

 With POSCO



POSCO STEELEON
**CORPORATE CITIZENSHIP
REPORT 2021**

posco
STEELEON

About this report

2021 POSCO STEELEON Corporate Citizenship Report highlights the company's achievements in the fields of Business·Society·People, based on the POSCO Group's management philosophy for sustainable management, 'Corporate Citizenship: Building a Better Future Together.' POSCO STEELEON identified major ESG (Environmental ·Social· Governance) issues through benchmarking, international standard analysis, and collection of stakeholders' opinions, and classified the performance of corporate citizenship according to the ESG fields, comprehensively sharing information on sustainable management. POSCO STEELEON will continue to build trust with stakeholders by transparently disclosing its performance of corporate citizenship.

Reporting principles

This report was prepared in accordance with the Core Option of the Global Reporting Initiative (GRI) Standards.

Reporting period

Most of the information presented in this report covers actions and achievements from Jan 1, 2021 through Dec 31, 2021. However, some information contains recent data from the first half of 2022. In addition, the quantitative performance of the ESG Fact Book includes 4 years of trend data from 2018 to 2021.

Reporting cycle

Every year (Release of the last report: July 2021)

Reporting scope

Data featured in this report is based on POSCO STEELEON's performance across domestic worksites. Reporting scope includes economy (based on K-IFRS standard), society, and environment in general.

Report assurance

To ensure that stakeholders can trust the published information, POSCO STEELEON arranged third-party verification from an independent external organization.

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POSCO CHARTER OF CORPORATE CITIZENSHIP

Companies achieve lasting growth and sustainability by pursuing harmony within the society where businesses operate. As a member of the social community, companies who have benefitted from resources provided by the society should look beyond profit, engage in addressing social issues and contribute to the prosperity of mankind and to making the world a better place. We believe that this is the right way to move forward.

POSCO, under its management philosophy of '**Corporate Citizenship: Building a Better Future Together**', will engage and communicate with all stakeholders including customers, employees and shareholders, and continually seek changes and innovation in pursuit of sustainability by ultimately creating greater value for the company.

Accordingly, POSCO that embraces Corporate Citizenship complies with the following principles when conducting business.

ONE

We nurture a robust business ecosystem with business partners.

- We practice the values of fairness, transparency and ethics across all business activities
- We pursue collaboration and mutual growth with partners and suppliers based on a culture of consideration and respect
- We support customer success by providing the finest products and services

TWO

We are at the forefront in addressing social issues and making society better.

- We take a leading role in confronting social challenges at the corporate level with a sense of empathy
- We carry out activities for the common good for the development of local communities and environmental protection
- We actively participate in philanthropy as part of our commitment to sharing with our neighbors and the society

THREE

We foster a happy and fulfilling workplace by creating a corporate culture based on trust and creativity.

- We create a safe and pleasant working environment to promote the health and well-being of our employees
- We pioneer a corporate culture of trust and harmony through fair HR management practices and stable labor relations
- We create a great workplace where diversity is respected and a healthy work-life balance can be realized

July 25, 2019

POSCO

CONTENTS

CEO Message	05
Business Overview	06
Real Value Story	11
2021 Corporate Citizenship Highlights	16
Stakeholder Communication	17
Risk Management	18
Materiality Assessments	20

Environmental

Eco-friendly Business	25
Sustainable Technology and Product Innovation	34

Social

Creating a Happy Workplace	41
Realizing a Safe Workplace	46
Sustainable supply chain	50
Social Contribution	55
Quality Management	59

Governance

Governance	63
Ethical Management	66
Fair-trade	69
Information Protection	72

Appendix

ESG Fact Book	75
GRI Content Index	83
TCFD Index	89
SASB Index	90
Independent Assurance Statement	92
Joined Associations	94





Dear stakeholders of POSCO STEELEON.

Since its establishment in 1988, POSCO STEELEON has grown into a trustworthy partner of POSCO's steel business and the leader of the industry with its expertise in surface treatment for the past 34 years. I would like to extend my gratitude to all stakeholders for your encouragement and support toward POSCO STEELEON.

In 2021, despite a challenging business environment caused by the COVID-19 pandemic and global logistics disruptions, POSCO STEELEON made meaningful performance by securing competitiveness in high-end products with the launch of INFINELI, a premium color steel sheet brand, while improving operation rate and stabilizing quality control with the enhancement of operation technologies. In preparation for a new leap forward, we changed our company name from POSCO Coated & Color Steel to POSCO STEELEON.

Today, we are living in an era where rapid change has become a new norm. Companies are asked to actively participate in environmental and social issues such as eco-friendliness and carbon neutrality. Moreover, the COVID-19 pandemic is bringing a huge shift in the economy and social structures, and issues that threaten the survival of companies such as the price hike of raw materials and energy are constantly rising, propelled by unrest in the international landscape.

POSCO STEELEON aims to overcome these difficulties with advanced ESG management based on the POSCO Group's management philosophy, 'Corporate Citizenship: Building a Better Future Together'. We will do our best to provide eco-friendly and differentiated products and solutions to consumers and to create a happy workplace for employees by promoting an organizational culture that puts emphasis on trust and harmony while prioritizing safety.

In addition, we will actively participate in solving problems of local communities and grow as a sustainable company with vigorous participation in corporate citizenship that creates the real value of symbiosis, the economy of coexistence, eco-friendliness, and social value.

We ask for your continuous interest and support for POSCO STEELEON, a company that does its best to win the love of all stakeholders including shareholders, customers, and local communities. Thank you.

July 2022

CEO Yun Yang Su of POSCO STEELEON.

윤양수

Business Overview

Company Overview

Since its establishment in 1988, POSCO STEELEON has been leading the coated/color coated steel sheet market with continuous technological innovation and the best quality products as a specialized company in surface-treatment steel sheets. The main products are aluminized · galvanized steel sheets and color coated steel sheets, which are supplied to various fields including construction, home appliances, and automobiles and exported to major global markets including North America, China, and Europe.

Overview

Category	Details
Company name	POSCO STEELEON
Establishment date	Feb 15, 1988
Head office address	173, Cheolgang-ro, Nam-gu, Pohang-si, Gyeongsangbuk-do
Locations of worksites	Pohang (galvanizing/color coating plant), Myanmar (galvanizing/color coating plant), Seoul (sales office), Changwon/Gwangju (branch office)
CEO	Yun Yang Su
Major business	Coated, color coated, and other surface-treatment steel sheets
Products	Aluminized steel sheet, galvanized steel sheet, color coated steel sheet
Number of employees	434 (as of Dec 2021)

Major financial performance*

Category	Unit	2019	2020	2021
Assets	Million KRW	503,427	485,429	586,433
Liabilities	Million KRW	282,345	258,127	264,011
Equity	Million KRW	221,082	227,302	322,422
Sales revenue	Million KRW	916,745	907,319	1,347,274
Operating income	Million KRW	9,977	16,923	143,279
Production volume	Thousand tons	986	960	1,042
Sales volume	Thousand tons	899	902	954

* On a consolidated basis

History

1980~

- '88.02.15. the establishment of Pohang Galvanized Steel Sheets Co., Ltd
- '89.11.30. the completion of 1CGL

1990~

- '92.11. mass-production and sales of ALCOSTA
- '94.01.14. recorded accumulated production of 1 million tons
- '98.07.23. the acquisition of Dongkuk Steel's share of Pohang Steel
- '99.03.01. merged with Pohang Steel Industries Co., Ltd and changed the company name to Pohang Coated Steel Co., Ltd
- '99.05.01. the acquisition of Posteel's cold rolling plant

2000~

- '02.08.16. listed on the stock exchange
- '04.11.15. the completion of 2CGL
- '06.09.01. the completion of 1CGL rationalization, started the production of ALZASTA
- '08.04.01. changed the company name to POSCO Coated & Color Steel Co., Ltd
- '08.11.30. received the award of the export tower of 300 million dollars

2010~

- '11.11.30. received the award of the export tower of 400 million dollars
- '14.10.31. the completion of Myanmar CCL
- '15.12.11. development of high corrosion resistance aluminized steel sheet (SUPER ALCOSTA)

- '16.12.30. development of Zinc magnesium aluminium alloy coated steel (MACOSTA)
- '18.10.18. the completion of 4CCL
- '19.05.07. the construction of PosART Factory
- '19.11.16. the integration of Myanmar POSCO Coated & Color Steel Co., Ltd and Myanmar POSCO corporation

2020~

- '21.07.08. the launch of INFINELI
- '22.03.21. changed the company name to POSCO STEELEON

Global network

In 2014, POSCO STEELEON constructed Myanmar's first color coating plant in Yangon, Myanmar, becoming a global steel company. Currently, POSCO STEELEON has a total of 8 production lines at home and abroad. In Korea, the head office and a color coating plant are located in Pohang, while the sales office is located in Seoul, and branch offices are located in Changwon and Gwangju. As an overseas corporation, a galvanizing and color coating plant is located in Myanmar, Yangon.

Business Introduction

Coated steel sheet

POSCO STEELEON is producing the best quality products in the galvanized steel sheet industry with its unrivaled technological prowess and is striving to become a world-class surface treatment steel sheet company through continuous technological innovation. POSCO STEELEON has a number of product lines such as hot-dip aluminized steel sheet (ALCOSTA) that was certified as the world's top product offering the best quality, AL-STs, ALZASTA, and MACOSTA, and its coated steel sheets are sold and used in a variety of fields from home appliances to construction materials to automobile parts.

① ALCOSTA (Aluminized Steel)

It is a high corrosion resistance aluminized steel sheet, that has outstanding heat resistance compared to other galvanized steel sheets and cold-rolled steel sheets. POSCO STEELEON's ALCOSTA has been selected as the world's top product offering the best quality by the Ministry of Trade and Industry.



ALCOSTA

② MACOSTA (Zinc Magnesium Aluminium Alloy Coated Steel)

It is a ternary hot-dip Zn-Al-Mg alloy steel sheet with outstanding corrosion resistance. It has 10 times more corrosion resistance than other galvanized steel sheets, allowing it to be used in any environment.



MACOSTA

③ AL-HPF (Aluminum - Hot Press Forming)

The HPF process offers high formability, which is why this process is used to manufacture automotive parts. In addition, it has outstanding corrosion resistance since coated aluminum prevents corrosion at high deformation temperatures. Recently, with the rising demand for lighter electric vehicles, it is used to make a body of electric vehicles.



AL-HPF

Production/Sales volume of coated steel sheet

(Unit: thousand tons)

Category	2019	2020	2021
Production volume	605	585	604
Sales volume	514	514	512

Sales revenue of coated steel sheet

(Unit: 100 million KRW)

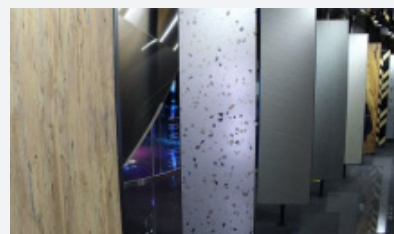
Category	2019	2020	2021
Sales revenue	4,283	3,940	5,652

Color coated steel sheet

POSCO STEELEON is manufacturing unrivaled, high-quality color coated steel sheets based on its outstanding coated steel sheet technology. PosART, our major color coated steel sheet is manufactured by combining the inkjet printing technology developed and patented by POSCO, steel, and ink solution with high corrosion resistance and processability. It is used for commemorative medals, high-end home appliances, as well as interior and exterior building materials, and can be designed precisely in accordance with the customer's needs. In addition, it has brought a new sensation to the steel industry by adding safe and eco-friendly features and led the premiumization of color coated steel sheets such as non-flammable color steel sheet PosNC.

① PosART

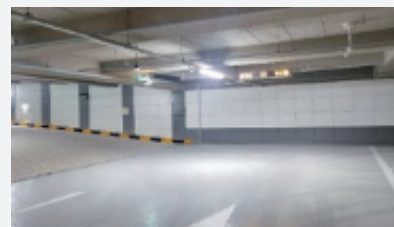
It is a premium color coated steel sheet that uses the inkjet printing technology developed and patented by POSCO, and full-color printing on a variety of materials including STS, PosMAC, and ALCOSTA is possible. Precise design can be done, which allows the manufacturing of customized, high-quality color coated steel sheet without restrictions on colors and patterns.



▲ PosART

② PosNC, non-flammable color steel sheet

It is a safe steel product for construction that meets the performance standards of non-flammable materials prescribed by the Ordinance of the Ministry of Land, Infrastructure, and Transport. When there is an outbreak of fire, it can secure time for people to evacuate by minimizing the generation of toxic gas, which makes it a popular interior and exterior building material as well as ceiling material.



▲ An underground parking lot that applied PosNC, non-flammable color steel sheet

③ Steel sheet with antibacterial effect

It is a steel sheet with excellent antibacterial features as well as weather resistance and corrosion resistance that is colored with paint mixed with antibacterial materials. Since it uses antibacterial materials that are harmless to the human body, it is often used as an interior building material for hospitals and food service facilities. Demand in the global market is expected to grow as it received international certification in 2020 in recognition of its excellent antibacterial features.



▲ Cultivation facility that applied steel sheet with antibacterial effect

Production/Sales volume of color coated steel sheet

(Unit: thousand tons)

Category	2019	2020	2021
Production volume	359	349	426
Sales volume	345	359	425

Sales revenue of color coated steel sheet

(Unit: 100 million KRW)

Category	2019	2020	2021
Sales revenue	4,612	4,761	7,638

Launch of the color coated steel sheet brand

INFINeLI

In 2021, we launched INFINeLI, a premium brand that integrates our color coated steel sheet products, to target the high-end market. INFINeLI is a combination of the words ‘infinite’ and ‘finely’, meaning that it can be used without the limit of color, design, and functionality.

As INFINeLI aims to present a new lifestyle to customers, going beyond simply offering color coated steel sheets, it became a popular brand for interior and exterior building materials that can provide customized design and functionality suitable for any environment. Moreover, it is an eco-premium steel product for construction that can be recycled and replace stone and wood which causes destructive activities to the environment such as mining and logging.

There are various products under the INFINeLI brand, including PosPRINT with a variety of designs and textures, a premium inkjet-printed steel sheet PosART, non-flammable color steel sheet PosNC, antibacterial color steel sheet PGS Antibacterial, and iridescent color steel sheet PVDF.

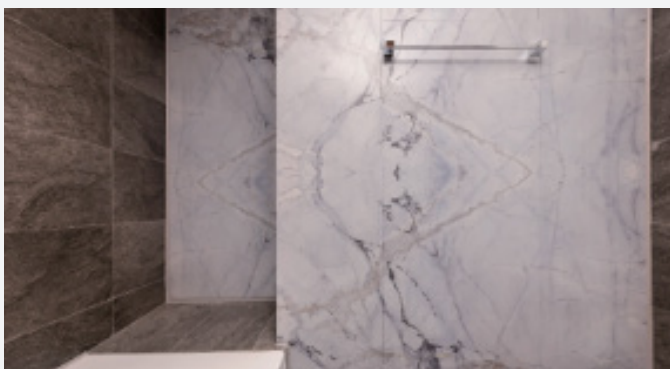
POSCO STEELEON is planning to lead the high-end color coated steel sheet market by establishing a win-win cooperative system and conducting joint marketing activities with customers to support their growth in sales.



▲ Printed steel sheet at Starbucks (wood texture, hairline)



▲ Printed steel sheet at Starbucks Gimhae Jinyeong branch



▲ PosART, interior building material



▲ STS color at the SHARP Gallery

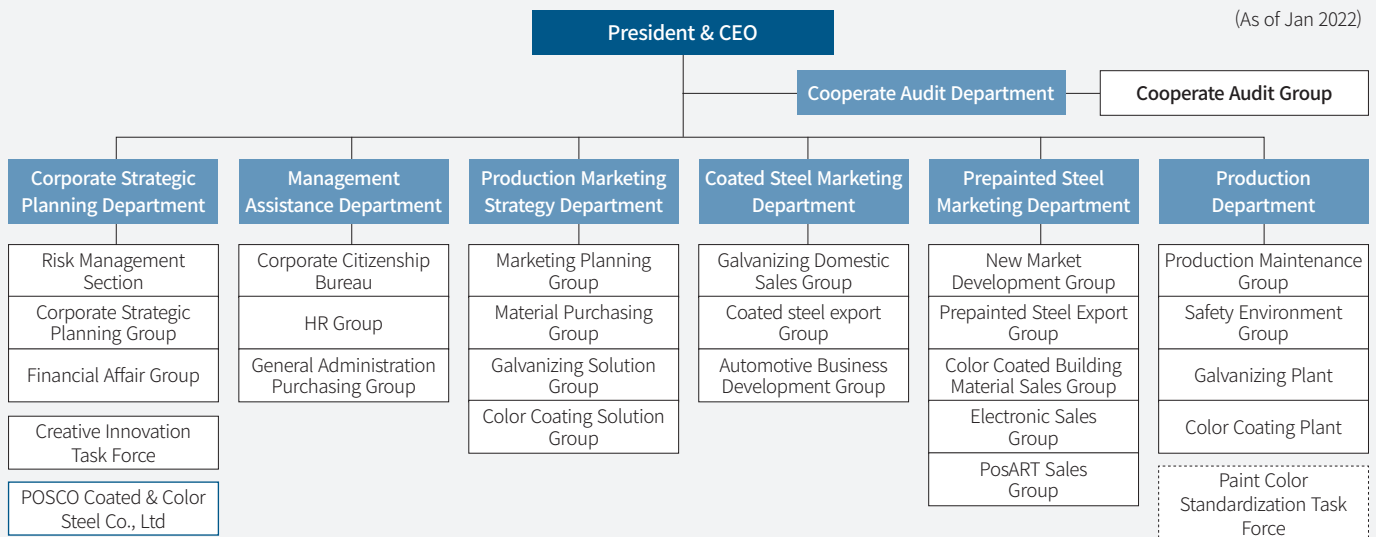
Corporate Citizenship promotion system of POSCO STEELEON



Organization chart

POSCO STEELEON has 7 departments, 19 groups, 2 plants, 1 bureau, and 1 foreign corporation.

(As of Jan 2022)



Real Value Story

5 brands for corporate citizenship

As a member of the society, POSCO STEELEON is taking the lead for the prosperity of the mankind and creation of a better world. To realize the POSCO Group's management philosophy of 'Corporate Citizenship: Building a Better Future Together', we are actively participating in the 5 brand activities for corporate citizenship.

A company you want to work with



Vision of POSCO Group

Management philosophy	Corporate Citizenship: Building a better future together			
Management vision				
Fields of activity	Business Business partners (contractors, customers, suppliers) - Practice of fairness, transparency, and ethics - Shared growth - Best products and services	Society Social communities and individuals (local communities and residents) - Contribute to addressing social issues with empathy - Development of local communities & environmental management - Participation in philanthropy	People POSCO Group employees - Create a safe and pleasant work environment - Fair HR affairs & stable labor-management relations - Diversity, inclusion, work-life balance	
POSCO talent	Creative talents who make actions and are considerate to others			
Code of Conduct	Substance	Execution	Practicality	
Core values	Safety	Win-win	Ethics	Creativity

GREEN WITH POSCO

POSCO STEELEON has established a 2050 carbon neutrality roadmap and is taking the lead in carbon reduction with continuous communication and partnership with stakeholders.

Manufacturing of eco-friendly information boards of cultural properties using PosART technology

POSCO STEELEON is participating in carbon reduction activities by applying low carbon, eco-friendly PosART products to information boards of major cultural properties and tourist sites across the country.

Usually, a massive amount of cost and waste is generated when replacing old information boards with new ones. However, since PosART is manufactured by adding a new board to the existing board without removing it, it can save cost and time while protecting the environment. Moreover, Braille for the visually impaired can be inscribed by using embossing technology, contributing to the creation of Barrier Free* environment.

※ Excellence of PosART products

- Carbon reduction by using steel, an eco-friendly material.

1.73tCO₂ of carbon per piece is generated for the production of a traditional information board, while PosART information board generates only 0.03tCO₂ of carbon per piece.

- Durability and easy repairment

In the case of traditional information boards, pictures and letters are engraved on the board, and paint is filled inside, which causes the paint to crack and damage the board when the temperature changes. PosART information board is easy to repair since steel letters and pictures are printed and added to the steel sheet.

In September 2021, we signed an MOU with the Gyeongbokgung Palace Management Office that manages Gyeongbokgung Palace, a representative cultural heritage in Korea, to create an eco-friendly and barrier free tourism environment and donated PosART braille information board. In recognition of the quality of our products, not only the Cultural Heritage Administration, but also major public institutions including Gyeongsangbuk-do Provincial Government, local governments, and welfare groups for the visually impaired are cooperating with us to create a low carbon and eco-friendly environment for cultural heritage and tourist sites.

*Barrier Free: a movement to break down physical and systematical barriers to create a better society for the elderly and disabled to live in.

- Increased the lifespan of information boards while lowering the costs

Production time for PosART information board is 1/10 of the traditional one, and it is durable for more than 5 years.

- Information board in braille for the visually impaired

Contribute to the creation of a barrier free environment by enabling the production of not only general information boards but also information boards in braille by using the lamination printing technology of PosART.



▲ Information board and information board in braille that applied PosART technology

Reducing the time needed for the color selection process of customers and the amount of paint wasted

The color coated steel sheet, used for interior and exterior building materials, ceiling materials, and home appliances is closely related to our daily lives. With the diversification of color coated steel sheets including PosART and printed steel sheets, customers are calling for a wider range of color options. To respond to customers' needs for diverse colors, POSCO STEELEON standardized and systemized paint colors to improve the satisfaction level of paint suppliers and customers. At the same time, we are actively practicing eco-friendly management by reducing the amount of paint wasted.

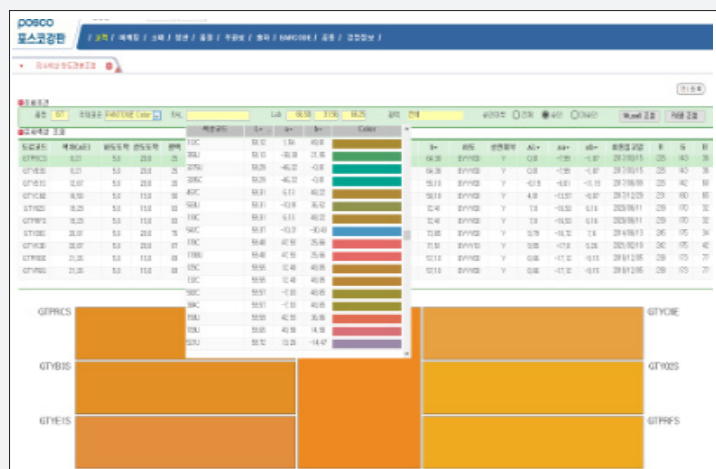
Since colors of paint were not standardized and systemized, it was impossible to check the paint inventory by colors in the past. Therefore, we had to develop a new color of paint whenever an order was made, which caused delays in delivery

due to duplicate manufacturing and the disposal of remaining paint inventories. To fix this issue, Paint Color Standardization Task Force was launched, which selected and standardized 110 colors of paint that are often used in color coated steel sheets and developed a color searching system that allowed customers to search up the color they want to reduce delivery time. Moreover, by preventing duplicate manufacturing of similar color paint, the amount of paint discarded decreased from 215 tons to 134 tons (▽38%).

With these activities, POSCO STEELEON is taking the lead in the color coated steel sheet market by fulfilling customers' needs while practicing eco-friendly management, serving as a technological solution provider for the sustainable growth of the industry.

※Major activities

- Color standardization of steel products for construction (integration of similar colors): 2,780 colors → 1,320 colors
- Digitalization and visualization of sample colors (color measurement → digitalization): 4,347 colors
- Measure international color code → digitalization and establishment of database (Munsell, RAL, PANTONE, NCS color)
- Development of similar color search system (develop excel macro system -> test and verification -> develop MES system)



▲ Systemization of paint for color coated steel sheet

TOGETHER WITH POSCO

POSCO STEELEON is taking the lead in creating a solid industrial ecosystem with mutual growth activities through cooperation with small and medium-sized domestic steelmakers.

Mutual growth with Haewon MSC, a domestic SME steel company

With the cooperation with affiliates and small and medium-sized steel companies, POSCO STEELEON replaced color materials for thin steel sheet/coated steel sheet with domestic materials, which had relied on Chinese imports.

Thin steel sheet/coated steel sheet GI materials for color coated steel sheets had been dependent on import from China, but as the delivery time has risen due to the COVID-19 Pandemic, we improved the procurement process and decided to use domestic materials with the cooperation with POSCO affiliates. We established a supply chain that provides thin steel sheet/coated steel sheet GI to POSCO STEELEON with POSCO and POSCO International, using idle coating facilities of Haewon MSC, a domestic SME steelmaker.

To improve the competitiveness in quality of Haewon MSC, a material supplier, and to ensure stable sourcing of materials,

POSCO STEELEON is regularly holding technology/operation exchange meetings with Haewon MSC and actively supporting the safety improvement activities in the worksites.

With these mutual growth activities, facility issues and operational conditions of Haewon MSC have improved dramatically, and the operation rate has increased from 50% to 90%, resulting in an improvement in business performance. POSCO STEELEON has solved the quality and delivery risk caused by the import from China by sourcing stable domestic materials and contributed to carbon reduction by removing marine transport.

Going forward, POSCO STEELEON will continue to cooperate with suppliers, contractors, and customers with consideration and respect to practice the first principle of corporate citizenship, 'Nurturing a robust business ecosystem with business partners'.

※ Performance of mutual growth

POSCO STEELEON	
Quality	Delivery time
300 tons/yr Reduction of poor-quality materials	75→65 days
Haewon MSC	
Operation rate	New employment
50%→90%	10 people



▲ The signing of MOU for business cooperation with Haewon MSC

COMMUNITY WITH POSCO

POSCO STEELEON is carrying out social contribution activities to solve problems of local communities by reflecting the nature of its business.

Housing repair project for the underprivileged in Daesong-myeon, Pohang City

As part of various programs that promote mutual growth with local communities, POSCO STEELEON has been carrying out residential environment improvement projects for the underprivileged in Daesong-myeon. In July 2021, we urgently supported a housing repair project for the safety of vulnerable families in Daesong-myeon, Pohang City, who are at risk of short circuit and fire due to serious water leaks caused by the deterioration of the housing environment.

We installed a roof on the house using our color coated steel sheet brand, INFINELI, to prevent water leaks, and employees voluntarily participated in exterior wall painting, completing the renovation of the house.

In particular, Saemaul Association in the region, Female Leader's Association, and a constructor named Design 180 agreed with the purpose of the project and joined the

donation campaign. Saemaul Association and Female Leader's Association supported the replacement of sinks and floor paper, while Design 180 supported the plastering of walls. Collaboration with local community members allowed us to finish the renovation project perfectly.

Besides, POSCO STEELEON is continuing to engage in social contribution activities, reflecting the nature of its business, such as donation of Braille products for the visually impaired using POsART technology, and the construction of safe welfare facilities using non-flammable steel sheets. Going forward, we will carry on tackling the problems of local communities with our best-quality products and technology.



▲ Roof installment in a residential environment improvement project of POSCO STEELEON

2021 Corporate Citizenship Highlights

Business



214 thousand tons
Sales of eco-friendly products



Society



1,085 hours
Hours of volunteering services of employees



Business



2,713 million KRW
Green investment



People



97.5 %
Safety and health education completion rate



Society



257 million KRW
Investments in social contribution



People



85 %
"0" industrial accident



Stakeholder Communication

Communication channel with stakeholders

POSCO STEELEON defines stakeholders and establishes communication channels in accordance with the areas of environment, social, and governance. We collect opinions of various stakeholders through communication channels and apply them to the general management of the company and make systematic improvements.

Communication channel with stakeholders

Areas	Stakeholders	Communication channel
Environment (E)	Local residents, government organizations	- Volunteer activities - Policy roundtable
	Customers	- Roundtable - Customer seminar - Survey
Social (S)	Local residents, government institutions, local governments	- Roundtable - Volunteer activities - Supervision
	Employees	- Management-Employee Council - Grievance Settlement Council - Sexual Harassment Prevention Center
	Contractors	- Company briefing for contractors - Mutual growth support center - Industrial Safety and Health Council
Governance (G)	Institutional investors	- Company briefing (IR) - Corporate disclosure

Stakeholder opinions

In 2021, we conducted a materiality analysis survey to collect important factors for the practice of ESG management from all stakeholders. We will do our best to actively reflect stakeholders' opinions in the ESG activities by analyzing the answers to open-ended questions drawn by each topic.

Detailed opinions of stakeholders

Areas	Topics	Detailed opinions of stakeholders
Environment (E)	Development of eco-friendly products and technology	- Need strategic response to environmental restrictions - Strengthen strategies that focus on eco-friendliness of products
	R&D	- Securing a competitive advantage by developing new products - Expand investment to secure new growth engines and achieve business differentiation
	Energy use	- Investment in renewable energy for eco-friendly management
	Greenhouse gas reduction	- Prepare for strengthening environmental regulations and emission trading - Reduce the amount of carbon generated in the manufacturing process and expand eco-friendly energy
	Environmental regulations	- Polish technologies and facilities in preparation of environmental regulations - Continuous monitoring and response to environmental laws
Social (S)	Safety and health	- Raise awareness on safety issues related to Serious Accidents Punishment Act - Continuously carry out activities that can raise awareness on safety of employees
	Satisfaction of customers	- Raise customer satisfaction by strengthening marketing and quality control
	Mutual growth	- Win-win cooperation for mutual growth with contractors and customers
	Local communities	- Continue to promote coexistence with local communities
Governance (G)	Board of directors	- Transparent management and establishment of fair-trade order
	Information security	- Need to raise awareness on strengthened information protection law and legal regulations among employees - Careful information sharing with employees considering security

Risk Management

POSCO STEELEON manages internal/external risks that affect business performance with the BOD(Board of Directors), investment deliberation committee, and internal accounting management system. The BOD makes final decisions on major business activities and investment-related issues through voting for effective decision making and business supervision.

Risk management of investment projects

POSCO STEELEON minimizes risks of investment projects by stipulating investment business management rules. The rules were prepared to strengthen risk management of investment projects and specify which investment projects should be submitted to the investment deliberation committee for discussion according to their amount and type of investment. In 2021, the following ESG items review clause was newly established for investment projects to strengthen ESG risk management, reviewing the ESG impacts of all investment projects.

The investment deliberation committee reviews the feasibility of investment projects and conducts evaluations to minimize possible risks and monitors whether approved projects are being executed according to investment plans and have potential risks to decide when to exit the projects.

The BOD’s screening on ESG risks

According to the BOD regulations, if an internal/external investment project uses 10% or more of the company capital, it should earn the approval of the BOD, a final decision-making body even when it was approved by the investment deliberation committee, for strong risk management. Effective decision-making is possible since the BOD is comprised of internal directors, outside directors, and non-executive directors with rich expertise. Since 2021, with the newly established ESG management investment rule in place, the BOD has been making a final decision on whether to proceed with investment projects after reviewing the ESG risks that may incur from them.

Moreover, when reporting mid to long-term management plans and annual business plans to the BOD on a yearly basis, ESG related activities including financial factors such as supply/sales/ income and loss, as well as safety and environment, and corporate citizenship are reported as well, granting managerial/supervisory roles on ESG management to the top management.

ESG items to be reviewed before investment

Environment



Environmental management
Climate change

Social



Mutual growth
Supply chain management
Social contribution
Job creation
Safety/health
Responsible minerals

Governance



Fair-trade
Ethical management
Information protection

Operation of internal accounting control system

POSCO STEELEON rapidly adopted the internal accounting control system in 2002, when the system was first introduced and has consistently updated it each fiscal year through self-evaluation. Because POSCO, the parent company, is listed on the U.S. Securities and Exchange Commission (SEC), we are subject to the rules of the Sarbanes-Oxley Act (SOx Act¹⁾ which means some areas of the internal accounting system need regular validation by external auditors since FY 2006. From FY 2022, the full internal accounting control system will be validated by external auditors.

POSCO STEELEON reviews the operational status of the internal accounting control system each fiscal year, after which

the CEO reports all results to the BOD(Board of Directors), the Audit Committee, and at the general shareholders' meeting. Operational status assessments include design testing²⁾ and operation testing³⁾. All deficiencies identified through this process are improved with consultations with external auditors, responsible departments, and the control executor.

- 1) Sarbanes-Oxley Act (SOx Act): The U.S. Accounting Reform Act enacted in July 2002 allows for stringent sanctions for accounting fraud.
- 2) Design testing: Evaluation made on the completeness of the control activity designs intended to prevent and detect erroneous or illegal practices related to financial statements.
- 3) Operation testing: Evaluation made on whether the control activities are performed in alignment with the risk control matrix

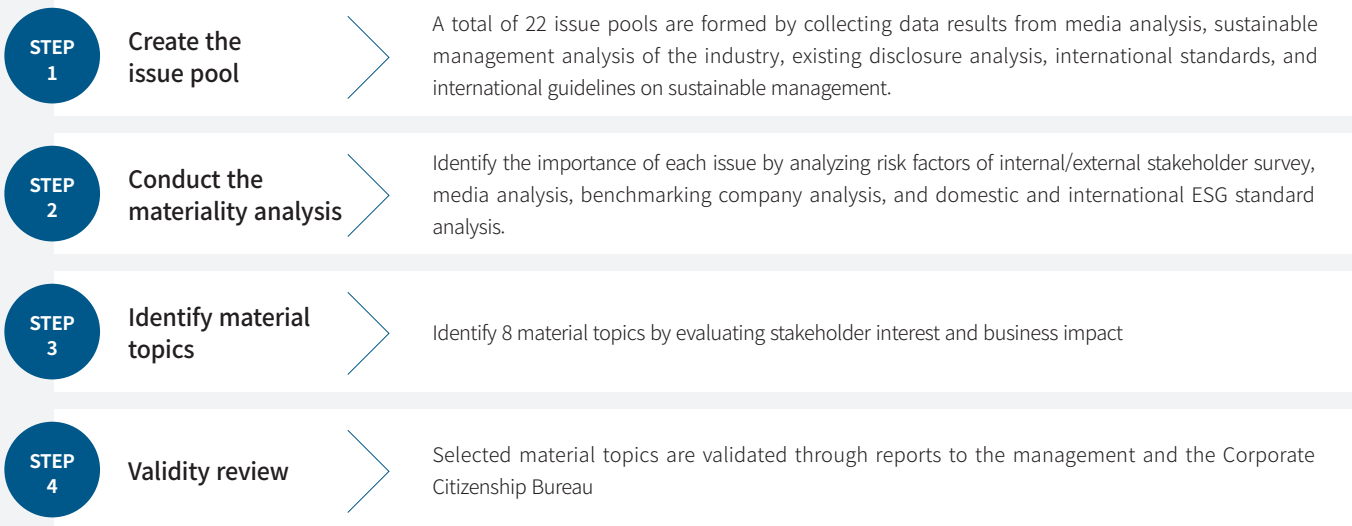
Internal accounting control system process

Category	Details
① Establish an operational situation inspection plan	- Provide process mapping for relevant departments after selecting major control activities and announce the schedule.
② Control activity design testing	- Select a particular transaction as a sample and trace the process according to the transaction evidence, identify risks, and review/evaluate whether the design of control activities is appropriate - Check whether the changes in organization and process were properly applied
③ Control activity operation testing	- Check all documents related to major control activities, which were reviewed by the operations manager and control executor - Verify the evidence of control execution and results
④ Auditing and reporting on the internal accounting control system	- Internal accounting control operation situations are inspected, with all results reported to the Board of Directors, the Audit Committee, and at the general shareholders' meeting by the CEO. - External auditing firm implements accreditation audits on the design and operation tests performed by the company

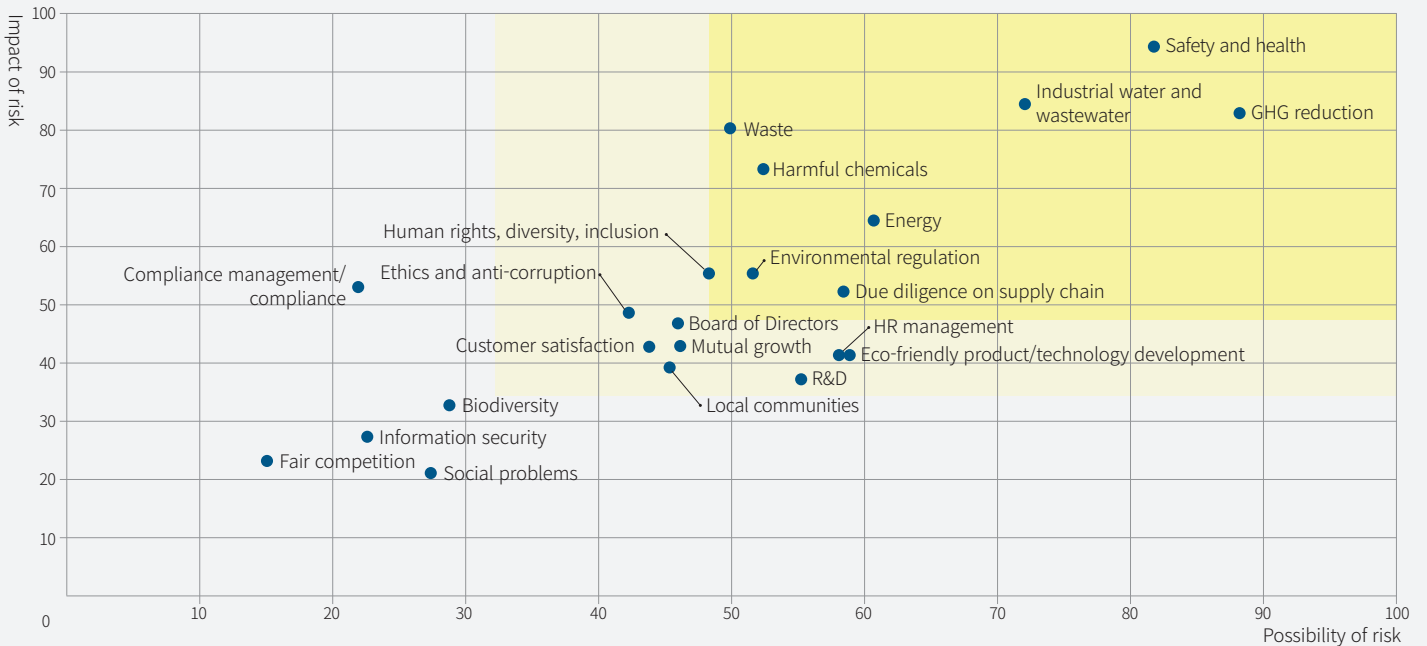
Materiality Assessments

POSCO STEELEON conducts an annual ESG materiality analysis to identify sustainable management issues of the company and promotes corporate citizenship activities based on the opinions of various stakeholders. In the 2021 materiality analysis, 8 major topics were selected among 22 issue pools with stakeholder survey and media analysis.









Materiality analysis process



2021 Materiality analysis matrix



Material topics and UN SDGs

Ranking	Area	Material topics	Topic boundaries						UN SDGs	Reporting location
			Executives and employees	customers	customers	Government-Local governments	Shareholders- Investors	Local communities		
1	Social	Safety and health	●		●	●	●			Safety and health
2	Environment	Greenhouse gas reduction	●		●	●	●	●		Response to climate change
3	Environment	Industrial water and wastewater	●		●	●				Resource circulation
4	Environment	Waste	●		●	●				Resource circulation
5	Environment	Harmful chemical materials	●		●	●				Resource circulation
6	Environment	Energy*	●		●	●				Resource circulation
7	Social	Due diligence of supply chain	●		●	●	●			Sustainable supply chain
8	Environment	Environmental regulations*	●		●		●	●		Environmental management system

*Newly added material topics compared to the previous year

ENVIRONMENTAL



Eco-friendly Business	25
Sustainable Technology and Product Innovation	34

ENVIRONMENTAL Management Approach

Context

Uncertainty in business management caused by climate change is emerging as a problem that requires a company-wide response. The government announced '2050 Carbon Neutral Strategy' in December 2020, and accordingly, major investors and customers are increasingly calling for the implementation of carbon neutrality. Moreover, as the importance of the environment rises, the development of eco-friendly products that can meet the market needs is directly linked to the competitiveness of the company.

Material Topics

Ranking	Major ESG topics
2	Reduction of GHG emissions
3	Industrial water and wastewater
4	Waste
5	Harmful chemicals
6	Energy
8	Environmental regulations

Risk & Impact

- Harm the company's image when the violation of environmental regulations or environmental accidents occur
- Increasing demand for eco-friendly technologies such as reduction of environmental pollution
- Strengthened resource management and treatment standards

Key Measures

- Establish a mid to long-term GHG reduction roadmap and execute strategies
- Strengthen response to major environmental regulations by building resource circular worksites with waste recycling and installment of Tele-Monitoring System (TMS)
- Provide environmental training to employees
- Increase the efficiency of wastewater treatment

Our Approach

To promote 2050 carbon neutrality, POSCO STEELEON has established a mid to long-term roadmap to reduce GHG emissions and formed an organization in charge of the environmental issues based on environmental management systems (ISO 14001), actively responding to climate change.

To make a consensus on the importance of the environment and environmental issues, we are providing environmental training to all employees, and continuously making green investments to develop eco-friendly products and to reduce energy consumption.

Our Performance



1,798 tCO₂/yr
Reduction of GHG
emission



2,713 million KRW
Green
investment



281 people
Number of employees
participated in
environmental training



100 %
Environmental
management system
adoption rate



214 thousand tons
Sales of eco-friendly
products



1,496 million KRW
R&D expense
(Including eco-friendly
R&D expenses)

Alignment with UN SDGs



Goal 3: Good health and well-being

Goal 6: Clean water and sanitation

Goal 7: Affordable and clean energy

Goal 9: Industry, innovation and infrastructure

Goal 12: Responsible consumption and production

Goal 13: Climate action

Eco-friendly Business

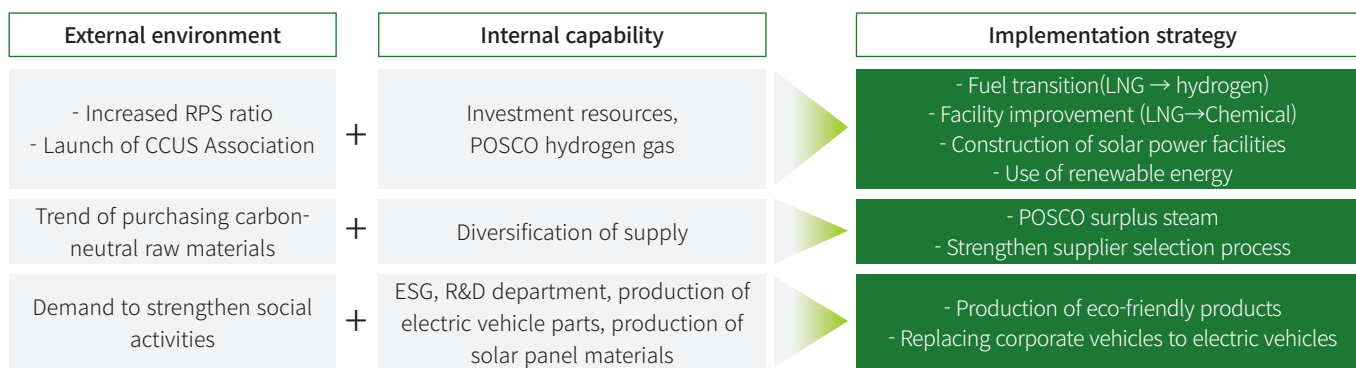
Investors and customers are calling for the transition to a low-carbon economy, and companies are actively responding to the climate change and transforming their business for carbon neutrality. In recognition of the urgency of the climate change, POSCO STEELEON has established 2050 carbon neutrality roadmap, trying to raise competitiveness in eco-friendly business by transitioning to low-carbon production system.

Response to climate change

Establishment of 2050 carbon neutrality roadmap

As a member of the POSCO Group, POSCO STEELEON is actively participating in 2050 carbon-neutral business activities such as the establishment of a GHG reduction plan to respond to global needs for environmental management and promote 2050 carbon neutrality. With our focus on the transition to hydrogen fuel and the use of renewable energy, we have set a 20% reduction target for 2030, and a 47% reduction target for 2040, and are planning to achieve Net Zero by 2050 with social reduction.

2050 carbon neutral strategy



2050 GHG reduction plan

(Unit: tCO₂)

Category	Reduction direction	Emission (As of 2020)	Amount of reduction			Remarks
			2030	2040	2050	
Scope 1	Energy transition (LNG →hydrogen)	70,807	6,525	32,889	57,320	- Introduce POSCO's hydrogen gas furnace/ Oven hydrogen burner commercialization technology (1 st 1CGL, 2 nd 2CGL/1CCL, 3 rd 2~4CCL) ※ Japan's Chugai Ro Co., Ltd .is developing the technology
	Facility replacement		11,063	11,273	11,903	- Replace furnace (LNG → Steam), Replace fuels for sewage treatment facility (Steam → Chemical or plasma treatment)
	Improve energy efficiency		1,264	1,414	1,584	- Reduce LNG consumption by lowering the annealing temperature (700→680°C)
Scope1 Total reduction			18,852	45,576	70,807	
Scope 2	Use renewable energy (Korean RE100)	53,199	6,300	13,050	53,199	- Increase the proportion of purchases (1st 15%, 2nd 30%, 3rd 100%)
Scope2 Total reduction			6,300	13,050	53,199	
Total		124,006	25,152 (△20%)	58,626 (△47%)	124,006 (△100%)	

GHG emissions and reduction efforts

As of 2021, emission allowances allocated by the emission trading scheme are 128,605tCO₂, and we are continuously making efforts to reduce GHG emissions to achieve carbon neutrality by 2050. We are discovering and implementing measures to improve facility efficiency more than twice a month through self-diagnosis of energy and promoting activities to increase the efficiency of waste heat recovery of exhaust gas. In particular, in 2021, surplus steam from Pohang Steelworks was converted into fuels and supplied to color coating plants, and a total of 2,638tCO₂ of GHG emissions were reduced by investing in the vacuum evaporation wastewater treatment facility of galvanizing plants.

GHG emissions

(Unit: tCO₂)

Category	2019	2020	2021
Scope 1 (direct emissions)	65,893	63,751	64,725
Scope 2 (indirect emissions)	61,878	60,419	62,641
Total	127,771	124,170	127,366

*Data scope: Domestic worksites
(galvanizing plant, color coating plant, Seoul office)

Performance of GHG intensity

(Unit: tCO₂/t-product)

Category	2019	2020	2021
GHG intensity	0.13	0.13	0.12

*Data scope: Domestic worksites (galvanizing plant, color coating plant)

Energy intensity

Category	Unit	2019	2020	2021
Fuel*	Nm ³ /t	30.44	30.50	28.19
Electricity*	kWh/t	126.35	122.81	117.75
Steam**	Ton/t	0.06	0.07	0.06

*Data scope: Domestic worksites
(galvanizing plant, color coating plant, Seoul office)

**Data scope: Domestic worksites (galvanizing plant, color coating plant)

GHG emission reduction strategies and performance

Promotion strategies	<ul style="list-style-type: none"> - Continuous discovery and execution of items to improve facility efficiency (more than 2 cases/month) - Raise efficiency of waste heat recovery of exhaust gas and use of external steam - Securing the maximum amount of emission reserves for new and expanded facilities - Purchase carbon credits at the lowest price to reduce costs
Major performance	<p>Realize carbon neutrality with fuel transition (LNG → Steam) by supplying P company's surplus steam to color coating plant</p> <ul style="list-style-type: none"> - GHG reduction 1,798tCO₂/yr, fine dust (NOx) reduction 6.1 tons/yr <p>Replace deteriorated vacuum evaporation waste water treatment facility of galvanizing plants</p> <ul style="list-style-type: none"> - Expected effect: Steam reduction 5,000 tons/yr, cost reduction 200 million/yr, GHG reduction 840tCO₂ - Improve the quality of effluent by solving potential risk of wastewater treatment of color coating plants.

Respond to environmental and energy regulations
Eliminate factors for energy waste

Resource circulation



Waste management

We are actively promoting activities for waste recycling and reduction to realize resource circular worksites. Considering environmental risks and economic feasibility, waste is treated or recycled internally. Information on toxic substances of waste that can't be treated internally is shared with a consignee so that it can be recycled safely outside the company.

Waste reduction of protective films for color coated steel sheets

Protective films are used to shield the surface of color coated steel sheets. Protective films are made from polyethylene (PE), which emits toxic pollution into the air when incinerated. By minimizing the order/use of protective films and promoting the recycling of them, POSCO STEELEON is lowering the inventory and waste of protective films, contributing to better air quality.

2021 waste reduction of protective films for color coated steel sheets

	Waste reduction	447 thousand m ²
	Financial effect	Save 46 million KRW

Amount of waste disposed

(Unit: tons)

Category	2019	2020	2021
Generated waste	3,274	3,439	3,757
Ordinary waste	1,368	1,520	1,565
Designated waste	1,906	1,919	2,192
Waste throughput	3,274	3,439	3,757
Incinerated	458	506	665
Landfill	819	631	383
Recycled	1,997	2,302	2,709

*Data scope: domestic worksites (galvanizing plant, color coating plant)

Reduction of the usage of industrial water and rationalization of wastewater treatment

We are protecting the environment by reusing treated wastewater of Pohang City, high-quality industrial water, instead of using industrial water from K-water. Moreover, we have built new water treatment facilities and are minimizing the discharge of pollution by treating wastewater in accordance with the internal standard, which is more stringent than the legal standard. Additionally, condensate generated in the manufacturing process is 100% recovered and reused, saving energy and industrial water consumption. We are also pioneering the creation of resource circular worksites by introducing improved wastewater sludge dewatering technology, reducing 359 tons of waste a year.

Furthermore, the deterioration of a vacuum evaporator, which is a treatment facility for wastewater generated from the rolling process of galvanizing plants, increased the steam consumption and hurt the wastewater treatment capability, raising environmental risks. Accordingly, we replaced the evaporator, which led to the reduction of 4,250 tons of steam consumption and 840tCO₂ of GHG emissions. We are also continuously improving the facilities and introducing new rolling oil technologies to reduce industrial water consumption and to make eco-friendly products.

Water consumption and discharge of wastewater

(Unit: tons)

Category	2019	2020	2021
Total water withdrawn	629,936	637,138	666,768
Galvanizing	326,432	328,895	329,586
Color coating	303,504	308,243	337,182
Reuse of treated wastewater	604,241	613,225	644,411
Galvanizing	309,687	314,433	316,041
Color coating	294,554	298,792	328,370
Water supply	25,695	23,913	22,357
Galvanizing	16,745	14,462	13,545
Color coating	8,950	9,451	8,812
Water consumption	167,093	161,774	145,124
Galvanizing	76,706	69,885	56,873
Color coating	90,387	91,889	88,251
Discharge of wastewater	462,843	475,364	521,644
Galvanizing	249,726	259,010	272,713
Color coating	213,117	216,354	248,931

*Data scope: domestic worksites (galvanizing plant, color coating plant)

Management of toxic chemicals

Toxic chemicals are separately stored and managed in preservation and storage facilities in a meticulous manner, and we are operating environmental management system-based worksites to prevent accidents caused by toxic chemicals. Moreover, with a regular annual inspection and occasional inspections by environmental institutions, we are thoroughly checking whether there is any weak spot in managing toxic chemicals. In addition, by sharing Material Safety Data Sheets (MSDS) with the person in charge in accordance with the Occupational Safety and Health Act, we are making sure that our employees are aware of the risks of toxic chemicals and manage them strictly.

Establishment of a response system for environmental accidents caused by toxic chemicals

For the safety of all stakeholders including employees and local communities, we have established a response system for toxic chemicals and are preemptively preparing for possible accidents such as gas leaks, fire, and explosions. Moreover, in preparation for possible environmental accidents, we are conducting mock drills twice a year, and have established a dike so that all toxic chemicals can be recovered when chemicals are spilled. In addition, we are equipped with response equipment to protect the health and safety of local communities in the occurrence of accidents.

Toxic chemical consumptions*

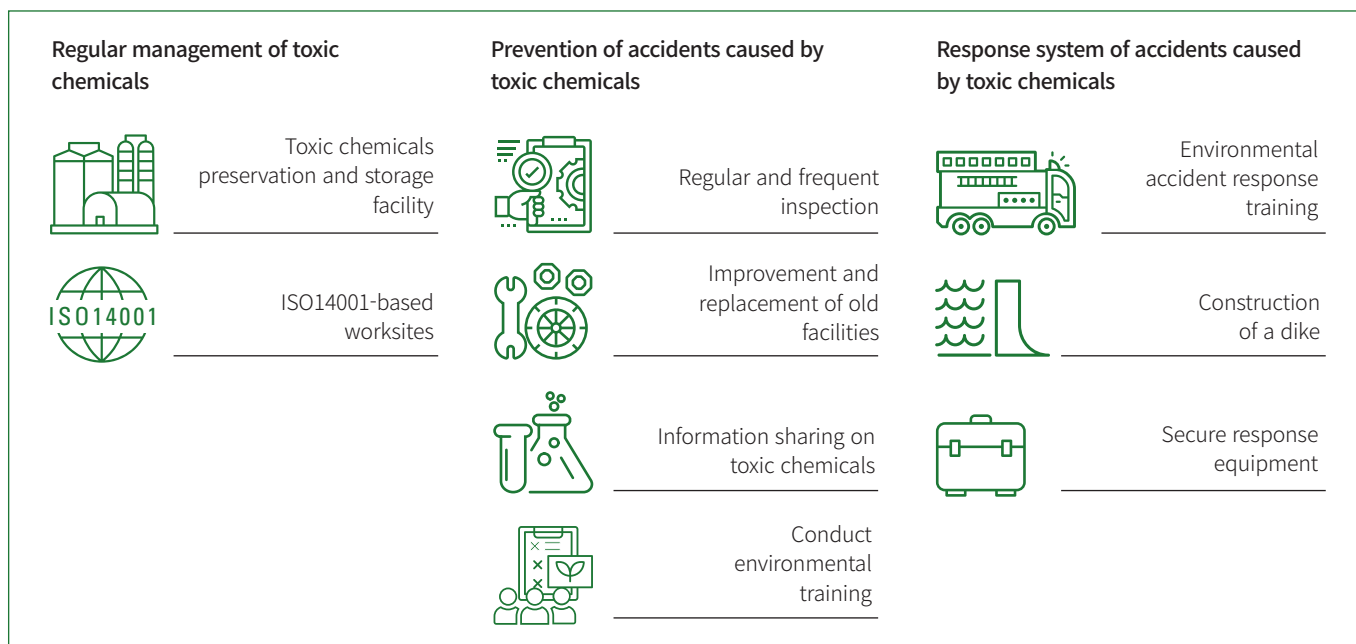
(Unit: tons)

Category	2019	2020	2021
Toxic chemical** consumptions (total)	3,288	3,730	4,085
Toxic chemical consumptions (galvanizing)	1,737	2,232	2,623
Toxic chemical consumptions (color-coating)	1,551	1,498	1,462

*Data scope: domestic worksites (galvanizing plant, color coating plant)

**NaOH, H₂SO₄, Cr, HCl, H₂O₂, Methylpyrrolidine

Toxic chemicals management system







Improvement of degreasing chemicals of color coating plants

The existing pre-treatment degreasing chemicals used in the production of color coated steel sheets of POSCO STEELEON had the possible risks of environmental degradation since they contain materials hazardous to the aquatic environment, which have the possible risks of causing harm to the environment. To remove the risks, we improved the degreasing chemicals into eco-friendly ones by applying non-toxic surfactants and reducing TOC (Total Organic Carbon)

Management of air pollutants

As a group-wide effort following the POSCO Group’s acquisition of ISO 50001 and CFP certification, POSCO STEELEON operates its plants according to internal environmental standards that are stricter than legal standards. In particular, we are applying processes to minimize the emission of air pollutants. We minimize the impact of waste gas on the atmosphere by utilizing RTO (Regenerative Thermal Oxidizer) and absorption/adhesion facility and use hydrogen and LNG, which are clean energy, to minimize air pollutants.

Air pollution management goals and strategies

Goal	 Respond to laws that require mandatory installment of TMS
	 Respond to the environmental pollution control act
Execution plan	 Install 3 TMS
	 Install 1 air pollution prevention facility

Minimize environmental issues by proactively responding to laws and regulations

Highlight

STEELEON strengthens ESG management by signing a carbon neutral practice agreement with Korea National Arboretum

- POSCO STEELEON-Korea National Arboretum establishes a mutually cooperative relationship to practice carbon neutrality.
- They decided to work together to improve national recreation forest facilities, support forestry projects, and develop and commercialize eco-friendly technologies.



▲ The signing of an agreement between POSCO STEELEON and Korea National Arboretum

POSCO STEELEON signed a business agreement for carbon neutrality with the National Arboretum in August 2021 at the Seoul office of POSCO STEELEON. In May, POSCO STEELEON supplied its eco-friendly color steel sheet ‘INFINELI’ as interior and exterior materials for an educational space for children in the National Arboretum. INFINELI, a recyclable steel sheet, embodies the colors and patterns of wood and stone, while not causing destructive activities to the environment such as logging or quarrying. Furthermore, POSCO STEELEON and Korea National Arboretum agreed on the importance of forest resources in responding to climate change. Based on this consensus, they signed the agreement to establish a cooperative system for mutual ESG activities. With this agreement, POSCO STEELEON will participate in eco-friendly forestry projects with Korea National Arboretum, support major activities to realize a carbon-neutral society, and cooperate with the Arboretum on the development and commercialization of future decarbonization technologies. In particular, with ‘INFINELI’, a color coated steel sheet brand of POSCO STEELEON, which is aiming for ECO PREMIUM, collaboration with Korea National Arboretum is expected in various environmental protection projects including community gardens and recreational forest improvement projects.

※ Main areas of cooperation

- Matters related to cooperation for forestry projects(gardens, arboretum education, etc.)
- Matters related to major events for climate response(carbon neutrality, international, etc.)
- Information sharing and network setting on carbon neutrality and ESG activities
- Matters necessary for mutual development and friendship, such as joint promotions on carbon neutral practices

Environmental management system

Environmental management strategy and vision

POSCO STEELEON is trying to practice environmental management throughout the entire business operations and lead the green growth. POSCO STEELEON is building an environmental management system based on the international standard, ISO14001. In addition, under the supervision of Safety Environment Group, we transparently manage and measure environmental performance with an environmental management system and practice continuous improvement activities through KPI management. POSCO STEELEON aims to minimize environmental risks by focusing on global environmental management, resource and energy, and environmental safety accidents.

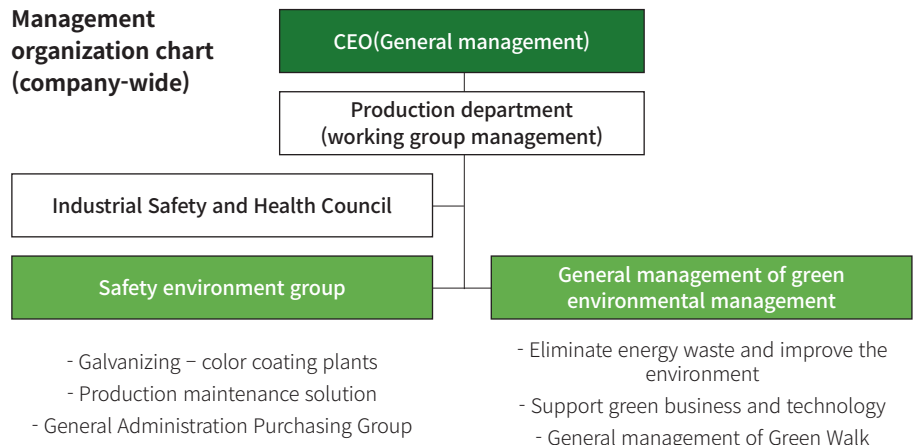
Organizations for environmental management and execution system

POSCO STEELEON has Safety Environment Group under Production Department. The safety part is in charge of occupational safety and health, while the environment part is in charge of energy and environmental issues. We established the company's energy and environmental strategies and indicators and are cooperating with galvanizing/color coating plants, the entities that practically use energy, to reduce GHG emissions at the company-wide level, executing tasks to achieve goals in the 3 areas of environmental management. Moreover, to unleash the leadership of the top management for ESG management, we are managing safety and corporate citizenship practices by setting them as the KPI of the CEO and being evaluated from the parent company, POSCO, every year.



▲ Environmental management system certificate (ISO 14001)

Management organization chart (company-wide)



Goals in the 3 areas of POSCO STEELEON

Main agenda	Lead the global environmental management	Resource and energy reduction	Prevention of environmental and safety accidents
Goal	<ul style="list-style-type: none"> - The best company in environmental management - Strengthen environmental conservation and social contribution activities - Focus the capacity on the development of eco-friendly products - Reduce the emission of environmental pollutants 	<ul style="list-style-type: none"> - Raise efficiency of energy facilities - Reduction of CO₂ intensity - Improve the recycling of waste resources 	<ul style="list-style-type: none"> - Zero environmental and safety accident - Zero failure of equipment
Execution strategy	Zero environmental risk		
Result	2 violations of environmental laws in 2021* 0 environmental accidents		

*The 2 violations of environmental laws in 2021 are related to the galvanizing plant (non-compliance of reporting obligations on alteration of air pollutant-emitting facilities) and color coating plant (non-compliance of reporting obligations on alteration of wastewater discharge facilities)

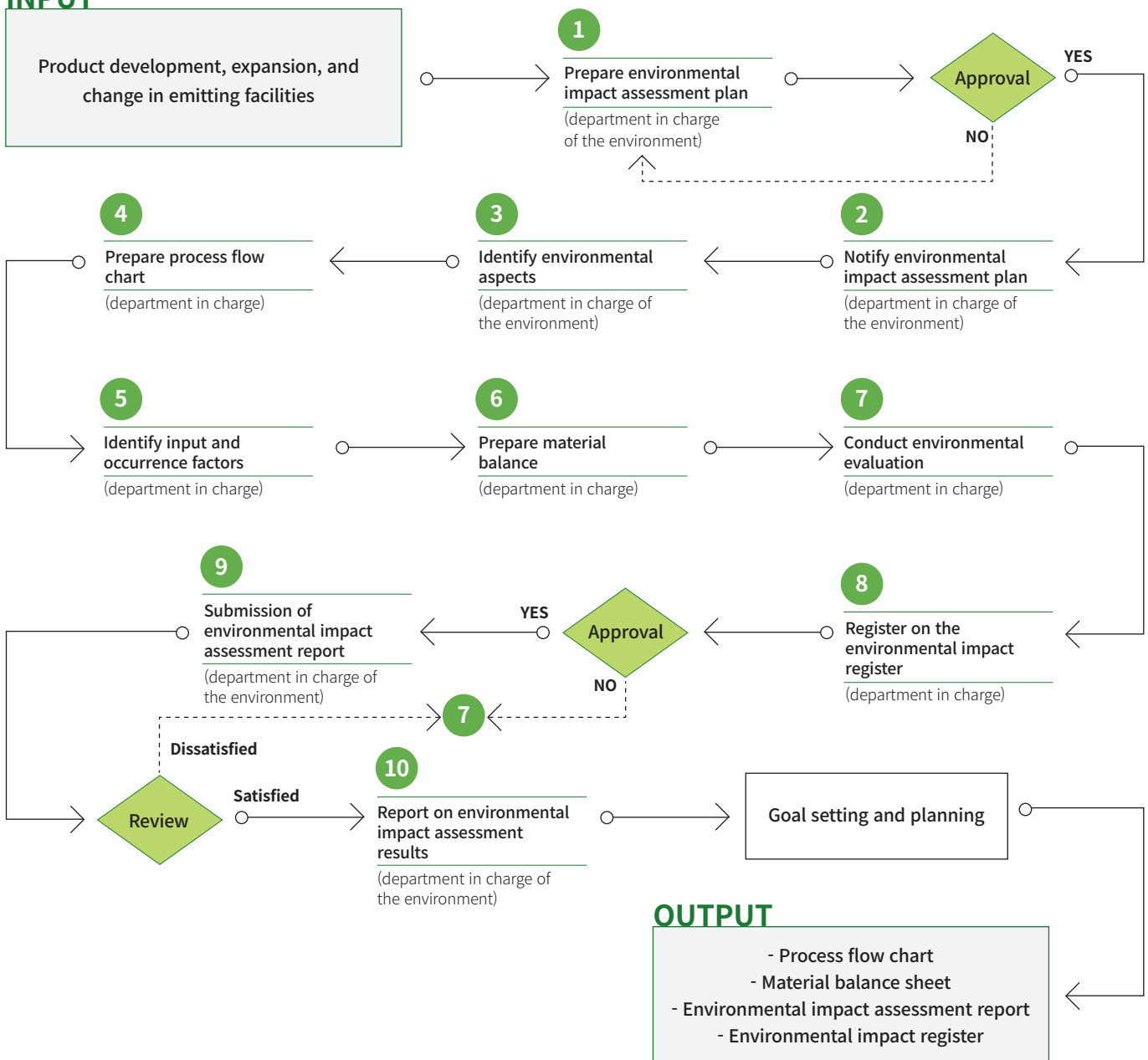
Environmental risk management process

POSCO STEELEON is minimizing risks on our business activities by regularly monitoring and preemptively responding to possible risks that may arise in each field, including the environment and energy. The environmental manager reviews environmental risks assessed by relevant departments based on the environmental management system (ISO 14001) and issues that require actions are improved and managed in cooperation with relevant departments.

Moreover, when environmental issues occur, risks and opportunities are analyzed to identify the gravity and impact on the business, which are reflected in major decision-making such as production and investment.

Process flow

INPUT

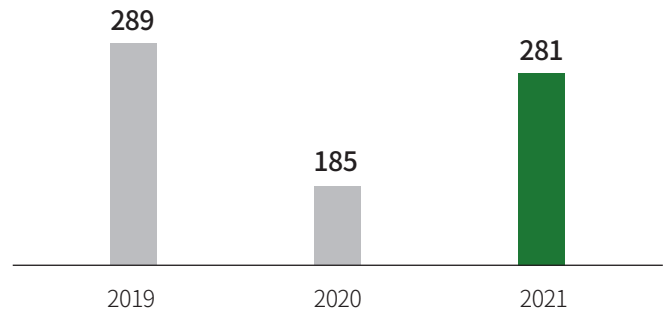


Environmental training on employees

We provide environment-related information and training to raise employees' awareness of environmental management and strengthen their capabilities. We provide the person in charge of the environmental work with external and special training tailored to the characteristics of their job and provide basic training for new hires so that they can understand the importance of the environment and general environmental management of the company. In 2021, we provided 8 hours of environmental training to 281 employees, helping them to build consensus on ESG management philosophy and recognize the importance of the environment.

Number of employees participated in environmental training

(Unit: persons)



Highlight

Small actions in daily life to achieve carbon neutrality, 3P+1(Plasticless) movement

- Build a consensus on carbon neutrality and ignite a change in perception by practicing energy saving
- Cut 40.1 tons of carbon emission annually, which has the same effect as planting 6,101 trees.



▲ Commemorative photo of employees participating in the 3P movement

The 3P+1 (Plasticless) movement was implemented to build a company-wide consensus on the 2050 carbon-neutral management goal by practicing carbon-reduction activities in daily life and at the workplace. 3P movement includes 3 activities, which are Private Cup (using personal cups such as tumblers and mug cups), Power Off (turning power strip off when leaving the office), and Proper Temperature (managing heating and cooling temperature). Plasticless (movement to reduce plastic waste) is a movement to raise awareness on the excessive use of plastics and reduce plastic waste by separating recyclable and non-recyclable plastics. In 2022, POSCO STEELEON designated every Thursday as 'Green Day', reminding employees about the 3P+1 movement so that the movement doesn't end up as a one-time event, but firmly takes root as a corporate culture with habitualization. As such, we are continuously promoting corporate citizenship activities based on ESG management.

Environmental management at domestic and overseas worksites

POSCO STEELEON is actively practicing policies and activities for environmental management at domestic and overseas worksites.

① Management of air pollutant concentration level of emissions

To respond to Total Air Pollution Load Management System, which has been implemented since April of 2020, the quota of total air pollution load was allocated to each worksite, and TMS was mandatorily installed. We protect the environment by managing air pollutant concentration levels of emissions with quota compliance and self-assessment of pollutants. Moreover, since March of 2022, we are regularly monitoring/managing air pollutant concentration levels of emissions using TMS.

② Installment of air pollution prevention facilities

Post-galvanizing Scrubber was installed to comply with environmental regulations and to minimize the emission of specific air pollutants that can be generated in the painting and drying process in 2CGL of galvanizing plants. Moreover, in preparation for the Act on the Integrated Control of Pollutant-discharging Facilities, which will come into effect in January 2022, we completed the installation of low-NOx burners in the LNG boilers of the color coating plant by December 2021.

③ Improvement of harmful chemicals handling facilities

Leak sensors were installed in harmful chemicals handling facilities to preemptively detect the leakage of harmful chemicals that may arise during the surface-treatment process such as galvanizing and painting and to prevent chemical accidents. In addition, we closed existing storage facilities for harmful chemicals and established a new facility to respond to regulations and to improve insufficiency. Moreover, we are continuously conducting activities to properly manage harmful chemicals handling facilities including submitting the results of regular inspections of harmful chemicals handling facilities done by Korea Gas Corporation to the Ministry of Environment in November 2021.

④ Establishment of the supply chain to reduce GHG emitting fuels (LNG →Steam)

As a step-by-step initiative for 2050 carbon neutrality roadmap, fuels for boilers at color-coating plants (LNG) were replaced with external surplus steam, reducing 1,800tCO₂ of GHG emissions annually. Moreover, by participating in the national LNG reduction policy in winter, 410,000 Nm³ of LNG and 896tCO₂ of GHG emissions were saved year-on-year (Feb~Mar).

Moreover, we are continuously practicing energy saving by diagnosing the efficiency of energy facilities in the production process.

Green investment

By developing eco-friendly new products and building high energy-efficient facilities, we are striving to achieve our vision for the second growth engine, 'realization of green growth with the advancement of manufacturing technologies'. While continuously expanding green investment, we will actively respond to eco-friendly management trends and build eco-friendly worksites.

Performance of green investment

(Unit: million KRW)

Category	2019	2020	2021
Green investment	1,055	559	2,713

Green purchase policy

We are considering contractors' ESG management from the initial stage of purchase so that the humanity can enjoy a sustainable life by efficiently using limited resources and creating a pleasant environment. For more information on green purchase, please refer to 'the expansion of eco-friendly purchasing' section of this report.

Sustainable Technology and Product Innovation

As the need for eco-friendly products increases in the market with eco-friendly, carbon-neutral policy, competition for product differentiation is expected to grow. In response, POSCO STEELEON is concentrating its research capabilities to secure sustainable development and technological competitiveness, developing a variety of eco-friendly products and materials.

R&D promotion system

R&D promotion strategy

Strategy Agenda

Galvanizing

New product and market development in preparation for environmental changes

- Differentiation of products and new product development utilizing specialized technologies
- Expansion of electric vehicle parts and eco-friendly products in preparation for acceleration in environmental change

Color coating

Differentiation and strengthening of INFINELI brand

- Raise competitiveness by leading the development of differentiated and eco-friendly products
- Reinforce sales infrastructure by strengthening the INFINELI brand

R&D investment

(Unit: million KRW, %)

Category	2019	2020	2021
R&D expenses	2,226	1,820	1,496
R&D expenses/Sales ratio	0.25	0.21	0.11



2019~2021 R&D performance

2019

- PosMarble UV steel sheet
- Foaming print steel sheet for elevators
- Non-flammable color steel sheet for interior materials
- Non-flammable color steel sheet for exterior materials
- Color MAC steel sheet
- 1Pass type 3C3B Metallic PVDF color steel sheet
- Fluoroethylene vinyl ether (FEVE) fluoride color steel sheet

2020

- High weatherproof Matt steel sheet (POSTERRA)
- AL color steel sheet for EV cell covers
- 3.0t extra thick AL non-flammable fluoride color steel sheet
- High weatherproof non-flammable steel sheet
- Colored galvanized steel sheet (Blue)
- High gloss Infinity PatternMAC
- UV STS color steel sheet
- Three-dimensional print steel sheet for televisions

2021

- High weatherproof coloring post-treatment
- Objet color steel sheet for refrigerator door
- Extra thick Al color fluoride Ceramic color steel sheet
- High tensile color steel sheet Eco-friendly print steel sheet (formaldehyde-free)
- High weatherproof chameleon steel sheet
- AL-STs bare spot improvement technology
- High corrosion-resistant coating material surface defect (black spot) reducing post-treatment technology

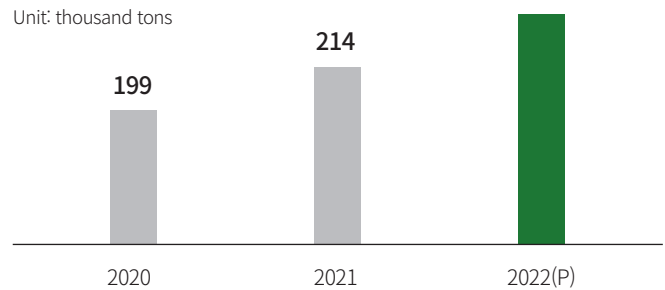
Eco-friendly products of POSCO STEELEON

POSCO STEELEON’s eco-friendly products are largely divided into improved hand-print and harmful materials-reduced (or free) products. Hand-print improvement is a case where a positive environmental effect is created thanks to process omission, efficiency improvement, and durability improvement. Harmful materials-reduced products are the ones with no or reduced generation of harmful substances to humans or the environment.

*Hand-print: positive environmental and social impacts (carbon reduction, etc.)

↔ Foot-print: negative impacts such as pollution and resource consumption

Sales of eco-friendly products



① MACOSTA

● Characteristics of the product

MACOSTA is a ternary hot-dip Zn-Al 1.4%-Mg 1.4% alloy steel sheet (KS D 3030) with outstanding corrosion resistance and processability, developed with POSCO STEELEON’s unique technology.

*KS D 3030: regulates hot-dip coated steel sheets and coils made with an alloy that consists of 1.5~8% of the combination of MG and Al and the rest with Zn (MACOSTA: Hot-dip Zn-Al-Mg alloy steel sheet)

● Paintability

Continuous painting and powder painting can be applied just like the existing painted steel.

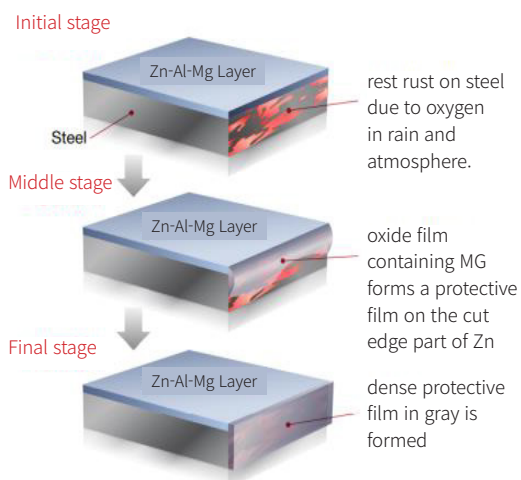
● Corrosion resistance

Slab

- Promotes the formation of Simonkolleite ($Zn_5(OH)_8Cl_2 \cdot H_2O$), a dense corrosion product with Mg in a highly stable state in the coating layer.
- Simonkolleite is formed and maintained like a film on the surface of the coating layer, preventing corrosion of substrate steel sheet.

Cross section

- Upper coating layer is dissolved to cover the cross section and promote stable growth of corrosion product.
- Corrosion product covers the red rust on substrate steel sheet that is already exposed to prevent corrosion.



▲ Film formation of Simonkolleite

High weatherproof product



fluorinated product



traditional roof tile (MATT product)



regular roof tile (MATT product)



bio antibacterial product



▲ Application example of roof material, steel roof tile, and vinyl house pad

② Antibacterial color steel sheet (PBG/PBK)

● Overview

- A color steel sheet mixed with a ceramic antibacterial agent with an excellent sterilization effect. It also has excellent antibacterial activity that suppresses the growth of bacteria, viruses, and fungi due to its excellent antibacterial effect along with weather resistance and corrosion resistance.
- Antibacterial color steel sheet certificates from overseas institutions
 - Subjects: PGS, PSP
 - Certification body: Hohenstein (Germany)
 - Germany's best sanitary/biotechnology institute antibacterial certification quality label that can be obtained after passing the conformity test according to the standard
 - Certificates for some products from domestic home appliance companies such as Samsung and LG
 - Test standard: ISO 22196
 - Test bacteria: Staphylococcus aureus ATCC 6538, Escherichia coli (E. coli) ATCC 8739

● Features

- Antibacterial activity
 - Sterilization by active oxygen of special metal ceramic antibacterial agent
 - Sterilization by metal ions (Ag, An, Cu)
 - Bacteria, mold, organic matter, ammonia gas adsorption, and deodorization by ceramic pores
 - Mixed additives that have been confirmed to be safe for the human body
- Range of products
 - PGS, PSP, PosMATT, PVC-Sol, antistatic, PVDF, non-flammable steel sheet, printed steel, PCS

Applications of antibacterial color steel sheet

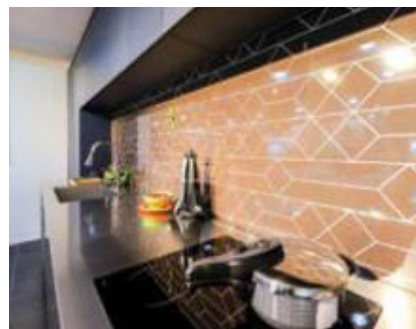
Exterior material ○	Interior material ○	Roof material ○	Fire door ○
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▲ Antibacterial color steel sheet certificate



▲ Test bacteria: Staphylococcus aureus and E-coli



▲ Application example of antibacterial features



③ Non-flammable color steel sheet (NCP2)

● Overview

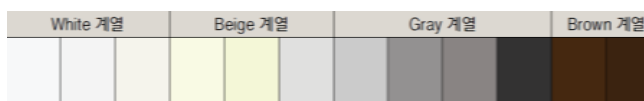
A color steel sheet that does not easily ignite at high temperatures and produces less smoke and harmful gases. It meets the performance standards* for non-flammable materials prescribed by Ordinance of the Ministry of Land, Infrastructure, and Transport.

*Non-flammability test (KS F ISO 1182), gas toxicity test (KS F 2271)

● Features

- Use of organic-inorganic composite type resin with excellent heat resistance and processability instead of commonly used polyester resin⇒Securing non-flammability
- Use of inorganic pigments instead of organic pigments and add inorganic flame retardants to suppress combustion to improve non-flammability⇒Restrict color realization

Available colors



Test items

Category	Test items	
	Non-flammability test(KS F ISO 1182)	Gas toxicity test(KS F 2271)
Experimental method	<ul style="list-style-type: none"> Put the specimen in a 750°C furnace and heat for 20 minutes 	<ul style="list-style-type: none"> Verify the effect of the combustion gas generated by burning the test specimen on the experimental rats (8 mice) through the stirring box
Performance standard	<ul style="list-style-type: none"> The maximum temperature must not rise more than 20°C above the equilibrium temperature. The mass reduction rate of the specimen must be less than 30% 	<ul style="list-style-type: none"> The average behavioral pause time of laboratory mice should be more than 9 minute

④ Printed color steel sheet (Print)

● Overview

A unique product with a wide range of colors and patterns, sophisticated luster, and texture through a special printing method on a single-color steel sheet that can offer customized designs according to the purpose of consumers.

● Features

- Luxurious and stylish design
- Diversified functions by selecting paint suitable for application characteristics
Hi-Polymer / Polyester / High weather resistance, etc.
- Maximized feeling of real metal when using high-brightness metallic ink
- Clear texture to express the three-dimensional effect
- Continuous/discontinuous design pattern



▲ Application example of printed color steel sheet

Applications of printed color steel sheet

	Home appliances	Building materials
Exterior material		○
Interior material		○
Roof material		○
Fire door		○
Refrigerator	○	
Washing machine	○	
TV	○	

SOCIAL



Creating a Happy Workplace	41
Realizing a Safe Workplace	46
Sustainable Supply Chain	50
Social Contribution	55
Quality Management	59

SOCIAL Management Approach

Context

Since human resources account for the largest portion of a company's competitiveness, companies should work hard to create a happy and safe workplace to work for without any safety accidents. Moreover, as the role and influence of a company on local communities increase, the corporate social responsibility for the coexistence with contractors and local communities is growing as well.

Material Topics

Ranking	Major ESG topics
1	Safety and health
7	Due diligence on supply chain

Risk & Impact

- Increase in safety accidents and human rights violations of workers from contractors
- Casualties and damage to the company's image caused by accidents
- Conflict with local residents

Key Measures

- Introduction of systematic safety and health system
- Accident-free incentive system to prevent safety accidents and safety training of employees and contractors
- Implementation of a fair-trade-type bidding system and comply with the principle of full cash payment to contractors
- Conduct activities based on social contribution promotion strategy and encourage volunteer activities of employees.

Our Approach

To ensure the safety of our employees and contractors, POSCO STEELEON organizes a safety and health system in accordance with the safety and health policy and supports various activities to achieve safe management goals, including the adoption of an accident-free incentive system. Moreover, we established an ESG purchasing system for sustainable supply chain management and strengthened share growth, while engaging in volunteer activities for local communities and participating in social contribution activities using our products, such as PosART.

Our Performance



257 million KRW
Amount of expenses
spent for social
contribution



1,085 hours
Volunteer work
hours of employees



85 points
Employee satisfaction
P-GWP index



100 %
Cash payment ratio
for contractors



97.5 %
Completion rate of
safety and health
training



3 cases
Introduction and
improvement of
mutual growth system

Alignment with UN SDGs



Goal 3: Good health and well-being

Goal 8: Decent work and economic growth

Goal 9: Industry, innovation and infrastructure

Goal 11: Sustainable cities and societies

Goal 12: Responsible consumption and production

Creating a Happy Workplace

Based on the corporate citizenship management philosophy, POSCO STEELEON is doing its best to provide support in each field, including the improvement of the welfare system, in order to realize a happy workplace. In order to form a win-win labor-management culture and to prevent conflicts arising from generation gap and gender discrimination in advance, we are striving to promote exchanges between employees. At the same time, we operate a capacity building program and establish a fair HR management system, nurturing and managing key talents directly related to the Company's sustainability.

Talent nurturing and management

Recruiting policy

It is no exaggeration to say that the key to business success is securing excellent human resources and nurturing them as key talents. POSCO STEELEON operates an advanced recruitment system to hire passionate and creative talents with consideration and a sense of action. The recruitment process is comprised of 4 stages. With personality and aptitude tests and interviews, we check the applicant's analytic, planning, and communication skills and leadership. In addition, we are taking the initiative in hiring the disabled and the vulnerable to comply with the government policy and fulfill our responsibilities as corporate citizen.

Image of a qualified employee of the company

Action	A talent who takes the initiative by showing determination with a sense of ownership and responsibility
Consideration	A talent who practices a value of coexistence with modesty and respect while pursuing an attitude of sacrifice and service
Creativity	A talent who is immersed in their work and actively applies new ideas to solve a problem

Recruitment process

Category	Evaluation method	Evaluation items
Document screening	- Examine the candidate's qualification for application	- Qualification for application such as education, work experience, language, professional skills, social activities, and cover letter
Personality and aptitude test	- Examined by an external personality and aptitude test specialized organization	- Basic personality and job aptitude
Practical interview	- AP(Analysis & Presentation): analysis and presentation on problem-solving cases - Analysis of the proposed task - Presentation and Q&A	- Individual ability to perform tasks
	- GD(Group Discussion): group discussion on the presented topic - Group discussion on the presented topic - Evaluation during discussion	- Ability to perform tasks in a group
	- ST(Specialty Test): 2 interviews	- Resume/culture fit, major-related knowledge
Executive interview	- Interview with HR executives	- Basic personality, value suitability, attitude

Managing employment quota of female workers and the disabled

POSCO STEELEON aims to comply with the legal standard stipulated in relevant laws and regulations when hiring female workers and the disabled. The target employment rate of female workers is 4.58%, equivalent to 70% of the average female employment rate of companies in the comparison group according to the Affirmative Action (AA) managed by the Ministry of Employment and Labor. As of March 2022 (based on the reporting date to the Ministry of Employment and Labor), the proportion of female workers at POSCO STEELEON is 6.99%. As of 2021, Korea Employment Agency for Persons with Disabilities mandates employers with 50 or more full-time workers to hire the disabled for at least 3.1% of their total employees. As of December 31, 2021, 3.3% of employees at POSCO STEELEON are persons with disabilities.

Employee information

(Unit: persons)

Category	2019	2020	2021
Total number of employees	427	424	434
Executives	10	10	9
Permanent workers	406	405	413
Temporary workers	11	9	12
Female workers	24	25	29
Persons with disabilities	10	11	14

Job-related capacity-building program for employees

We provide specialized training systematically according to the positions and jobs of each employee to help them develop their capacity. The training consists of a total of 5 areas and 16 courses, which offer a vision for growth to employees.

Moreover, to respond to the rapidly changing environment with the 4th industrial revolution and secure competitiveness, we provide Data Intelligence training as well.

Graduate School / MBA study abroad program

POSCO STEELEON supports graduate school/MBA study abroad programs to present a growth vision to employees and to improve their work-related skills. Employees who have worked for the company for 5 years and more are eligible for the application. After going through a selection process, successful candidates enter nearby national universities' MBA courses or POSCO Technological University. In 2021, a total of 3 employees entered the MBA at the University of Seoul and POSCO Technological University. Recently, we are actively supporting the degree acquisition of employees, reviewing ways to expand the program to private universities.

Education hours and expenses of education per person

(Unit: hours, thousand KRW)

Category	2019	2020	2021
Education hours	36	56	31
Education expenses	536	401	504

Main curriculum

Category	Details
Job	Graduate school/MBA study abroad program
	Data competency improvement training
	AI expert course
	Marketing competency improvement training
	Job-specific training and seminar/forum
Leadership	Professional certificate acquisition program
	MZ generation Vision+
Global	Overseas benchmarking course
	Global leader training course (rotation duty between Myanmar/head office)
Mindset/attitude	Put yourself in someone else's shoes Workshop (Empathy plus workshop)

Fair performance management and evaluation

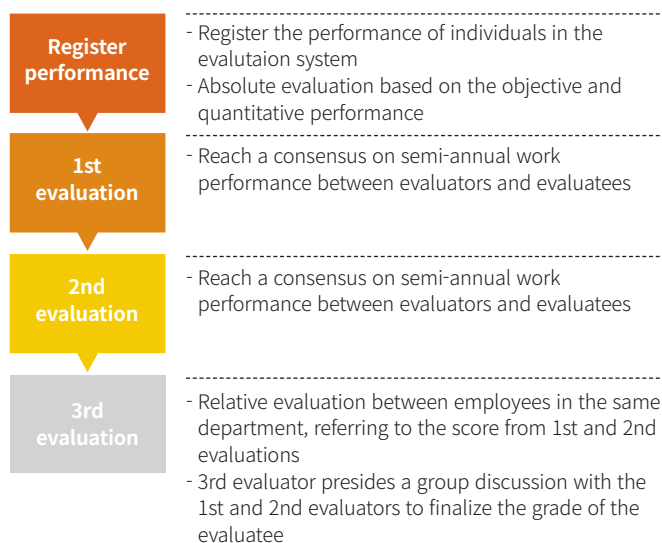
We create a rewarding and happy workplace by improving the overall position·promotion·evaluation·compensation system. We are operating an advanced HR system by assigning titles according to roles and introducing a self-directed promotion while adopting a point system in a promotion. In addition, we operate a reasonable and fair evaluation and compensation system where individuals can receive compensation based on their skills and performance. Employees' performance and skills are evaluated through a process separated into performance and competency.

When it comes to performance evaluation, a final grade is granted after a group discussion among evaluators to ensure objectivity. When it comes to competency evaluation, individuals' abilities can be evaluated in a more meticulous way with the evaluation items of common·job-based·job-specific skills. Transparency and fairness are guaranteed in the evaluation process with a meeting with evaluators and setting a period where employees can file an objection.

Competency evaluation items

Category	Details
Common competencies	- Share the company's core values and evaluate the practice level - Pursue challenges, emphasis on execution, etc.
Job-based competencies	- Competencies required for high performance and growth in the current department - Business mindset, planning skills, crisis management skills, communication skills, etc.
Job-specific competencies	- Level of expertise such as knowledge, experience, and qualifications required for high performance in the current job

Performance evaluation process



Welfare system

Support capacity building

We are providing various programs to support job-related capacity-building activities of employees. To help employees' career development, we are supporting the acquisition of professional certificates of office workers and technical workers. Moreover, we are providing partial support for education expenses and language test fees to help employees at the headquarter and overseas branch to enhance their English and 2nd foreign language skills.

Support for capacity building of employees

(Unit: persons, 10,000 KRW)

Category	2019	2020	2021
Employee	4	8	16
Support	200	400	1,360

Work-life balance

Since the work-life balance of employees is linked to the company's business performance, we offer a variety of programs to help our employees to achieve work-life balance. We are supporting club activities to strengthen communication between employees and provide recreational facilities free of charge so that employees can enjoy their vacation. Moreover, we provide a lending program, welfare card program, scholarship, and support for medical expenses for the stable livelihood of our employees. In addition, we are taking initiatives in enhancing the welfare of our employees by giving congratulations and condolences allowances, rewards for long-serving employees, childbirth allowances to address low birth rate, and allowances for fitness centers to improve the health of the employees.

Support for resettlement and health care

POSCO STEELEON is working hard to provide a workplace where employees can work happily. We are operating various support systems that can help employees whose working location has changed to resettle in a new environment. Moreover, we operate in-house health promotion facilities to help our employees maintain the best condition. In addition, we offer medical checkups for the families of employees.

Welfare system*

Category	Details
Lending program	- Support the purchase of a house of non-homeowners, lend living expenses
Health promotion and medical support	- Operate in-house health promotion facilities - Annual medical checkups for employees and their families - Offer nutritional supplements and flu vaccinations to employees working in vulnerable environment
Educational support	- Support the acquisition of professional certificates - Support expenses for telephone English lessons for language skill improvement
Leisure support	- Support for condominium reservation, support the season card purchase of Pohang Steelers
Family support	- Support medical expenses for employees and their families - Support tuitions of employees' children
Others	- Offer congratulations and condolences allowances, support a studio for new hires and employees who need resettlement, support fitness center expenses and club activities

*Temporary workers can enjoy only a part of the system (not applied to workers not directly hired by the company)

Raise the satisfaction level of employees

We collect the annual P-GWP(POSCO – Great Work Place) index to check the satisfaction level of employees on company policies and systems. P-GWP Index, which is comprised of 5 sections and 11 items, examines the organizational satisfaction level and engagement level of POSCO Group employees. POSCO STEELEON's index is the highest among the POSCO Group, and among them, core values, organizational management, HR system, and communication are highly evaluated by employees.

Employee satisfaction based on P-GWP survey

(Unit: points)

Category	2019	2020	2021
Employee satisfaction	83	86	85

Harmonious labor-management culture

Activities of Management-Employee Council

We are implementing various policies to establish a harmonious labor-management culture. At Management-Employee Council representatives of labor and management have regular and occasional meetings, continuously working together for win-win cooperation between labor and management.

In 2021, with the enforcement of Serious Accidents Punishment Act, we focused on safety-related matters by creating internal management rules for the safety of the workplace and finding ways to raise awareness on the safety of employees. Moreover, we promoted the participation of workplace safety compliance programs with the adoption of a zero-accident incentive system through consultation and expanded the recipients of medical checkups for early diagnosis of serious diseases of employees. In addition, labor and management agreed on various issues such as the improvement of supporting standards for professional certificate acquisition, establishment of a vacation program for retirees and an annual leave support system, and hosting of company-wide Empathy Plus Workshop.

Based on the trust and candid communication between labor and management, Management-Employee Council is improving the welfare of employees.

Meetings between employees with different hierarchies

Active communication between employees builds creative corporate culture and encourages members to set the same goal and cooperate. POSCO STEELEON is holding meetings between employees with different hierarchies to strengthen communication within the company. Employees from different hierarchies such as short-serving employees, employees with previous work experience, and middle managers participate in the meeting and share ideas on agendas, suggesting various ideas for improvement.



▲ Meetings between short-serving employees



▲ Activities of Management-Employee Council to create a culture of seamless communication

Main agenda of Management-Employee Council in 2021

Quarter	Main agendas	Date	Number of participants
1 st quarter	Implement zero-accident incentive system	2021.3.23	12people
2 st quarter	Improve the supporting standards for professional certificate acquisition	2021.6.22	12people
3 st quarter	Expand the recipients of medical checkups	2021.9.14	12people
4 st quarter	Adjust retirement date	2021.12.28	12people

Diversity and inclusion

Voice Up STEELEON

POSCO STEELEON holds quarterly meetings among employees of the MZ generation to discover areas of improvement and business ideas. MZ generation, who are born after the 1980s, are playing an important role as working-level workers in the company. At the meeting, various agendas from marketing to the company's vision are discussed, collecting creative ideas for improvements. POSCO STEELEON will continue to respect diversity between generations and encourage communication, while actively reflecting various ideas for improvements identified in the process.

Diversity training for employees

We are offering diversity training to internalize a culture that respects social diversity. All employees are taking E-learning training courses to raise awareness on the disabled in the workplace. Sexual harassment prevention training is conducted to prevent gender discrimination and conflicts in advance. In addition, we are promoting a culture of mutual respect among employees by providing training courses that can help them to understand the MZ generation to address differences in values between generations.



▲ Diversity training for field managers

Highlight

Virtual Empathy Plus Workshop

A virtual Empathy Plus workshop was held using a virtual platform (Web-Ex) despite the COVID-19 crisis. The Empathy Plus Workshop is an online training conducted to promote a culture of understanding and respect between generations and to create a united POSCO STEELEON by encouraging virtual communication between departments.

Moreover, the POSCO Group's lighthouse leadership training session was held during the Empathy Plus Workshop, promoting the right leadership of managers.



▲ Online training course

Realizing a Safe Workplace

POSCO STEELEON considers the safety and health of all stakeholders as key business value. We have established our own safety and health management strategies and policies to create a safe and pleasant work environment and are doing the best to create a safe workplace by launching training systems and the organization in charge of the execution.

Safety and health

Safety and health system

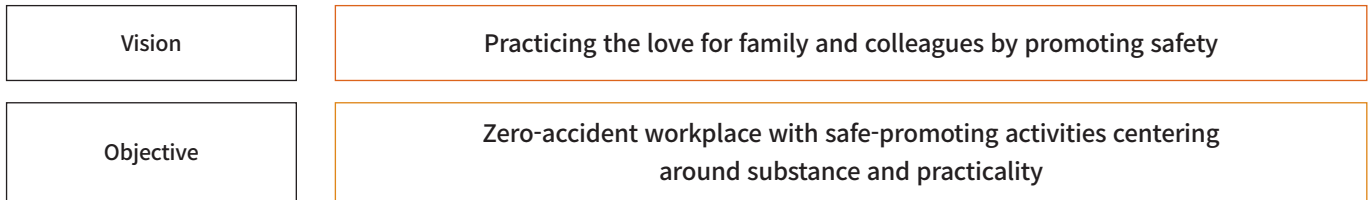
POSCO STEELEON has set safety as its top priority and aims to achieve zero-safety accidents with the establishment of a safety culture that respects humanity. To achieve a vision of ‘realizing a safe POSCO STEELEON that respects the value of life’ and the goal of zero accidents, we are carrying out 10 tasks related to management-awareness-facilities every year.

Safety and health accident index

(Unit: cases, persons, %)

Category		2019	2020	2021
Number of accidents	Direct employees	2	3	1
	Contractors	4	1	0
Number of deaths	Direct employees	0	0	0
	Contractors	0	0	0
Lost time injuries	Direct employees	2.42	3.34	1.08
	Contractors	5.38	1.34	0

2021 agendas for safety and health



10 major tasks

1. Behavior: safe culture with compliance

- Expand the support for safety management of partners/contractors
- Cultivate safe leadership and management competency (acquisition of safety certification, etc.)
- Raise awareness of safety by implementing a zeroaccident incentive system



2. Process: focused management of safety and health practices

- Establish a responsible system to manage safety in high-risk works
- Enforce stricter regulations to prevent the violation of safety rules of contractors
- Reinforce safety training program (one-way communication → two-way communication)



3. Facility: safe workplace

- identify potential risks and make improvements through daily, themed, and joint inspections
- Transition to factory-led PSM and level up support



4. Health: self-managing health activities

- Prevent 5 major adult diseases and concentrated management of those with health problems
- Proactive prevention of occupational diseases and emergency response to crisis such as COVID-19



Activities to prevent the recurrence of safety accidents

To prevent possible jamming accidents rising from the operator intervention, we are changing work methods and facilities, and are continuously making improvements by discovering risk factors of each work unit.

In addition, placing supervisors or signalers is required in a working environment where communication between workers is difficult to prevent safety accidents.

Health and safety management policy

1. Safety and health is a key management philosophy and take priority over any other value including production and quality.
2. We thoroughly comply with safety and health rules and company regulations.
3. We nurture safety awareness and ability to practice through systematic education and training.
4. We identify all risk factors before they escalate and take appropriate prevention and improvement measures.
5. All employees actively participate in safety and health activities.
6. We establish a safety and health system and check and improve the execution of it.
7. We maintain a safety management system with stakeholders including contractors.

Safe leadership of the management

POSCO STEELEON is preventing safety accidents with substance and practicality-oriented safety activities. Daily safety activities of field supervisors are reported to the persons in charge of safety and health management and shared with all related workers. At the same time, with real-time feedback on difficulties rising in the field, we are creating a better work environment.

In addition, a joint safety inspection is conducted every month under the leadership of the persons in charge of safety and health management, checking on-site safety management status and listening to employees' VOC, thereby realizing a zero-accident, zero-disaster workplace with empathy and communication.



▲ Joint safety inspection led by Production Department

Highlight

Safety education and training

POSCO STEELEON operates safety and health programs for its employees and particularly puts a lot of effort into internalizing safety awareness through education and training. We produce safety training and UCC¹⁾ by ourselves for employees with different hierarchies, raising the efficiency of training. The UCC was also shared with major contractors, raising safety awareness throughout the supply chain.

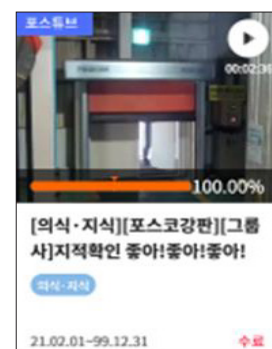
In addition, to create a safe environment in a fun manner, safety training materials are distributed each month with a safety quiz event. Moreover, to improve employees' knowledge of occupational safety, we launched a system that provides full support for textbooks, education expenses, and exam fees when acquiring related certificates, raising the certificate acquisition rate and satisfaction level of employees.

1) User Created Contents

Performance of occupational safety and health training

(Unit: %, persons)

Category	2019	2020	2021
Completion rate of safety and health training	97.4	96.5	97.5
Achievement rate of zero-safety accident	100	100	85
Health autonomy (based on 5 major adult diseases)	48.2	45.5	48
Number of people newly acquired safety certificates	1	2	11



▲ Safety UCC

Conduct risk assessment and respond to industrial accidents

POSCO STEELEON identifies occupational safety and health risks for processes and operations and conducts risk assessments to prevent risks. Process risk assessment is conducted regularly every four years after the previous assessment, and occasional assessments are needed when launching a new operation or using new materials. A risk assessment is conducted for processes that use hydrogen, sulfuric acid, and hydrochloric acid, boiler pipe cleaning, replacement of boiler tubes, and other maintenance and repair processes. Management standards are established by classifying the risk into 6 levels. Recommendations for improvement derived from the risk assessment result should be executed without any omission with a specific action plan. In the event of an industrial accident, it should be immediately notified to the department in charge of safety and health issues, and detailed preventive measures are planned and implemented, such as investigating the cause and identify the person responsible for the accident to prevent the recurrence of similar accidents.

Situation where an occasional risk assessment is required

Category	When to conduct a risk assessment
Process risk assessment	<ul style="list-style-type: none"> - Before starting a new operation - Before the change of facilities or procedures - Before the use of new materials - In case of accidents such as serious industrial accident - When deemed necessary by self-audit or external inspection
Operation risk assessment	<ul style="list-style-type: none"> - Before performing an operation - When identifying the cause and the appropriateness of response when an accident occurs - When changing the process or work operations - When using new materials - When explaining the safety of equipment to stakeholders in an easy way

Improvement of risk factors

Risk level	Management standards	Remarks
1~3 Negligible risk	Maintain current safety measures	Accept hazardous works (con continue the work as it is)
4~6 Insignificant risk	Risks that require the regular provision of safety information and standard safety work guideline	
8 Minor risk	Risks that require management such as affixing of risk signs and writing of standard operating procedure	
9~12 Significant risk	Risks that require risk reduction measures such as facility improvement during the planned maintenance and repairing period	Conditionally accept hazardous works (continue working when there is no risk, but risk reduction activities should be carried out)
15 Serious risk	Risks that require the establishment of temporary and emergency safety measures before starting works, while setting risk reduction measures such as facility improvement during the planned maintenance and repairing period.	Hazardous works are not allowed (the work must be stopped immediately)
16~20 Unacceptable risk	Immediate suspension of works (immediate facility improvement is required to continue working)	

Sharing of safety management goals among all employees

In 2021, a total of 5.9 billion KRW was invested for safety to improve work environments and to remove potential risk factors so that we can create a safe, zero-accident workplace that puts safety first. In addition, we offer additional incentives when the zero-accident goal is achieved each year, introducing a zero-accident incentive system for all employees of the company and contractors. Moreover, with training, all workers were informed that they have the right to stop work when they are aware of the risk of occupational accidents. As a result, awareness of safety among employees increased, and the right of work suspension was exercised 60 times in 2021, raising awareness on safety in the workplace. Moreover, to eliminate unsafe practices of subcontractors, we implemented a safety evaluation system and imposed 12-month bid restrictions and the first warning to 2 subcontractors respectively. Going forward, we will strive to establish safety-first management for all employees with the goal of achieving zero safety accidents.

Response to COVID-19

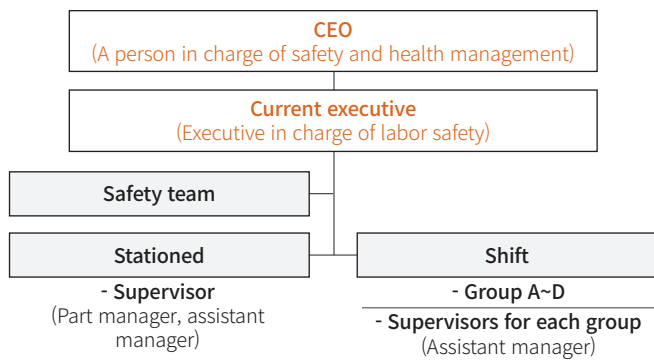
POSCO STEELEON is minimizing the damage caused by COVID-19 by identifying and improving various difficulties felt by employees due to the continuous spread of COVID-19. To prevent the spread of the virus, we put response guidelines and various support measures in place, creating a safe work environment from the virus. We are doing our best to prevent the spread of infections with mandatory Indoor mask-wearing rules, daily self-diagnostic tests, and distribution of hand sanitizers. In addition, we are responding flexibly to the situation by adjusting work from home guidelines as the work environment rapidly changes with the spread of the virus.

Safety management of contractors

Establish organizations in charge of safety and reinforce safety personnel for major contractors

We supported contractors in reinforcing their own safety personnel and organizations for efficient safety management and response to safety-related laws such as Serious Accidents Punishment Act. As a result, contractors have newly established a safety team, faithfully carried out their own safety activities, and closely cooperated with Safety Environment Group of POSCO STEELEON, ensuring the safety of direct employees as well as contractors.

Safety organizations and personnel of contractors



Discovering unsafe facilities and potential risks

We are conducting daily, themed, and joint inspections to discover and improve contractors' unsafe facilities and potential risks in advance. In 2021, as a daily inspection, work plan inspection and work safety assessment were conducted. With themed inspections, problems were immediately addressed to prevent serious accidents by checking rigging equipment, handling the status of heavy lift cargo, use of heavy equipment, and protection devices for dangerous machinery. Joint inspections were conducted with Cooperate Audit Department to inspect on-site safety facilities, implementation of safety measures for workers, and protective equipment at worksites handling hazardous materials.

As a result of these activities, a total of 154 problems were discovered and improved, contributing to the creation of a safe work environment for contractors.

Discovering and improving unsafe facilities and potential risks of contractors

(Unit: cases)

Category	Discover	Improved	Not addressed
Total	154	154	0

Symbiosis and cooperation program with contractors

The symbiosis and cooperation program is a project to improve the safety and health environment of contractors. Contractors and POSCO STEELEON jointly conduct a risk assessment and narrow the safety and health gap among companies with personnel and physical support from POSCO STEELEON, promoting mutual growth. Currently, a symbiosis and cooperation program is being carried out with 5 contractors centering around galvanizing and color coating plants, establishing a quarterly monitoring system and risk reduction measures. With the program, POSCO STEELEON is fulfilling its social responsibility in the areas of safety and health to prevent industrial accidents of contractors.

Performance of symbiosis and cooperation program with contractors

 105 cases Works subject to risk assessment	 17 cases Problem identification
 77 types Materials subject to chemical risk assessment	 7 cases Improvement completed

Support for safety and health education of contractors

POSCO STEELEON provides special safety and health training materials, safety training materials for hazardous machinery, and safety management guidebooks to contractors every month. Moreover, risk assessment training was conducted for safety supervisors and executives of contractors. We are doing our best to prevent industrial accidents of contractors by providing firefighting training including training on wearing a respirator and utilizing firefighting equipment.



▲ Safety and health training for supervisors of contractors

Sustainable Supply Chain

POSCO STEELEON is striving to build a sustainable supply chain based on its management philosophy of corporate citizenship. In particular, we are laser-focused on purchasing from social-friendly companies, expansion of eco-friendly purchases, and ESG activities of contractors to realize ESG procurement.

Supply chain management

Practice the values of fairness, transparency, and ethics

POSCO STEELEON is building a mutual growth system based on trust and cooperation to create a collaborative value with contractors. POSCO STEELEON is taking a leap forward as a brand of mutual growth with the POSCO Group’s philosophy of corporate citizenship and collaborative value, seeking coexistence with local communities by raising the competitiveness of contractors and creating social values. In particular, in 2021, we made efforts to create a solid industrial ecosystem based on ESG, establishing an ESG system and ESG procurement system in the supply chain to increase the purchase of eco-friendly products and holding briefing sessions about health supports and labor issues for major contractors.

Direction for mutual growth

Brand name	Corporate citizenship and mutual growth		
Objective	Coexistence with local communities by raising the competitiveness of contractors and creation of social value		
Directions	Open & Fair Give fair-trade opportunities Establish fair-trade practices	Innovation Support innovative growth that cares for safety and the environment	Community Participate in solving local problems with activities for win-win cooperation
Major activities	Addressing financial difficulties of contractors - Full cash payment - Financial support with win-win fund and network loan - Early payment of delivered goods for holidays - Adjustment of unit price according to inflation	Technical support for partners - Technical support for techno partnership - Operating benefit sharing system - Joint development of new products - Joint patent application, operation of Technical Data Bailment System	
	Business support / cooperative purchasing with partners - Customized business consulting, business doctor system - Roundtables, site visits with partners - Support activities for mutual growth of executives - Support for secondary contractors	Contractor education and training - Support vocational training consortium of partners - Conduct QSS on-site consulting - Conduct safety and health consulting - Other supports	

Implement a fair-trade style bidding system

Transparent purchasing policy and process

To practice fair and transparent transactions and management, we are implementing a fair-trade style bidding system using an electronic system, and strive to maintain transparent processes and procedures. We operate a fair-trade system that gives fair bidding opportunities to new contractors by disclosing information on long-term contracts or repetitive private contracts.

Purchasing policy and process

Purchasing policy



Purchasing process



Establish fair-trade orders with business contractors

By operating the electronic purchasing system E-Pro, we provide equal opportunities to new suppliers as well as existing suppliers to establish a fair-trade order with contractors. We discovered 10 new excellent contractors in 2021 with the electronic purchase system.

4 fair-trade practices for contractors

1 Practices for desirable contract signing

Clarify key points to be complied with in the contract, such as contract signing method, unit price, and delivery date.

2 Practices for fair contractor selection process

Fair contractor selection, registration, and operation process

3 Practices for establishment and operation of internal deliberation committee on subcontracting

Operate internal deliberation committee for preliminary review on the fairness and legitimacy of subcontracting

4 Practices for issuance and preservation of documents

Matters related to the issuance and preservation of contracts during contract signing and transaction processes.

Full cash payment to contractors

In principle, POSCO STEELEON makes payments in cash when trading with contractors to improve their cash flow. We minimize the cash liquidity risk of contractors by strictly complying with the payment dates agreed with them. In addition, we check and manage payment schedules through our own management processes and establish measures to prevent payment delays.




Terms of payment

Category	Payment standard
Rate of cash payment	100%
Payment date	Within 7 days from the completion of inspection and warehousing
Payment cycle	Once a week

ESG purchase policy

POSCO STEELEON intends to solidify its status as an eco-friendly company and participate in the 2050 carbon-neutral policy by introducing Supply Chain ESG purchasing policy of the POSCO Group. In accordance with the POSCO-type ESG purchasing policy which includes areas such as the environment, human rights, and ethics, we are increasing the purchase from contractors who comply with the eco-friendly policy in the purchasing process and fulfill corporate social responsibilities. To this end, we are strengthening ESG evaluation for contractor management, establishing evaluation criteria for new contractors that incentivizes the use of eco-friendly products and products that receive safety and health certification by giving points while disincentivizing the violations of ESG by deducting points. Moreover, to improve contractors' post-evaluation standards, continuous improvement is being implemented including adding ESG-related items and expanding the safety and environment-related points.

POSCO SUPPLY CHAIN ESG purchasing policy

	Select suppliers from the ESG perspective
	Expand eco-friendly purchase
	Support ESG activities of suppliers

Registration standard of contractors

Category	ESG-friendly items
Points added	<ul style="list-style-type: none"> - Hold environmental management ISO 14001 certification - Manufacture government-approved eco-friendly products - Designated as an eco-friendly company - Publish environmental reports - Implement environmental management accounting - Practice green purchasing - Hold health and safety certifications such as KOSHA 18001, and ISO 45001 - Use of eco-friendly products from the perspective of 3R(Recycle, Reduce, Reuse) - Establish eco-friendly operation process and supply chain
Points deducted	Contractors where complaints arise, ESG-related violations

① Preference system for socially responsible companies

When purchasing facility MRO items manufactured by socially responsible companies such as the enterprise owned or operated by persons with disability and women or social enterprises, we provide an incentive of about 5% of the bidding price. Also, contractors registered as our sourcing group receive preferential treatment. With this system, we support companies that pursue social values, contributing to the independence of the vulnerable group and coexistence with local communities

*MRO (Maintenance Repair and Operation) : Consumables that are directly used in the manufacturing process, and parts need for the maintenance of manufacturing facilities

② Expand eco-friendly purchases

To reinforce the concept of eco-friendliness from the purchasing stage, we have established a purchasing system from the perspective of 3R (Recycle, Reduce, Reuse) and are expanding eco-friendly purchasing. We are expanding the purchase of eco-friendly paint with antibacterial and bio features while reducing GHG emissions and energy costs through the purchase of POSCO’s surplus steam (with pipe connection). Moreover, by using a reprocessed Pattern Roll instead of a new one, we saved costs and made a recycling effect.

In addition, we improved the evaluation criteria of new contractors such as granting points to contractors that show excellent performance in safety and health certification, eco-friendly manufacturing processes, and the use of eco-friendly products, discovering and cultivating excellent contractors with high ESG capabilities.

Items subject to 3R purchase

Category	Items	Expected ESG effect
Reduce	Expand the use of eco-friendly paint	Reduce harmful pollution
	Purchase of surplus steam	Reduce GHG emission
Recycle	Recycle of waste	Environmental improvement
Reuse	Reuse of Pattern Roll	Recycling of resources

③ Support ESG activities of contractors

We are supporting in-house professionals such as certified labor attorneys and nurses for stable ESG activities of contractors. We hold briefing sessions about major issues of our contractors, including labor laws and industrial accidents, and in-house nurses make in-person visits to check blood pressure, blood sugar level, and cholesterol level, giving consultations on health issues.

Benefit sharing system

We introduced the benefit sharing system as a mutual growth policy to strengthen the competitiveness of our contractors. The benefit sharing system is a system that shares the results of improvement activities achieved with contractors. With the benefit sharing system, POSCO STEELEON and its contractors freely share opinions on all agendas where improvements can be made including major facilities.

Performance of the benefit sharing system from 2019 to 2021

Performance



*A total of 4 support / 3 cases with substantial results

Project title

- Prevent end mark of extra thick products in Line 4 of the color coating plant
- Improve RTO LNG reduction in Line 3 of the color coating plant
- Vacuum suction Roll installation at the end of Tension Leveler in Line 2 of the galvanizing plant
- Extend the service life of PosMAC double boiler at the galvanizing plant

Supply chain CSR

Contractor code of conduct

POSCO STEELEON stipulated 'Contractor code of conduct' so that contractors can fulfill their social responsibilities and submit a pledge of compliance every year. Contractor code of conduct is a rule that must be followed by contractors wishing to do business with POSCO STEELEON. It is comprised of 7 sections of human rights, safety and health, environment, ethics, protection of business secrets and intellectual property, quality management, and social contribution. We require all of our contractors to comply with the code of conduct by specifying the criteria for violation in terms and conditions of purchase agreements.

In addition, in a case where the violation of the code of conduct is recognized or reported by media, related parties, or the contractor management system of the POSCO Group, bidding and contract rights are disentitled for a certain period based on standards for sanctioning of unfair practices in the general terms and conditions of the purchase agreement, applying strict operating rules.

A summary of the contractor code of conduct

Category	Details
Environment	<ul style="list-style-type: none"> - Harmful materials - Prevent air pollution, the generation of wastewater and waste - Prevent pollution and reduce the use of resources
Respect for human rights	<ul style="list-style-type: none"> - Voluntary employment - Prohibit child labor - Prohibit discrimination - Working hours - Wages - Humane treatment - Responsible minerals
Mutual growth and social contribution	<ul style="list-style-type: none"> - Expand mutual growth - Perform social contribution
Ethics and fair-trade	<ul style="list-style-type: none"> - Business integrity - comply with special terms and conditions for the practice of ethics - Comply with fair-trade - Build trust
Safety and health	<ul style="list-style-type: none"> - Safety management - Health management
Protection of business secrets and intellectual properties	<ul style="list-style-type: none"> - Manage and protect business secrets - Protect intellectual properties
Quality management	<ul style="list-style-type: none"> - Quality management - Change management - Quality management with suppliers

Support the fair-trade and ethics training of contractors

POSCO STEELEON operates a support program for contractors' fair-trade and ethical management. We distribute in-house ethical training materials on the E-Pro website and carry out training on business manners and etiquette at on-site briefing sessions. Moreover, we are supporting the establishment of fair-trade orders with contractors and the practice of win-win cooperation by announcing the 4 major fair-trade practices. In 2021, in-person training was shifted to written training due to the impact of COVID-19.



▲ Ethics training materials for contractors

Operation of communication and cooperation channels with contractors

POSCO STEELEON values open communication with contractors. We encourage contractors and stakeholders to raise their opinions freely through a cyber report center and listen to contractors' voices by visiting production their worksites at least once a year. Moreover, we are holding a regular roundtable meeting with contractors to strengthen communication and to build cooperative relationships of mutual respect. We prevent accidents by sharing potential risk factors at the meeting to achieve zero-accident worksite and discuss pain points and issues with contractors, taking the lead in open communication.

Social Contribution

The corporate social value that POSCO STEELEON pursues is to create a happy world through sharing and practice, and we are carrying out social contribution activities with sincerity based on the philosophy of sharing. Our employees contribute to local communities through monthly volunteer activities and practice the value of coexistence with regular sponsorship while fulfilling their social responsibilities as a corporate citizen.

Strategy on social contributions

POSCO STEELEON is carrying out systematic social contribution activities with sincerity under the management philosophy of ‘a corporate citizen that grows together’. To carry out systematic social contribution activities, we divided social contribution programs into 4 areas under the slogan of ‘Sharing in the right way together’, and carry out different activities in each area.

POSCO STEELEON’s promotion strategy for social contribution activities

Social contribution slogan	‘Sharing in the right way together’			
Direction for corporate citizenship	Sharing the light of hope	Sharing a happy space	Sharing a love toward local communities	Sharing for global communities
Major achievements in 2021	<ul style="list-style-type: none"> - Production of 24 Braille books for the visually impaired - Donated 90 PosART family photos for the visually impaired - Donated 100 PosART portraits of longevity to Gyeongbuk Association for the disabled in farming and fishing villages 	<ul style="list-style-type: none"> - 3 residential environment improvement projects using steel products for construction for local children’s centers - Participate in cooperation projects with POSCO affiliates (space of hope, CID projects, etc.) 	<ul style="list-style-type: none"> - 5 village improvement projects to create a happy village at Yeonil-eup - 1 roof improvement project for the vulnerable in the nearby area - Kimchi sharing project at Daesong-myeon: delivered 800 Kimchi to 16 institutions - Cultural project with Gyeongbuk Arts & Culture Foundation: offer PosART group photo to 23 villages - Remodeling of old facilities of Handong Global University using PosART wood grain color steel sheet - Deliver thank you gifts to Pohang Nam-gu public health center for the response against COVID-19 	<ul style="list-style-type: none"> - Donate medical equipment (diagnostic kits, masks, ventilators) and desks and chairs to overseas corporation for the response of COVID-19

Expenses for social contribution and volunteer history of employees

(Unit: million KRW, hours, persons)

Category	2019	2020	2021
Total expenses for social contribution	202	110	257
Total volunteer hours	5,956	1,045	1,085
Volunteer hours per person	13.9	2.5	2.5
Participants	317	219	257

Major partnership NGOs and civic groups for social contribution activities

Organization	Social contribution activities
Gyeongbuk welfare center for the visually impaired	Donate PosART Braille products
Korea Association for the disabled in farming and fishing villages	Produce portraits of longevity of the disabled
ChildFund Korea	Support repair projects of local children’s center

Performance of social contribution activities

Social contribution activities for local communities

① Selected as a company recognized for CSR activities for local communities

Corporate Social Responsibility in the Community is a system that selects excellent companies and institutions that continuously engage in CSR for local communities in partnership with NGOs. In 2021, POSCO STEELEON was selected as a company recognized for its contribution to local communities by the Ministry of Health and Welfare, with excellent scores in evaluation areas including systematic social contribution strategy, program, performance, and impact.

② Kimchi sharing activities for local communities

Every year, together with local residents in Daesong-myeon, we do volunteer activities that deliver kimchi to local welfare organizations. In 2021, despite the difficult situations under disease control measures imposed due to COVID-19, we continued kimchi sharing activities and delivered 800 kimchi to 16 institutions including daycare centers and nursing homes in the nearby area.

③ Deliver thank you gift to the medical staff at Nam-gu public health center

In the Nam-gu area of Pohang, home of the steel industrial complex, the number of confirmed cases has increased rapidly since August 2021. To encourage medical staff and employees at Nam-gu public health center, who are doing their best to contain the virus, we delivered vitamin supplements and snacks.



▲ Certified as a company recognized for CSR activities for local communities



▲ A commemorative photo shooting at the kimchi sharing activity in 2021



▲ A commemorative photo shooting at the delivery of thank you gift

④ Improve the residential environment for the vulnerable

We urgently supported the residential environment improvement project to secure the safety of the vulnerable families who were at risk of short circuit and fire accidents due to water leakage caused by deteriorated residential environments in Daesong-myeon area near the company. INFInELI, color coated steel sheet of POSCO STEELEON was used to install the roof to solve water leakage, and the house was renovated by employees who voluntarily participated in exterior wall painting.

⑤ Creating a happy village in Yeonil-eup

In collaboration with the Yeonil-eup dong office, we formed a local volunteer group with Yeonil-eup local youth association and other local groups and conducted volunteer activities to improve the residential and village environments in marginalized villages where many seniors live.

We conducted volunteer activities for villages such as waste picking at bamboo forests, improving the residential environment for the elderly who live alone, and painting the wall of the senior citizen community center, which were well-received among local residents.

Social contribution activities that reflect the nature of the business

① Remodeling to restore damage caused by an earthquake at Handong Global University

We are continuously maintaining a cooperative relationship with Handong Global University in Gyeongsangbuk-do, Pohang, by holding regular recruitment sessions to hire local talents. To strengthen cooperative relationship with Handong Global University, POSCO STEELEON supported the repair and remodeling of the main building with INFInELI and PosART, whose wall was damaged by the earthquake.

② Happy space sharing activities for local children’s centers

We made donations to Gyeongbuk local headquarter of ChildFund Korea to improve the environment of local children’s centers. Moreover, to create a safe learning environment for local children, we repaired deteriorated children’s centers with INFInELI, a steel product for construction of POSCO STEELEON, upholding social values. We selected 3 local children’s centers in Gyeongbuk area where urgent repair is needed and applied a structural INFInELI panel, a high-quality color coated steel sheet, on a damaged wall.



▲ Wall painting to improve the residential environment of the vulnerable



▲ Supporting the interior remodeling project of Handong Global University



▲ Volunteer activities to create a happy village in Jungdan 2 li, Yeonil-eup



▲ A commemorative photo shooting at the environment improvement project for local children’s centers

③ Delivery of PosART photos

We participated in 2021 Running Art Truck project held by Gyeongsangbuk-do and Gyeongbuk Arts & Culture Foundation and donated photos made with PosART technology to 23 areas including Haksan-li, Bonghwa-gun. PosART photos of the elderly living in the village were donated on this day, leaving a meaningful memory to local residents.

④ Donation of PosART portraits of longevity

Since 2018, we have been carrying out PosART portraits of longevity donation projects. We produce and donate portraits of longevity made with POSCO STEELEON's steel to capture the most beautiful moments of the elderly who are recipients of the national basic living stipend or in the second-lowest income bracket in Pohang, and had been unable to leave a single photo due to economic difficulties.

Cultivation of future talents

To nurture future talents, the 2021 INFINELI Design Contest for College Students was held. The contest was held for a week in collaboration with our customer, Seung-il Co., Ltd, to promote INFINELI, a color coated steel sheet brand launched in 2021. The works submitted to the contest were evaluated by a judging committee consisting of internal and external experts in each field such as architecture and design. The awards, including 1 excellence prize and 2 grand prizes, were given to a total of 10 teams.



▲ PosART photo delivery in Haksan-ri, Bonghwa-gun



▲ Ham Woori happiness sharing ceremony where portraits of longevity were delivered



▲ University student design contest award ceremony

Quality Management

To practice consumer-oriented quality management based on the POSCO Group’s POSCO quality policy, POSCO STEELEON evaluates product stability through the screening of quality management system of each paint supplier and quality assessment activities. At the same time, we are working hard to improve quality by conducting QSS field innovation activities.

Quality management implementation system

Quality management strategy and quality management system

To sophisticate the autonomous quality management system and to secure the quality of products that suit the needs of customers, POSCO STEELEON holds IATF 16949 (automotive quality management system) and ISO 9001 (quality management system). For example, automotive customers require us to obtain IATF 16949 certification to ensure product quality. As such, POSCO STEELEON is trying to establish a quality system that meets the needs of customers by acquiring various domestic and international certifications.

Spread a quality-oriented culture with the introduction of QSS

All employees are promoting facility improvement activities based on QSS (Quick Six Sigma), a tool for field innovation activities of POSCO. In 2021, a total of 41 cases of irrational waste were discovered, and 40 of them were immediately improved. With the introduction of QSS, a culture where work and innovation coexist is taking place, creating a synergy for innovation as more employees are sympathizing with the culture.



▲ ISO 9001 certification



▲ IATF 16949 certification (galvanized)



▲ IATF 16949 certification (color coated)

POSCO STEELEON quality charter

Vision	THE POSCO QUALITY The best quality that impresses the spirit of customers		
Core value	Customer Inside	Basic Inside	Synergy Inside
Major activities	<ul style="list-style-type: none"> - Respond to the needs to create demands with the cooperation with customers - Provide an integrated solution through cooperation with the POSCO Group - Improve quality design process 	<ul style="list-style-type: none"> - Maintain quality certification (reinforce the competency of internal auditors) - Improve technology using broadband material and non-carbon steel - Strengthen product appearance quality inspection - Discover chronic defects of strategic products and make improvements 	<ul style="list-style-type: none"> - Screening of quality management system and inspection activities of paint suppliers - Discover new suppliers - Establish advanced quality management system - Strengthen the quality agreement system of each supplier
Code of conduct	We create customer value by reflecting customers’ potential needs	We value the basics and principles and eliminate gaps and waste	We pursue mutual growth in the Supply Chain based on trust and communication

GOVERNANCE



Governance	63
Ethical Management	66
Fair-trade	69
Information Protection	72

GOVERNANCE Management Approach

Context

The BOD(Board of Directors) determines important management policies related to the company’s business, evaluates business performance, and supervises the management. The company introduced the outside director system for independent BOD operation and arbitrary decisions of controlling stakeholders are monitored at the BOD. Moreover, we have set a code of ethics to realize ethical management and have been sharing it with our employees and contractors so that it can firmly take root in our culture.

Material Topics

Risk & Impact

- Lack of efficiency, independence, and professionalism of BOD
- Legal risks rising from unethical practices and unfair-trade
- Release of confidential information due to cyber-attacks, misuse of information by employees

Key Measures

- Regular BOD meetings
- Establishment of norms for ethical management and operation of fair-trade programs
- Information protection training for employees and contractors

*No material topics identified in Governance issue.

Our Approach

POSCO STEELEON operates BOD composed of directors with professional knowledge by introducing the outside director system and holds 6 times of regular board meetings a year.

To grow into a company trusted by stakeholders, we are promoting ethical management based on the POSCO Group’s code of ethics. We launched an organization dedicated to ethical management, and with ethical training and reporting systems, we encourage all members including our employees to comply with the code of ethics. To create a fair-trade culture while promoting ethical management, we operate a fair-trade compliance program and work hard to minimize risks such as unfair common practices and unfair-trade practices with subcontractors. In addition, we set a company-wide information protection activity plan and provide training to raise awareness on information protection to employees and contractors.

Our Performance



100 %
BOD participation rate



100 %
Completion rate of ethical training



92 points
POSCO Group fair-trade index evaluation



409 people
Number of participants in information security training

Alignment with UN SDGs



Goal 16: Peace, justice and strong institutions

Governance

POSCO STEELEON appoints internal, outside, and part-time directors with rich experiences and professional knowledge for rational decision making and pursues independent management of BOD(Board of Directors). Moreover, we have introduced an electronic voting system to enhance the participation of minority shareholders in decision-making and to promote the rights and interests of stakeholders, increasing the participation rate of various shareholders. in decision-making.

Board of Directors

BOD composition

The BOD is the highest decision-making body composed of directors who make decisions on the company's business. As of December 2021, POSCO STEELEON has a total of 4 directors including 2 internal directors, 1 outside director, and 1 non-executive director. The company checks and monitors the overall management by appointing directors with knowledge, experience, and expertise. Corporate Strategic Planning Group handles and supports activities of the BOD and regularly provides information on major business issues.



BOD composition

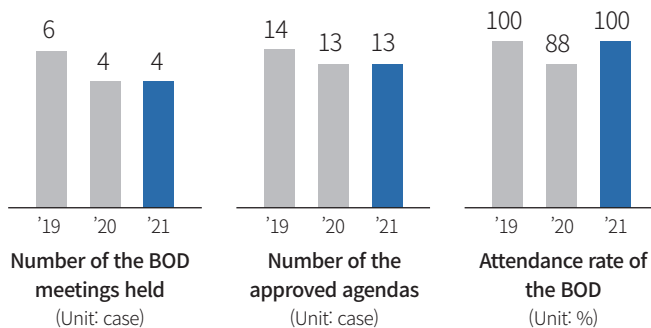
(As of Dec 31, 2021)

Job title	Name	Position	Major career	Term
Internal director (2 people)	Yun Yang Su	CEO	2019 POSCO Executive Vice President (Head of Automotive Material Marketing Department) 2016 POSCO Senior Vice President (Head of Automotive Material Marketing Department) (Pusan National University International Trade major)	Mar 15, 2021~ Mar 21, 2022 (Date of the appointment: Mar 30, 2020)
	Shin Kun Chul	Head of Corporate Strategic Planning Department	2018 POSCO Vice President (Head of Investment Management Group) 2017 POSCO Vice President (Head of New Business Planning Group) (Inha University International Trade major)	Mar 15, 2021~Mar 21, 2022 (Date of the appointment: Mar 18, 2019)
Outside director (1 person)	Lee Chong Soo	Outside director	Professor at POSTECH Graduate Institute of Ferrous & Energy Materials technology (current) Chairman of the Korean Institute of Metals and Materials 2012 Dean of POSTECH Graduate Institute of Ferrous & Energy Materials technology	Mar 15, 2021~Mar 13, 2023 (Date of the appointment: Mar 18, 2019)
Other non-executive director (1 person)	Yoon Chang Woo	Head of Electrical and Electronics Marketing Department of POSCO	Current POSCO Senior Vice President (Head of Electrical and Electronics Marketing Department) 2019 POSCO Senior Vice President (Head of PT. KP Purchase Marketing Department) 2017 POSCO Vice President (Head of PT. KP Purchase Marketing Department) (Kyungpook National University Teachers college, New York Institute of Technology MBA)	Mar 15, 2021~Mar 21, 2022 (Date of the appointment: Mar 30, 2020)

Operation of the BOD(Board of Directors)

In principle, the BOD meetings should be held 6 times a year regularly, and if there is an urgent agenda to be addressed, an interim meeting of the BOD will be held. Agendas for the BOD meetings can be proposed by the CEO, auditors, or directors. If an auditor or director proposes the agenda, he or she should submit the key points of the agenda to the CEO. Resolutions on the agenda submitted to the BOD(Board of Directors) require the attendance of more than half of the directors and the consent of more than half of the directors attended, and those with a special interest in the agenda can't exercise their voting rights.

BOD performance results



Major resolutions made in 2021

Month	Date	Agenda
2021-01	Jan 27	- Matters related to FY 2020 - Convene a general shareholders' meeting - Agendas for a general shareholders' meeting
2021-02	Mar 15	- Appoint CEO - Discuss the position of internal directors - Standards for executive remuneration
2021-03	Apr 23	- Appoint a fair-trade compliance manager - Adjust executive remuneration standards
2021-04	Dec 14	- Approve management plan for 2022 - Approve the limit for short-term borrowings - Disposal of bad debts - Contribute to the in-house labor welfare fund - Contribute to donations for 2021

Examination of ESG risks of the BOD

According to the BOD rules, internal/external investments that use more than 10% of the capital must gain the approval of the BOD, the final decision-making body, to strengthen risk management. The BOD is consisted of internal directors, outside directors, and other non-executive directors with expertise, supporting efficient decision-making. Since 2021, with a new ESG management investment rule, the BOD has been making a final decision on whether to proceed with investment projects after reviewing the possible ESG risks. Moreover, when annually submitting mid to long-term management plans to the BOD, not only financial factors such as supply/sales/income and loss but also ESG related activities such as safety, environment, and corporate citizenship are reported, providing the top management managerial/supervisory role for environmental management.

Compensation system for the BOD

Limits on remuneration and incentives for directors are decided at a shareholders' meeting, and detailed operation standards are determined by the BOD. The remuneration of directors is paid within the limits approved by a shareholders' meeting, considering their positions and roles.

Remuneration of the BOD

(Unit: persons, million KRW)

Category	Number of people	Total remuneration	Average remuneration per person
Internal director	2	783	392
Outside director	1	51	51
Auditor	1	276	276

Operation of audit system

An auditor, appointed by the resolution of a shareholders' meeting conducts the audit. The auditing organization operates a separate and independent organization called 'Corporate Audit Group' and consists of 1 group leader and 4 supporting personnel. They support audit work, evaluate internal control systems, check and improve work processes, and implement activities to improve organizational culture.

Protection of shareholder rights

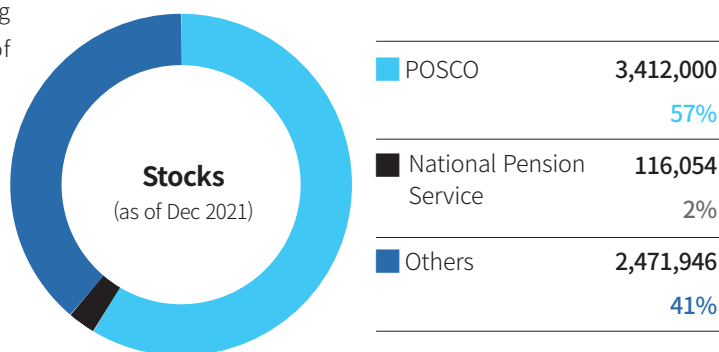
We strive to establish a transparent and reasonable governance structure to enhance shareholder value and protect their rights and interests. The basic principles of governance are included in the company regulations related to governance, such as the articles of incorporation and the BOD(Board of Directors) operational regulations, and detailed activities of the BOD are disclosed on a regular basis through annual, semi-annual, and quarterly reports published on Data Analysis, Retrieval and Transfer System of the Financial Supervisory Service (<http://dart.fss.or.kr>)

Electronic voting system

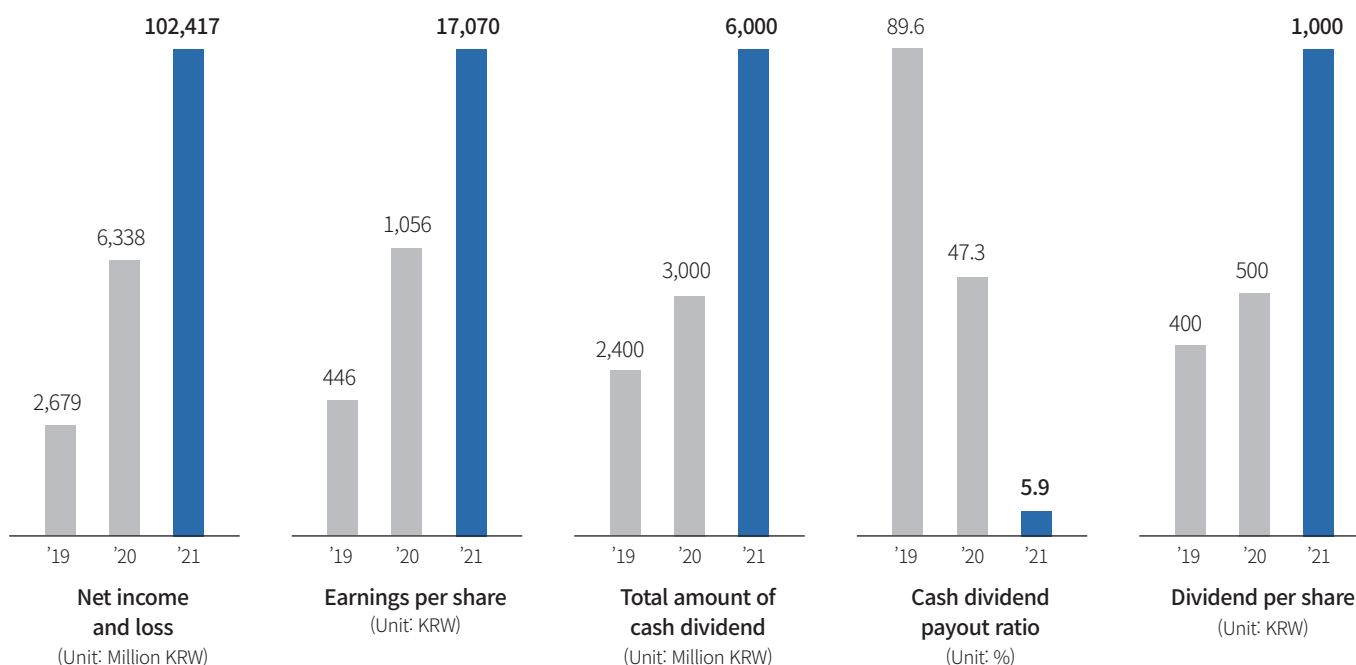
We are realizing shareholder-friendly management by introducing an electronic voting system to enhance the convenience of shareholders in exercising their voting rights.

Stocks and dividends

As of the end of December 2021, the total number of issued shares is 6,000,000 common shares. The largest shareholder is POSCO Co., Ltd, which owns 56.87% of the total shares, and other minority shareholders account for 41% of the total shares. POSCO STEELEON determines an appropriate level of dividend rate in consideration of the investment for the continuous growth of the company, enhancement of shareholder value, and business environment within the available dividend amount. When there is a resolution related to dividends, information is shared with shareholders by announcing cash or property dividends as well as by publishing annual reports (including semi-annual and quarterly reports).



Dividends(on a consolidated basis)



Ethical Management

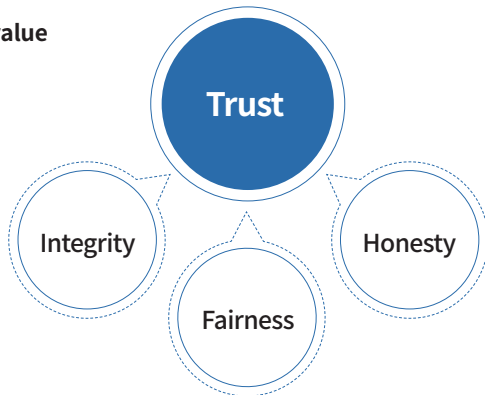
POSCO STEELEON understands that ethical management requires not only internal compliance to the company’s code of ethics. That is why we are managing all stakeholders, including contractors, to comply with the code of ethics. In addition, continuous trainings are provided so that the code of ethics can be internalized to all members of the organizations. Moreover, we are making efforts to prevent unethical practices in advance with internal reporting and consulting system.

Ethical management system

Ethical management promotion system

POSCO STEELEON is practicing ethical management based on the code of ethics of the POSCO Group established in 2003 to become a company trusted by all stakeholders. We strive to become a company that stakeholders trust and follow by realizing the value of integrity, fairness, and honesty through ethical management.

Core value



Code of ethics and management principle

Category	Details
Code of ethics and management principle	<ul style="list-style-type: none"> - Enacted in 2003 - Explicitly included the UN’s human rights management in 2014 - Added the content on the prevention of conflicts of interest in 2020 - Composed of professionalism, ethical management principles, and practical guidelines - Revision and enforcement of Labor Standards Act related to workplace harassment in Oct 2021
Others	<ul style="list-style-type: none"> - Operation of internal standards such as special terms and conditions on ethics, workplace harassment prevention guidelines, and anti-corruption compliance standards

Code of ethics practice guidelines

Practice guidelines	Defining the standards for the implementation of the code of ethics
Detailed items	<ol style="list-style-type: none"> 1) Ethical practice and rules* 2) Work-life balance of employees 3) Creating customer value and securing trust 4) Obligation of good faith and sincerity to investors 5) Establishment of a win-win relationship with trading companies 6) Contribution to the nation and society (attitude of corporate citizenship) 7) Environmental protection and ecosystem conservation 8) Protection and respect for human rights

*Present specific ethical standards on areas including bribery, hospitality, solicitations, fair-trade, and prevention of conflicts of interest

*Code of ethics and practice guidelines in full text:

https://www.poscosteeleon.com/kr/sub.do?MENU_SEQ=10104&PAGE_SEQ=10105&LANG=ko_KR#none

Organization in charge of ethical management and supervisory body

POSCO STEELEON has organized a dedicated organization for systematic ethical management and operates an ethics committee.

Cooperate Audit Group is an independent organization that is in charge of overall ethical management activities such as ethics training, monitoring of unethical behaviors, and audits on ethical management and supports audit work. The ethics committee is an ethical management consultative body established based on the code of ethics and shares issues related to ethical management. The committee is held twice a year under the leadership of the Head of Cooperate Audit Department, where about 40 self-compliance members and ethical practice leaders from each department attend. In 2021, a total of 2 ethics committees were held to discuss agendas about fair-trade assessment and operations of ethical management.

Evaluation of the code of ethics

4 areas are evaluated to strengthen ethical standards in accordance with the purpose of ethical management innovation. Evaluation data on the business ethics activity index are submitted to POSCO's Cooperate Audit Department once a year.

Evaluation items for business ethics

Evaluation item	Details
Establish the code of ethics and supervision processes	<ul style="list-style-type: none"> - Establish and operate the code of ethics - Establish a supervisory body for ethical management - Appoint executives in charge of ethical management - Organization and personnel for ethical management
Effective operation of the system	<ul style="list-style-type: none"> - Group training for employees - E-learning training on business ethics for employees - E-learning training to prevent sexual harassment - Operate internal report/consulting system - Proper incentives or punishments
Continuous monitoring and evaluation	<ul style="list-style-type: none"> - Continuous monitoring and improvement
Additional actions	<ul style="list-style-type: none"> - Measures to prevent recurrence after the occurrence of ethical violation - Support for related companies to spread ethical management

Ethics training

We regularly carry out ethics training for all employees every year in order to prevent unethical practices in advance and to establish an ethical culture in the company.

In 2021, 21 times of group training were conducted for new hires and all departments, and 6 written training sessions were provided centering around major cases.

In addition, we are improving the ethical awareness of all employees by offering workplace sexual harassment prevention and corporate ethics training through the mandatory E-learning course of the POSCO group.

Performance on E-learning ethics training (Unit: persons, %)

Category	2019	2020	2021
Number of people completed corporate ethics training (completion rate)	406 (99.5)	413 (100)	416 (100)
Number of people completed sexual harassment prevention training (completion rate)	408 (100)	413 (100)	416 (100)

Prevention of ethical risks of contractors

In 2021, POSCO STEELEON supported the following activities through on-site inspections and meetings with employees so that ethical management can firmly take root among contractors.

Supportive activities for the ethical management of contractors

Category	Details
Active support for follow up measures implemented after the survey on contractors' organizational culture that respects humanity (Oct 2020)	- 21% of employees experienced the abuse of power → campaign activities on reporting the abuse of power (5 times), distribution of training materials (1 time)
Investigations on complaints about the violations of human dignity and abuse of power (Apr 12, 2021 / cyber report submitted)	- Investigation found out that there was no abuse of power, and the management of contractors was requested to prevent similar cases from occurring again
Listen to employee grievances of contractors and encourage safety/ethical risk prevention activities	<ul style="list-style-type: none"> - Monitor unfair-trade practices with contractors (2 times) - Training on revisions of safety-related laws (2 times) - Order the compliance with safety rules such as 6 emergency measures (2 times)
Support for building an organizational culture that respects humanity by improving the workplace environment of contractors	- Discover 80 safety related issues through on-site inspection on contractors' working environments (6 times)

Occurrence of corruption

(Unit: case, KRW)

Category	2019	2020	2021
Number of violations	0	0	0
Amounts of penalties	0	0	0

Unethical practice reporting system

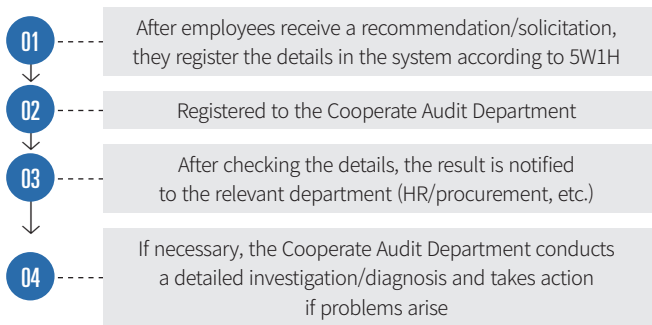
Operation of internal reporting and consulting system

We operate an internal reporting and consulting system and regularly inform the operation process to employees. In principle, internal reporting should be handled within 2 weeks after the initial report. If an in-depth investigation is needed, it will be conducted for at least 1 month and the result will be notified to the complainant. When a violation of the code of ethics is found to be true, a responsible person receives punishment and continuous supervision and monitoring are made by the Cooperate Audit Department to prevent similar violations from happening again in the future.

① Clean POSCO STEELEON system

Clean POSCO STEELEON is a system where employees can voluntarily record and manage recommendations and solicitations to prevent unethical practices in advance. Investigations are conducted under the supervision of the Cooperate Audit Department, and if necessary, detailed investigations and proper actions are taken.

Process of Clean POSCO STEELEON system



② Cyber reporting center

The cyber reporting center is an external reporting system where unethical practices of employees are reported while strictly complying with the principle of source confidentiality. Reports are received through various channels including mail, fax, and online reports, and to promote active reporting, up to 10 million KRW of incentive is provided to reporters. In addition, according to the Foreign Corrupt Practices Act of the US, unethical practices that happened abroad can also be reported. In principle, the report is handled within 2 weeks after the initial report.

Type of report

Receiving hospitality	Receiving bribery (money, gift)	Unfair-trade practices
Discriminatory (unfair) practices	Leak of confidential information	Unethical and illegal practices

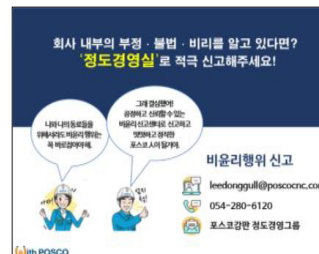
③ Survey on organizational culture that respects humanity

POSCO STEELEON conducts a survey on organizational culture that respects humanity every year to identify risks on ethical management in advance and take action. The survey consists of 9 questions including workplace harassment and sexual harassment, and a total of 72% of employees participated in the 2021 survey. Since July 2019, thanks to the enforcement of the workplace harassment prevention act, the number of violations of human dignity has been decreasing with increased social awareness on corporate culture and employees' ethical awareness (2019: 80 cases, 2020: 52 cases, 2021: 48 cases). The Cooperate Audit Department sets improvement and recurrence prevention plans and executes them based on the survey results, continuously managing issues regarding organizational culture.

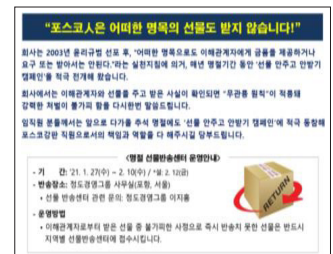
Survey results on organizational culture that respects humanity

(Unit: case)

Category	2019	2020	2021
Number of reports	1	1	1
Number of reports addressed	1	1	1



▲ Campaign to report unethical practices



▲ Operate a holiday gift return center

Fair-trade

After establishing a dedicated organization for fair-trade compliance, POSCO STEELEON is operating a fair-trade compliance program. In addition to trainings for employees and internal control activities, we are carrying out activities to minimize risks, such as monitoring risks of unfair common practices and establishing a system to prevent unfair-trade related to subcontracting.

Managing risks on fair-trade

Fair-trade compliance program

The fair-trade compliance program refers to an internal compliance system operated for fair competition and compliance with fair-trade-related laws and regulations. There are a total of 9 elements in the fair-trade operation of POSCO STEELEON, which are used mutatis mutandis with the POSCO Group's common items for inspection and evaluation items of Fair-trade Commission.

Fair-Trade Compliance Council

We are operating a Fair-Trade Compliance Council that takes charge of the operation of a fair-trade compliance program. The BOD(Board of Directors) appoints a compliance manager and meetings are held at least twice a year. The compliance manager is designated as a standing auditor, and the Cooperate Audit Department, which assists the work of a standing auditor, is responsible for the overall operation and management of the program.

Elements for fair-trade compliance program

Category	Category	Category
Core elements (7)	CEO's commitment to compliance	CEO's expression of will, reporting of performance and CP operation plan to the BOD
	Designation of compliance manager	Appointment of a compliance manager by the BOD and official announcement
	Make and distribute compliance manual	Published: Nov 2007 Revised: Apr 2010, Sep 2012, July 2017, Feb 2018
	Training program	Execute E-learning training (2 courses)
	Internal supervision system	Establish a regular monitoring system, pre-audit on quarterly performance
	Disciplinary measures against offenders	Investigate on illegal practices, reward for an excellent leader who practices fair-trade
Sub-elements (2)	Document management system	Operate CP related document system, check issues and violations on fair-trade
	Formation of the compliance council	- Hold a semi-annual meeting
	Evaluation on CP operation	- POSCO Group's fair-trade index: 92 points

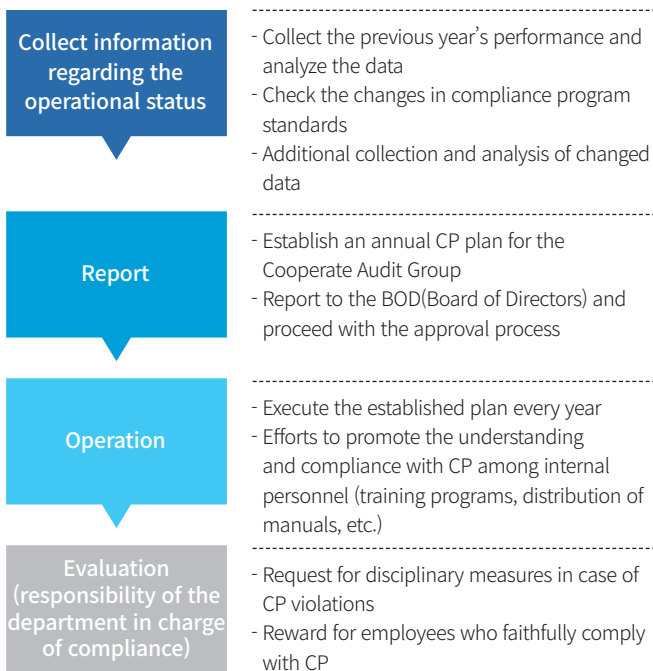
2021 results on fair-trade compliance pledge

	Subject number	Number of person pledged	Pledge rate
POSCO STEELEON (electronic signature)	417 people	417 people	100%

Fair-trade compliance program management process

The fair-trade compliance program consists of the following processes: identify the current status – establish an operation plan – report – operation – evaluation. The evaluation process includes internal and external evaluations which are operated individually.

Fair-trade compliance program management process



fair-trade compliance program training

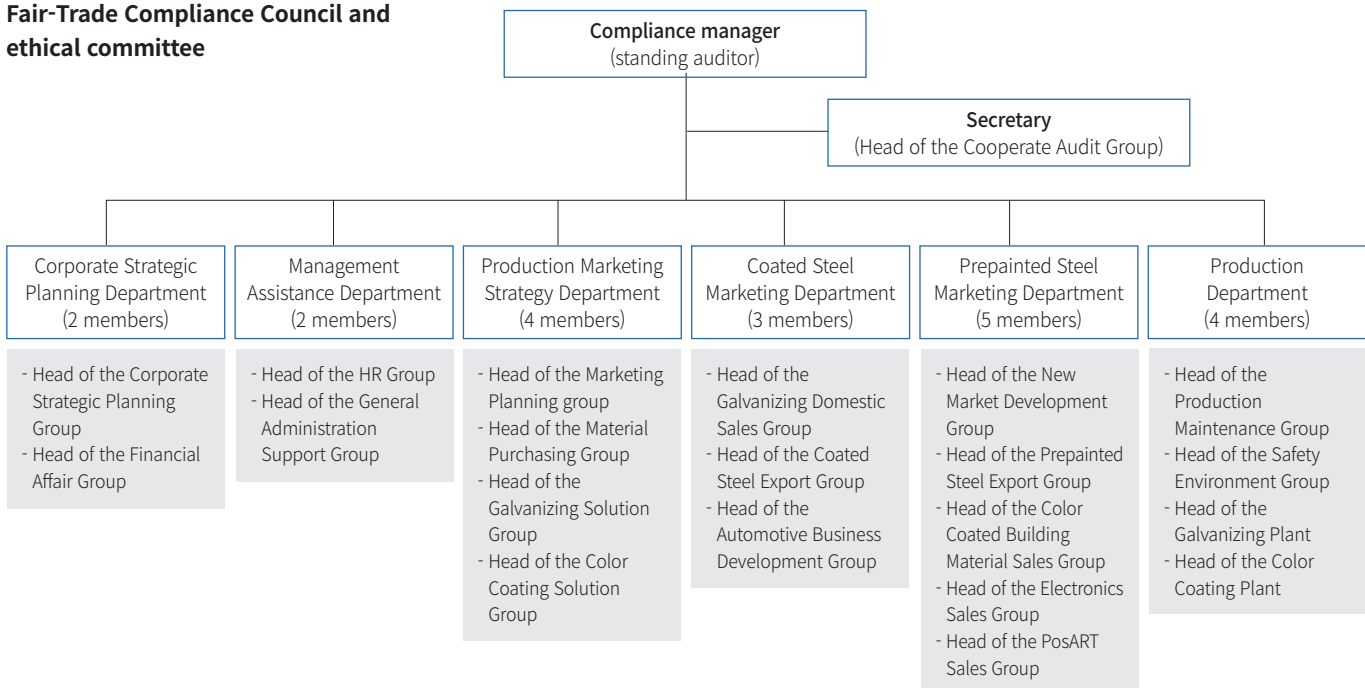
We are regularly providing fair-trade compliance program training. Internal/external training, as well as online training, are provided so that employees can recognize the importance of fair-trade.

2021 fair-trade compliance training performance

Format	Details
Online training	- E-learning training (2 courses): 40 people
Internal training	- Training for each department centering around fair-trade practice leaders (once/semi-annually) - Training for new hires/experienced employees (twice) - Training for survey results on contractors' organizational culture that respects humanity (Nov)
External training	- Training on Fair-trade Act, Subcontracting Act, and system of public announcement (4 times, 6 people) - Participate in POSCO PCA ¹⁾ - Participate in the POSCO Group's Cooperate Audit Academy (Standing auditor and 2 people)

1) POSCO Compliance Academy

Fair-Trade Compliance Council and ethical committee



Check the risk of unfair common practices

Unfair common practices are the actions that hinder free competition by fixing prices with other companies or adjusting shipment schedules to avoid competition. When adjusting the prices of products, the timing of price change of a company may overlap with that of competitors since they share similar business environments in the same industry. Accordingly, to minimize the risk of unfair common practices, POSCO STEELEON clearly shares the reasons behind price adjustments including business situations, preventing violations of Fair-Trade Act in advance. Moreover, adjusting shipment schedules by fixing the scale of production facilities with competitors is also a violation of the Fair-Trade Act. Therefore, to prevent the violation, the reasons behind the new construction-expansion of facilities are clearly stated through various documents.

Audit system for private contracts

Pre-audit system for private contracts is operated to create a culture that fosters fair competition and mutual growth. Private contracts in all business areas that exceed a certain amount of limit including materials, facilities, and cooperation are audited by the Cooperate Audit Group to eliminate inappropriate or unnecessary private contracts.

Prevention system for unfair trade related to subcontracting

POSCO STEELEON establishes fair-trade order and prevents violations of the Fair-Trade Act by preemptively identifying risks related to Subcontracting Act. During the subcontract inspection, we make adjustments/corrections to the contract by discovering conditions that are unilaterally favorable to the company, omission •errors in contract details, and delay in payment. Moreover, when violations arise, we minimize risks related to Subcontracting Act by making corrections to contracts and establishing measures to prevent the recurrence of violations.

2019-2021 corrections and improvements related to trade with subcontractors

	Address 28 cases of delivery of incomplete document
	Correction of 10 unfair special contracts
	1 improvement on the confusion in the use of terminology
	Addressed 8 cases of delayed payments

Information Protection

POSCO STEELEON strictly complies with domestic and foreign information protection laws and regulations. We are operating an information protection council led by the IT department and establishing a company-wide information protection management system.

Information protection management

Chief information security officer

The chief information security officer of POSCO STEELEON is the head of the Management Assistance Department who has worked as an executive in the related field at the previous company for more than a year. Therefore, he satisfies the article 36-6, Scope of Information and Communications Service Providers Subject to Reporting of Designation of Chief Information Security Officers, of the Enforcement Decree of the Act on Promotion of Information and Communications Network Utilization and Information Protection. Moreover, according to the article 45-3 of the related laws, the designation of the chief information security officer was reported to the Minister of Science and ICT.

Information protection management system

To comply with domestic and foreign information protection laws such as the Act on Promotion of Information and Communications Network Utilization and Information Protection, we established an information protection management system. The system is divided into 8 fields, which are subdivided into information protection and system protection. IT department takes charge of information security, and each department handles company-wide information protection strategies, change management, and diagnosis of information security.

Operation of Information Protection Council

POSCO STEELEON is operating a separate Information Protection Council to strengthen cooperation among departments in information protection and to vitalize company-wide information protection activities. The Information Protection Council deliberates on the direction and action plan for information protection and establishes and revises information protection guidelines. The council consists of information security officers of each division and staff from the information protection department, and is convened semi-annually or whenever the convention is necessary. In 2021, we diagnosed the security level in daily lives, and carried out various activities such as mock inspections on phishing emails and E-learning training on information protection.

Information protection management system

Areas	Details
Security regulation	Process/information system/system operation management/security management standard
Education management	Information protection activities/change management
HR management	Information protection by department/personnel security
Asset management	Information protection by department/asset protection
Protected area management	Management support/general affairs management/cost management
Information system management	Information protection by department/information system
Response to accidents	Information protection activities/response to security accidents
Security audit	Information protection activities/diagnosis of information protection

Information protection role of each division

Department	Major roles
HR	<ul style="list-style-type: none"> - Background check and ask for security pledge when hiring employees - Maintenance of nondisclosure agreement of retirees - Reward and penalties related to information protection
General affairs	<ul style="list-style-type: none"> - Establish and execute security plans for each worksite - Establish a detailed action plan for each business in preparation for emergencies - Establish and execute detailed action plans in preparation for company-wide emergencies
IT	<ul style="list-style-type: none"> - Operate information system and address weak points - Establish-revise information security guidelines and provide information security training to employees - Prevent and respond to information system infringement accidents
R&D	<ul style="list-style-type: none"> - Establish information protection measures for key technologies and perform information protection activities - Review public disclosures of technologies and facilities for security protection
Drawing management	<ul style="list-style-type: none"> - Overall protection activities of the R&D center - Protection activities in the field of drawing
Promotion	<ul style="list-style-type: none"> - Respond to security accidents such as media handling

Major activities of information protection council



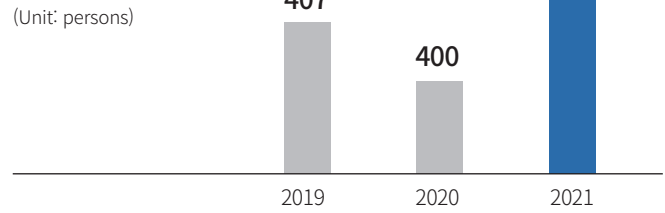
Information protection training for employees

POSCO STEELEON is conducting information protection training to raise employees' awareness on information security and to actively prevent the misuse, abuse and leakage of information. We provide training on personal information protection to all employees at least once a year and encourage them to recognize the importance of information protection and practice it, such as requiring the signing of a security pledge. Moreover, we are strengthening our information protection capabilities in our daily lives by carrying out various security activities.

2021 training performance to raise awareness on information protection

Category	Objective	Schedule
Training on information security	- Strengthening personal information protection - Improving employees' security level and preventing phishing/smishing in advance	May 2021 Oct 2021
Training and evaluation on common competencies of each department	Cultivation of basic knowledge necessary for job performance such as the management philosophy of corporate citizenship, company culture, and production system	June 2021 (Pohang) July 2021 (Seoul)
Information security training for new hires	Information security training for new hires of 2021	June 2021
Support for contractors' security activities	Support security personnel of contractors to participate in the training provided by Korean Association for Industrial Technology Security	June 2021

Number of participants in information protection training



Number of violations of customer privacy

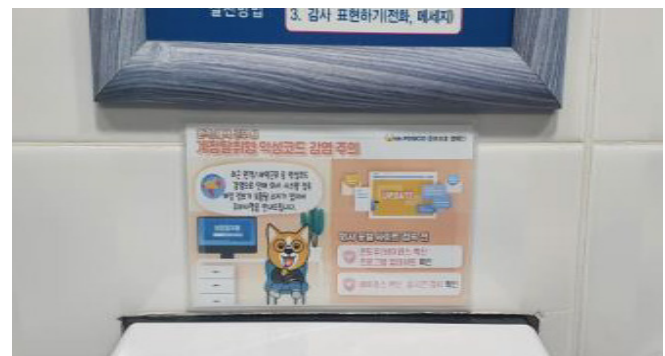
(Unit: case)

Category	2019	2020	2021
Number of complaints reported regarding customer privacy	0	0	0
Number of proven customer data breaches, thefts, and losses	0	0	0

Information protection training for contractors

We provide information protection training to employees of contractors so that they can recognize the importance of security. Basic security hygiene that can be practiced in everyday life were trained such as wearing a security card at all times, turning off the PC when leaving the office, prohibiting the use of unauthorized storage devices, and prohibiting the access to harmful/unnecessary websites. In particular, we give warnings to employees who frequently access websites that are not related to their work during working hours and take measures to prevent them from accessing the websites.

We have strengthened the employee password management system to prevent external users from accessing the sever, shared examples of phishing emails and malicious code penetration, and provided training on how to respond to security issues.



▲ A poster that raises awareness on security

APPENDIX

ESG Fact Book	75
GRI Content Index	83
TCFD Index	89
SASB Index	90
Independent Assurance Statement	92
Joined Associations	94

ESG Fact Book

Environmental

Environmental management

Category	Unit	2018	2019	2020	2021
Environmental management system (ISO 14001) adoption rate	%	100	100	100	100
Number of certification-target worksites*	Count	2	2	2	2
Number of certified worksites*	Count	2	2	2	2
Number of environmental law violations**	Case	0	0	0	2
Number of employees participated in environmental training	Persons	258	289	185	281
Green investments	Million KRW	5,049	1,055	559	2,713

*Domestic worksites (galvanizing plant, color coating plant)

**The 2 violations of environmental laws in 2021 are related to the galvanizing plant (non-compliance of reporting obligations on alteration of air pollutant-emitting facilities) and color coating plant (non-compliance of reporting obligations on alteration of wastewater discharge facilities)

Waste generated*

Category	Unit	2018	2019	2020	2021
Total waste generated	ton	2,954	3,274	3,439	3,757
Ordinary waste	ton	1,376	1,368	1,520	1,565
Designated waste	ton	1,578	1,906	1,919	2,192

*Domestic worksites (galvanizing plant, color coating plant)

Waste disposed*

Category	Unit	2018	2019	2020	2021
Total waste disposed	ton	2,954	3,274	3,439	3,757
Recycled	ton	1,653	1,997	2,302	2,709
Incinerated	ton	525	458	506	665
Landfill	ton	776	819	631	383

*Domestic worksites (galvanizing plant, color coating plant)

Water consumption and discharge of wastewater*

Category	Unit	2018	2019	2020	2021
Total water withdrawn	ton	529,105	629,936	637,138	666,768
Galvanizing	ton	315,311	326,432	328,895	329,586
Color coating	ton	213,794	303,504	308,243	337,182
Reuse of treated wastewater	ton	502,958	604,241	613,225	644,411
Galvanizing	ton	299,528	309,687	314,433	316,041
Color coating	ton	203,430	294,554	298,792	328,370
Water supply	ton	26,147	25,695	23,913	22,357
Galvanizing	ton	15,783	16,745	14,462	13,545
Color coating	ton	10,364	8,950	9,451	8,812
Water consumption	ton	107,711	167,093	161,774	145,124
Galvanizing	ton	50,710	76,706	69,885	56,873
Color coating	ton	57,001	90,387	91,889	88,251
Discharge of wastewater	ton	421,394	462,843	475,364	521,644
Galvanizing	ton	264,601	249,726	259,010	272,713
Color coating	ton	156,793	213,117	216,354	248,931

*Domestic worksites (galvanizing plant, color coating plant)

Energy consumption*

Category	Unit	2018	2019	2020	2021
Total energy consumption	GJ	2,358,642	2,563,704	2,447,264	2,540,034
Fuel*	GJ	1,135,939	1,275,792	1,239,153	1,249,091
Electricity*	GJ	1,104,321	1,164,225	1,096,850	1,159,848
Steam**	GJ	118,382	123,687	111,261	131,095
Energy intensity	GJ/t-product	2.65	2.67	2.63	2.48

*Domestic worksites (galvanizing plant, color coating plant, Seoul office)

**Domestic worksites (galvanizing plant, color coating plant)

GHG emissions*

Category	Unit	2018	2019	2020	2021
Total GHG emissions	tCO ₂ -eq	115,574	127,771	124,170	127,366
Direct GHG emissions(Scope 1)	tCO ₂ -eq	58,062	65,893	63,751	64,725
Indirect GHG emissions(Scope 2)	tCO ₂ -eq	57,512	61,878	60,419	62,641
GHG intensity	tCO ₂ -eq/t-product	0.13	0.13	0.13	0.12

*Domestic worksites (galvanizing plant, color coating plant, Seoul office)

Emission of air pollutants*

Category	Unit	2018	2019	2020	2021
NOx	ton	21.6	22.5	28.9	53.0
SOx	ton	8.7	16.4	6.1	7.5
Dust	ton	7.9	5.3	3.1	3.9

*Domestic worksites (galvanizing plant, color coating plant)

Emission of water pollutants*

Category	Unit	2018	2019	2020	2021
COD(Chemical Oxygen Demand)	mg/L	14.1	15.8	18.3	17.8
SS(Suspended solid)	mg/L	1.9	2.4	4.5	2.1

*Domestic worksites (galvanizing plant, color coating plant)

Consumption of hazardous chemicals

Category	Unit	2018	2019	2020	2021
Consumption of hazardous chemicals	ton	3,146	3,288	3,730	4,085
Galvanizing	ton	1,848	1,737	2,232	2,623
Color coating	ton	1,298	1,551	1,498	1,462

Social

HR

Category	Unit	2018	2019	2020	2021
Total number of employees	Persons	413	427	424	434
Total number of executives	Persons	10	10	10	9
Number of female employees	Persons	0	0	1	1
Total number of permanent employees	Persons	391	406	405	413
Number of permanent male employees	Persons	373	387	385	387
Number of permanent female employees	Persons	18	19	20	26
Total number of temporary employees	Persons	12	11	9	12
Number of temporary male employees	Persons	9	6	5	10
Number of temporary female employees	Persons	3	5	4	2
Number of employees not directly hired by the company (dispatched, or subcontract workers)	Persons	288	277	269	277
Number of male employees not directly hired by the company	Persons	274	265	255	262
Number of female employees not directly hired by the company	Persons	14	12	14	15
Total number of female employees	Persons	21	24	25	29

New hires and turnover (retire)

Category	Unit	2018	2019	2020	2021
Number of new hires	Persons	42	32	8	20
Voluntary turnover rate	%	3	3	1	1
Average continuous years of service	Years	15	15	16	16
Male	Years	15	16	16	16
Female	Years	7	6	8	8
Total number of retirees	Persons	14	18	14	10
Number of retirees	Persons	0	4	1	4
Manager turnover rate*	%	43	17	57	40
Employee satisfaction	Points	73	83	86	85

*Manager: all managers, from junior managers (mid-level managers) to top management.

Work-life balance

Category	Unit	2018	2019	2020	2021
Maternity leave for spouse	Persons	8	8	10	7
Total number of people who took maternity leave	Persons	3	1	1	1
Male	Persons	0	0	0	0
Female	Persons	3	1	1	1
Total number of people who took childcare leave	Persons	3	3	0	1
Male	Persons	0	0	0	0
Female	Persons	3	3	0	1
Number of reinstated target employees after taking childcare leave	Persons	1	3	3	0
Male	Persons	0	0	0	0
Female	Persons	1	3	3	0
Number of reinstated employees after childcare leave*	Persons	1	3	3	0
Male	Persons	0	0	0	0
Female	Persons	1	3	3	0

*There is no reinstated employee in 2021 (reinstated after March 2022)

Employee diversity

Category	Unit	2018	2019	2020	2021
Female share of total workforce	%	5.1	5.6	5.9	6.7
Wage level of female employees compared to male employees	%	68	65	66	70
Female share in managerial positions*	%	1.0	0.9	1.2	1.4
Female share in top management positions (including director)	%	0.0	0.0	0.2	0.2
Female share in junior managerial position**	%	1.0	0.9	0.9	1.2
Number of employees with disabilities	Persons	10	10	11	14
Proportion of employees with disabilities	%	2.9	2.9	3.1	3.3
Number of veterans	Persons	17	17	17	16
Number of foreigners	Persons	0	0	0	0

* Ratio of women in all managers, from junior managers to top management

**Junior managers refer to mid-level managers

Human capital development

Category	Unit	2018	2019	2020	2021
Total training hours	Hours	16,050	14,929	23,036	13,087
Male	Hours	14,902	14,182	20,986	12,425
Female	Hours	1,148	747	2,050	662
Training hours per employee	Hours	40	36	56	31
Male	Hours	39	36	54	31
Female	Hours	55	31	85	24
Total training expenses per employee	Thousand KRW	316,471	228,720	170,045	218,551
Training expenses per person	Thousand KRW	766	536	401	504

Safety and Health*

Category	Unit	2018	2019	2020	2021
Total disaster rate**	%	0.28	0.81	0.58	0.23
Direct employees	%	0.25	0.48	0.71	0.23
Contractors	%	0.33	1.25	0.31	0
Total number of injured employees	Persons	2	6	4	1
Direct employees	Persons	1	2	3	1
Contractors	Persons	1	4	1	0
Number of disasters	Cases	2	6	4	1
Direct employees	Cases	1	2	3	1
Contractors	Cases	1	4	1	0
Total fatalities	Persons	0	0	0	0
Direct employees	Persons	0	0	0	0
Contractors	Persons	0	0	0	0
Lost time injuries (total, per 1 million hours)	%	1.33	3.82	2.43	0.60
Lost time injuries (direct employees)	%	1.26	2.42	3.34	1.08
Lost time injuries (contractors)	%	1.41	5.38	1.34	0
Total recordable incident rate (total, per million hours)	%	1.33	5.10	4.26	1.80
Fatality rate (total, per million hours)	%	0	0	0	0
Completion rate of Safety and health training sessions	%	98.5	97.4	96.5	97.5

*Based on direct employees and primary contractors

Safety management

Category	Unit	2018	2019	2020	2021
ZERO safety accident achievement rate	%	85	100	100	85
Proportion of healthy people (*based on 5 major adult diseases)	%	45	48	46	48

Human rights training

Category	Unit	2018	2019	2020	2021
Total training hours	Hours	18	19	13	14
Number of employees completed training*	Persons	387	551	226	175

* If 1 person completes training N times, it is counted as N people

Survey on organizational culture that respects humanity

Category	Unit	2018	2019	2020	2021
Number of reports	Cases	1	1	1	1
Number of measures taken	Cases	1	1	1	1

Training on ethics

Category	Unit	2018	2019	2020	2021
Number of people participated in training on ethics	Persons	397	406	413	416
Participation rates of training on corporate ethics	%	100	99.5	100	100
Number of people participated in training on sexual harassment	Persons	396	408	413	416
Participation rates of training on sexual harassment	%	100	100	100	100

Social contribution

Category	Unit	2018	2019	2020	2021
Social contribution expenses	Million KRW	253	202	110	257
Total voluntary service hours	Hours	7,930	5,956	1,045	1,085
Voluntary service hours per person	Hours	19.2	13.9	2.5	2.5
Number of participants	Persons	322	317	219	257

R&D investments

Category	Unit	2018	2019	2020	2021
R&D expenses	Million KRW	2,110	2,226	1,820	1,496
Proportion of R&D expenses	%	0.23	0.25	0.21	0.11

Customer satisfaction

Category	Unit	2018	2019	2020	2021
Customer satisfaction index	Points	80	83	84	91

Governance

BOD(Board of Directors) structure

Category	Unit	2018	2019	2020	2021
Size of the BOD	Persons	4	4	4	4
Internal directors	Persons	2	2	2	2
Outside directors	Persons	1	1	1	1
Other non-executive directors	Persons	1	1	1	1
Female directors	Persons	0	0	0	0

BOD operations

Category	Unit	2018	2019	2020	2021
Number of BOD meetings held	Counts	5	6	4	4
BOD meeting attendance rate	%	97	100	88	100
Number of approved agendas	Cases	14	14	13	13

Reporting of unethical practices and actions taken

Category	Unit	2018	2019	2020	2021
Number of reports	Cases	2	3	6	5
Number of measures taken	Cases	2	3	6	5

Corruption

Category	Unit	2018	2019	2020	2021
Number of occurrences	Cases	0	0	0	0
Number of disciplinary measures taken and dismissals made due to corruption	Cases	0	0	0	0
Number of contracts canceled/unrenewed due to corruption	Cases	0	0	0	0

Legal actions implemented for anti-competition practices and violation of the Fair-Trade Act

Category	Unit	2018	2019	2020	2021
Number of violations	Cases	0	0	0	0
Amount of penalties	KRW	0	0	0	0

Employee training on information protection

Category	Unit	2018	2019	2020	2021
Number of participants	Persons	346	407	400	409

Violation of customer privacy

Category	Unit	2018	2019	2020	2021
Number of complaints reported related to customer privacy	Cases	0	0	0	0
Proven number of customer data breaches, thefts, and losses	Cases	0	0	0	0

GRI Content Index

General Disclosures

Category	Index	Details	Pages and notes	Assurance																																						
GRI 102: General Disclosures																																										
	102-1	Name of the organization	POSCO STEELEON	6p	○																																					
	102-2	Activities, brands, products, and services	Manufacturing galvanized steel sheets, color-coated steel sheets, and other surface treatment steel sheet	6~9p	○																																					
	102-3	Location of headquarters	173, Cheolgang-ro, Nam-gu, Pohang-si, Gyeongsangbuk-do	6p	○																																					
	102-4	Location of operations	Pohang (galvanizing/color coating plant), Myanmar (galvanizing/color coating plant), Seoul (sales office), Changwon/Gwangju (branch office)	6p	○																																					
	102-5	Ownership and legal form	External audit target, KOSPI market listed firms <table border="1"> <thead> <tr> <th>Shareholder name</th> <th>Number of shares owned</th> <th>Share</th> </tr> </thead> <tbody> <tr> <td>POSCO Co., Ltd</td> <td>3,412,000 shares</td> <td>57%</td> </tr> </tbody> </table>	Shareholder name	Number of shares owned	Share	POSCO Co., Ltd	3,412,000 shares	57%	65p, Annual report 205p	○																															
Shareholder name	Number of shares owned	Share																																								
POSCO Co., Ltd	3,412,000 shares	57%																																								
	102-6	Markets served	Provide surface treatment steel sheets to domestic and overseas customers	6p	○																																					
	102-7	Scale of the organization	1. Number of employees: 429 people 2. Number of worksites: 6 (Headquarter · galvanizing plant, color coating · processing plant, Seoul office, Myanmar branch, Changwon/Gwangju branch) 3. Sales revenue: 1,347,274 million KRW 4. Total liabilities and equity: 586,433 million KRW 5. Sales volume: 937 thousand tons of galvanized · color-coated steel sheet	6p	○																																					
Organization profile	102-8	Information on employees and other workers	<table border="1"> <thead> <tr> <th colspan="6">Employees</th> <th rowspan="3">Number of employees not directly hired by the company*</th> </tr> <tr> <th rowspan="2">Business area</th> <th rowspan="2">Gen-der</th> <th colspan="2">Indefinite term employees</th> <th colspan="2">Fixed term employees</th> </tr> <tr> <th>Permanent</th> <th>Part-time</th> <th>Temporary</th> <th>Part-time</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Steel industry</td> <td>Male</td> <td>390</td> <td>-</td> <td>10</td> <td>-</td> <td>262</td> </tr> <tr> <td>Female</td> <td>27</td> <td>-</td> <td>2</td> <td>-</td> <td>15</td> </tr> <tr> <td colspan="2">Total</td> <td>417</td> <td>-</td> <td>12</td> <td>-</td> <td>277</td> </tr> </tbody> </table> <p>*Employees not directly hired by the company: dispatched, or subcontract workers</p>	Employees						Number of employees not directly hired by the company*	Business area	Gen-der	Indefinite term employees		Fixed term employees		Permanent	Part-time	Temporary	Part-time	Steel industry	Male	390	-	10	-	262	Female	27	-	2	-	15	Total		417	-	12	-	277	78p, Annual report 212p	○
Employees						Number of employees not directly hired by the company*																																				
Business area	Gen-der	Indefinite term employees		Fixed term employees																																						
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Steel industry	Male	390	-	10	-	262																																				
	Female	27	-	2	-	15																																				
Total		417	-	12	-	277																																				
	102-9	Supply chain	- Major contractors: 11 - Amounts of transactions with major contractors: 784,205 million KRW - Business areas of major contractors: supply of raw materials and supplementary materials, and provision of services	GRI Content Index	○																																					
	102-10	Significant changes to the organization and its supply chain	Changed the company name to POSCO STEELEON from POSCO Coated & Color Steel Co., Ltd. in April 2022	GRI Content Index	○																																					
	102-11	Precautionary principle or approach	POSCO STEELEON carries out its business based on procedure forms of each area such as the environment, fair-trade, and ethical management, and evaluates and responds to risks according to procedural processes.	19p, 31p, GRI Content Index	○																																					
	102-12	External initiatives	N/A	-	○																																					

Category	Index		Details	Pages and notes	Assurance															
Organization profile	102-13	Membership of associations	Korea Iron & Steel Organization, Pohang Iron & Steel Industrial Complex, Pohang Chamber of Commerce and Industry, Korea International Trade Association, Gyeongbuk Forest for Life, Pohang Environmental Movement Association, Pohang YMCA, Pohang UNESCO, Pohang Crime Victim Support Association, Pohang Industrial Complex Ecological Restoration Council	94p	○															
Strategy	102-14	Statement from senior decision-maker	Refer to CEO Message	5p	○															
Ethics and integrity	102-16	Values, principles, standards, and norms of behavior	Management philosophy: Corporate Citizenship: Building a Better Future Together Code of conduct: substance, execution, practical Core value: safety, win-win, ethics, creativity Ethical value: truth, fairness, integrity https://www.poscosteeleon.com/kr/sub.do?MENU_SEQ=10118&PAGE_SEQ=10121&LANG=ko_KR	11p, 66p, POSCO STEELEON website	○															
Governance	102-18	Governance structure	The BOD(Board of Directors) makes decisions on major agendas such as economy, environment, and society, and there is no separate committee established. Moreover, from 2021, the BOD has been making a final decision on whether to proceed with investment projects after reviewing the ESG risks that may incur from them.	64p, GRI Content Index	○															
	102-23	Chair of the highest governance body	The chairman of the BOD is concurrently held by the CEO Yun Yang Su with the appointment by the BOD resolution on March 30, 2020, based on the relevant articles of incorporations and BOD operational regulations.	63p	○															
	102-24	Nominating and selecting the highest governance body	POSCO STEELEON operates the BOD composed of directors with rich experience and expertise related to the company's business to respond to the rapidly changing business environment. Directors are appointed at the general shareholders' meeting, and director candidates are selected by the BOD and appointed in shareholders' meetings by the resolution. Outside directors are appointed among those with rich expertise and experiences in the industry, finance, academia, laws, accounting, or public sectors and who don't have significant interests in the company.	63p	○															
	102-36	Process for determining remuneration	Limits on remuneration and incentives for directors are decided at shareholders' meetings, and detailed operation standards are determined by the BOD. The remuneration of directors is executed within the limits approved by shareholders' meetings, considering their positions and roles. Remuneration of the BOD (Unit: persons, million KRW) <table border="1" data-bbox="574 1521 1281 1693"> <thead> <tr> <th>Category</th> <th>Number of people</th> <th>Total remuneration</th> <th>Average remuneration per person</th> </tr> </thead> <tbody> <tr> <td>Internal director</td> <td>2</td> <td>783</td> <td>392</td> </tr> <tr> <td>Outside director</td> <td>1</td> <td>51</td> <td>51</td> </tr> <tr> <td>Auditor</td> <td>1</td> <td>276</td> <td>276</td> </tr> </tbody> </table>	Category	Number of people	Total remuneration	Average remuneration per person	Internal director	2	783	392	Outside director	1	51	51	Auditor	1	276	276	64p
Category	Number of people	Total remuneration	Average remuneration per person																	
Internal director	2	783	392																	
Outside director	1	51	51																	
Auditor	1	276	276																	
Stakeholder engagement	102-40	List of stakeholder groups	Employees, customers, contractors, government agencies and local governments, local communities, shareholders, and investors	17p, 20~21p	○															
	102-41	Collective bargaining agreements	POSCO STEELEON has established a harmonious communication culture between labor and management based on Management-Employee Council. Decisions made by Management-Employee Council have legal force and are applied equally to all target employees (application rate: 100%)	GRI Content Index	○															
	102-42	Identifying and selecting stakeholders	Employees, customers, contractors, government agencies and local governments, local communities, shareholders, and investors	17p, 21p	○															

Category	Index	Details	Pages and notes	Assurance																																						
Stakeholder engagement	102-43	<p>Contractors: briefing sessions for contractors, mutual growth support group, industrial safety, and health council</p> <p>Customers: meetings, customer seminars, surveys</p> <p>Local residents · government agencies: volunteer activities, policy roundtables</p> <p>Institutional investors: company briefing sessions, BOD(Board of Directors), corporate disclosure</p> <p>Employees: Management-Employee Council, Grievance Settlement Council, Sexual Harassment Prevention Center</p> <p>Local residents · government agencies · local governments: meetings, volunteer activities, guidance and inspection</p> <p>POSCO STEELEON has been conducting materiality analysis since 2021 to collect important issues for ESG management practices from all stakeholders.</p>	17p, 20-21p	○																																						
	102-44	<p>Material topics and concerns raised</p> <p>Refer to materiality assessments</p>	20-21p	○																																						
Reporting practice	102-45	<p>Entities included in the consolidated financial statements</p> <p>Major financial performance on a consolidated basis (Unit: 100 million KRW, thousand tons)</p> <table border="1"> <thead> <tr> <th>Category</th> <th>2019</th> <th>2020</th> <th>2021</th> </tr> </thead> <tbody> <tr> <td>Liabilities</td> <td>2,823</td> <td>2,581</td> <td>2,640</td> </tr> <tr> <td>Equity</td> <td>2,210</td> <td>2,273</td> <td>3,224</td> </tr> <tr> <td>Sales revenue</td> <td>9,167</td> <td>9,073</td> <td>1,347</td> </tr> <tr> <td>Production volume</td> <td>964</td> <td>934</td> <td>1,030</td> </tr> <tr> <td>Sales volume</td> <td>859</td> <td>873</td> <td>937</td> </tr> </tbody> </table> <p>Consolidated subsidiary</p> <p>- There is 1 consolidated subsidiary of the company</p> <table border="1"> <tbody> <tr> <td>Company name</td> <td>Myanmar POSCO C&C Co., Ltd.</td> </tr> <tr> <td>Establishment date</td> <td>Oct 3, 2013</td> </tr> <tr> <td>Address</td> <td>Yangon, Myanmar</td> </tr> <tr> <td>Major business</td> <td>Steel manufacturing and sales</td> </tr> <tr> <td>Total assets at the end of the most recent business year</td> <td>19,473 million KRW</td> </tr> <tr> <td>Basis of ownership structure</td> <td>Holding more than 50% of the voting rights in the company (K-IFRS 1110)</td> </tr> <tr> <td>Whether it is a major subsidiary</td> <td>N/A</td> </tr> </tbody> </table>	Category	2019	2020	2021	Liabilities	2,823	2,581	2,640	Equity	2,210	2,273	3,224	Sales revenue	9,167	9,073	1,347	Production volume	964	934	1,030	Sales volume	859	873	937	Company name	Myanmar POSCO C&C Co., Ltd.	Establishment date	Oct 3, 2013	Address	Yangon, Myanmar	Major business	Steel manufacturing and sales	Total assets at the end of the most recent business year	19,473 million KRW	Basis of ownership structure	Holding more than 50% of the voting rights in the company (K-IFRS 1110)	Whether it is a major subsidiary	N/A	6p, Annual report 18-19p	○
	Category	2019	2020	2021																																						
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Whether it is a major subsidiary	N/A																																									
	102-46	<p>Defining report content and topic boundaries</p> <table border="1"> <tbody> <tr> <td>STEP 1. Issue pool configuration</td> <td>A total of 22 issue pools are configured by gathering data results from media analysis, sustainability management analysis in the same industry, existing disclosure analysis, international standards, and global sustainability management guidelines</td> </tr> <tr> <td>STEP 2. Conduct materiality analysis</td> <td>Identify the importance of each issue by analyzing internal and external stakeholder surveys, media analysis, benchmarking company analysis, and risk analysis of domestic and overseas ESG standards</td> </tr> <tr> <td>STEP 3. Select material topics</td> <td>Select 8 major issues by evaluating stakeholder interest and business impact</td> </tr> <tr> <td>STEP 4. Validity review</td> <td>Selected issues are validated through reports to management and Corporate Citizenship Bureau</td> </tr> </tbody> </table>	STEP 1. Issue pool configuration	A total of 22 issue pools are configured by gathering data results from media analysis, sustainability management analysis in the same industry, existing disclosure analysis, international standards, and global sustainability management guidelines	STEP 2. Conduct materiality analysis	Identify the importance of each issue by analyzing internal and external stakeholder surveys, media analysis, benchmarking company analysis, and risk analysis of domestic and overseas ESG standards	STEP 3. Select material topics	Select 8 major issues by evaluating stakeholder interest and business impact	STEP 4. Validity review	Selected issues are validated through reports to management and Corporate Citizenship Bureau	20p	○																														
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Category	Index	Details	Pages and notes	Assurance																											
Reporting practice	102-47	List of material topics <table border="1" data-bbox="579 534 1285 874"> <thead> <tr> <th>Rank</th> <th>Area</th> <th>Material topic</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Social</td> <td>Safety and health</td> </tr> <tr> <td>2</td> <td>Environment</td> <td>GHG reduction</td> </tr> <tr> <td>3</td> <td>Environment</td> <td>Industrial water and wastewater</td> </tr> <tr> <td>4</td> <td>Environment</td> <td>Waste</td> </tr> <tr> <td>5</td> <td>Environment</td> <td>Harmful chemicals</td> </tr> <tr> <td>6</td> <td>Environment</td> <td>Energy*</td> </tr> <tr> <td>7</td> <td>Social</td> <td>Due diligence of the supply chain</td> </tr> <tr> <td>8</td> <td>Environment</td> <td>Environmental regulations*</td> </tr> </tbody> </table> <p>* Newly added material topics compared to the previous year</p>	Rank	Area	Material topic	1	Social	Safety and health	2	Environment	GHG reduction	3	Environment	Industrial water and wastewater	4	Environment	Waste	5	Environment	Harmful chemicals	6	Environment	Energy*	7	Social	Due diligence of the supply chain	8	Environment	Environmental regulations*	21p	○
	Rank	Area	Material topic																												
	1	Social	Safety and health																												
	2	Environment	GHG reduction																												
	3	Environment	Industrial water and wastewater																												
	4	Environment	Waste																												
	5	Environment	Harmful chemicals																												
	6	Environment	Energy*																												
	7	Social	Due diligence of the supply chain																												
8	Environment	Environmental regulations*																													
102-48	Restatements of information	N/A	-	○																											
102-49	Changes in reporting	Energy and environmental regulations were selected as new topics compared to the previous year	21p	○																											
102-50	Reporting period	From January 1, 2021 to December 31, 2021 Include some achievements in the first half of 2022	2p	○																											
102-51	Date of the most recent report	July 2021 (POSCO C&C CORPORATE CITIZENSHIP REPORT 2020)	2p	○																											
102-52	Reporting cycle	Annually	2p	○																											
102-53	Contact point for question regarding the report	Address: 173, Cheolgang-ro, Nam-gu, Pohang-si, Gyeongsangbuk-do (Jangheung dong) POSCO STEELEON Corporate Citizenship Bureau Department in charge: Corporate Citizenship Bureau of Management Assistance Department Contact: 054-280-6453 E-mail: sjkwon@poscosteeleon.com Website: https://www.poscosteeleon.com	2p	○																											
102-54	Claims of reporting in accordance with GRI standards	This report was prepared in accordance with the Core Option of the Global Reporting Initiative (GRI) Standards.	2p	○																											
102-55	GRI Standard applied and Index GRI content index	Refer to GRI Content Index	-	○																											
102-56	External assurance	Refer to the third party's verification statement	92~93p	○																											

Topic-specific Disclosures

GRI Standards	Title	Pages and notes	Assurance	
TOPIC 1: Safety and health				
GRI 103: Management approach	103-1	Explanation of the material topic and its boundary	40p, 46p	○
	103-2	The management approach and its components		○
	103-3	Evaluation of the management approach		○
GRI 403: Occupational health and safety (2018)	403-1	Occupational health and safety management system	46p	○
	403-2	Hazard identification, risk assessment, and incident investigation	47~48p	○
	403-3	Occupational health service	43p , 46~47p	○
	403-4	Worker participation, consultation, and communication on occupational health and safety	47~48p	○
	403-5	Worker training on occupational health and safety	47p	○
	403-6	Promotion of worker health	43p	○
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked to business relationship	49p	○
	403-9	Work-related injuries	46p, 80p	○
TOPIC 2: GHG reduction				
GRI 103: Management approach	103-1	Explanation of the material topic and its boundary	24~25p	○
	103-2	The management approach and its components		○
	103-3	Evaluation of the management approach		○
GRI 305: Emission (2016)	305-1	Direct GHG emissions (Scope 1)	26p, 76p	○
	305-2	Energy indirect GHG emissions (Scope 2)	26p, 76p	○
	305-7	Nitrogen oxides (NOx), sulfur oxides (Sox), and other significant air emissions	77p	○
TOPIC 3: Industrial water and wastewater				
GRI 103: Management approach	103-1	Explanation of the material topic and its boundary	24p, 27p	○
	103-2	The management approach and its components		○
	103-3	Evaluation of the management approach		○
GRI 303: Water and Effluents (2018)	303-3	Water withdrawal	27p, 76p	○
	303-4	Water discharge		○
	303-5	Water consumption		○
TOPIC 4: Waste				
GRI 103: Management approach	103-1	Explanation of the material topic and its boundary	24p, 27p	○
	103-2	The management approach and its components		○
	103-3	Evaluation of the management approach		○
GRI 306: Waste (2020)	306-3	Waste disposal	27p, 75p	○
	306-4	Waste recycle		○
	306-5	Waste reclamation		○
TOPIC 5: Harmful chemicals				
GRI 103: Management approach	103-1	Explanation of the material topic and its boundary	24p, 28p	○
	103-2	The management approach and its components		○
	103-3	Evaluation of the management approach		○
GRI 307: Environmental compliance(2016)	307-1	Non-compliance with environmental laws and regulations	75p	○

GRI Standards	Title		Pages and notes	Assurance
TOPIC 6: Energy				
GRI 103: Management approach	103-1	Explanation of the material topic and its boundary	24p	○
	103-2	The management approach and its components		○
	103-3	Evaluation of the management approach		○
GRI 302: Energy (2016)	302-1	Energy consumption within the organization	76p	○
TOPIC 7: Due diligence on supply chain				
GRI 103: Management approach	103-1	Explanation of the material topic and its boundary	40p, 50~54p	○
	103-2	The management approach and its components		○
	103-3	Evaluation of the management approach		○
GRI 308: Supplier environmental assessment(2016)	308-1	New suppliers that were screened using environmental criteria	52~53p	○
TOPIC 8: Environmental regulation				
GRI 103: Management approach	103-1	Explanation of the material topic and its boundary	24p, 31~33p	○
	103-2	The management approach and its components		○
	103-3	Evaluation of the management approach		○
GRI 308: Environmental compliance(2016)	307-1	Non-compliance with environmental laws and regulations	75p	○
Other general reporting issues				
GRI 205: Anti-corruption(2016)	205-3	Confirmed incidents of corruption and actions taken	68p	○
GRI 206: Anti-competitive behavior(2016)	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	69~70p, 82p	○
GRI 401: Employment (2016)	401-1	New employee hires and employee turnover	78p	○
	401-2	Benefits provided to full-time employees	43p	○
	401-3	Parental leave	79p	○
GRI 404: Training and education(2016)	404-1	Average hours of training per year per employee	42p, 80p	○
	404-2	Programs for upgrading employee skills and transition assistance programs	42~43p	○
GRI 405: Diversity and equal opportunity(2016)	405-1	Diversity of governance bodies and employees	63p	○
GRI 412: Human rights assessment (2016)	412-1	Operations that have been subject to human rights reviews or impact assessments	68p	○
	412-2	Employee training on human rights policies or procedures	66~67p, 81p	○
GRI 418: Customer privacy(2016)	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	82p	○

TCFD Index

TCFD recommendations		POSCO STEELEON's response																
Governance	a. Describe the board's oversight of climate-related risks and opportunities	Going forward, we are planning to strengthen the company-wide capacity to respond to climate change by preparing a management and supervision system of the BOD(Board of Directors).																
	b. Describe management's role in assessing and managing climate-related risks and opportunities	We are implementing the emission trading scheme to achieve the national GHG reduction target, and the performance related to climate change is verified by a third-party organization through the submission of a GHG emission report. Moreover, the management establishes a plan for carbon neutrality and frequently reviews decarbonization measures.																
Strategy	a. Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term	As a member of the POSCO Group, POSCO STEELEON is participating in the group-level environmental management activities including POSCO's carbon neutrality vision for 2050. Moreover, we are establishing detailed strategies by analyzing the external environment and internal capabilities to respond to the rapidly changing needs of international environmental management and to promote 2050 carbon neutrality.																
	b. Describe the impact of climate-related risks and opportunities on the organization's business, strategy, and financial planning																	
	c. Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario																	
Risk management	a. Describe the organization's processes for identifying and assessing climate-related risks	We manage green and environmental management under the supervision of Safety Environment Group, and identify and evaluate risks related to climate change through third-party verification on a GHG emission report and monitoring plans.																
	b. Describe the organization's processes for managing climate-related risks																	
	c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management																	
Metrics and targets	a. Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process	POSCO STEELEON discloses key climate indices including energy consumption and GHG emissions in the Corporate Citizenship Report and National Greenhouse gases Management System.																
	b. GHG emissions and relevant risks disclosed when Scope 1, 2, and Scope 3 are applicable	<p>GHG emissions (Unit: tCO₂)</p> <table border="1"> <thead> <tr> <th>Category</th> <th>2019</th> <th>2020</th> <th>2021</th> </tr> </thead> <tbody> <tr> <td>Scope1(direct emission)</td> <td>65,893</td> <td>63,751</td> <td>64,725</td> </tr> <tr> <td>Scope2(indirect emission)</td> <td>61,878</td> <td>60,419</td> <td>62,641</td> </tr> <tr> <td>Total</td> <td>127,771</td> <td>124,170</td> <td>127,366</td> </tr> </tbody> </table> <p>* Data scope: domestic worksites (galvanizing plant, color coating plant)</p>	Category	2019	2020	2021	Scope1(direct emission)	65,893	63,751	64,725	Scope2(indirect emission)	61,878	60,419	62,641	Total	127,771	124,170	127,366
	Category	2019	2020	2021														
Scope1(direct emission)	65,893	63,751	64,725															
Scope2(indirect emission)	61,878	60,419	62,641															
Total	127,771	124,170	127,366															
c. Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets	POSCO STEELEON aims to limit the GHG emissions within emission allowances, 128,605tCO ₂ , and is trying to save production costs by measuring GHG intensity and achieving 0.130(tCO ₂ /t-product) intensity by 2023.																	

SASB Index

Code	Accounting metrics	POSCO STEELEON's response
GHG emissions		
EM-IS-110a.1	1) Gross scope 1 emissions	64,725 tCO ₂
	2) Percentage covered under emissions-limiting regulationemissions	100% POSCO STEELEON's scope 1 emissions are based on those generated from domestic worksites (galvanizing plant, color coating plant, Seoul office). POSCO STEELEON verifies its scope 1 emissions through verified GHG statements.
EM-IS-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	<p>POSCO STEELEON has been carrying out GHG reduction activities to limit the emission within 128,605tCO₂, the amount allocated according to the emission trading scheme in 2021. We strive to discover and implement our own energy diagnosis and measures to improve facility efficiency, as well as to raise the efficiency and reuse of waste heat recovery of exhaust gas. Moreover, we are purchasing carbon credits at the lowest price to reduce costs.</p> <p>In addition, in 2021, surplus steam from Pohang Steelworks was converted into fuels and supplied to color coating plants, reducing 1,800tCO₂ of GHG emissions a year. At the same time, 4,250 tons of steam consumption and 840tCO₂ of GHG emissions were reduced by replacing the deteriorated vacuum evaporation wastewater treatment facility of galvanizing plants.</p>
Air		
EM-IS-120a.1	1) NOx (excluding N2O)	53.0ton
	2) SOx	7.5ton
	3) Particulate matter (PM10)	3.9ton
	4) CO emissions	49.89ton
Energy management		
EM-IS-130a.1	1) Total energy consumed	2,540,034GJ
	2) Percentage of grid electricity	0%
	3) Percentage of renewable source electricity	0%
EM-IS-130a.2	1) Total fuel consumed	1,249,091GJ
	2) Percentage of coal	0%
	3) Percentage of natural gas	100%
	4) Percentage of renewable	0%
Water management		
EM-IS-140a.1	1) Total fresh water withdrawn	We are building a water supply chain by reusing treated wastewater. Water withdrawn: 666,768ton thousand m ³ (Consumption of treated wastewater: 644 thousand m ³ / Water consumption: 23 thousand m ³)
	2) Percentage recycled	0%
	3) Percentage in regions with High Baseline Water Stress (40-80%)	It is not applicable in Pohang area as its water stress index is less than 40%
	4) Percentage in regions with Extremely High (>80%)' Baseline Water Stress	It is not applicable in Pohang area as its water stress index is less than 40%

Code	Accounting metrics	POSCO STEELEON's response
Waste management		
EM-IS-150a.1	1) Total amount of waste generated	3,757ton
	2) Percentage hazardous	58.3% (Waste containing specific hazardous substance is classified as designated waste and treated with due process. The designated waste standard is different from the SASB standard.)
	3) Percentage reused-recycled-reused	0%
Safety and health		
EM-IS-320a.1	Total recordable incident rate (TRIR)	1.80 (Full time + Contract, incident rate per 1 million hours)
	Fatality rate	0 (Full time + Contract, incident rate per 1 million hours)
Supply chain management		
EM-IS-430a.1	Discussion of the process for managing iron ore and/or coking coal sourcing risks arising from environmental and social issues	N/A

*SASB Activity Metric was excluded from the disclosure list since it isn't applied to POSCO STEELEON.

Independent Assurance Statement

To: The Stakeholders of POSCO STEELEON Co., Ltd.

Introduction and objectives of work

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

Assurance Standards and Levels

This assurance was based on the AA1000AS v3 (2020) Assurance Standard and confirmed that the report was prepared in accordance with the Core Option of GRI Standards, the international standards guidelines of sustainability reports. The assurance level was based on the Type 1 that confirmed compliance with the four principles of AA1000 AP (2018) in accordance with the AA1000 AS and the Type 2 assurance that verified the quality and reliability of the information disclosed in the report. Type 2 was verified for below topic standards.

- **GRI Topic-specific Standards:** 302-1, 303-3~5, 305-1~2, 305-7, 306-3~5, 307-1, 308-1, 403-1~7, 403-9

Scope of Assurance

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

- Based on the period from January 1st to December 31st 2021 included in the report
- Major assertion included in the report such as sustainability management policies, strategies, objectives, business and performance
- Information related to material issues determined as a result of materiality assessment
- Appropriateness and consistency of processes and systems for data collection, analysis and review

The following contents were not included in the scope of assurance.

- Financial information
- Disclosures in the international standards and initiatives index excluding GRI
- Other related additional information such as the website presented in the report

Methodology

As part of its independent assurance, the assurer has used the methodology developed to collect relevant evidence to comply with the verification criteria and to reduce errors in the reporting, and has performed the following activities;

- To determine verification priorities, review of materiality issue analysis process and verification of the results
- System review for sustainability strategy process and implementation
- Review the evidence to support the material issues through interviews with senior managers with responsibility for them
- Verification of data generation, collection and reporting for each performance index

Assurance Opinion

On the basis of our methodology and the activities described above, it is our opinion that

- The information and data included in the report are accurate and reliable and the assurer cannot point out any substantial aspects of material with mistake or misstatement.
- The report was prepared according to the Core option of the GRI Standards.
- The assurance opinion on the four principles presented by the AA1000 AP (2018) is as follows.

AA1000 AP (2018)

Inclusivity: Stakeholder Engagement and Opinion

POSCO STEELEON defined executives and employees, customers, partners, government/local governments, S-shareholders/ investors and local communities as key stakeholder groups, and operates communication channels for each group for stakeholder engagement. POSCO STEELEON conducted a survey on internal and external stakeholders and collected various opinions and expectations of stakeholders based on the response results and reflect the derived material issues in decision-making on sustainability management.

Materiality: Identification and reporting of material sustainability topics

POSCO STEELEON derived the issue pool of 22 topics through the risk assessment process and communication with stakeholders, based on the results of media research, benchmarking global advanced companies, analysis of major global initiatives related to sustainability, and opinions collected from communication channels of each stakeholder group. POSCO STEELEON conducted a materiality assessment that comprehensively considered stakeholder interest and business impact and selected the 8 material topics identified.

Responsiveness: Responding to material sustainability topics and related impacts

POSCO STEELEON establishes and implements a response plan for each material topic to appropriately respond to the derived material topics that reflects the expectations of stakeholders and discloses detailed response activities and performance for them in the report.

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

POSCO STEELEON implemented the process to identify and evaluate the impact on organizations and stakeholders related to material topics. POSCO STEELEON make decisions on operations and management of impacts that could arise from each material topic by identifying and assessing the impacts, risks, and opportunities regarding selected material topics. And the results of impact, risk, and opportunity factors analysis on material issues are used for decision-making to respond to each issue, and the process was disclosed in the report.

Key areas for ongoing development

- It may be helpful to increase the proportion of external stakeholders in the process of conducting materiality assessment and deriving material issues material topics can help reflect sustainability issues that have a substantial impact.
- Each section of the report describes the positive aspects and expresses efforts to further develop them. However, at the same time, identifying issues with poor performance and specifying specific plans and mid-to/long term plans/goals for resolving them will help improve the balance of reporting.

Statement of independence and competence

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

Evaluation against GRI 'In Accordance' Criteria

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

[Universal Standards]

Organizational Profile 102-1~13/ Strategy 102-14/ Ethics and Integrity 102-16/ Governance 102-18, 102-23, 102-24, 102-36/ Stakeholder Engagement 102-40~44/ Reporting practice 102-45~56/ Management Approach 103-1~3

[Topic-specific Standards]

- Economic: 205-3, 206-1
- Environmental: 302-1, 303-3~5, 305-1~2, 305-7, 306-3~5, 307-1, 308-1
- Social: 401-1~3, 403-1~7, 403-9, 404-1~2, 405-1, 412-1~2, 418-1



15 July 2022

S. H. Lim / BSI Group Korea, Managing Director

Joined Associations

Korea Iron & Steel Organization

Pohang Chamber of Commerce and Industry

Gyeongbuk Forest for Life

YMCA Pohang

Pohang Crime Victim Support Association

Pohang Iron & Steel Industrial Complex

Korea International Trade Association

Pohang Environmental Movement Association

Pohang UNESCO

Pohang Industrial Complex Ecological Restoration Council



POSCO STEELEON CORPORATE CITIZENSHIP REPORT 2021

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STEELEON