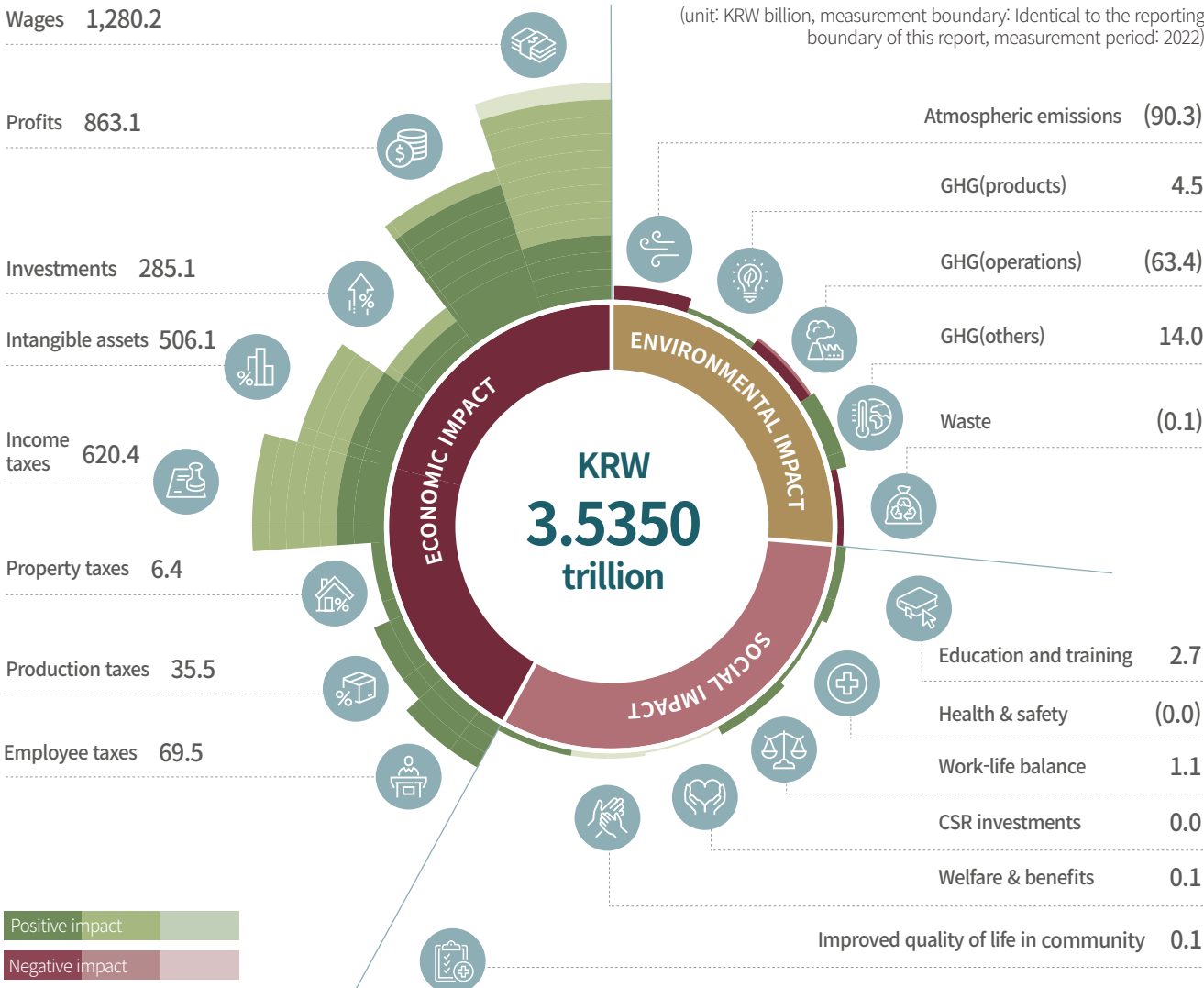
ESG Policy Book
GRI Standards Index
SASB Index
Financial Statement
About POSCO International
Total Impact Measurement and Management(TIMM)
Certifications & Trademarks /Memberships
Independent Assurance Statement

Total Impact Measurement and Management(TIMM)

Impact Measurement Results in 2022

In 2022, POSCO International's impact measurement under the TIMM framework was performed on our financial and non-financial performance of Energy Business Unit Unit as well as Global Business Unit. To start, the value of economic impact rose in general as the merger resulted in our quantitative growth. A greater portion of this growth, however, came from the payment of corporate income taxes and other income taxes as well as wage increases for our employees and partner employees in Global Business Unit in 2022, rather than from the merger itself.

Meanwhile, our overseas healthcare CSR initiative that was resumed in 2021 was excluded from the scope of measurement as it was not implemented in 2022. In 2022, we expanded our global CSR programs including education-related ones to continue with our CSR efforts in various ways. Plant operation in Energy Business Unit and other facilities emitting large quantities of GHG resulted in a significant increase in our air pollutant and GHG emissions, mitigating our positive environmental impact in the process.





At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

ESG Policy Book
GRI Standards Index
SASB Index
Financial Statement
About POSCO International
Total Impact Measurement and
Management(TIMM)
**Certifications & Trademarks
/Memberships**
Independent Assurance Statement

Certifications & Trademarks

HQ	• Authorized Economic Operator(AEO) • Compliance Program(CP) of Strategic Export • Approved Exporter Certification • ISO 14001 • ISO 9001 • ISO 45001 • ISO 27001	• ISMS Certification • GMP Plus B3 Feed Safety Assurance • GRS, RCS • GAFTA(Arbitration) • LEED Green Building Certification • Family-Friendly Certification • Compliance Program(CP) AA Rating
	Shwe Project in Myanmar	• ISO 14001 • ISO 45001
Overseas Worksite	PT.BIA in Indonesia	• ISPO Certification • ISO 45001 • RSPO Certification
	POSCO International Textile in Uzbekistan	• OEKO-TEX STANDARD 100(cotton yarn/cotton fabric) • GRS • RCS
	POSCO TMC INDIA	• ISO 14001 • IATF 16949 • ISO 9001
	SUZHOU POSCO-CORE TECHNOLOGY	• ISO 14001 • IATF 16949 • ISO 9001
	MMW Grain Terminal in Ukraine	• GAFTA(Approved Analysts) • ISO 22000
POSCO Mobility Solution	• ISO 9001 • ISO 14001 • ISO 45001 • IATF 16949 • KOSHA-MS	• BIS • JIS • KS • PED/AD 2000 • RS (Russian Maritime Register of Shipping) • RINA(Registro Italiano Navale) • KR(Korean Register of Shipping) • Steel Structure Manufacturer Certification

Trademarks

Since 1974, more than 3,500 applications and registrations have been made on our DAEWOO trademark across 160 countries. The trademark is used by the Company and its overseas corporations in Korea and abroad across the electronics, automotive components, machinery, construction and transportation industries, and its distinctive value is highly recognized in Asia, Latin America, the Middle East, and CIS countries. We continue to maintain and manage our trademark rights through application and registration, and operate a monitoring system that connects experts across the globe to safeguard our trademark.

	- Trademark application made in 1974 - Nearly 3,500 trademark applications and registrations made across 160 countries - Trademark management policy and committee under operation		
--	--	--	--

Memberships

No.	Organization	Year of Membership	No.	Organization	Year of Membership
1	Korea International Trade Association(KITA)	1967	14	Korea Enterprises Federation(KEF)	2016
2	Korea Importers Association(KOIMA)	1971	15	Federation of Oils, Seeds and Fats Association(FOSFA)	2016
3	Korea Electric Association(KEA)	1971	16	International Gas Union(IGU)	2018
4	Korea Defense Industry Association(KDIA)	1978	17	Korea Iron & Steel Association(KOSA)	2018
5	Korea Chamber of Commerce & Industry (KCCI Seoul, KCCI Incheon)	1994	18	UN Global Compact	2019
6	Korea Automobile Manufacturers Association(KAMA)	2007	19	DHI Consortium	2019
7	Energy & Mineral Resources Development Association of Korea(EMRD)	2008	20	Sustainability Management Research Society, Korean Standards Association	2019
8	Independent Power Producer Association(IPPA)	2010	21	Private LNG Industry Association	2021
9	The Korea Gas Union(KGU)	2012	22	Energy Alliance	2021
10	Korea Overseas Agro-Resources-Development Association(Korea OADS)	2012	23	Korea Business Council for Sustainable Development(KBCSD)	2021
11	Korea New and Renewable Energy Association(KNREA)	2012	24	Future Leaders Forum	2021
12	The Korea Gas Union(KGU)	2012	25	Energy Future Forum	2021
13	GAFTA	2015	26	Federation of Middle Market Enterprises of Korea	2021
			27	K-CCUS Association	2022

Contributors to This Report

We would like to extend our deepest gratitude for all employees who have contributed to the preparation of 2022 Sustainability Report through their proactive support and continued interest.

CEO Division	
Corporate Audit Division, Legal Division, Communications Division, Corporate Citizenship Bureau	
Global Business Unit	
Strategy & Management Group	Corporate Strategy Department, Investment Strategy & Planning Department, Global Planning Department, Investment Management Department, Trade & Invest Accounting Department, Enterprise Risk Management Department, Human Resources Department, Human Relations Department, Corporate Culture & Innovation Department, Administration Support Department
Steel Business 1 Group	Steel Business Strategy 1 Department
Steel Business 2 Group	Steel Business Strategy 2 Department
Agro & Industrial Materials Group	Agro & Industrial Materials Strategy Department, Agro-Resources Development 2 Department
Energy Business Unit	
Energy Strategy & Management Group	Safety & Health Department, Carbon Neutrality TF, Energy Corporate Strategy Department, Energy Finance & Accounting Department, Energy Investment Management Department, Energy Human Resources & Administration Department, Energy Corporate Culture Department, Information Security Department
Gas Business Group	CCS Commercialization, Business Management Department, Gas Production Operation Division
Energy Business Development Group	Power Trading Department, Green Energy, Development Division, Hydrogen Solution Division
Energy Infra Group	Technology Support Department, Administration Support Department, LNG Terminal Department, Incheon Safety Section, Gwangyang Safety Section
Overseas Operations	Group affiliates
PT.BIA in Indonesia, POSCO International Textile in Uzbekistan	POSCO Mobility Solution, POSCO WIDE



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

ESG Policy Book
GRI Standards Index
SASB Index
Financial Statement
About POSCO International
Total Impact Measurement and Management(TIMM)
Certifications & Trademarks /Memberships
Independent Assurance Statement

Appendix

Independent Assurance Statement

Introduction

POSCO INTERNATIONAL CORPORATION (“the Company” or “POSCO INTERNATIONAL”) commissioned DNV Business Assurance Korea, Ltd. (“DNV”, “we” or “us”), part of DNV Group, to undertake independent assurance of its POSCO INTERNATIONAL Sustainability Report 2022 (the “Report”).

Our Opinion

On the basis of the work undertaken, nothing came to our attention to suggest that the Report does not properly describe POSCO INTERNATIONAL’s adherence to the Assurance Principles described below. In terms of reliability of the performance data, nothing came to our attention to suggest that these data have not been properly collated from information reported at operational level, nor that the assumptions used were inappropriate. We believe that POSCO INTERNATIONAL is reporting in accordance with the GRI Standards.

We have reviewed the topic-specific disclosures of GRI Sustainability Reporting Standards 2021, which were identified in the process of materiality assessment.

No.	Material topics	Topic Standard	No.	Material topics	Topic Standard
1	GHG emissions	305-1,2,4	6	Protecting human rights	406-1
2	Diversifying new business portfolios	Non-GRI *	7	Sustainable supply chain management	414-1
3	Improving energy consumption efficiency	302-1	8	Employee health & safety	403-1~7,9
4	Protecting the ecosystem	304-3	9	Complying with laws/policies and international standards	206-1
5	Employee training	401-1,3	10	Bolstering ethical management and anticorruption	205-1

* Addition of separate indicators – Expansion of eco-friendly business – Energy, Materials, Agri-Bio)

Stakeholder Inclusiveness

The participation of stakeholders in developing and achieving an accountable and strategic response to sustainability.

POSCO INTERNATIONAL defines shareholders and investors, customers, suppliers, employees, local communities/civic groups, and government/international organizations as major stakeholder groups. The Report includes major issues of interest for each group, communication channels, and related POSCO INTERNATIONAL’s response activities. The definition of stakeholders and the way they participate are introduced in the Report, and major concerns collected from stakeholders are reflected in the materiality assessment process. In particular, POSCO INTERNATIONAL conducted a survey of internal and external

experts with a high level of understanding of POSCO INTERNATIONAL and ESG during the materiality assessment process and reflected them in the priorities of the materiality assessment results.

Materiality

The process for determining the issues that are most relevant to an organization and its stakeholders.

Based on an understanding of the business context, POSCO INTERNATIONAL identified 22 ESG topics that are important to companies and identified the impact of business management activities linked to each ESG topic on the economy, environment and people. Afterwards, an impact assessment was conducted based on four criteria (scale, scope, correctability, possibility of occurrence) for each topic targeting internal and external experts with a high understanding of POSCO INTERNATIONAL and ESG. Through the final review and approval of the board of directors on the assessment results, 10 material topics and 5 key ESG topics were finally drawn. DNV confirms that material topics chosen from this assessment and related topic standards are reflected in the Report.

Sustainability Context

The presentation of the organization’s performance in the wider context of sustainability.

POSCO INTERNATIONAL has set the company’s vision as ‘Green Energy & Global Business Pioneer’ in order to pursue ecofriendliness and sustainability with energy business integration as a starting point. POSCO INTERNATIONAL has established a growth strategy to lead the three core businesses in the global eco-friendly energy, material, and agri-bio fields, in line with the POSCO Group’s commemorative philosophy of ‘Corporate Citizenship Growing Together’. In particular, POSCO INTERNATIONAL is striving to contribute to professional decision-making related to climate change response by the board of directors by appointing experts in the environmental management field as outside directors from 2023 to promote ESG management.

Completeness

How much of all the information that has been identified as material to the organization and its stakeholders is reported.

POSCO INTERNATIONAL discloses in detail the background and implementation status of issues selected for material topics that reflect the expectations of stakeholders. In particular, POSCO INTERNATIONAL categorizes 10 material topics into 5 key ESG topics and discloses 2022 performance and future plans along with risk and opportunity impact analysis. The reporting boundary includes the headquarters of POSCO INTERNATIONAL, major business sites (Shwe Project in Myanmar, Incheon LNG Combined Cycle Power Plant, Gwangyang LNG Terminal) and some of its subsidiaries (POSCO Mobility Solution, PT.BIA, POSCO International Textile, etc.) In the future, it is recommended to expand the management scope of non-financial data to other overseas countries for more systematic management. The assurance team confirmed that the material topics selected through the materiality assessment were fully reflected according to the physical and temporal reporting boundaries.



At a Glance

Material Sustainability Topics



Materiality Assessment



Governance



Strategy and Risk Management



Metrics and Targets

Appendix

- ESG Policy Book
- GRI Standards Index
- SASB Index
- Financial Statement
- About POSCO International
- Total Impact Measurement and Management(TIMM)
- Certifications & Trademarks /Memberships
- Independent Assurance Statement

Independent Assurance Statement

Reliability and quality

The accuracy and comparability of information presented in the Report, as well as the quality of underlying data management systems.

The assurance team has sampled data and tested accuracy and reliability of the sustainability performance data of the Company. We interviewed the responsible staff for verifying information and data in the Report including data handling process and reviewed the data gathering process with the supporting documents and records. Based on the assessment, the intentional error or misstatement is not noted. Data owners were able to demonstrate to trace the origin of the data and to interpret the processed data in a reliable manner. The data was identifiable and traceable. The Company reports the sustainability performance of the last three years and can be compared over time. Any errors or unclear expressions found during the verification process were corrected prior to the publication of the Report.

Scope and Approach

We performed our work using DNV's assurance methodology VeriSustain™ (Ver. 5.0) which is based on our professional experience, international assurance best practices including the International Standard on Assurance Engagements 3000 ("ISAE 3000"), and the Global Reporting Initiative Sustainability Reporting Standards ("GRI Standards"). DNV has performed verification in the form of a limited level of assurance. We evaluated the Report for adherence to the Principles of stakeholder inclusiveness, materiality, sustainability context, completeness, and reliability. We used the GRI Quality of Information Principles (Balance, Clarity, Accuracy, Reliability, Timeliness and Comparability) as criteria for evaluating performance information, together with POSCO INTERNATIONAL's data protocols for how the data are measured, recorded and reported. The engagement excludes the sustainability management, performance and reporting practices of POSCO INTERNATIONAL's subsidiaries, associated companies, suppliers, contractors and any third-parties mentioned in the Report. We did not interview external stakeholders as part of this assurance engagement. Economic performance based on the financial data is cross-checked with internal documents, the audited consolidated financial statements and the announcement disclosed at the website of Korea Financial Supervisory Service (<http://dart.fss.or.kr>) as well as POSCO INTERNATIONAL's website (<https://www.cj.co.kr/en/index>). The review of financial data taken from these sources is not within the scope of our work.

We planned and performed our work to obtain the evidence we considered necessary to provide a basis for our assurance opinion. We are providing a 'limited level' of assurance. Limited depth of evidence gathering including inquiry and analytical procedures and limited sampling at lower levels in the company were applied. The baseline data for environmental and social performance are not verified, while the aggregated data at the corporate level are used for the verification.

Basis of Our Opinion

The assurance was conducted during June 2023. We undertook the following activities as part of the assurance process.

- Challenged the sustainability-related statements and claims made in the Report and assessed the robustness of the underlying data management system, information flow and controls
- Site visits to POSCO INTERNATIONAL HQ in Songdo, Korea to review process and system for preparing sustainability data and implementation of sustainability strategy
- Conducted interviews with representatives from the various departments
- Conducted document reviews, data sampling and interrogation of supporting databases and associated reporting system as they relate to selected content and performance data
- Reviewed the process and the result of materiality assessment.

Responsibilities of the Directors of POSCO INTERNATIONAL and DNV

The Directors of POSCO INTERNATIONAL have sole responsibility for the preparation of the Report. Our statement represents our independent opinion and is intended to inform all stakeholders. DNV was not involved in the preparation of any statements or data included in the Report except for this Assurance Statement. DNV's assurance engagements are based on the assumption that the data and information provided by the client to us as part of our review have been provided in good faith. DNV expressly disclaims any liability or coresponsibility for any decision a person or an entity may make based on this Independent Assurance Statement.

Competence and Independence

DNV's established policies and procedures are designed to ensure that DNV, its personnel and, where applicable, others are subject to independence requirements (including personnel of other entities of DNV) and maintain independence where required by relevant ethical requirements. This engagement work was carried out by an independent team of sustainability assurance professionals. This engagement work was carried out by an independent team of sustainability assurance professionals.

DNV - Business Assurance

DNV Business Assurance Korea Ltd. is part of DNV Group, a global provider of certification, verification, assessment and training services, helping customers to build sustainable business performance. www.dnv.co.kr/assurance

Seoul, Korea

August 24, 2023

For and on behalf of DNV Business Assurance Korea Ltd.



Sang Rye Chang

Sang Rye Chang
Senior Auditor and Lead Auditor

Chang Rok Yun

Chang Rok Yun
Senior Auditor

Jae Hee Kim

Jae Hee Kim
Technical Reviewer