



# About this Report

### Reporting Principle

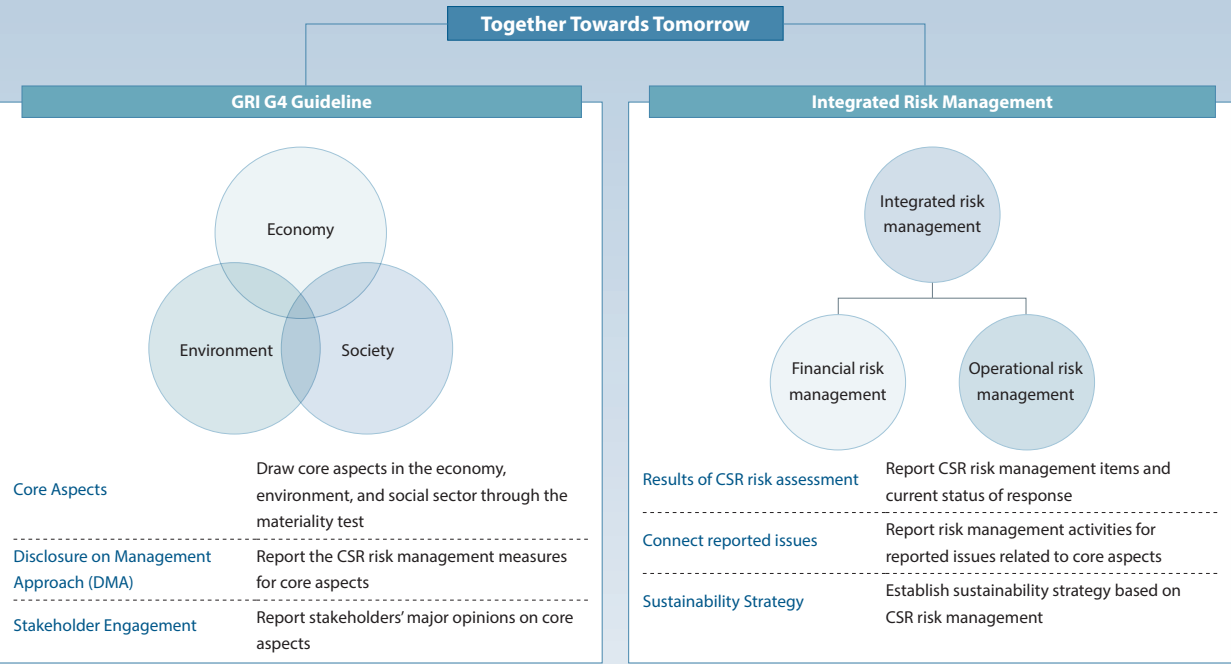
POSCO E&C publically discloses activities and performances to its stakeholders with regard to core aspects in economy, environment, and society, which are drawn by a materiality test each year since 2011. POSCO E&C Sustainability Report 2014-15 was compiled in accordance with the GRI (Global Reporting Initiative) reporting guideline and meets the G4's "Core" standard.

### Reporting Period

This report covers POSCO E&C's activities and performances from January 1 to December 31, 2014. Information after 2015 is included where it is considered to have an important impact on stakeholders' decisions such as corporate governance.

### Characteristics of the Report

POSCO E&C Sustainability Report 2014-15, published this year for the fourth time, faithfully covers major elements of GRI G4 such as drawing material aspects, management approaches, and stakeholder engagement. The report also includes the company's CSR risk analysis and current status of response in regard to business sustainability. It also includes detailed major performances of sustainable management activities and future plans on the basis of TBL (Triple Bottom Line).



# CEO Message



## POSCO E&C aims to build the foundation for its growth as a “Global EPC Value Innovator” through reconstitution of fundamentals and continued practice of value management

Dear Stakeholders,  
We sincerely appreciate your engagement with and continuous support for POSCO E&C.

Based on our experience in engineering and construction, which created the world’s leading steel mills, POSCO E&C has continued to expand into project planning, financing, engineering, and management of our core business in steel, national infrastructure, environment, urban development, and construction, and developing ourselves in to a global EPC Developer.

The year 2014 marked the 20th anniversary of POSCO E&C’s formation. Despite the challenging global business environment, POSCO E&C emerged as one of the top three construction companies in Korea, exceeding KRW 10 trillion in orders for the fifth consecutive year. We have become an industry leader in safety management with a record low accident rate of 0.08% as well. Our accomplishments were made possible, thanks to the support of all our respected stakeholders and our dedicated employees who remain committed to our company’s future.

The year 2015 poses new obstacles as we look towards the future. Overall investment activities have decreased due to historically low oil prices and unstable currency market. POSCO E&C plans to overcome these challenges and sustain growth through securing new growth engines and setting new management priorities. These plans include creating sustainable business development system, strengthening project management capacity and focusing on Economic Value Added (EVA) and cash flows.

In the face of these challenges, the Public Investment Fund (PIF), the Saudi Arabian sovereign wealth fund, has become our second largest shareholder with a 38% share. Through the opportunity, and PIF will incorporate a joint venture in Saudi Arabia to establish a foundation for a greater leap. We will seize more foundations for new opportunities. In addition, strengthening our corporate governance up to reinforced global standards will ensure the confidence of our stakeholders, enhance management efficiency.

POSCO E&C continues to strongly focus on fulfilling our corporate social responsibility. We place top priority on safety and sustainable eco-friendly management for conservation of environment in all aspects of our business.

We are engaged in multiple community outreach activities both domestically and overseas, including cultural and medical volunteer work, and working towards improvements in schools and living conditions for the disadvantaged in Korea and the rest of the world. Our employees volunteer to put their time, effort and work experience and expertise together and engage in raising social awareness.

POSCO E&C has achieved a tremendous growth over the last twenty years. We are taking our twentieth anniversary as an opportunity to reflect upon our milestones and reform our fundamentals in order to advance for a better, brighter future that can contribute towards the evolution of our society.

We ask for your continued support and encouragement for our journey.

President & CEO, POSCO E&C **Tae-Hyun Hwang**

# Company Overview

## “EPC Value Innovator Leading the 21st Century Based on the Global Market”

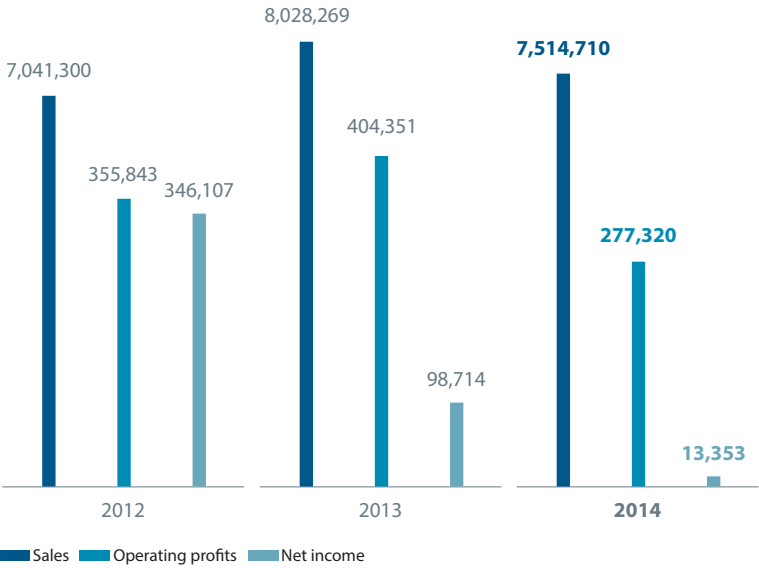
Since its establishment in December 1994, POSCO E&C has grown into a global E&C (Engineering & Construction) company based on plant engineering technology, know-how, and experienced personnel, demonstrating superior competitiveness in the world. The company has increased the number of overseas projects in which it is engaged, and it has diversified its business sectors by reinforcing the PEPCOM\* system, which encompasses the entire process from business planning to design, procurement, construction, and operation. We are realizing continuous growth by serving society as a global EPC value innovator, strengthening the level of environment and safety management, and fulfilling our social responsibilities such as ethics management, human resource management, social contribution, and win-win growth activities.

\* PEPCOM: Planning, Engineering, Procurement, Construction, Operation & Maintenance

## Financial Performance

In 2014, the Korean construction market moved into the trend of growth as it expanded in size, led by domestic housing. The global economy, however, still experiences slow recovery as well as intensified price competitiveness in the overseas construction market.

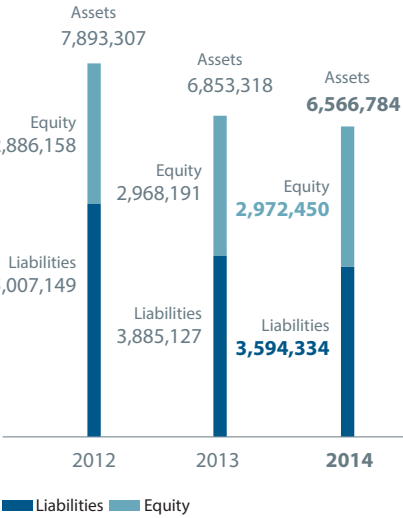
Major Financial Performance (Separate Standards, Unit: KRW 1 million)



Corporate Profile (As of December 31, 2014)

Classification	Content
Company name	POSCO E&C Co., Ltd. (POSCO ENGINEERING & CONSTRUCTION CO.,LTD)
CEO & President	Tae-Hyun Hwang
Headquarters	180, Daesong-ro, Nam-gu, Pohang, Gyeongsangbuk-do, Korea
Establishment	December 1, 1994
No. of employees	4,133 persons
Industry	Engineering & Construction
Business area	Steel plant, energy plant, chemical plant, water treatment & environmental plant, civil infrastructure, architecture, etc.
Credit rating	Corporate bill: A1, Corporate bond: AA- (NICE Rating, Korea Investors Service)

Despite the challenging management environment at home and abroad, POSCO E&C recorded KRW 10 trillion and 13.1 billion in winning orders in 2014. The company also achieved KRW 7 trillion and 514.7 billion in sales and KRW 277.3 billion in operating profits (separate standards).



## Sustainable Management Performance

With the successful sale of “The Sharp” apartments in lots with 13,000 households in 2014, POSCO E&C has leveraged its brand power and become one of the three largest construction companies in Korea. For the first time since its establishment, the company achieved the third rank in the assessment for construction capability. As POSCO E&C acquired nine additional new technologies, we currently own the largest number of new technologies among domestic construction companies. In the safety management sector, POSCO E&C has recorded the lowest accident rate, 0.08%, among domestic construction companies. In addition, we achieved the best performance in the environmental aspect, such as GHG emissions and waste recycling.

## Global Business Performances

POSCO E&C has continuously strived to pioneer new overseas markets by operating a total of 21 bases in 16 countries such as Myanmar, Chile, Iraq, etc. Along with the company’s five major strategic directions, we have tapped into the overseas market based on adjacent markets in existing pioneering countries such as those in Southeast Asia, Australia, Latin America, etc. Sales from global business in 2014 totaled KRW 2 trillion and 428.3 billion; this was an increase of 46% compared to 2013 and accounted for about 32% of all sales. This achievement can be attributed to an increase in sales in the Middle East and Latin America through projects such as the Khabat Thermal Power Plant in Iraq and Brazil CSP Steel Plant Complex Project.

## Global Network

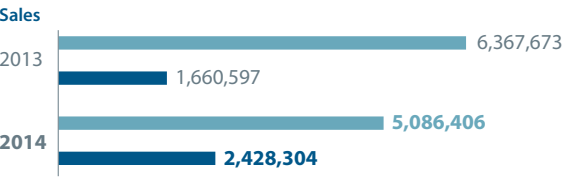
Overseas subsidiaries (13)	Branches (6)
China: Beijing*, Hunchun	Kazakhstan: Almaty
India: Gurgaon	Cambodia: Phnom Penh
Indonesia: Jakarta	Chile: Santiago
Vietnam: Ho Chi Minh, Hanoi	Peru: Lima
Cambodia: Phnom Penh	United Arab Emirates: Abu Dhabi
Australia: Brisbane	Saudi Arabia: Riyadh
Venezuela: Caracas	
Mexico: Mexico City	
Brazil: Fortaleza	
Ecuador: Quito	
	Offices (2)
	Vietnam: Hanoi
	U.S.: Houston

\* Beijing-China Construction Overseas Subsidiary, Beijing POSCO Center

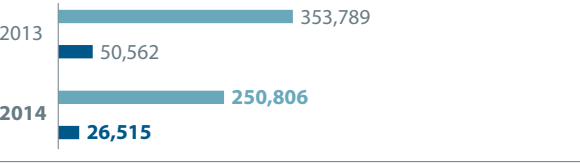
Major Performance for Sustainable Management in 2014

Classification	Performance	Notes
Assessment of construction capability by domestic construction companies	3rd rank	-
Project sites GHG emissions	87,720 tons	Decreased by 23% compared to the previous year
Project sites waste recycling rate	76%	Increased by 3% compared to the previous year
Converted accident rate	0.08%	Lowest level among domestic construction companies
KS-QEI (Korea Standard-Quality Excellence Index)	1st rank	Six consecutive years in the apartment complex sector
Training hours per employee	63 hours	Increased by 46% compared to the previous year
Amount of donation for ‘The 1% Sharing Campaign’	KRW 540 million (Executives and employees) KRW 540 million (Company matching grant)	Increased by KRW 220 million compared to the previous year

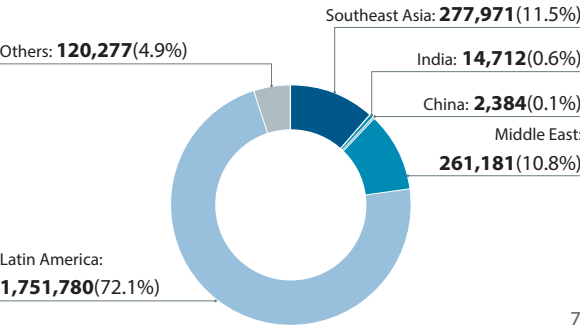
Domestic/Overseas Sales and Operating Profits (Unit: KRW 1 million)



## Operating Profits



Sales for Each Overseas Area in 2014 (Unit: KRW 1 million)





# Business Area

## Plant Business

Based on plant engineering technology accumulated by constructing the Pohang and Gwangyang steelworks, we at POSCO E&C have continuously developed our construction capabilities. We have improved our use of the FINEX construction method, an innovative technology in the steel industry, and achieved success both in the domestic market and worldwide. As sole total solution provider in the world that can comprehensively carry out steel plant EPC, POSCO E&C has simultaneously implemented overseas mega projects, including the Indonesia Integrated Steelwork Project and Brazil CSP Steel Plant Complex, which are the largest steel plant projects won in the overseas market by a domestic construction company. Our company is enhancing its status in the global market by expanding our business portfolio to resource development and industrial plant.

### Major Performance

- New order for the Uttam Steel Mill Project in India, which is worth KRW 1 trillion 515.4 billion.
- New order for the sulfur transfer facility project worth KRW 417.7 billion for Aramco, Saudi Arabia.
- Completed construction for a 4-hot rolling mill with a capacity of 3.3 million tons in Gwangyang.
- Completed construction of Pohang 3-FINEX with a capacity of 2 million tons.

## Civil Engineering Business

POSCO E&C has acquired top tier technology and capability through various massive infrastructure projects such as roads, railway, ports, and environmental facilities and proactively pioneers overseas projects based on our experience. Beginning in Vietnam, we expanded our market to Saudi Arabia, Australia, and Poland. Moreover, we diversified our business, branching from infrastructure business to the resource development business. We aggressively engaged in the construction of environmental facilities such as wastewater facilities, waste-to-energy transformation facilities, and air cleaning facilities, as well as enacting improvements in the O&M sector (Operation & Management). With investment in PIF (sovereign wealth fund of Saudi Arabia), POSCO E&C will take the lead in developing social infrastructure facilities in the Middle East and proactively participate in overseas resource development projects such as the projects in Australia.

### Major Performance

- The railway project EPC priority consultation partner to connect Carmichael Coal Mine, Australia and Abbot Point Export Port.
- New order for the Second Ho Chi Minh City Water Environment Improvement Project Package J. Vietnam, worth KRW 74 billion.
- New order for Da Nang – Quang Ngai Expressway Development Project Civil Works Contract Package A5 Vietnam, worth KRW 61.3 billion.
- New order for East Sea Southern Line Deokha Car Depot worth KRW 94.4 billion (KRW 236 billion in total scale).
- New order to construct foundation of Ulleung Sadong Port East Sea Wall worth KRW 101.5 billion (KRW 156.2 billion in total scale).



## Energy Business

By winning an order for Ventanas Coal-fired Thermal Power Plant, Chile, in 2006, POSCO E&C entered the energy plant construction market in Latin America—a first for domestic construction companies. After this construction project, the company has won continuous orders for plants such as Campiche, Angamos, and Cochrane and raised its competitiveness in the energy business. In addition to the coal-fired, combined, and gas-fired generation sector, the company has expanded into the future energy sector such as SNG (Synthetic Natural Gas), producing composite natural gas by utilizing gasification technology, and CCS (Carbon Dioxide Capture and Storage). We will carry out ultra-super critical coal-fired thermal generation and gasification energy business by focusing on IGCC (Integrated Gasification Combined Cycle) based on eco-friendly gasification technology.

### Major Performance

- New order for Puerto Bravo Gas-fired Thermal Plant in Peru with capacity of 600MW.
- New order for APU raw material recovery project in Venezuela worth KRW 270 billion.
- New order for New Pyeongtaek Combined Thermal Power Plant with capacity of 950MW.
- New order for the Seokmun Community Energy construction project worth KRW 170 billion.
- Completed construction of Ansan Combined Thermal Power Plant with capacity of 834MW.

## Architecture Business

Based on top tier construction, our product composition capability in the industry, and knowhow accumulated from carrying out the Songdo International City Project, POSCO E&C successfully conducted projects for new cities overseas and engaged in private mixed-use development in projects such as those in Vietnam. The success of these projects has led to worldwide recognition of the company's capability in the urban development business sector. We have also proactively broken new ground in the high-rise building sector by utilizing high-intensity concrete technology and wind-induced vibration control technology. POSCO E&C will prepare to make new inroads in the global market by selecting target countries, considering national risks and market opportunities, expanding the synergistic effect in the E&C business group, and utilizing PIF investment.

### Major Performance

- New order for the Bundang Maehwa Village story-increasing remodeling project worth KRW 110 billion.
- Completed construction of Incheon Songdo International City Northeast Trade Center (NEAT Tower) with the highest building in Korea (305m, 65 floors)
- Carried out Daewoo Amara Hotel Project in Myanmar.
- New order for Ratu Prabu Building 3 Project in Indonesia worth KRW 90 billion.
- Signed an MOU for Astana Respublika Plaza Project in Kazakhstan worth KRW 70 billion.



# Corporate Governance

## Structure and Roles of the Board of Directors

POSCO E&C reinforces transparency and efficiency in management through the establishment of an advanced corporate governance. The company's BOD is currently operated by three executive directors and one non-executive director. It will be reorganized so that it is composed of a total of six members, including four executive directors and two non-executive directors, after the closing date of share purchase agreement with PIF (Public Investment Fund, national wealth fund of Saudi Arabia). As the BOD includes one executive director and one non-executive director, who are appointed by PIF, decisions can be made by mutual control and transparency, thus increasing the efficiency of the BOD activities. The BOD deliberates and resolves not only management-related aspects such as the basic management guideline and policy, annual management goals, and approval for budget, but also financial aspects such as issuing new stocks and investment plans and aspects regarding directors.

### The BOD Members

Classification	Name	Position
Executive director	Tae-Hyun Hwang	President & CEO / Member of the Board
	Jung-Sik Lee	Senior Executive Vice President / Plant Engineering & Construction Division
		Expected to be appointed by POSCO
		Expected to be appointed by PIF
Non-executive director	Young-Hoon Lee	Non-Executive President / Member of the Board
		Expected to be appointed by PIF

\* Reflected changes in BOD after the closing date of share purchase agreement with PIF

## Operation and Major Activities of the BOD

For 2014 and the first half of 2015, the BOD meetings were held a total of 23 times and 75 cases related to major management activities were resolved, including capital increase with consideration, selling shares, and credit offering. POSCO E&C will adjust the number of meetings to enhance efficiency in operating the BOD and to raise the judiciousness in making decisions. We will also increase the period of notification to convene the BOD so that directors can prepare sufficiently for agendas and make the functioning of the BOD more effective. We will also raise efficiency in making management decisions by establishing a new management committee as a sub-committee in the BOD.

## Major Performances in the BOD from 2014 to the First Half of 2015

Date	Contents for resolution
Jan. 28, 2014	Approve financial statements in 2013
Feb. 13	Convene the 32nd general shareholders' meeting and discussed agendas
Mar. 17	Appoint directors and grant positions in 2014
Apr. 9	Newly appoint the director for autonomous fair trade program in 2014
Jun. 12	Plan for short and mid-term amendment management (2014-2016)
Aug. 14	Sell shares for IBC
Dec. 15	Management plan (draft) for 2015
Dec. 22	Engage in paid-in capital increase for POSCO Plantec
Jan. 29, 2015	Approve the 33rd statement of appropriation of Retained earnings
Feb. 26	Approve change in the 33rd surplus appropriation statement
Mar. 16	Granted the position of executive directors in 2015
Apr. 9	Appoint the director for autonomous fair trade program
Jun. 1	Issue new stocks (paid-in capital increase with assignment of a third party)

\* Full content of the BOD resolution is provided in the business report.

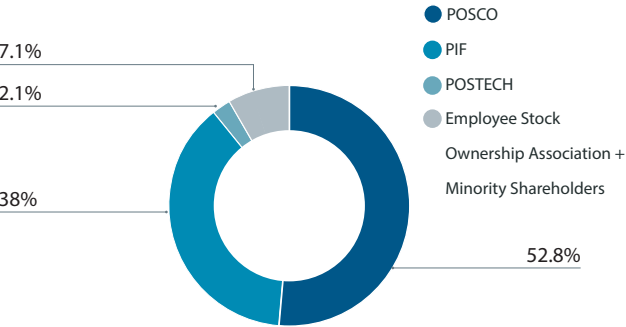
## Audit System

To ensure independence in audit, POSCO E&C appoints an auditor by a resolution in the general shareholders' meeting and operates the Corporate Audit Department as a subsidiary body in charge of internal audits. The roles and authority of an auditor are stipulated in separate audit regulations to prepare internal mechanisms for accessing management information that is necessary in audit tasks.

## Shareholder Structure

The shareholders of POSCO E&C will be composed of 52.8% by POSCO, 38% by PIF, and 2.1% by POSTECH after share purchase agreement with PIF.

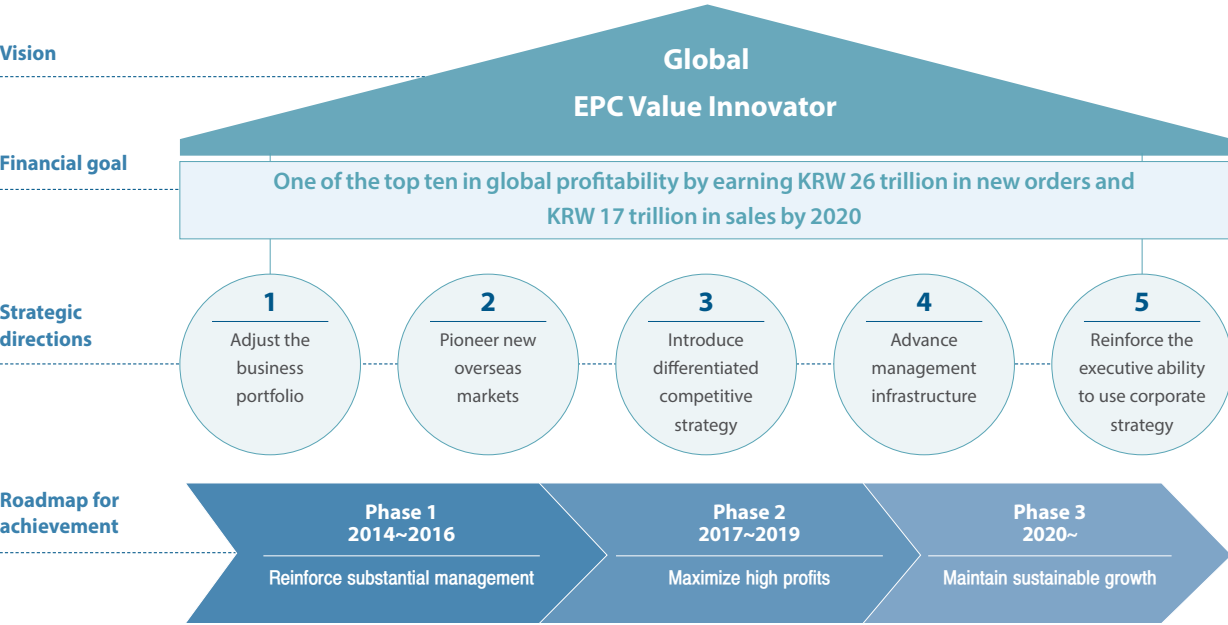
### Share Ownership after the Closing Date of Share Purchase Agreement with PIF



# Vision & Strategy

## Five Major Strategic Directions

Pursuing our vision of operating as a “Global EPC Value Innovator,” POSCO E&C has set the goal for becoming “one of the top ten in global profitability by earning KRW 26 trillion in new orders and KRW 17 trillion in sales by 2020”. Our company also established five major strategic directions: adjusting the business portfolio, pioneering new overseas markets, introducing differentiated competitive strategy, advancing management infrastructure, and reinforcing the executive ability to use corporate strategy. We will grow into a robust company with a healthy foundation by strengthening substantial management.



**Adjust the business portfolio:** With the aim of boosting profitability, POSCO E&C categorizes four intensified and six differentiated business projects on the basis of attractiveness and possibility to secure competitiveness and develops these projects through the strategic distribution of resources.

Four intensified businesses	Six differentiated businesses
Coal fire power plant / Water treatment / Railway / Mining	Steel / Urban development / Desalination of seawater / Real estate market / Redevelopment / SNG-RDF

\* RDF: Refused Derived Fuel

**Pioneer new overseas markets:** Beyond the existing method of carrying out business in various regions, POSCO E&C will pioneer the overseas market based on adjacent markets in countries where we already do business such as those in Southeast Asia, Australia, Latin America, etc.

**Introduce differentiated competitive strategy:** POSCO E&C is planning to prepare plan for potential customer database as a late entering corporation and present differentiated value to customers. We will also improve cost competitiveness, technology skill, and sales capability by ensuring strategic partnership and establishing a joint venture.

**Advance management infrastructure:** POSCO E&C will establish an efficient and stable management system by advancing supportive infrastructures for boosting the capability of the core value chain, such as planning, management, and procurement.

**Reinforce the executive ability to use corporate strategy:** POSCO E&C will put in great efforts to achieve the vision of operating as a “Global EPC Value Innovator” by sharing our goals and strategy with all executives and employees and systemizing our processes.

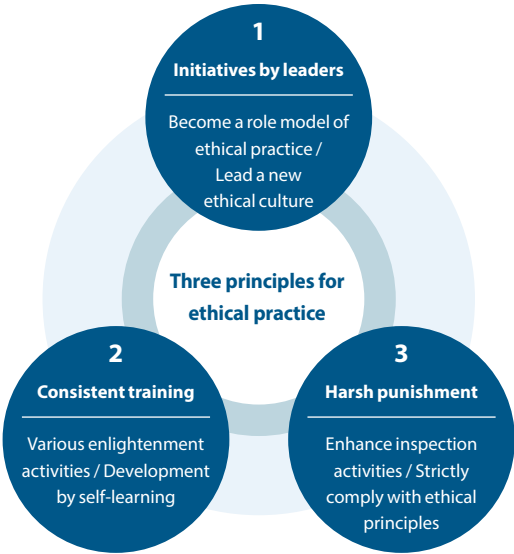
# Ethics Management

## System for Ethics Management

As society demands that companies attain higher levels of ethics management, ethics management has a critical effect on the sustainable development of companies. There is also an increasing tendency to consider ethical companies more favorably when choosing products or services. To achieve transparent and fair ethics management, POSCO E&C has carried out enlightenment activities for executives and employees since the company enacted and proclaimed our Code of Conduct in 2003 and complied with three principles for ethical practice so that we can achieve autonomous ethics management.

The three principles for ethical practice consist of initiatives by leaders (becoming a role model for ethical practice, leading a new ethical culture), consistent training (various enlightenment activities, development by self-learning) and harsh punishment (enhancing inspection activities, strictly complying with ethical principles).

In addition to these three principles for ethical practice, POSCO E&C enacted the guidelines for compliance with FCPA (Foreign Corrupt Practices Act) in consideration of the global business environment. We have continuously amended the Code of Conduct and supplemented detailed content on respecting human rights, protecting the environment, and social responsibility.



## Reinforcement of Overseas Anti-corruption Activities

POSCO E&C has reinforced the global ethics management system so that incidents related to overseas anti-corruption do not occur, regardless of region or project. To strictly comply with FCPA, we opened the bulletin board for FCPA on the ethics management website to allow the registration of training materials and performances and distributed the FCPA compliance guidelines. After implementing FCPA training for overseas regions, 485 employees in 12 countries completed this training course. We also dispatch the FCPA newsletter which aims to internalize awareness of ethics management to overseas leaders biweekly. The company also translated and distributed the guidelines in Vietnamese, Chinese, and Portuguese so that local overseas employees can fully acknowledge and comply with the FCPA guidelines.

## Implementation of Ethical Education for Executives and Employees

To internalize ethics management, we implement customized training for each department and project site conducted by direct visit of standing auditors and the director of the Corporate Audit Department, cyber training, pop-up training, and executive-led training. In 2014, POSCO E&C conducted an ethical practice workshop for 202 ombudsman persons and ethics promotion leaders, who serve as a watchtower for ethical practice in our company. We organized ethical training for 270 leaders in charge at the CEO meeting and enhanced ethical awareness by offering monthly ethical training to project sites financial managers and overseas employees who can be easily exposed to ethical risks. In 2014, the company provided a total of 17,308 executives and employees with 20,517 hours of ethical training.

Current Status of Implementation of Ethical Education

Ethical training	Unit	2012	2013	2014
Executives and employees	Person	17,743	15,994	17,308
	Hour	18,479	18,938	20,517
Business partners	Person	476	1,558	1,108
	Hour	476	1,558	1,108

## Departmental Ethical Practical Assessments

POSCO E&C conducts assessment of the level of ethical practice in all departments so that fair assessment and feedback can be achieved for autonomous ethical practice for each department. In 2014, our company implemented assessment of a total of 185 departments and project sites. Through this assessment, we comprehensively examined all the ethics-related education records and performances for ethical practice at each department, including level of carrying out corporate ethics self-practice program, completion of ethics training, occurrence of unethical activities, awards from external institutes, and records of stakeholder meeting result reporting. While only one department selected as the best received a prize until 2013, the scope of awards expanded to the three best departments since 2014 to encourage ethical practices in each department.

## Reinforcement of Ethics Management of Business Partners

To achieve high-quality ethics management, the ethical awareness of business partners who conduct corporate management activities together should be managed as an important element. POSCO E&C conducts fair trade by attaching special terms for ethics compulsory in domestic and overseas contracts. When ethical violation cases such as unethical practice or violation of the Framework Act on the Construction Industry occur with business partners, we have imposed sanctions and limited all trades and contracts with the POSCO Family companies since 2012. We also organizes ethical training for newly registered business partners to spread POSCO E&C's ethical awareness and offer ethical training for directors and managers of business

partners before national holidays when ethical violation cases are more likely to occur. In 2014, we offered training to a total of 1,108 business partner employees at 96 domestic project sites.

## Future Plan

POSCO E&C will further develop existing ethics management activities and operate them more effectively. As for recent unethical issues regarding some executives and employees, we will conduct a thorough audit and analysis and carry out activities to fundamentally prevent their recurrence within our company. Setting ethics management as a top priority, we will reinforce ethical training for executives and directors in charge and create a culture that takes initiatives by leaders in ethics management. We will also collect cases of ethical dilemmas to help employees make the right decisions in ethical dilemmas that can occur in daily tasks. Then we will encourage them to refer to these cases anytime and anywhere via PC and smartphone.

To equip globally prestigious FCPA compliance programs, POSCO E&C will reform existing programs and reinforce internal control and review procedures such as due diligence and monitoring for business partners with specialized institutions.

In overseas sites and branches, we will strengthen our efforts to identify risks and preventive measures by conducting concentrated audits for regions where FCPA violation risks are likely happen. In terms of the four major unethical practices—receiving bribes, embezzlement, sexual harassment, and information manipulation—we will adopt the one strike-out system, applying zero tolerance rule.

## Case study

### Publication of Ethics Management Poster

POSCO E&C distributed ethics management posters in the first and second half of the year with the aim of enhancing executives' and employees' ethical awareness by promoting ethics management more effectively. The company published posters in the first half of the year to explain about the identity protection for a whistle blower who reports internal unethical practices, and published posters promoting the enhancement of ethical practice awareness in the second half of the year. Through this effort, we have enabled executives and employees to reinforce reporting of unethical practices and achieve ethics management in our overall work. The distributed posters were posted at project sites at home and abroad and in our headquarters and local offices so that they were seen by all executives and employees.



# Stakeholder Engagement

## Channels for Communication with Stakeholders

POSCO E&C has established an engagement system for each stakeholder to identify stakeholders’ major opinions and strived to carry out sustainable management in various sectors such as economy, society, and environment. When it comes to factors that can have a significant impact on the economy, society, and environment among the stakeholders’ major opinions, our company immediately reflects these opinions on management activities to solidify trust with stakeholders.



## Major Stakeholder Opinions and Responses from POSCO E&C

Customer	
Major opinion	POSCO E&C's response
Enhance customer satisfaction level	<ul style="list-style-type: none"><li>• Launch and implement the Onmaum Sharing Service</li><li>• Enhance customer satisfaction level through prior preventive activities such as quality check</li><li>• Conduct education regarding customer-centered management for customer contact employees and business partners</li><li>• Conduct survey for customer satisfaction level once a year</li></ul>
Reinforce customer health and safety	<ul style="list-style-type: none"><li>• Apply design for preventing floor noise issue and fire</li><li>• Introduce safety facilities for children</li></ul>
Reinforce protection of customer personal information	<ul style="list-style-type: none"><li>• Set a personal information validity period</li><li>• Conduct regular check for departments and consignment companies in charge of handling personal information</li></ul>

Society	
Major opinion	POSCO E&C's response
Address issues in local communities	<ul style="list-style-type: none"><li>• Support education for children in low-income households continuously through support for Incheon Children Center (One &amp; One activity)</li><li>• Conduct activities for improving living environment for disadvantaged households with the aim of preventing fires</li><li>• Support career exploration such as job education for multicultural households and young student immigrants</li><li>• Exchange culture and supported education facilities through public diplomacy and social contribution activities</li></ul>
Strengthen volunteer and donation activities	<ul style="list-style-type: none"><li>• Encourage company-wide donation culture through 'The 1% Sharing Campaign' and reinforced volunteer work with the participation of executives and employees</li><li>• Continuously operate Happy Builder, a college student volunteer group</li></ul>

Business Partners	
Major opinion	POSCO E&C's response
Realize fair trade	<ul style="list-style-type: none"><li>• Operate four major guidelines for fair trade and used standard subcontract agreement</li></ul>
Support raising competitiveness of business partners	<ul style="list-style-type: none"><li>• Prepare commercialization for technology in need of patent and application among technologies jointly developed with business partners</li><li>• Reinforce competitiveness of business partners through Industry Innovation 3.0</li></ul>
Reinforce human rights in business partners	<ul style="list-style-type: none"><li>• Reflect provisions of human rights protection in all contracts for domestic and overseas projects with business partners</li></ul>

Investors	
Major opinion	POSCO E&C's response
Proactive communication with investors	<ul style="list-style-type: none"><li>• Conduct electronic announcement</li></ul>
Enhance corporate value	<ul style="list-style-type: none"><li>• Raise technology competitiveness in R&amp;D partnership by developing new national technology and green technology and operating POSCO working group</li><li>• Reduce production cost by utilizing developed technology and supporting technology</li><li>• Pioneer new overseas markets based on adjacent markets in existing pioneered countries</li></ul>
Implement transparent management activities	<ul style="list-style-type: none"><li>• Conduct ethical training for executives and employees and departmental ethical practical assessments</li><li>• Comply with FCPA (Foreign Corrupt Practices Act) guideline</li><li>• Attach special terms for ethics in domestic and overseas contracts and managed the level of ethics management in business partners through ethical training</li></ul>

Employees	
Major opinion	POSCO E&C's response
Enhance satisfaction level of employees	<ul style="list-style-type: none"><li>• Share CEO's message and gifts for employees and their family members on special occasions (birthday, childbirth, etc.)</li><li>• Provide domestic news and food materials for overseas employees</li></ul>
Promote work-life balance	<ul style="list-style-type: none"><li>• Operate For POSCO E&amp;C Kidsvill (Children aged one to five)</li><li>• Operate Family Care Leave Program (supports maximum 90 day leave)</li><li>• Support accompaniment of family members for employees who are supposed to work at an overseas office for over one year</li></ul>
Reinforce communication between employees and departments	<ul style="list-style-type: none"><li>• Collect employees' opinions through labor-management council (quarterly basis)</li><li>• Vitalize communication between employees and management through events for vitalizing labor-management joint organizations</li><li>• CEO directly visiting project sites for overseas employees and listening to their grievances</li></ul>

Environment	
Major opinion	POSCO E&C's response
Develop eco-friendly products and technology	<ul style="list-style-type: none"><li>• Conduct R&amp;D for eco-friendly technology continuously such as membrane systems for advanced water purification and carbon reduction concrete using High Volume Slag (PosMent)</li></ul>
Manage environmental impact of business partners	<ul style="list-style-type: none"><li>• Conduct assessment for environmental management by business partners (monthly basis)</li><li>• Implement business for supporting the spread of environmental management by business partners and follow-up management</li></ul>
Comply with environmental laws and regulations	<ul style="list-style-type: none"><li>• Implement real-time assessment and take immediate measures for violation cases on environmental laws and regulations through the environmental management computing system</li></ul>
Response to Climate Change	<ul style="list-style-type: none"><li>• Manage GHG emissions and energy use amount by using the computing system</li><li>• Construct eco-friendly houses and develop energy-saving technology such as passive, active, and new renewable technology</li><li>• Manage GHG emissions for construction equipment of business partners</li></ul>

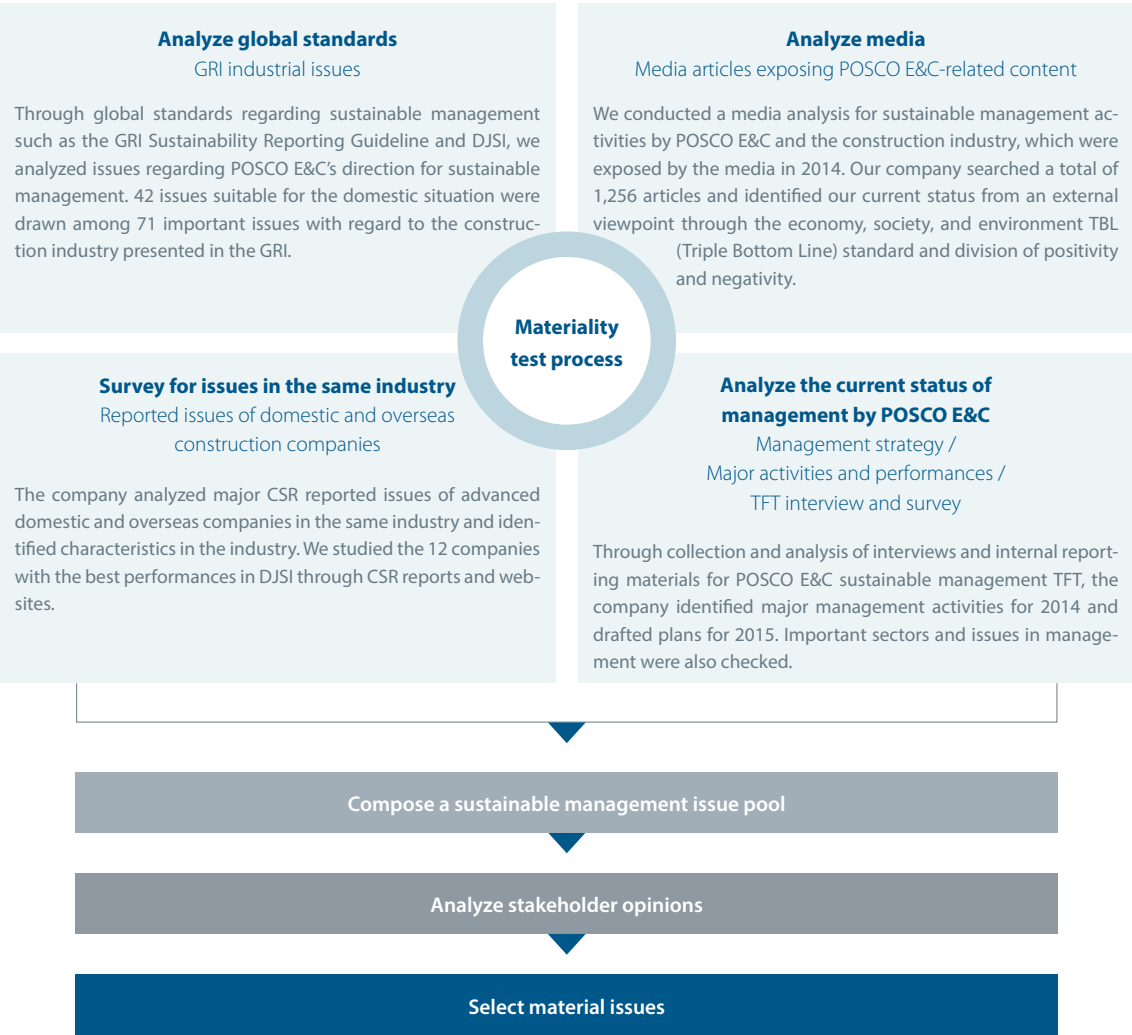


# Materiality Test

## Process for Materiality Test

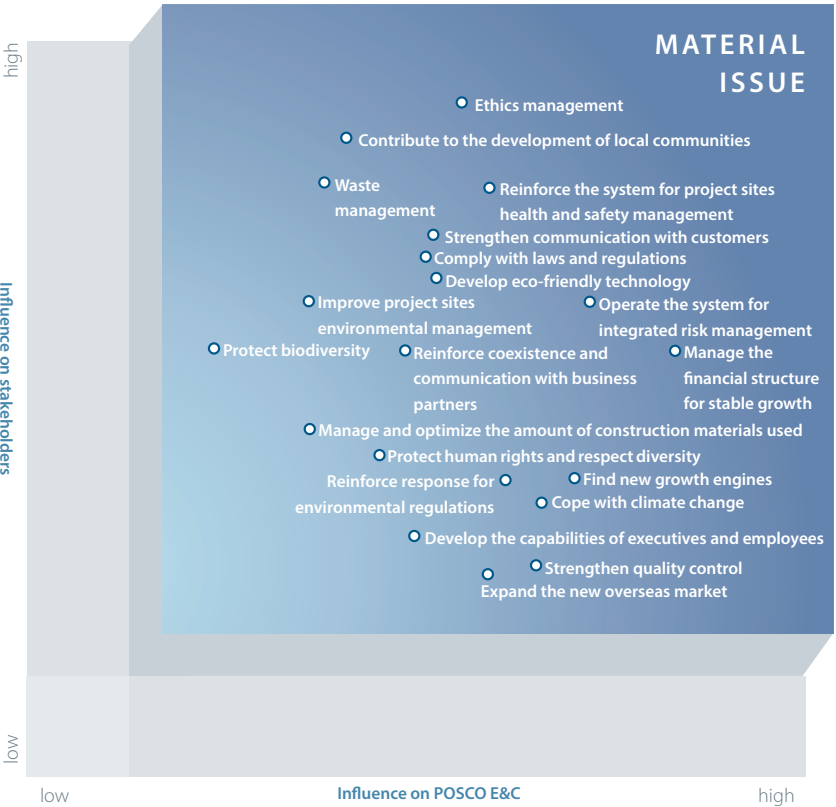
POSCO E&C strives to select reporting themes that have an important impact on our company's sustainability and reports relevant systems, performances, and future plans through the sustainability report. Towards this aim, we conduct the materiality test on an annual basis by analyzing sustainable management issues and carrying out the stakeholder survey. We identified a total of 57 issues through various analyses, including the analysis for global sustainable management standard, articles reported by the media in 2014, benchmarking for domestic and overseas best reports in the same industry, and materials for the current status of internal management.

POSCO E&C collected opinions from not only departments communicating with stakeholders regularly and collecting and analyzing their opinions, such as departments for customers, procurement, and labor issues, but also departments representing the company's internal perspective, such as departments for management planning and human resources. We segregated and quantified each issue based on its relevance to POSCO E&C and impact on decision-making by stakeholders. This report opens the company's sustainable management performance to stakeholders on the basis of material issues from the results of quantification.



## Results of Materiality Test

Importance was quantified for 57 issues based on impact on stakeholders' decision-making, relevance to POSCO E&C, and our selected priorities. The top 20 issues were selected as material issues, while 37 issues were categorized as relevant issues. In terms of material issues, reinforcing ethics management, contributing to developing local communities, and managing financial structure for stable growth were selected as the most important issues. This selection is considered to have been affected by POSCO E&C's recent management initiative pursuing substantial growth. Issues regarding environment were assessed to have greater importance compared to the past; this phenomenon is considered to be a result of more companies being requested to fulfill their responsibilities in a social and environmental context.



## Composition of the Report Based on Material Issues

This report presents POSCO E&C's system, activities and performances, and future plans in detail for 20 material issues selected through the materiality test. Each issue is categorized by the aspects presented in the GRI G4 guideline. For each aspect, importance, direction, and method to measure performances recognized by POSCO E&C are reported. Our major performances for material issues are reported as well, and a summary of all this information is effectively presented to stakeholders.

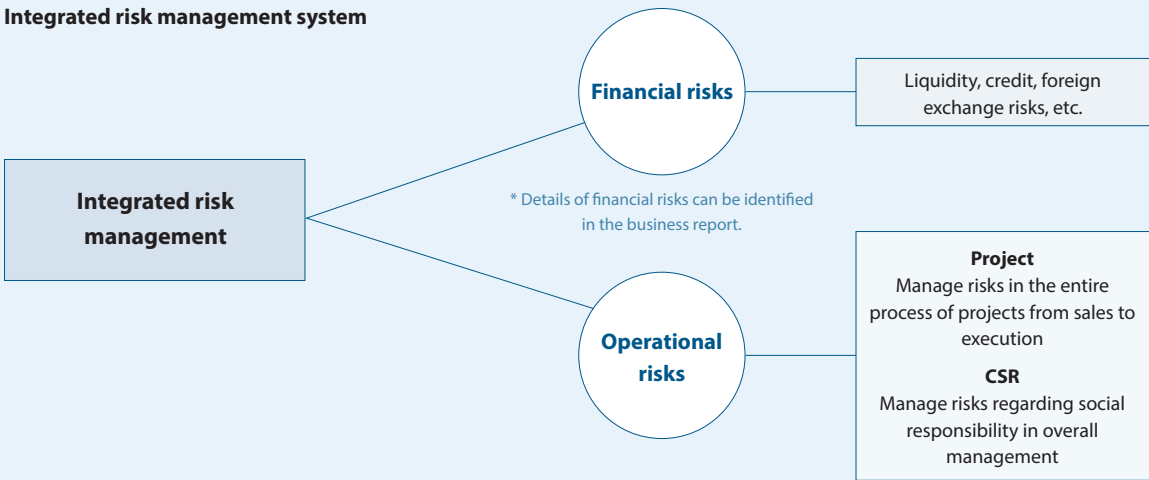
Sector	Material Issues	Relevant G4 Aspects	page
Economy	<ul style="list-style-type: none"><li>Ethics management</li><li>Manage the financial structure for table growth</li><li>Operate the system for integrated risk management</li><li>Comply with laws and regulations</li><li>Find new growth engines</li><li>Expand the new overseas market</li></ul>	<ul style="list-style-type: none"><li>Anti-corruption</li><li>Economic Performance</li><li>Indirect Economic Impacts</li></ul>	12-13 6, 28-35 64-67
Environment/ Safety	<ul style="list-style-type: none"><li>Waste management</li><li>Develop eco-friendly technology</li><li>Cope with climate change</li><li>Reinforce response for environmental regulations</li><li>Improve project sites environmental management</li><li>Manage and optimize the amount of using construction materials</li><li>Protect biodiversity</li><li>Reinforce the system for project sites health and safety management</li></ul>	<ul style="list-style-type: none"><li>Energy</li><li>Biodiversity</li><li>Emissions</li><li>Effluents and Waste</li><li>Compliance</li><li>Occupational Health and Safety</li></ul>	45 42 44 43 39 46-49
Society	<ul style="list-style-type: none"><li>Contribute to the development of local communities</li><li>Strengthen communication with customers</li><li>Reinforce coexistence and communication with business partners</li><li>Strengthen quality control</li><li>Protect human rights and respect diversity</li><li>Develop the capabilities of executives and employees</li></ul>	<ul style="list-style-type: none"><li>Training and Education</li><li>Human Right</li><li>Local Community</li><li>Customer Health and Safety</li><li>Product and Service Labeling</li></ul>	59-60 63 64-67 55-56 53

# Integrated Risk Management and Sustainability Strategy



Effectively managing various risks in our business processes is vital for sustainable growth. The construction industry faces various potential risks from development to the beginning of construction and operation after winning an order. When these risk elements are not properly managed, they can have great impact on business continuity. POSCO E&C clearly recognizes risks in the entire business process and reinforces management for potential risks. We put in act great effort to establish an integrated risk management system encompassing financial risks and operational risks based on analysis and assessment of risks.

Financial risks and operational risks are subdivided into various aspects and managed by each group in charge, while measures and strategy for alleviation are prepared depending on the importance of risks. In 2015, we added CSR(Corporate Social Responsibility) risks, including them under operational risks, to manage risks regarding CSR, which has recently received much attention. POSCO E&C also established an integrated risk management system by reestablishing the strategy for sustainable management and carrying out response activities.



**CSR Risks**

As companies are getting bigger in scale and have more of a potential impact on society, their corporate social responsibilities have also become more extensive. While a company's responsibility to economic development was emphasized in the past, various aspects encompassing CSR (Corporate Social Responsibility) such as environment, human rights, and social contribution are also required now. Companies that are lukewarm or passive to CSR issues can be greatly impacted by damage to their social reputations. POSCO E&C identifies potential risks related to CSR, proactively carrying out activities to respond to these risks in advance and ultimately achieve sustainable growth.

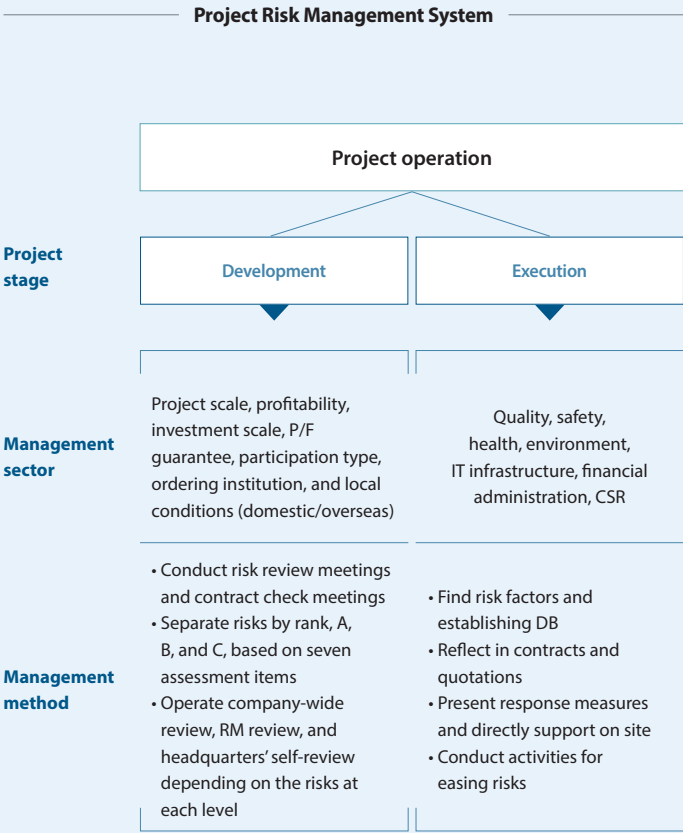


POSCO E&C separates and manages potential risks from project contract to completion based on the sales stage and performance stage. After review and deliberation on potential risks at each stage, the company alleviates risks and expands and applies these improvement measures to overseas projects.

Risk Management at the Sales Stage

POSCO E&C manages risks at the beginning of the sales stage by operating risk review meetings and contract check meetings before winning a project. Through these meetings, we categorize risks into A, B, and C ranks based on seven assessment items: scale, profitability, investment amount, P/F guarantee, participation type, client, and business environment (domestic/overseas). In 2014, RM meetings were held for 489 cases. Afterwards, the risk business review is flexibly operated in a wide deliberation, RM deliberation, and deliberation by division, depending on the risks at each level. In 2014, business reviews were conducted for 158 cases, and the total number of meetings and review cases increased by 9.3% compared to the previous year.

With thorough risk management for project operation, the company achieved financial improvements worth about KRW 240 billion, including improvement in profit and loss, reducing guarantee, investment amount, and saving expenses spent in winning contracts. We also conducted risk examination in the non-financial sector, including construction period and commercial contract conditions, identified 39 cases of risk factors, and carried out activities for easing risks.



Performance for Management of Profitability in Won Projects

	Plan for 2014		Performance for 2014		Notes (Increase and decrease)	
	Number of improved cases	Price for improvement (KRW 100 million)	Number of improved cases	Price for improvement (KRW 100 million)	Number of improved cases	Price for improvement (KRW 100 million)
Improving in profit and loss	10	200	27	788	⊕ 17	⊕ 588
Reducing guarantee	5	-	10	506	⊕ 5	⊕ 506
Scaling back investment	5	50	13	1,098	⊕ 8	⊕ 1,048
Saving expenses spent in winning contracts	5	10	24	69	⊕ 19	⊕ 59
Improving other business conditions	50	-	39	-	⊖ 11	-
Total	75	260	113	2,461	⊕ 38	⊕ 2,201

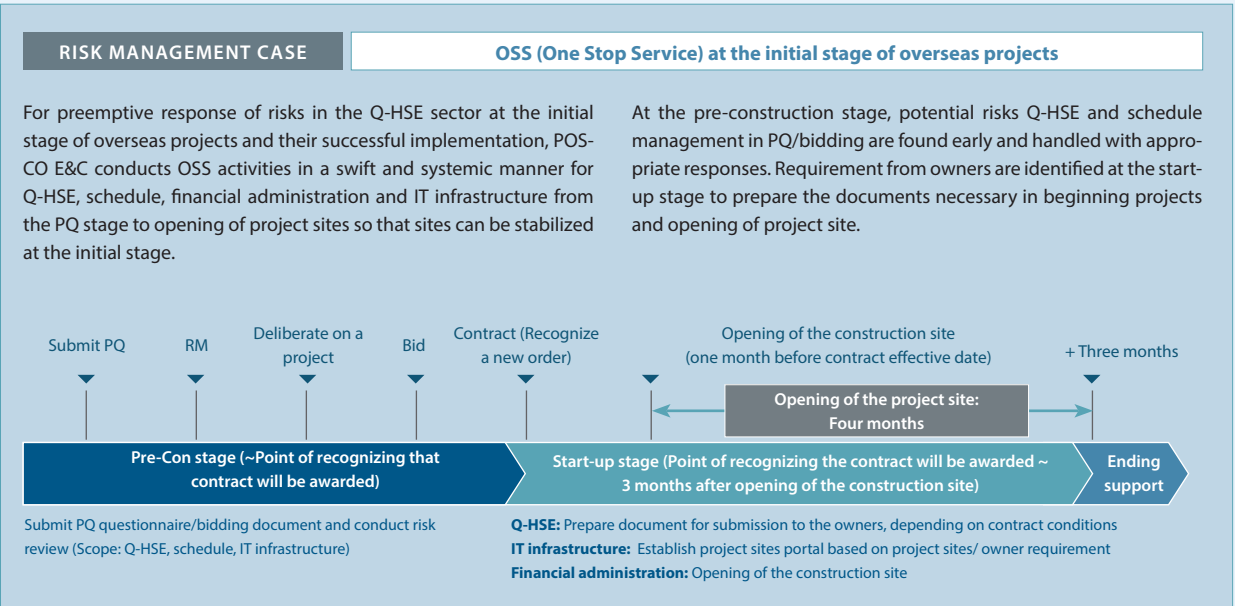
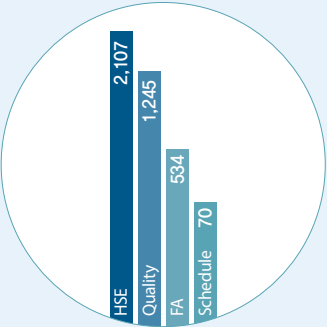
Risk Management at the Performance Stage

Various Q-HSE risk factors can occur at project sites. Employers have been requesting risk management to be brought up to a level equivalent to global standards such as ISO 31000 and PM-BOK for owners in carrying out overseas projects. As responses to risks are conducted individually at each project site, they are easily lost and do not remain among the company's intellectual assets, and similar response activities recur. Under these circumstances, POSCO E&C has reinforced the headquarters' support for potential project sites risks in conducting projects for effective risk management. We also analyze project sites risk factors for quality, environment, health, and safety, share response cases in the DB, and enhance the maturity level for risk management. In 2015, the company will establish the "POSCO E&C Risk Judgment Standard" as the practical risk management system for the Q-HSE sector and make an objective standard and collect response cases for risk factors. Based on this system, we will establish an effective supportive work system in the short bidding preparation period. The risk judgment standard is established to suit the FIDIC (International Federation of Consulting Engineer) conditions and global owners (44 companies) requirements, and KOTRA's information on each country (14 countries) is analyzed and data on elements that have an impact on construction period and cost are compared and received. This data will be utilized as the standard for judgment in reviewing contracts and negotiations.

Current status of risk DB (As of Q3 in 2014)



\* COUNTRY REPORT: Country information and local issue such as local regulations and labor environment in the field of Q-HSE which have to be reflected in initial execution of overseas projects







POSCO E&C has established the integrated risk management system by adding CSR risks in the existing risk management sector. Based on the definition of CRS risk, our company developed a tool for identifying importance and the current status of responses and began systemic management. We will become a sustainable company by establishing strategies for alleviating risks according to the level of CSR risks and carrying out adequate response activities.

CSR Risk Management System

POSCO E&C analyzed global standards for sustainable management to identify risk factors that should be managed from the perspective of CSR. The company selected 49 CSR risk factors in economy, environment, and society by identifying various risks on the basis of sustainable management issues related to the construction industry. We defined potential risks for each factor in detail and separated and assessed the importance of each risk based on impact and probability. The importance of risks was defined in five stages—Critical, Major, Serious, Moderate, and Minor—depending on impact and probability. Afterwards, POSCO E&C’s level of response for each risk was divided into risk governance, response activity, and culture. Through survey and analysis, the company identified whether proper responses are

provided in consideration of the importance of each risk. POSCO E&C strives to alleviate risks in cooperation with relevant departments by conducting tasks for factors in need of improvement and enhances response to CSR risks and management capability by establishing a sustainability strategy system based on the results of the risk analysis.

Recognize CSR Risks

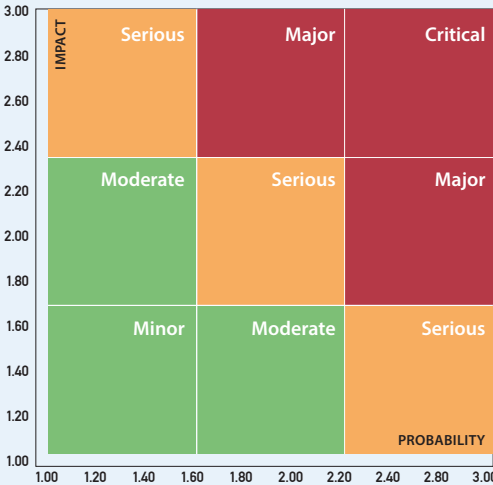
POSCO E&C composed a matrix for assessing the probability and impact of 49 CSR risks and identified the importance of each risk. Sectors marked in red (Critical, Major) are sectors that have risks with high probability and impact and should be critically managed by the company; four risks in the economy, three in the environment, and five in the society sector were

checked. Material risks included management of exchange rate regarding overseas projects, tax payment, and inflation in the economy sector, and waste treatment linked to the characteristics of the construction industry, and protection of biodiversity in the environment sector. In the society sector, customer and employee health and safety issues, which recently have been receiving much attention, and eradicating anti-competition practices were identified as risks that should be critically managed for POSCO E&C’s sustainable development.

The yellow sector (Serious) includes risks that do not have high impact or probability of occurring, but they still require continuous monitoring and management. Two risks in the economy, four in the environment, and 11 in the society sector were identified. Identified risk factors included quality management and local politics/social risks in the economy sector, and pollutant management such as construction noise and dust and GHG emissions management in the environment sector. In the society sector, improvement of domestic and overseas working environment and protection of workers’ human rights were selected.

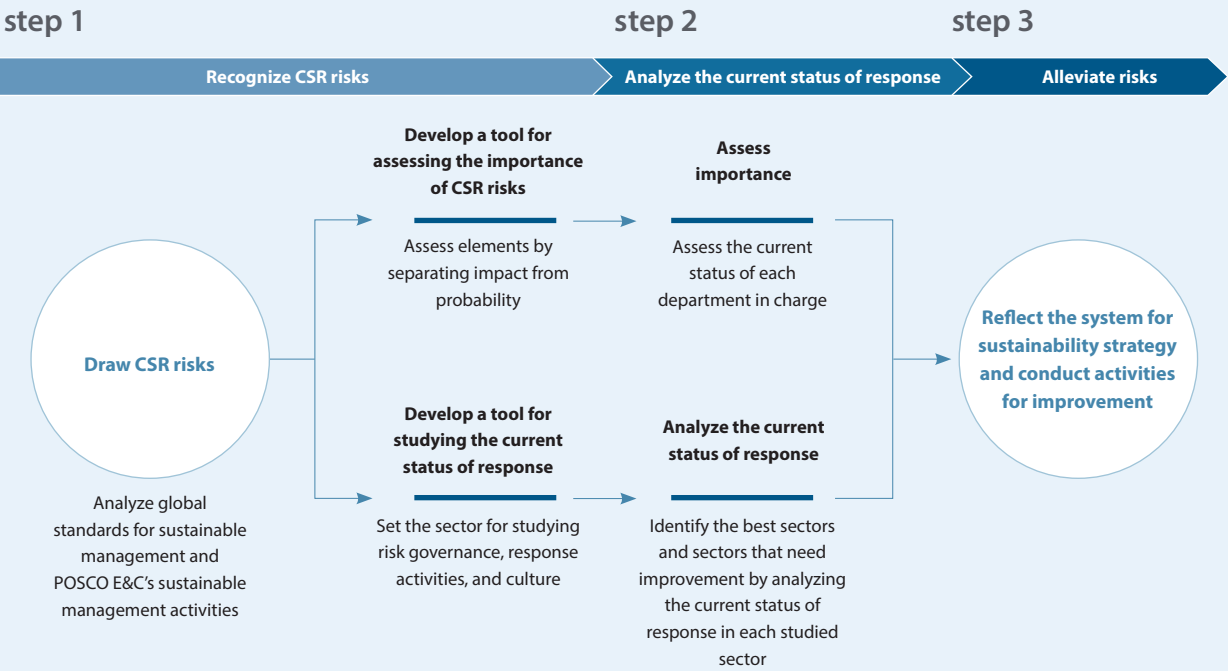
The green sector (Minor, Moderate) includes risks with a relatively low probability and impact, but they have the potential to impact POSCO E&C in the long term. There is no current urgency to resolve these risks with relevant measures, but their probability and change in impact should be identified and monitored on a regular basis. Nine risks in the environment sector and 11 risks in the society sector were analyzed, including management of energy efficiency, use of recycled materials, management and business partners, and eco-friendly verification of buildings.

CSR RISK MATRIX



Sector	Economy	Environment	Society	Total
Critical	3	-	-	3
Major	1	3	5	9
Serious	2	4	11	17
Minor	-	8	11	19
Moderate	-	1	-	1
Total	6	16	27	49

CSR Risk Management Process



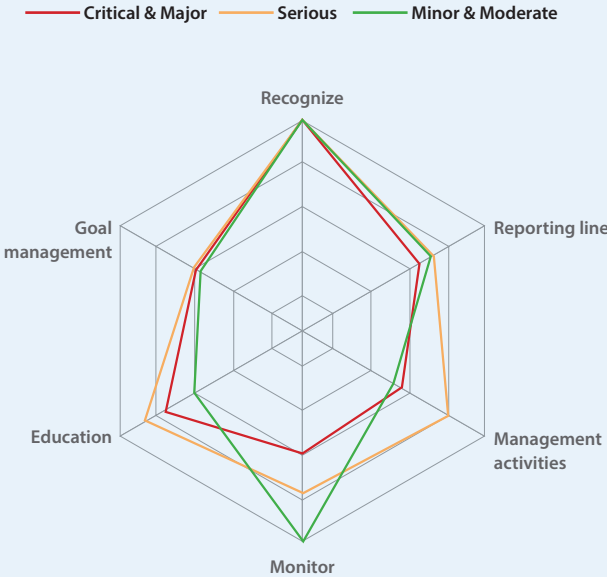
Analyze the Current Status of Response

To analyze the current status of response for 49 CSR risks, the company conducted a survey for response activities based on the importance of each risk for six detailed items (recognition, reporting activities, monitoring activity, education, and goal management) in three sectors (governance, response activity, and culture). Overall, the recognition and education activities for risks are properly carried out, but proactive goal management for easing risks is insufficient.

Alleviate Risks

The company will carry out risk-easing activities such as drawing improvement tasks for each risk, depending on the results of analyzing the current status of CSR risk response. By reestablishing our sustainability strategy, we will reinforce company-wide CSR capability. POSCO E&C will regularly analyze the importance of CSR risks and enhance our company’s sustainability by managing CSR risk management at each PLC (Project Life Cycle) level of projects.

Current Status of Coping with CSR Risk





POSCO E&C has established sustainability strategy based on the results of the CSR risk analysis. Strategic direction was divided into the business, culture, and stakeholder sectors, and our company will set goals and detailed tasks for each strategic direction and implement them by stage. Through these efforts, POSCO E&C will achieve its sustainable management goal of “pursuing sustainable growth based on social responsibilities and principles.”

Establish Sustainable Management System for Easing CSR Risks

POSCO E&C newly reestablished strategic directions and goals for sustainable management to reduce risks in sectors of high importance or improve insufficient response activities depending on the results of CSR risk analysis.

In the economy sector, reinforcing financial soundness and continuous management of the customer satisfaction level were selected as important factors. In the environment and society sector, it was identified that internalization and promotion activities for sustainable management were important to cope with various potential risks at overseas business sites in a flexible and effective way.

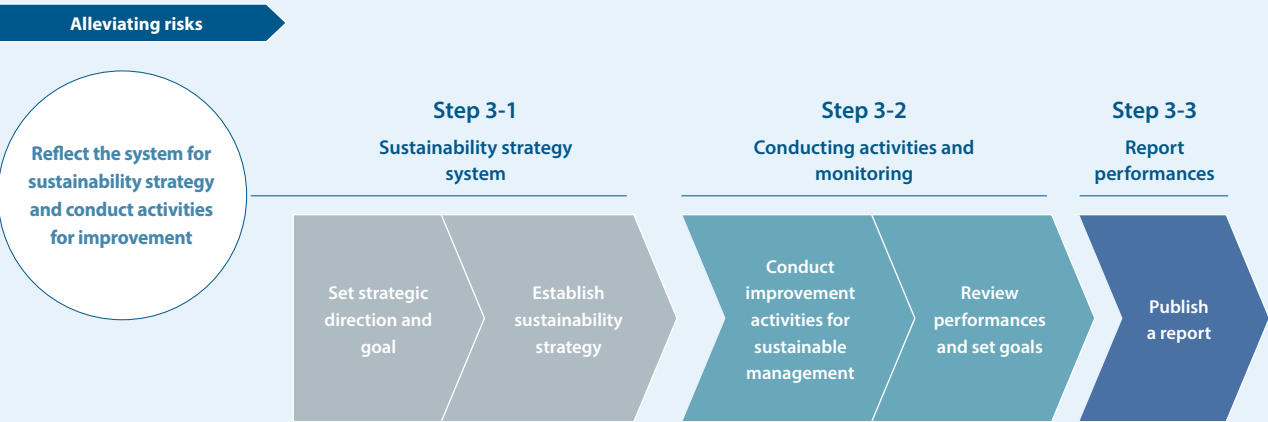
Our company redefined its new sustainable management goal as “pursuing sustainable growth based on social responsibilities and principles,” stipulated strategic directions in business, corporate culture, and stakeholder sectors based on the importance of individual risks identified in each sector, and established detailed goals for each strategic direction.

In the business sector, we will reinforce financial soundness, expand customer-centered management, strengthen quality management, and find new growth engines with the aim of “pursuing a sustainable business model.” In the culture sector, the company intends to set the goal of “settling a culture of fulfilling social responsibilities” to internalize and spread sustainable management and achieve a sustainable corporate culture based on changes in the executives’ and employees’ awareness. In the stakeholder sector, we set the goal of growing together with stakeholders by proactively accepting various stakeholders’ opinions, including those from our customers, local communities, executives and employees, investors, environment, and business partners, through “vitalizing communication with stakeholders.”

Detailed tasks for achieving goals in each strategic direction will be carried out by establishing plans for each stage, and major activities and performances will be reported in the sustainability report.

Process for Sustainable Management

step 3



Goals for Each Strategic Direction

**Pursue a sustainable business model:** POSCO E&C aims to establish a business model by fully considering the aspects of sustainable management. We will achieve sustainable development by enhancing financial soundness, reducing business risks, reinforcing consumer-oriented management and quality management activities, and finding new growth engines.

**Set the culture of fulfilling social responsibility:** To achieve sustainable management, a corporate culture based on social responsibility should be set as the standard for thinking and practice for all executives and employees. All executives and employees of POSCO E&C will internalize the practice of ethics management by thinking in accordance with ethics management principles and conducting tasks. Our company will spread

the fulfillment of social responsibility throughout the entire supply chain by improving the system to enhance the level of project sites health and safety, realizing continuous improvement of awareness, and expanding support for the social responsibility management of business partners.

**Vitalize communication with stakeholders:** Communication with stakeholders is a business opportunity to reduce CSR risks by reflecting external opinions on management activities. POSCO E&C will carry out proactive communication with various stakeholders including our customers, business partners, overseas local business offices, and local communities. We will also proactively participate in environment-related initiatives and faithfully fulfill our social responsibilities and roles as a corporate citizen.

Strategy for Sustainable Management



REVIEW FOR SUSTAINABLE MANAGEMENT		System and performances for sustainable management (2012-2015)			
POSCO E&C strives to become a trusted company for stakeholders by realizing sustainable management. In 2012, we established the system for sustainable management and carried out various activities with four major strategic directions—“Reinforcing the culture of sustainable management,” “Strengthening infrastructure,” “Developing sustainable business,” and “Vitalizing communication with stakeholders.” In 2013, we selected improvement tasks for five sectors to		2012	2013	2014	2015
		<ul style="list-style-type: none"><li>Establish a strategic system for sustainable management</li><li>Prepare activities for each strategic goal</li><li>Publish a sustainability report</li></ul>	<ul style="list-style-type: none"><li>Enhance the executive ability for sustainable management</li><li>Carry out 11 improvement activities in five sectors (human rights, environment, social contribution, business partners, executives and employees)</li><li>Publish a sustainability report</li></ul>	<ul style="list-style-type: none"><li>Broaden sustainability culture and awareness</li><li>Expand CSR risk management due to increase in overseas business projects</li></ul>	<ul style="list-style-type: none"><li>Improve strategic system based on CSR risks</li><li>Prepare improvement activities for each strategic goal</li></ul>



# WE BUILD VALUE TOWARD GROWTH

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## Reinforcing Fundamental Business Competitiveness

POSCO E&C will become a “Global EPC Value Innovator”, taking the lead in the market by reinforcing financial soundness and striving to secure a high level of quality and raise our technological competitiveness.



# Substantial Management

POSCO E&C aims to overcome internal and external business difficulties through substantial management. With management activities based on EVA (Economic Value Added)\*, efforts to expand new orders, and upgraded capability of managing projects, we are preparing for the future by maintaining and improving profitability and cash flow in a sound manner.

\* EVA: Index simultaneously considers economic added value, size of operating profits, and opportunity cost of input finance

### RELATED CSR RISKS

#### Cash Flow

Due to the sluggishness of the domestic construction industry and low priced orders due to intensified competition, concerns over the financial soundness of construction companies have increased. POSCO E&C strives to maintain a robust financial structure by establishing the health check system in which financial soundness of each project can be regularly confirmed. We will also carry out activities to enhance profitability and reduce account receivable.

### 2014 KEY FIGURES

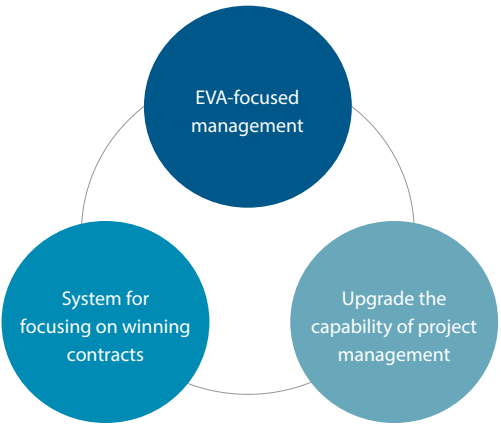


### Substantial Management System

In 2014, the global economy still experienced slow recovery and has not fully overcome the economic slowdown. Price competition in the overseas construction market has intensified, while earning shock\* of construction companies continuously occurred despite the expansion of the construction market led by domestic housing. Under these external circumstances, POSCO E&C also found it challenging to expect a stable basis for new orders. We accordingly established new management strategic directions for 2015: implement EVA-focused management, establish a system for focusing on winning new orders, and upgrade the capability of project management to achieve substantial performance.

\* Earning shock: Announcing lower performance than market expectation when a company announces its performance

#### Management Strategic Direction for 2015



### EVA-focused management

In 2014, POSCO E&C shifted into a value-focused management system, focusing on profitability, as POSCO’s new management proclaimed our vision of transforming into “POSCO the Great.” Our company strives to reinforce our competitiveness by improving not only external factors such as new orders and sales, but also enhancing profitability and cash flow. Currently, we are preparing improvement in profit and our financial state by introducing EVA as the core management index for our value-focused performance index. After adapting the project health check system, we have improved our cash flow. POSCO E&C will become a robust company that will continue to grow, even under challenging internal and external circumstances.

### Enhance Profitability

POSCO E&C conducts various activities for improving profitability, which is the most important factor in enhancing EVA. As our company focuses more on profits rather than sales, we avoid winning contracts with low profits and earning shock. We are also expanding the widespread movement of reducing costs, reducing external contract expenses, maximizing changes in design, and increasing productivity through the 3S movement\*.

\* 3S movement: As one of the movements for improving productivity, it signifies standardization, simplification, and specialization

### Reduce Account Receivable

POSCO E&C aims to enhance EVA by reducing invested capital\* as well as conducting activities for improving profitability. To reduce account receivable, a representative item among invested capital items, we avoid sales from non-charged construction without tax invoices, root out advanced input simply for increasing sales, and improve cash flow by connecting plans for inputs of production cost and those for existing charge. In changing our design, we strive to minimize account receivable through swift agreement with owners.

\* Invested capital: Capital invested by a company only for sales activities

### Focus on Winning New Orders

With POSCO Group’s independent plant product, FINEX\* 2.0 slim and CEM\*\*, POSCO E&C has secured cost competitiveness and independent technology and strengthened plant sales power. Our company has reinforced local-based sales activities utilizing relations with existing client companies in the Middle East and established a joint corporate body in cooperation with PIF, which raises expectations of new orders.

\* FINEX: A new steel process for producing iron mold by directly using ore; this technology is one step more advanced than COREX

\*\* CEM: Process for a compact endless casting and rolling mill with integrated processes for steelmaking, continuous casting, and rolling

### Upgrade the Capability of Project Management

Project sales profits can be greatly influenced by management capability. POSCO E&C sets a localization strategy for each region from the initial design stage and establishes a plan by focusing on risk prevention to allow systemic project management. We share successful and failed cases of similar projects that are either completed or in progress with the staff members in charge by vitalizing PRM (Project Risk Management). We also hold mandatory meetings in which we share knowhow prior to beginning construction. We enhance the overall project management capability by reinforcing Q-HSE (Quality, Health, Safety, and Environment) management for overseas projects.

Focus		
Project Health Check System		
POSCO E&C has introduced and operated the project health check system for the first time among construction companies to monitor major indexes in the entire project process and secure financial soundness. As the company monitors indexes that should be significantly managed at each stage and shows them to the management and project sites directors, we prevent potential financial risks in advance and induce cash flow as well as profits. We set up a risk standard by utilizing Big Data over the past three years and set off alarms when the standards are exceeded; this system plays an important role in risk management.		
Through these efforts, projects have shifted from profit-focused to cash-focused management, while visibility and transparency for risk indexes can be secured and preemptive response to risks is made possible. As the difference between receiving payment from owners and paying the amount to subcontracts—the most chronic problem for construction companies—has narrowed, the company significantly contributes to maintaining a healthy sales cash flow. As the major decision makers (President, headquarters director, executives, project sites directors, etc.) can see the progress of projects in detail and mutually compare relevant indexes, the company’s management level has been enhanced even further.		
Major Elements for Management in Each Stage of Projects		
Winning an order – Beginning of construction	Construction	After completion of construction
Current status of balance for winning an order and projects that have been begun	Procedure, process, collection, payment, and production cost	Undecided elements such as receivables

# Quality Management

Quality is the most important element in ensuring a competitive edge. In the construction industry, the issue of quality can directly lead to customer safety, and companies are required to strive to improve their quality. POSCO E&C makes extensive efforts to achieve professional and systematic quality management by fostering quality management specialists and improving work processes.

### RELATED CSR RISKS

#### Quality Management

The construction industry requires extensive efforts to maintain a certain level of quality as a massive industry that handles a large amount of personnel and materials, depending on each request by owners under various legislation and environments. POSCO E&C minimizes quality management risks by nurturing quality specialists and establishing a professional supportive system.

### 2014 KEY FIGURES



### Quality Management System

POSCO E&C aims to ensure continuous quality improvement by establishing an optimal quality management system and contribute to developing our society and future by creating the best customer value and management performances. We will also strive to realize our vision of serving as a “Global EPC Value Innovator” by enhancing the maturity of quality management and product competitiveness under POSCO E&C’s three major value elements in quality management—Customer Inside, Basic Inside, and Synergy Inside.



### Audit Maturity of Quality Management by POSCO Family

POSCO E&C acquired a score of 869 in the audit of the Maturity of Quality Management, which was conducted by POSCO Group, and achieved impressive growth compared to our score of 803 in 2013. This result shows that POSCO E&C has achieved high performance in quality management and possesses the most prominent capability among domestic construction companies.

#### Quality Management Performance

Classification	Unit	2012	2013	2014
POSCO Family Maturity of Quality Management Audit	Score	782	803	869
International Register of Certificated Auditors (Accumulated)	Person	11	16	14

### Quality Risk Management

POSCO E&C finds potential quality risks in projects in advance at the stage of project preparation and successfully conducts projects by carrying out preventive and improvement activi-

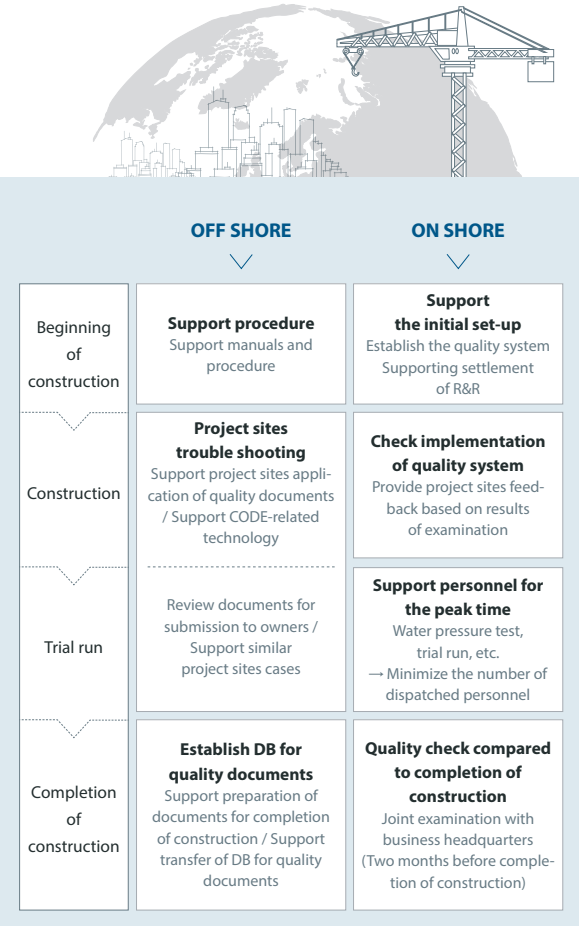
ties. When project sites open, quality risk specialists from the headquarters visit the project sites and implement cQSS\* workshops along with employees to manage quality and construction. They check quality risks that can occur depending on conditions of project sites by reviewing the contract, specifications, and drawing. They then draw a response and solution by conducting an assessment for risks. Risks that can be addressed are improved immediately, while targets for daily management are reflected in the intensified quality management plan and continuously monitored.

\* cQSS: Innovative activities that focus on actual sites for improving “Cost, Quality, Speed, and Safety Risk”

### Establish the Specialized Supportive System for Overseas Projects

POSCO E&C organizes a regular supportive team and provides support for quality, depending on each stage of PLC (Project Life Cycle) for overseas projects. We draw and manage elements necessary for quality management at each stage from winning a contract to the official beginning of the project, construction, trial run, and completion. In 2014, we standardized and established our own overseas project construction guideline.

#### Specialized Supportive System for Overseas Projects



Through these efforts, we prepared a basis for securing a similar level of quality for all our project sites around the world.

### Vitalize Autonomous Quality Improvement Activities

POSCO E&C operates a process for autonomous quality improvement activities. When defects in quality are detected, the NCR (Non Conformance Report) is published and the causes are analyzed to prepare measures to prevent the reoccurrence of these problems. As results for activities are added to the DB through the NCR integrated management system and shared with each project site, quality defects can be prevented and managed in advance. In 2014, we expanded the participation of construction managers, encouraged engagement by overseas project site, and conducted a total of 6,227 cases of autonomous quality improvement activities.

### Foster Quality Management Specialists

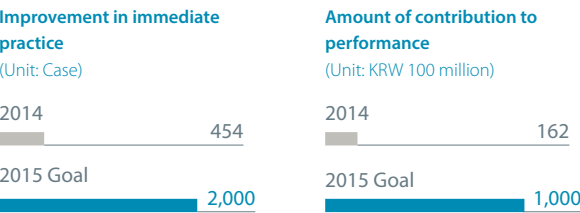
As the percentage of overseas projects and needs for international verification of advanced owners have increased, POSCO E&C has strived to secure and foster personnel specialized in global quality. As our company continuously provides overseas specialized education such as IRCA, CWI, and ASME\*, we have currently secured 14 IRCA examiners, 12 PMPs (Project Management Professional), and five internationally certified welding examiners. To enhance the professionalism and capability of quality management personnel, we will continuously provide sufficient support.

\* IRCA: International Register of Certificated Auditors  
CWI: Certified Welding Inspectors  
ASME: American Society of Mechanical Engineers (Standard for international generation facilities enacted by American Society of Mechanical Engineers)

### Future Plan

In 2015, POSCO E&C will expand cQSS—an activity for improving production cost and reducing risks at project sites—to the design stage, implement preemptive measures for risks such as cost, quality, construction period, and safety, and realize robust project sites. Through the company-wide standard review session, our company will conduct efficiency audit for 1,125 types of processes and improve and standardize elements based on waste, cut, and simplify by finding waste elements for core processes so that an optimal work process can be established.

#### Performance and Goal for cQSS Activities





# Technology Competitiveness

POSCO E&C pursues substantial management activities not only to achieve financial soundness but also reinforce fundamental competitiveness through R&D. We will become a company that leads technology development in the construction industry by securing core technology in connection with our business strategy and providing proactive technology support for project sites.

## RELATED CSR RISKS

### Energy Efficiency for Buildings

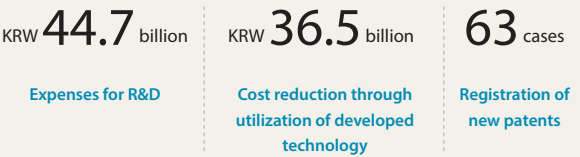
Enhancing energy efficiency in buildings is not just part of a good marketing strategy, now that the government is regulating the energy consumption of buildings. POSCO E&C makes extensive efforts to meet market needs, protect the environment, and uphold the government policy by developing eco-friendly technology.

\* For example, our passive houses are representative cases that demonstrate our company's efforts to improve energy efficiency in buildings.

### Management of Intellectual Property

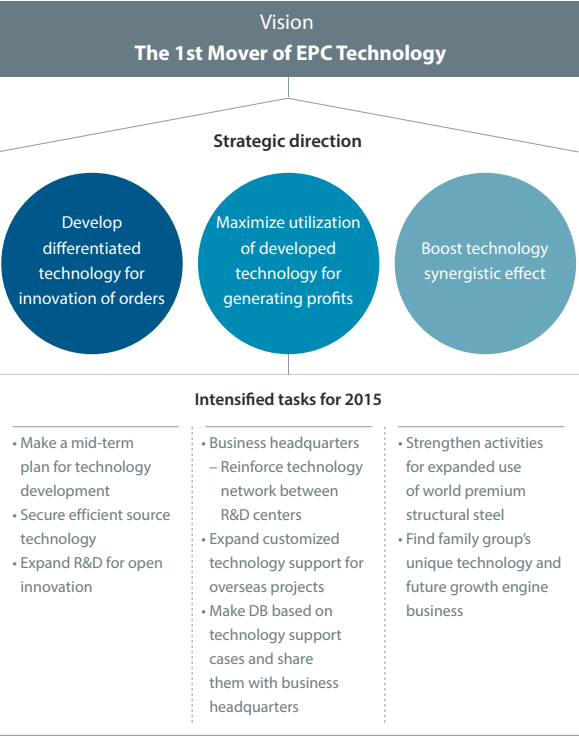
Managing intellectual property is more important than ever: conflicts over intellectual property frequently occur, and the size of lawsuit payments are large enough to pose a serious risk to a company's sustainable management activities. POSCO E&C prevents these kinds of risks by proactively managing our intellectual properties such as patents and royalty.

## 2014 KEY FIGURES



## R&D System

The driving force for sustainable business growth comes from owning the best technology. To achieve our R&D vision of being "The 1st Mover of EPC Technology," POSCO E&C has set strategic directions—developing differentiated technology for innovation of orders, maximizing the utilization of developed technology to generate profits, and boosting the technology synergistic effect—in connection with our business strategy and contributed to growing our company and creating value. Based on our steel plant engineering technology with world-class competitiveness, we established a mid-term technology development plan and roadmap for core products technology development to carry out systemic research and development.

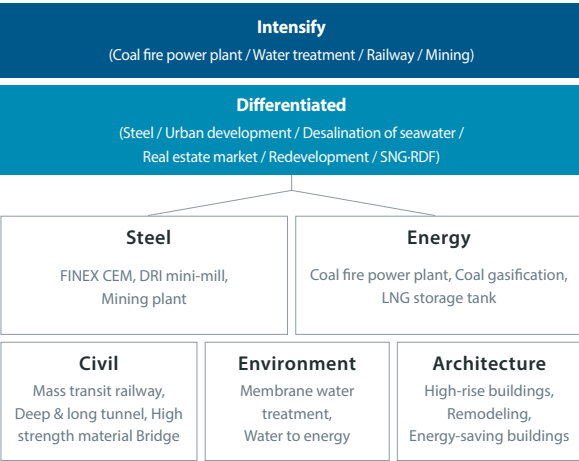


## Current Status of R&D

Classification	Unit	2012	2013	2014
Investment in R&D	KRW	198	152	447
	100 million			
Verification of new national technology and green technology	Case	8	7	6 cases of new national technology 3 cases of green technology
R&D specialists	Person	64	59	54

## Secure Core Technology in Connection with Business Strategy

POSCO E&C makes great efforts to connect R&D performances to business strategy in order to directly improve our competitiveness. Based on the concentration of our business strategy and portfolio for differentiated business, our company established mid-term technology development plans, selected 14 core products, and drew 128 cases of secured technology. By continuously securing technological competitiveness, we will raise our global competitiveness.

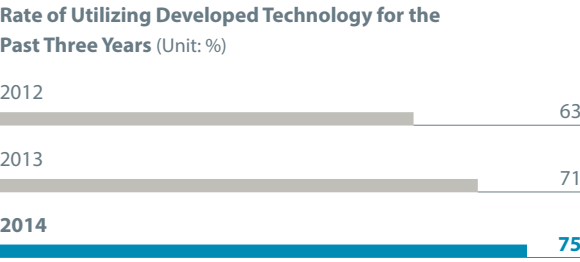


## Develop New National Technology and Green Technology

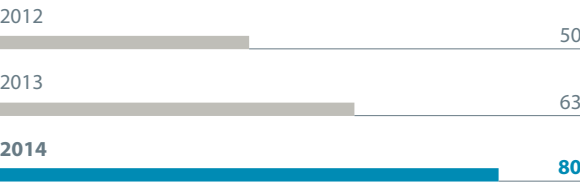
In 2014, POSCO E&C received verification for 6 cases of new excellent technology certified by Korean government, including the expansion type anchor construction method, low-energy RO seawater desalination technology, etc. The expansion type anchor construction method not only saves construction expenses by 30%, but it also shortens the construction period by reducing cable anchoring. Low-energy RO seawater desalination technology enables a high collection rate and non-chemical operation by utilizing ceramic filters and RO. In the green technology sector, our company acquired 3 cases certification of green technology by Korean government, including embedded rail track technology. As a construction method that is finished after the tram track is reclaimed underground, this technology allows for the establishment of trams, which are considered to be eco-friendly transportation, in urban areas. POSCO E&C has acquired 21 cases of new excellent technology and 8 cases of green technology to show its high R&D competitiveness.

## Reduce Costs by Utilizing Developed Technology and Conducting Technology Support Activities

POSCO E&C has raised cost competitiveness by commercializing developed technology and conducting engineering tasks independently, and has contributed to improving project quality and expanding technology support for overseas projects through effective technology support. In 2014, we reduced costs worth KRW 43.7 billion by utilizing developed technology and providing technology support.



## Number of Technology Support for Overseas Projects (Unit: Case)



## Enhance Technology Synergistic Effect

With the aim of enhancing technology and production cost competitiveness by using POSCO WP (World Premium) steel more extensively, POSCO E&C operates a working group, which is composed of three companies: POSCO Steel Solution Center, POSCO E&C, and POSCO Engineering. As the group used 3,700 tons of WP steel in 16 projects, we saved KRW 1.45 billion and enhanced the satisfaction level of owners with our quality improvements. Thanks to cooperation in R&D in various sectors, we continuously made great efforts to maximize our technology capability and boosted efficiency in technological development by conducting joint research with small and mid-sized specialized companies with core technology. In 2014, our company shared specialized technology and research infrastructure in a technology partnership with DAEWOO E&C's technology researchers and prepared a basis for win-win growth by conducting joint development to invent new technology.

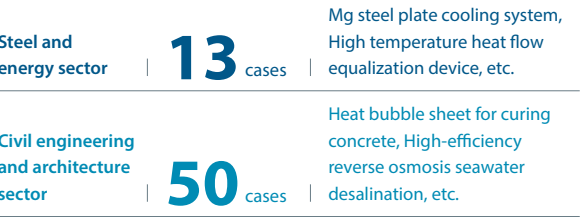
## Reinforce Management of Intellectual Property Rights

As the competition among companies has recently intensified, it's becoming more important for them to manage their intellectual property rights. POSCO E&C reinforces its technology competitiveness by securing the best patents through the proactive



management of its intellectual property rights. In 2014, we newly registered a total of 63 cases of patents and transferred four cases of technology, including the CFT top-down construction method and waterproofing-root resistance membrane layer of the green roof system. By selling these technologies, the company earned KRW 610 million from technology licensing income for a total of 19 cases.

Major Patent Technology Registered in 2014



Current Status of Ownership of Patents by POSCO E&C (Unit: Case)



Focus

Chungju Technology Research Institute

In 2014, POSCO E&C completed construction of the Technology Research Institute at Gageum-myeon, Chungju, Chungbuk to improve the overall R&D environment. With an investment of about KRW 4.7 billion, facilities were built on a 87,481.4m² site, including research facilities and laboratory, mock-up\* laboratory, and pilot plant operation unit, to carry out various research development tests. This research unit applied five self-developed technologies such as a thermal output and storage heating and air-conditioning system\*\*, modified fly ash concrete\*\*\*, etc. This unit is expected to contribute to the reinforcement of self-research capability and saving of external trial expenses through independent testing.



Number of Cases of Patent Application in Each Year (Unit: Case)



Future Plan

Despite the quantitative growth of overseas markets, our competition is still intensifying. Extensive growth in the domestic market is less expected since it has already entered the maturity phase. Under these circumstances, POSCO E&C plans to achieve innovation of orders by developing differentiated technology and enhance the technology synergistic effect among our group companies by maximizing the utilization of developed technology for generating profits. We will select and develop core products that reflect the current market and technology trends based on our business strategy by realizing our mid-term technology development roadmap at the early stage. We will carry out business by utilizing national research tasks and securing source technology efficiently. Currently, our company is carrying out 26 national tasks including e-FERA and wind-induced vibration control technology. POSCO E&C will find unique technology and future growth engine business for the group, develop solutions for the expanded use of WP steel for R&D co-operation and enhancement of synergy, and proactively engage in technology committees, and strive to secure the company's competitiveness and the group's development.

- \* Mock-up: Producing a small amount of samples with the same form of actual products to identify form and function before actually producing the products
- \*\* Thermal output and storage heating and air-conditioning system: Technology that conserves energy by using phase change materials and laying pipes for structures
- \*\*\* Modified fly ash concrete: Concrete technology with significant durability to enhance structural strength during winter and reduce humidity

Facility name	Use
Specimen production unit and railway technology laboratory	Produce 97 cases of steel and concrete structure specimens, conducting tests for double structures and low-noise railway bridges
Plant environment laboratory	Conduct tests for the core parts of pilot plants
Model laboratory	Conduct tests for laboratory scale models, water models, and interpretation verification
Architecture mock-up laboratory	Conduct standard tests for floor impulse sound, assessing performance of eco-friendly materials
Mock-up test site	Produce specimens for application at project sites
Pilot plant operation site	Operate and assemble pilot plants
Exposure test site	Conduct weather resistance of materials and structure

Special Issue

Concluding Share Purchase Agreement with PIF, Saudi Arabia

In June 2015, POSCO E&C concluded the share purchase agreement with PIF (Public Investment Fund), a sovereign wealth fund of Saudi Arabia, and attracted overseas investment worth KRW 1 trillion and 240 billion by selling 38% of the company's shares (selling 10,802,850 stocks of POSCO E&C owned by POSCO and issuing 5,083,694 new stocks of POSCO E&C). PIF has become part of POSCO E&C as our second-largest shareholder, following the largest shareholder, POSCO.

To cope with the rapidly-changing energy market environment such as decreased oil price, the Saudi Arabian government needed to invest in social overhead capital to foster industrial infrastructure such as the auto industry and manufacturing industry based on PIF. POSCO E&C has provided PIF with advanced technology and knowhow on energy and civil engineering, fostered specialized technicians, secured profitability and safety in the Middle Eastern market, and created a low-risk and high-profit construction business model in collaboration with local companies to begin the Middle East 3.0 era.

Thanks to this contract, POSCO E&C has enhanced corporate value by reinforcing financial soundness and increasing our credit rating. As the company had two directors appointed by PIF, involving them in our company's management, POSCO E&C will establish a transparent management system and efficient operation system in line with global standards.

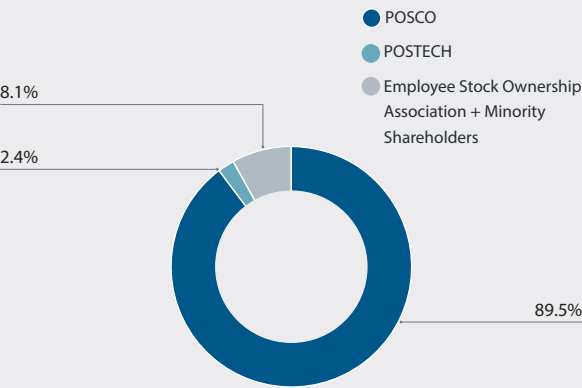
With the establishment of this joint venture for a state-owned construction company in Saudi Arabia, POSCO E&C will jointly pioneer the major construction business in Saudi Arabia with projects worth KRW 100 trillion a year, including railways, hotels, and architecture projects led by the Saudi Arabian government. The company will also continuously find new cooperative projects through the steering committee between our two companies and expand our cooperation sectors to the automobile, ICT (Information and Communications Technologies), IPP (Independent Power Plant), private generation business sectors. Through these activities, POSCO E&C will enhance profitability and strengthen business competitiveness by overcoming the management crisis caused by the recent global economic recession and making inroads into new overseas markets and new growth sectors.



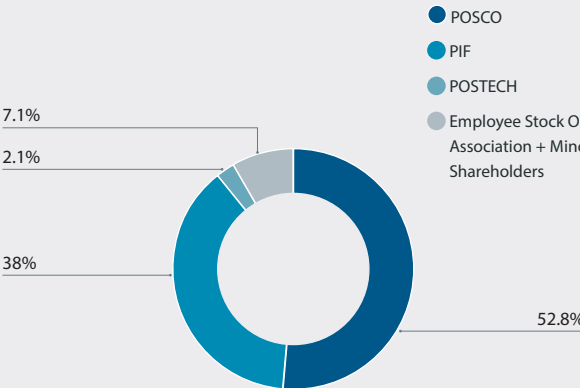
Concluded share purchase agreement with PIF (Public Investment Fund), sovereign wealth fund of Saudi Arabia

Change in the Share Ownership

Existing share ownership



Share ownership after the closing date of share purchase agreement with PIF



# WE BUILD VALUE FOR GREEN TOMORROW

Eco-friendly Management	38
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## Establishing an Advanced Environment & Safety System

POSCO E&C takes the lead in preserving the beauty of the earth's environment by carrying out eco-friendly management. We strive to ensure a safe working environment for all executives and employees in a healthy manner.

# Eco-friendly Management

As environmental issues such as climate change and environmental pollution have worsened, it's becoming more important for companies to actively address these issues. These environmental problems actually present new business opportunities for companies, such as development for eco-friendly technology. As a corporate citizen, POSCO E&C fulfills eco-friendly management with responsibility to improve environmental issues and strives to expand business areas by developing eco-friendly technology.

### RELATED CSR RISKS

#### Reduce GHG emissions

Reducing GHG emissions for the environment is one of the most important global issues that companies must handle. POSCO E&C makes extensive efforts to construct eco-friendly houses and build awareness of the environment among executives and employees. Our company strives to reduce GHG emissions in the entire business process by increasing support for environmental management for business partners.

#### Waste management

The construction industry generates a large amount of waste due to the nature of its business, so companies are required to comply with related laws and regulations in treating waste. POSCO E&C analyzes and manages types and amount of waste on a regular basis and minimizes waste generation by developing new technology.

### 2014 KEY FIGURES

4,134cases	76%	20,392tCO <sub>2</sub> eq
Autonomous environmental improvement activities	Waste recycling rate	Amount of GHG emission reduction at project sites

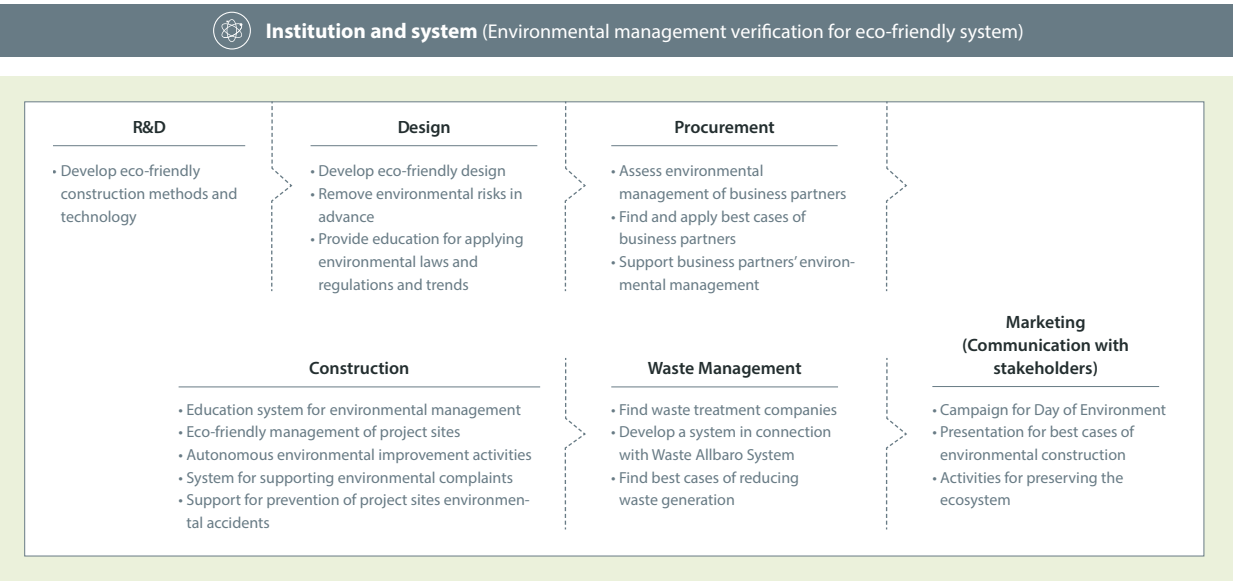


### Eco-friendly System

POSCO E&C and the POSCO Family companies have jointly proclaimed and complied with the POSCO Family environmental management policy to establish a basis for sustainable growth through eco-friendly means. This policy signifies our company's drive to achieve sustainable management by protecting the natural environment. We are committed to establishing a society that efficiently circulates its resources, developing environmental technology, and continuously improving the environment by preventing pollution and complying with laws and regulations. POSCO E&C has achieved its environmental management vision of "Build the Green" to protect the earth's environment through construction. In pursuit of our goal of "promoting eco-friendly construction culture," all business sites proactively engage in environmental management. We will achieve eco-friendly management in the entire business process by spreading relevant knowhow to business partners based on the best performance of environmental management.



### Major Activities and Performances (Each Business Process Stage)



### Institution and System

POSCO E&C's eco-friendly management is carried out in all sectors of management activities. We operate our systemic environmental management system and prepare proactive activities for newly enacted laws and regulations related to the environment.

**Operate Eco-friendly Environmental Management System - POEMS (POSCO E&C Environmental Management System)**  
POSCO E&C has launched and operated the eco-friendly environmental management system, which has been optimally designed for the construction industry. This system enables the company to establish environment-related plans, manage performance, and identify environmental laws and regulations, automatically managing overall factors regarding environment such as collection and analysis of environmental data including waste and greenhouse gas. We use this system not only for smooth operation of environmental management activities but also as a communication channel between project sites and our headquarters.

**Implement Environmental Management for Overseas Projects**  
POSCO E&C identifies each country's environmental regulation and demands in advance from the process of signing order to implementation. By doing so, environmental management can be achieved by establishing a work system as well as placing and operating environmental managers at all overseas project sites. We also minimize environment-related risks by providing training on local environmental laws and regulations, violation cases, and waste treatment methods for executives and employees who are supposed to be appointed for overseas business sites.

**Respond to Environmental Standards, Laws, and Regulations**  
Since getting ISO14001 environmental management system certification in 2000, POSCO E&C has continuously improved business processes, including not only environmental management but also energy and greenhouse gas management. In response to the changes brought about by the Toxic Chemicals Control Act, which took effect in 2015, we enhanced our management level by reviewing the response level for emergency cases, such as chemical leak accidents, and conducting intensive reviews.

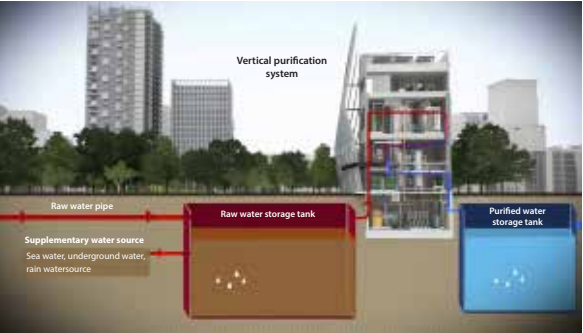
Classification	Unit	2012	2013	2014
Fines due to violation of the environmental laws and regulations	KRW 1 million	0	0	0
Non-monetary sanctions due to violation of the environmental laws and regulations	Case	10	8	10

**R&D**  
POSCO E&C minimizes impact on the environment due to construction activities by developing new eco-friendly construction methods and technology. We devise economic performance in an environmentally sound manner by developing technology to achieve cost reduction and quality improvements.



Membrane Systems for Advanced Water Purification

Safety and sufficient availability are the two most critical elements of any plant that produces and supplies drinking water. Conventional water treatment technology supplies users with water treated in massive-scale water treatment facilities through a long distance water pipe, but this method has short-comings. Pipe damage during the transfer of running water can decrease the water quality, as well as affect the amount of water purified at the plant depending on the quality of raw water. To address these weaknesses, POSCO E&C has developed a vertical water purification system that can stably produce and supply running water from a very close distance with customers such as urban park sites. This new water treatment system received the Global Honor Award of the Project Innovation Awards (PIA) from the International Water Association (IWA). Our company has also developed water treatment based on membrane filtration, which can secure a stable amount of water purified at the plant, regardless of change in raw water quality. As we developed a highly-efficient water purification system to respond to water quality changes by combining organic and ceramic membranes, our company has been certified a New Technology by the Ministry of the Environment.

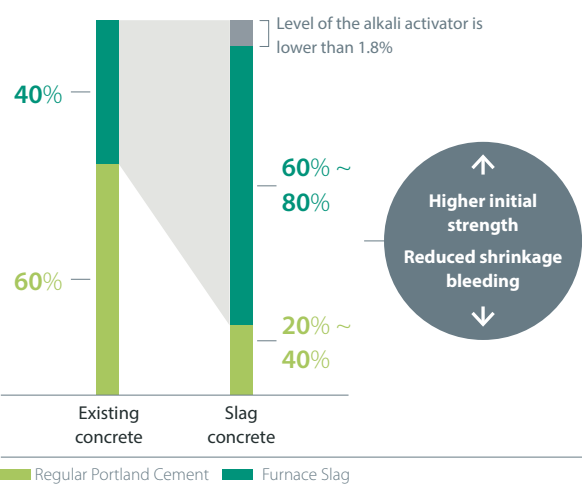


Vertical Purification System

Carbon Reduction Concrete Using High Volume Slag-PosMent)

POSCO E&C developed slag concrete technology, which replaces cement with slag by up to 60 to 80 percent by using alkali activator. This technology is applied to the concrete production process to enhance the amount of slag use. It offers high economic viability thanks to the lower cost of slag and has higher initial strength than cement. Reducing the amount of cement use also reduces the amount of carbon. In partnership with POSCO, we have integrated high volume slag technology into PosMent technology and expanded its scope of application in a nationwide scale, including Pohang, Gwangyang, and Songdo to prepare commercialization and future business. We are currently developing PosMent technology based on our self-developed HVSC (High Volume Slag Concrete) technology.

Effect of Slag Concrete Technology



Design

POSCO E&C strives to lift the burden of energy cost by considering eco-friendly elements from the stage of design, providing beautiful and clean housing environments with designs that enhance energy efficiency. We help reduce housing unit consumption electricity by 10% at maximum through standby electricity block equipment. In addition, we set energy goals and identify the real-time amount of use by applying HEMS (Home Energy Monitoring System) to encourage users to save energy. POSCO E&C improves housing environments for residents and reduces temperature in urban areas by planting greenery in apartment complexes. The POSCO Green Building in Songdo was designed to have eco-friendly characteristics, which were planned throughout the entire process of design-construction-maintenance-disposal. It was designed to supply 35% of energy required for managing the building independently and produce 280kw of electricity for an hour. Through design that considers the ecological environment, we secure green area ratio over 25% and create Biotope\*.

Our company considers the analysis of environmental impact and takes measures for the storage of chemical substances and handling of leakage incidents from the stage of design, and we remove environmental risks in advance through DfE (Design for Environment). Moreover, we provide staff members in charge of design with training on understanding and application measures for environmental laws, regulations, and trends.

\*Biotope: Joint habitat for various species including human beings, animals, and plants

Procurement

POSCO E&C induces improvement through assessment along with support for environmental management activities by business partners. Through these activities, our company reduces CSR risks for business partners, prepares stepping stones for sustainable growth, and prevents environmental pollution.

Assess Environmental Management of Business Partners

POSCO E&C takes immediate improvement measures for potential environmental violation cases by business partners at project sites through monthly environmental assessment and project sites autonomous improvement activities. We notify the department in charge of handling contracts about the results of environmental violation cases on a monthly basis and reflecting such results to the performance assessment of business partners. We give our best business partners rewards and impose sanctions on business partners with insufficient performance. Our company encourages proactive participation in the Environment Day events and autonomous improvement activities so that business partners can identify and reduce environmental risks, and we strive to achieve practical improvements through continuous feedback.

Results of Environmental Management Assessment for Business Partners

Classification	2014
Number of business partners for environmental impact assessment	452
Number of business partners with identified negative environmental impact	49
Number of business partners that exhibited improvement and consultation was achieved for negative environmental impact	49
Number of business partners whose contracts were terminated due to negative environmental impact	0

Distribute Eco-friendly Construction Guidelines

POSCO E&C has produced and distributed its eco-friendly construction guidelines since 2013 so that our business partners can implement environmental impact assessment and reflect it in their actual work. As the guidelines describe environmental issues for each construction type, management standards for each issue, and best cases, it contributes to improving the environmental management level of business partners. As the same business partners frequently carry out construction for other construction companies due to the characteristics of construction business, we expect a huge ripple effect. Based on the guidelines, we intend to prevent environmental pollution in project sites and reduce GHG emissions by proactively finding the best environmental and energy cases of business partners and applying these cases to project sites.

Support for Environmental Management by Business Partners

To promote eco-friendly management by business partners in the construction sector, POSCO E&C conducted a project of support for spreading environmental management with the Korea Environmental Industry & Technology Institute for three years from 2010 to 2013. Our company has strived to reduce the amount of greenhouse gas and generated waste by spreading best cases in each construction type to similar types of compa-

nies and holding presentations for the best cases. We realized that when dead trees are generated since they are not planted based on the standard for landscaping construction, additional expenses for waste, energy for transportation, and reconstruction are created. To address this issue, the company produced an eco-friendly construction guideline so that there were no dead trees that are in violation of the standard, thus reducing about KRW 270 million of costs in just the landscaping sector. Together with Green Partnership in 2015, practical activities by business partners for reducing GHG emissions at project sites will be carried out.

Construction

POSCO E&C establishes work processes for taking immediate measures in response to accidents and preventing violation of environment-related laws and regulations, accidents, and complaints, which can easily occur at project sites. We implement prior review of environmental impact and training for staff members in charge of handling the environment.

Establishment of Roles and Responsibilities for Environmental Management

To achieve efficient environmental management at project sites, POSCO E&C has analyzed a total of 21 environmental management jobs such as compliance with environmental laws and regulations, licensing management, environmental complaints, waste, and greenhouse gas, and clarified the roles and responsibilities of staff members in charge. The company has laid the foundation for efficient environment-related work so that project sites environment managers can adjust oversell environment-related work and managers in charge of construction are responsible for installing and operating facilities for scattering dust and noise, while staff members in charge of finance and management deal with environmental complaints. As for overseas employees, we provide them with training on local environment-related risks and management measures. For workers for business partners, we carry out the pledge for compliance with environmental management as well as provide video education on environmental control so that they can enhance their sense of responsibility and compliance with environmental laws and regulations.

Autonomous Environment Improvement Activities

POSCO E&C selects ten environmental management items that can be easily dismissed at project sites and encourages autonomous improvement. In 2014, our company set a higher goal of 4,000 cases of autonomous environment improvement activities, an increase by 25% compared to 2013. As a result of proactive encouragement for the participation of all project sites, we achieved good performance in a total of 4,134 cases of improvement activities.

Management of Air Pollution and Pollutants

POSCO E&C carries out proactive effort to prevent scattering dust and noise at project sites.

Management of Scattering Dust

POSCO E&C develops cleaning devices for removing scattering dust, which can be generated on the floors of project sites. These devices operate efficiently and swiftly, protecting workers’ health and minimizing environmental pollution.

Noise Management

With the aim of preventing environmental complaints regarding noise control, our company places equipment properly and controls the amount of work by operating a noise prediction simulation program at the initial stage of construction so that the minimum amount of noise can be created. We install movable air wall for soundproofing specialized for each of kind of equipment that generates significant noise. This enhances the effect of sound insulation for these causes of noise and minimizes any possible damage to local residents who live near project sites.

Activities for Preserving the Ecosystem

POSCO E&C carries out activities for preserving the ecosystem to protect animals and plants in accordance with the environmental impact assessment. As otters and oystercatchers, which are categorized in the first and second class of endangered wild animals and plants, were found near domestic project sites, our company implemented thorough preventive activities such as continuously monitoring the environment, managing noise and vibration during construction, and installing filth prevention coating (to prevent the spreading floating soil) so that impacts on the habitat environment can be reduced. As the habitat for Ranunculus Kazusensis in Ranunculaceae, which is an endangered plant in Korea, has been recently identified to grow near project sites, the company jointly conducted a detailed survey for the current status of the habitat of Ranunculus Kazusensis with experts, and then transplanted the plant to the region similar with the original habitat.

Activities for preserving the ecosystem have also been conducted at overseas sites: For the Brazil CSP Project, all workers at the construction site were required to contact the HSE (Health, Safety, Environment) Team upon finding any animals and plants. The HSE Team then identifies these animals and plants with experts and carries out migration work. As the company safely protects and migrates animals and plants detected at the construction site, including pigeons, snakes, frogs, squirrels, and guinea pigs, negative impacts on the local ecosystem are minimized.

Management of Environmental Complaints by Communication with Local Residents

POSCO E&C minimizes environmental complaints through proactive communication with local residents who live near project sites. Our company proactively shares potential environmental impacts and preventive plans by conducting audit and prediction for environmental complaints before beginning construction. We provide local residents with prior notice, and hold presentations. In case we cause any environmental damage, we strive to proactively address it based on our internal processes.

Case Study

Address environmental conflict in Ipam-dong, Gangneung

Due to its unique regional characteristics, Ipam-dong, Gangneung is a region where severe complaints about vibration, noise, and blasting during earth work are expected. Under these circumstances, POSCO E&C implemented proactive activities for dealing with environmental conflicts. We applied various technologies and ideas such as using noise-free and vibration-free core drills and rock-splitters instead of blast gunpowder to minimize damage from noise. In addition, we explained the construction plan and installation of environmental reduction facilities by holding a monthly regular meeting with local residents, listened to their complaints and collected opinions to proactively seek cooperation and mutual understanding. Thanks to these efforts, we were able to address environment-related conflicts with stakeholders, particularly the local residents who live near the project site, and prevent legal disputes.

Waste Management

POSCO E&C makes great effort in developing construction methods and technology to minimize waste generation. Our company strictly divides and manages waste based on its characteristics and types from the point of generation so that waste can be reused and recycled.

Current Status of Waste Management

Classification	Unit	2012	2013	2014
Wastewater discharge	Ton	292,683	276,897	198,256
Waste generation	Ton	610,312	688,740	418,076
Waste recycling rate	%	76	73	76
Waste treatment expenses	KRW	18,916	11,841	14,221
	1 million			

\* Wastewater is entirely treated through wastewater treatment facilities.  
\* 318,178 tons of waste out of 418,076 tons in 2014 was recycled and the remaining 29,969 tons and 69,929 tons were incinerated and buried in landfill sites, respectively. There was no recycling of waste to be buried in landfill sites.  
\* 418,076 tons of waste in 2014 can be broken down to110 tons of designated waste, 12,556 tons of onsite waste, and remaining construction waste, respectively.

Find Ideas for Reducing Waste

At project sites, massive amounts of various wastes are continuously generated. POSCO E&C manages recyclable waste not through incineration or reclamation, but recycles waste through the proper treatment facilities. We also carry out eco-friendly innovative activities and continuously find methods to essentially prevent the generation of waste. Thanks to these efforts, our company applied a new idea for improvement for the first time in Korea, the substitution of the basic floor concrete necessary for producing PC boxes at the project site of Units No. 5 and 6 of the Yeongheung Thermal Power Plant. With this application, the amount of waste concrete was recorded as “zero.”

Case Study

Zero Amount of Waste Concrete by Improving the Method to Produce PC Box

At the project site of Units 5 and 6 of Yeongheung Thermal Power Plant, POSCO E&C improved the method to produce the PC box and essentially prevented the generation of waste concrete. As a channel for the inflow of seawater for supplying cooling seawater for generation plants, the PC box usually places blinding concrete on the ground. However, when blinding concrete is crushed and unloaded, scattering dust is generated. This causes environmental issues, such as the treatment of waste concrete. To address this problem, POSCO E&C placed soil and spread plywood instead of blinding concrete so that the evenness of the ground is maintained. As environmental issues were addressed by replacing mass concrete, the company prevented the generation of 2,200 tons of waste concrete and reduced KRW 413 million in costs.

Reduced 2,200 tons of waste concrete

Reduced KRW 413 million in costs

Develop a System in Connection with “Allbaro System” by the Ministry of Environment

POSCO E&C has developed and operated a system that can check the discharge, transportation, and treatment of waste at all domestic project sites on a real-time basis by connecting to the “Allbaro System,” the waste management system used by the Ministry of Environment. Through this system, our company strives to comply with environmental laws and regulations and enhances recycling rate by continuously analyzing waste types and generation amounts.

Stakeholder Communication

To achieve effective eco-friendly management, we should first improve and internalize stakeholders’ awareness of environment friendliness. POSCO E&C conducts environment-related campaigns and holds relevant events and contests to enhance stakeholders’ eco-friendly awareness and encourages them to participate in eco-friendly management.

Campaign for Environment Day

POSCO E&C selected June as the Month of the Environment and conducted an environmental campaign by expanding the existing Green Walk Campaign. Based on the slogan of “Protecting the environment begins with your actions,” our company carried out various “walking, turning off, reducing, and collecting” activities, such as riding bicycles or public transportation for commuting and reducing leftovers. We conducted environmental volunteer activities in connection with local environmental groups, including “Saving Seunggicheon Stream.” As project sites in the country held project site-based earth protection events and implemented environment-related training and pledges for compliance with environmental management in joint cooperation with all business partners, we have highlighted the importance of environmental preservation among stakeholders and encouraged autonomous engagement.

Contest for Eco-friendly Construction Ideas

POSCO E&C held a contest for eco-friendly ideas with various stakeholders such as executives, employees, business partners, and residents of The Sharp to improve environmental awareness and reduce costs. In 2014, we operated the event under the theme of environment-related technology, collecting actual cases to reduce energy and environmental pollution of project sites and ideas and cases for protecting the environment in daily life. A total of 104 ideas were collected, and the six best cases were awarded through review by specialists.

Future Plan

More and more companies are becoming more environmentally aware and responsible. POSCO E&C will reinforce eco-friendly management by being aware of our environmental responsibility as a corporate citizen with our industrial characteristics. We will implement analysis for environment-related laws, regulations, and standards such as the Toxic Chemicals Control Act, which will be implemented from July 2015. Our company will prepare preemptive measures for improvement actions by studying the awareness of work processes and relevant laws at our headquarters and project sites to identify the current status. Through these efforts, POSCO E&C will strengthen response procedures to prevent environmental accidents in the entire business process.



Response to Climate Change

POSCO E&C has established and operated a computing system to calculate and manage the amount of GHG emissions and energy use at business buildings and project sites. Our company draws improvement measures for reduction by analyzing the data on greenhouse gas and energy on a monthly basis and induces swift improvements in executives and employees’ awareness and behavior by finding the best cases. Through these activities, POSCO E&C aims to become the leading company in the construction industry by meeting the government-led greenhouse gas reduction goal of 7.1% (construction industry) compared to BAU\* by 2020. We make every effort to achieve zero energy by establishing an energy-saving roadmap for buildings as well as the level for each year’s goal.

\* BAU: Business As Usual

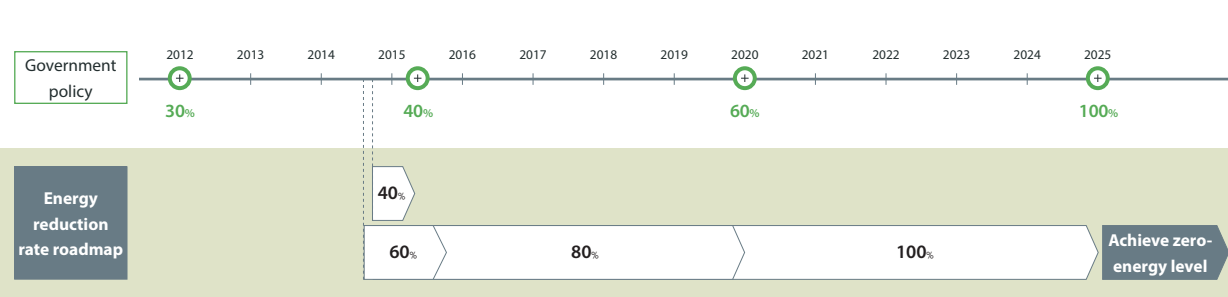
Construction of Eco-friendly Houses

To respond to the energy-saving rate goal for each year, which has been even stricter by legal amendment in the “Standard for Construction of Eco-friendly Houses, POSCO E&C has developed eco-friendly technology by dividing strategies into “strategy for reducing 40%,” “strategy for reducing 60%,” and “strategy for zero-energy community.” In 2014, the company applied passive technology, which is a technology to minimize energy waste without mechanical devices, and realized passive housing in the POSCO Green Building. Furthermore, we established strategy for saving 60% of energy by operating our eco-friendly strategy

Classification of Eco-friendly Technology

Classification	Contents
Passive	Technology to minimize energy waste without mechanical equipment
Active	Technology to save energy proactively by applying mechanical equipment
Renewable	Technology to produce renewable resources with natural energy

Mid- and Long-term Roadmap for Building Energy Reduction Rate



team and are developing technology for saving energy in convergence with passive, active, and new renewable technology. From 2015, POSCO E&C has developed optimal design measures for realizing zero-energy buildings in cooperation with Cambridge University through the Prosperity Fund Program by the British Foreign Commonwealth Office. We will enhance the eco-friendly level of residential buildings by developing and applying various eco-friendly technologies.

Greenhouse Gas Management for Construction Equipment of Business Partners

Even though the construction equipment of business partners accounts for over 70% of GHG emissions at project sites, it is usually difficult for small-sized business partners to manage GHG emissions from construction equipment. POSCO E&C conducts sampling for these project sites and manages GHG emissions for business partners’ machines. We manage equipment by finding improvement factors such as applying the method to calculate greenhouse gas by performance evidence (receipts), drawings and specifications (amount of completed construction), and construction record (number of input machines). Our company manages the energy use performance of business partners’ construction equipment and GHG emission on a monthly basis by establishing a greenhouse gas/energy management computing system for business partners and amending the internal guideline. We also encourage our partners to update or replace deteriorated equipment by comparing and analyzing energy efficiency based on types and years of equipment.

Training for Project Sites Environmental Managers

Since project sites environmental managers are changed regularly—a characteristic of the construction industry—POSCO E&C provides them with regular training and encourages them to input performance for managing greenhouse gas through assessment. Our company will offer rewards for the best energy-saving cases and spread these cases to project sites.

Focus

POSCO Green Building

POSCO Green Building is an energy-saving building model developed by the POSCO Family to meet the government-led green building eco-friendly policy. Built as part of the “Research on Spreading Market Demand-based Newly Constructed Green Buildings” by the Ministry of Land, Infrastructure, and Transport and jointly conducted with Yonsei University and the POSCO Family companies, this building is utilized as a research laboratory for new materials and the green construction sector. As the world’s largest complex building laboratory unit with a total of 106 types of Korea’s best eco-friendly element technologies applied, POSCO Green Building implements 30 types of self-developed technologies as a low-carbon eco-friendly building in the form of POSCO’s unique model that is an accumulation and combination of green steel, energy, and ICT construction technology.



POSCO Green Building

Amount of GHG Emissions

Classification	Unit	2012	2013	2014
Scope1	tCO <sub>2</sub>	7,725	6,027	4,142
Scope2	tCO <sub>2</sub>	27,281	25,719	26,033
Total (Scope1+Scope2)	tCO <sub>2</sub>	35,006	31,746	30,175
Scope1	tCO <sub>2</sub> /KRW	0.001097	0.000751	0.000551
Basic unit emissions	1 million			
Scope2	tCO <sub>2</sub> /KRW	0.003874	0.003204	0.003464
Basic unit emissions	1 million			
Scope3	tCO <sub>2</sub>	107,364	76,370	57,522

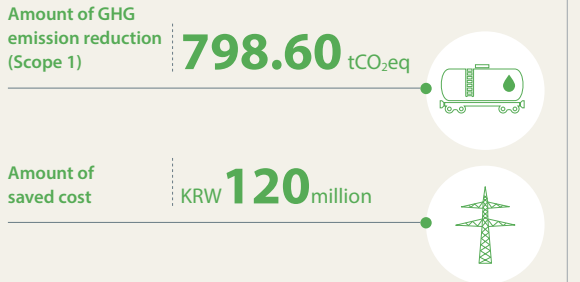
Classification	Unit	Scope1	Scope2	2014
Pohang Headquarters, Songdo Building, etc.	tCO <sub>2</sub>	1,435	6,437	7,872
Domestic project sites	tCO <sub>2</sub>	2,707	19,596	22,303

\* GHG emissions were calculated in accordance with the government policy on the operation of greenhouse energy goal management. The company manages the rate of emission reduction based on 2012.  
\* Basic unit emissions were calculated as emissions compared to sales (separate standard).

Case Study

GHG Emissions Reduction by Improving the Method to Supply Electricity for Marine Construction

FD (Floating Dock) is massive specialized equipment that is used in producing a caisson and holding launch for breakwater and dock construction. Generally, internal generators using oil as fuel were used to provide electricity to power the crane in FD and internal cabin. While considering the method to reduce GHG emissions at the project site of breakwater for New Saemangeum Harbor, POSCO E&C came up with the idea of reducing the amount of oil use by improving the method of supplying electricity to FD from outside, rather than using the existing internal generators. First, we identified electricity facilities in the caisson production area and had the site owner to examine the current condition and whether external electricity could be adopted. After persuading an owner, we received approval for the installation of electricity facilities and were ultimately able to import electricity in FD from outside, thanks to the construction of these electricity facilities. Through this simple case for changing existing work practices, we reduced 798.60tCO<sub>2</sub>eq (300.08L of diesel) in GHG emissions and achieved savings in economic cost worth about KRW 120 million.



Amount of Use for Each Type of Energy (Unit: TJ\*)

Classification	2012	2013	2014
Gasoline	18.91	21.48	21.64
Diesel	32.77	43.78	32.72
Kerosene	50.99	10.29	6.98
LPG	1.40	5.54	2.73
LNG	12.43	12.54	11.56
Electricity	526.6	507.43	512.36
Hot water	35.36	16.15	17.27

Classification	Amount of fuel use	Amount of electricity use	Amount of steam use
Pohang Headquarters and Songdo Building, etc.	24.00	111.13	17.27
Domestic construction sites	39.79	403.49	-

\* TJ (Tera Joule): Energy unit. 1J refers to the amount of energy necessary to move 1m with the strength of 1N, while T refers to 10<sup>12</sup>.



# Safety and Health Management

As industrial accidents have recently increased at domestic project sites, social interests in safety and health management by companies have increased as well. POSCO E&C reinforces relevant activities to achieve safety and health for worksites, including our employees and business partners.

### RELATED CSR RISKS

#### Management of Industrial Accidents

Industrial accidents can lead to not only human injuries but also monetary and reputational damage. POSCO E&C establishes safe workplaces through process-focused preventive activities.

#### Safety and health Culture

For safety and health management, it is important to establish system and ensure employees' awareness of safety and health. POSCO E&C establishes a self-initiated safety and health culture based on the management's strong drive.

#### Safety Audit

Systemic safety audit enhances the safety level at project sites and prevents accidents. POSCO E&C implements regular project sites audit and assessment of business partners and provides support. Our company conducts overseas project sites safety management through global standard safety management and carries out the management of construction machines and equipment to boost the safety audit level.

### 2014 KEY FIGURES



### Safety and Health System

POSCO E&C recognizes safety and health as the best value for realizing "respect for human beings" and strives to create a zero accident and happy workplace. Towards this aim, our company intends to prevent accidents by faithfully operating our safety and health management system, maintaining a pleasant and safe work environment for employees in the entire work process, and establishing a "self-initiated safety and health culture." In 2015, the company has set our safety and health goal as "realize life-caring safe project sites that lead the global construction safety and health culture", and we've made every effort to create a zero accident and happy workplace.



### Raise Awareness of Safety and Health at Project Sites

#### Operation of Autonomous Safety Programs

POSCO E&C operates autonomous safety programs to prevent accidents at project sites. We prepare for various potential accidents under the supervision of managers by operating a safety ownership program by area, facility, and time. Along with reinforced compliance with safety regulations by all workers, we strictly prohibit behavior that can directly cause accidents, including not wearing protective gear and dismantling safety

facilities. In case of a violation, strict measures are immediately taken. In addition, we operate the three-strikes out system in which three accumulated violation cases for safety regulations result in the dismissal of workers to enhance workers' safety awareness.

#### Operation of Self-directed Safety Spread (SSS) Activities

POSCO E&C conducts "Self-directed Safety Spread (SSS)" so that all executives and employees recognize the importance of safety by themselves, remove fundamental risk elements, and realize safe project sites. All employees including business partners at project sites find risk elements and thoroughly manage project sites insecure elements by fulfilling the safety jobs for each position. Our company implements emotional safety activities for employees' autonomous participation, such as improving the working condition by expanding amenities, activities for sharing gratitude, and respecting workers. Moreover, we invite workers' ideas on safety management and give rewards for the best proposals.

Beyond the existing TBM (Tool Box Meeting) based on safety direction by managers, we implement M.O.S. (Moment Of Safety) TBM with reinforced TBM for each working team. Through this change, we not only identify each condition of safety activities and practical risk elements to enhance safety level, but also ensure a positive shift in awareness and behavior to encourage employees to find and improve risk elements for themselves.

#### Engagement of Safety and Health Activities by the Management

POSCO E&C enhances project sites safety awareness led by the top executives. The CEO visits project sites on a monthly basis to check the current status of safety facilities and program operation and holds meetings with project sites employees. Through the Safety Responsibility Executive System, the executives in charge of construction examine project sites every two months, while executives discuss response measures and strategies for quality, health, safety, and environmental risks by holding a Q-HSE Executive Meeting.

#### UCC Contest for Spreading Safety Awareness

To spread best safety management cases at project sites and enhance autonomous safety management awareness and safety level, POSCO E&C held the "UCC Contest for Best Cases of Project Sites Safety Activities." This event was held with the spirit of creating a company-wide mindset for safety and informing stakeholders about the importance of safety. As a result of proactive engagement by employees of POSCO E&C and business partners, the six best works received prizes among a total of 70 UCC works. Our company will continuously strive to spread safety awareness by sharing the best works with all employees and utilizing cases as materials for project sites safety education.

#### Safety and Health Management for Business Partners

To enhance business partners' safety awareness and responsibility, POSCO E&C holds a safety and health meeting on a monthly basis in which the management of business partners participate. Through this conference, we discuss safety and health issues that have continuously affected project sites and the direction for improving them. When it comes to business partners with over KRW 5 billion in transactions a year, our company makes it mandatory to place exclusive safety managers to improve the capability to execute autonomous safety and provides support by diagnosing the level of business partners' participation in safety activities so that business partners can autonomously establish safety goals and improve safety management.

#### Implementation of Fire Drills

POSCO E&C conducted fire drills for all executives and employees to spread the importance of preventing fires and raising executives and employees' awareness of firefighting and safety. Our company reexamined whether the team for coping with disaster was swiftly operational in case of disaster, while executives and employees participated in the drill by separating into various teams, including a command team, firefighter-leading team, safety-leading team, and first-aid emergency team, in accordance with the drill scenario. After the drill, we provided education on safe evacuations in case of fire and methods to transfer the injured and use the firefighting facilities.



Fire Drills

Establish the Environment for Advancing Safety and Health

Certification for Safety and Health Management System

POSCO E&C systemically manages planning, implementing, evaluating and taking action for safety and health through our system organized on the web. In 2003, our company acquired the OHSAS18001 and KOSHA18001 safety and health management system. In winning the Grand Prize at the Safety Management Awards by the Ministry of Employment and Labor for the first time in the construction industry, POSCO E&C’s capability to manage the safety and health system at the high level has been well recognized.

Operation of Permit-to-work System and Immediate Improvement System

Through the Permit To Work system and Immediate Improvement System, POSCO E&C removes accident risk elements of project sites and boosts efficiency in safety plans. This not only makes it mandatory to submit and approve safety plans in performing risky work, but also reinforces the prevention of accidents by immediately suspending work and implementing safety training when workers violate the safety standard. The Integrated Safety Control Center, which opened in 2012, has installed 70 close-circuit TVs at 35 project sites and monitors the current condition of work on a real-time basis.

When unsafe situations are detected at project sites, control agents notify project sites directors and safety managers about these situations. After taking the appropriate measures for the violators of safety regulations, the managers of the project sites

report results. These results are made into a DB and reflected in the improvement of the safety and health system and related activities.

Implementation of Regular Safety Audit

POSCO E&C has reinforced regular safety activities “based on process management” and improved the project sites audit and support system to increase executives and employees’ interest and participation in safety matters. Our company newly launched a system for diagnosing the participation level of employees’ safety activities and the engagement level of safety activities by business partners. We conduct traffic light assessment, categorize audit results based on scores into blue, green, yellow, and red, and take measures for vulnerable sectors to implement intensive management.

Contents on Improvement of Regular Safety Audit

Classification	Number of cases
Audit and support at project sites	<ul style="list-style-type: none"><li>Partially integrate audit items and change the amount of scores for each item</li><li>Change the period of safety audit from once every two months to a quarterly basis</li><li>Induce continuous safety activities by changing project sites audit score calculation</li></ul>
Audit of the participation level of employees' safety activities	<ul style="list-style-type: none"><li>Newly launch audit items for enhancing employees' safety activities other than project sites audit</li></ul>
Audit of the participation level of safety activities by business partners	<ul style="list-style-type: none"><li>Implement audit led by project sites safety managers on a monthly basis</li><li>Improve safety culture of business partners by reflecting the level of safety activities at the normal time</li></ul>

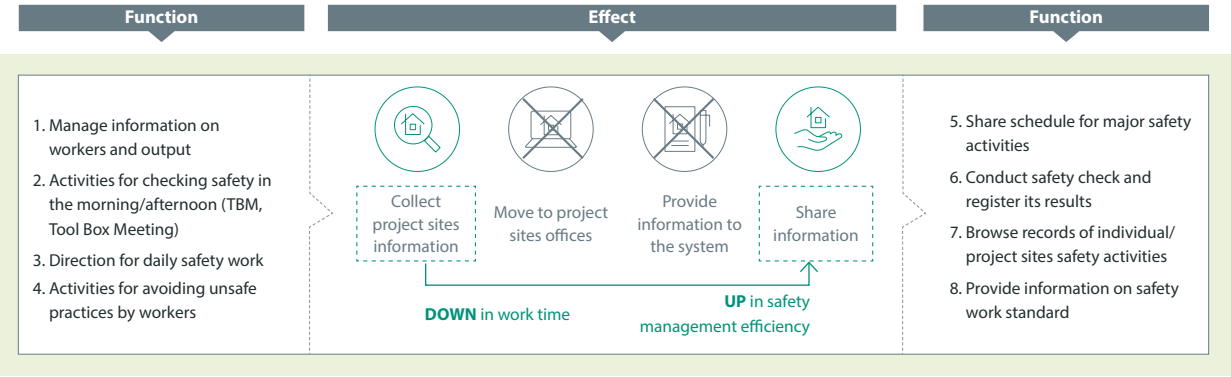
Establishment of the Real-time based Safety Management Environment

POSCO E&C has developed a safety management mobile application to improve safety by establishing a real-time safety management environment without the constraints of time and place. The safety management mobile application provides mobile functions for the entire process of safety activities—from

Number of Improving Project Sites Risk Elements in 2014

Classification	Number of cases
Safety Audit Team	5,125
Integrated Safety Control Center	4,639
Employees/Business partners at project sites	120,400
Total	130,164

Function and Effect of Safety Management Mobile Application



the beginning to the end of project sites work —based on the most basic jobs with high frequency of use. As it has become possible to share information on a real-time basis, including management of workers’ entry, direction for daily safety work, improvement of unsafe practices and facilities, results of safety checks, and schedules, this system is a significant asset in the practical prevention of accidents.

Appointment of Health Managers

As the construction industry has various potential work-related risks including diseases due to handling heavy items, exposure to chemical substances, and suffocation by work in closed areas, special care needs to be ensured for executives and employees’ health. In accordance with the Occupational Safety and Health Act, POSCO E&C appoints project sites health managers and has them carry out health management work separate from safety management. These health managers perform various tasks such as improving the work environment, managing chemical substances, diagnosing executives and employees’ health, operating health programs such as disease prevention programs, and managing a Health Management Center.

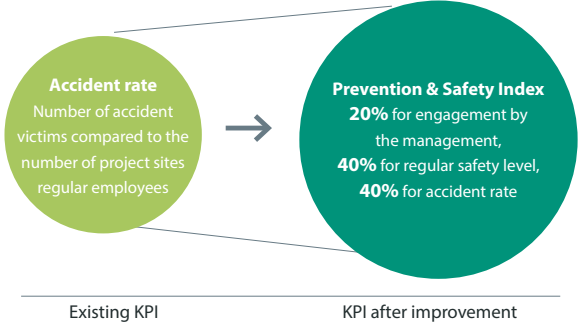
Major Tasks of Health Managers

Classification	Contents
Measure the work environment	Improve the work environment based on the results of measuring the project sites work environment and monitor the current status
Manage Material Safety Data Sheet	Manage Material Safety & Health Data Sheet for chemical substances that are handled at project sites
Manage health check-up	Conduct regular health check-up once or more a year depending on the conditions of each project site, as well as special health check-ups for workers who handle hazardous materials and are exposed to them
Operate health programs	Operate health programs depending on conditions of each project site including hearing preservation program and respiratory organ protection program
Manage health promotion	Assess the risk level of brain cardiovascular system diseases, measure work-related stress, and manage biological hazardous factors
Operate a health management center and conduct medical practice	Operate a health management center with consultation room, recuperation room, and treatment room, supported by medical personnel such as doctors and nurses

Improvement in Safety and Health KPI

POSCO E&C has identified not only performance in accident rate but also recent trends in the safety and health policy by the government, assessing the efforts to prevent industrial accidents. We adopted the “Prevention & Safety Index (PSI)” as a new KPI, which comprehensively assesses the participation of the management in safety and health issues, efforts of all employees, and relevant results instead of the existing result-focused safety and health KPI, and simultaneously managed both result-based index such as accident rate and leading indicators.

Direction for Improvement of Safety and Health KPI



Focus Introduction of Prevention & Safety Index

POSCO E&C has calculated Prevention & Safety Index by reflecting the level of management engagement in safety, project sites regular safety management level, and accident rate. In 2014, our company achieved a score of 723 out of 1,000, which is equivalent to the level of “management supervision.” The company will continue to carry out improvements to achieve a score of 809, the level of “autonomous safety”, by 2017.

Table for Preventive Safety Indicators Rank

Classification	Score	Description
Strong (Mutual safety)	Score of 900-1,000	Vital networking for enhancing safety
Good (Autonomous safety)	Score of 800-899	Voluntary participation in safety activities by executives and employees
Adequate (Management supervision)	Score of 700-799	Emphasize compliance with safety regulations (Disciplinary actions)
Bad (Instinct level)	Score of 600-699	Safety issues are only managed by safety managers
Weak (Lack of management)	Score of 500-599	Generating profit is the only goal of the organization

Future Plan

POSCO E&C will further reinforce its safety and health management system to realize “life-caring safe project sites leading the global construction safety and health culture.” Our company will encourage all employees to engage in safety activities by taking measures for improving the participation level of safety activities and enhance the level of project sites safety management through regular process-focused safety activities. We will prevent accidents by strengthening headquarters’ support for safety at low-level or high-risk project sites. With the aim of achieving the goal for Prevention & Safety Index, which are newly-introduced KPIs, we will implement preemptive responses—going beyond short-term improvement efforts—to realize improvement in our company-wide safety management system.





## WE BUILD SOCIAL VALUE TOGETHER

Customer Centered Management	52
Human Resource Management	58
Social Contribution	64
Win-win Growth	68

### Fulfilling Social Responsibility as a Corporate Citizen

POSCO E&C establishes Win-win relations with various stakeholders such as customers, executives and employees, local communities, and business partners to lead the way toward a better future.



# Customer Centered Management

POSCO E&C believes that customer satisfaction is fundamental for sustainable development and makes various efforts to achieve this goal. Our company enhances customer satisfaction level by listening to customer opinions, protecting customer information, and considering customer safety and convenience.

### RELATED CSR RISKS

#### Customer Safety and Health

Construction that considers customer safety and health actually improves customers' lives and enhances their satisfaction. Through continuous research and development, our company introduces new technology and materials and examines and improves activities from the viewpoint of customers.

#### Protect Customer Personal Information

As the number of personal information leakage incidents has recently increased, customer interests in protecting personal information is also on the rise. POSCO E&C protects customer personal information by encrypting personal information, conducting mock hacking tests, and implementing a personal information effective term system.

### 2014 KEY FIGURES

Score of

92

Living-in satisfaction level in 2014

1<sup>st</sup> rank

Apartment unit sector in Korea Standard-Quality Excellence Index (KS-QEI/ Six consecutive years)

ISO 27001

Acquired certification



### Customer Centered Management System

POSCO E&C has set the core values for customer satisfaction as “Best Efforts, Warm Heart, and Always On” and carried out various activities to realize these values. To enhance customer satisfaction and satisfaction level at the moving-in stage, the company reinforces prevention activities and quality management and strives to develop products for customer safety and health. We also build trust with customers by reinforcing activities for protecting customer’s personal information.



### Enhance Customer Satisfaction Level

#### Perform Prevention Activities

With the aim of preventing customer grievances, POSCO E&C conducts prevention activities from the stage of winning an order and licensing to the stage of completing, moving in, and maintaining. In 2014, the company implemented quality checks 25 times for 21 projects and preventive checks 23 times for 16 projects.

#### Quality Check Process for Prevention

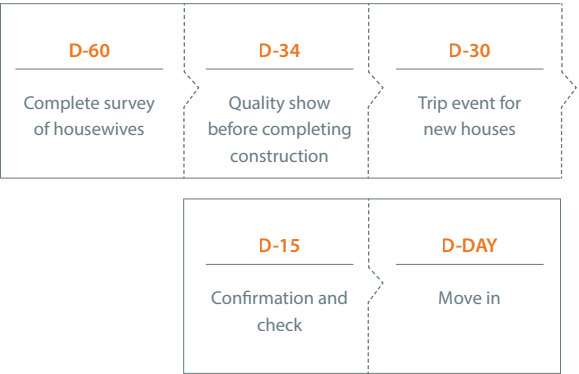
- |                                           |                                                                                                           |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| 1. Winning Orders and Licensing           | • Prevent exaggerated advertisement by conveying accurate information to customers                        |
| 2. Selling and Preparing for Construction | • Prevent grievances after moving in with design reflecting customer needs                                |
| 3. Constructing                           | • Provide best-quality products by conducting perfect construction                                        |
| 4. Completing, Moving in, and Maintaining | • Minimize the gap between customers’ expectations and products<br>• Provide the best maintenance service |

### Strengthen Quality Management

POSCO E&C analyzed cases in each construction type with critical or repetitive defects or lawsuits and selected target construction types which affect quality. For selected target construction types, the company intended to enhance the quality level by conducting checks for preventing defects and providing training.

We have also secured customer safety and health and boosted customer satisfaction by preventing potential defects in houses through quality check activities based on customer engagement, such as a complete survey of housewives before moving in, quality show before completing construction, and trip event for new houses.

#### Quality Check Process before Moving in



### Enhance Move-in Satisfaction Level

For the convenience of customers who move in new houses, POSCO E&C operates a pre-inspection reservation system for occupants. As a manager waiting on the date and time desired by customers conducts a check on household units with customers, the waiting time can be reduced. The system also provides a detailed explanation on units, earning trust from customers. With the introduction of the mobile (tablet) check system, examination agents register results by using a tablet device or smartphone and immediately send them to the business partners in charge to enhance the speed of dealing with defects before moving in. As a result, in 2014, the move-in satisfaction level of 10,322 household units in 13 apartment complexes was recorded at a score of 92.

### Implement Customer Centered CS System

POSCO E&C operates a customer centered CS system to identify customer needs accurately, deal with them swiftly, and consider their needs from their perspective. Through the 24-hour feedback service, our company personnel visit households with flaws, to identify problems and offer feedback with a treatment schedule within 24 hours. As a result, we achieved a score of 87 in AS satisfaction level in 2014.

### Customer Centered CS System

Classification	Content
24-hour feedback service	Give feedback with direct visit within 24 hours in case of registering AS cases
Operate integrated operation team	Provide continuous customer support after withdrawing move-in support center
Onmaum Sharing Service	Provide products such as suppliers for Senior Citizen Center to enhance move-in satisfaction level
Write and distribute guidelines on maintenance of apartment	Provide information such as notice for termination of AS period to allow customers to conduct maintenance for themselves



### “Onmaum Sharing Service” Reflecting Customer Perspective

POSCO E&C implements “Onmaum Sharing Service” to provide sophisticated consideration and sincerity from the customers’ perspective to ensure greater convenience and less stress for customers. The company not only supplies carts which are used in mega-supermarkets in each underground parking lot to help move supplies from the apartment parking lot to apartments, but also provides various services such as computers and relevant devices for convenience at the Senior Citizen Center and Business Room to enhance residents’ quality of life.

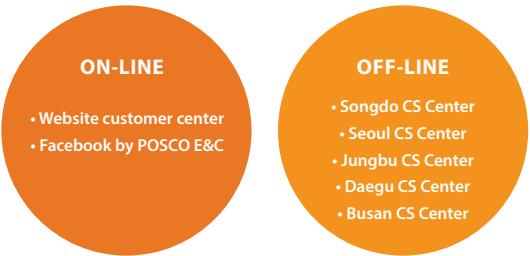
“I felt really welcomed and grateful to have someone putting such great effort for my convenience, even if it was just to improve little things. I especially believe that the Onmaum Sharing Service is an impressive service that focuses on giving consideration and care to even occupants who find it difficult to move heavy baggage by themselves.”

From an interview with customers

Expand Communication with Customers

To achieve trust from customers and establish a positive corporate image, POSCO E&C provides online and offline communication channels for open communication with customers. On the website of The Sharp (<http://www.thesharp.co.kr>), the company strives to respond more swiftly to customer needs through one-on-one online consultation service. Since October 2012, we have operated the “POSCO E&C Facebook Page,” an official social network service (SNS) channel, to achieve two-way communication with customers. With this communication channel, we share information to identify with customers, including news on recruitment for Happy Builder, a college student volunteer group. Thanks to these efforts, POSCO E&C was selected as the first rank in the construction industry sector for the “Best Korean Company with the Highest Empathy in 2014” by the Korean Marketing Association. In terms of offline channels, the company operates customer centers at five local offices—Songdo, Seoul, Jungbu, Daegu, and Busan—to receive reported customer grievances.

On- and Off-line Communication Channel



Reinforce Infrastructure for Supporting Customers

Conduct Jump-Up Campaign

As customer needs have been gradually collectivized and diversified, POSCO E&C conducted the Jump-Up Campaign with the aim of improving existing CS activities. With the participation of POSCO E&C’s Customer Centered Management Group and CS business partners’ executives and employees, the company has drawn measures for achieving the zero level of defects. We discussed strategy for enhancing AS satisfaction level and measures for addressing grievances in managing move-ins and improving customer satisfaction level.

Strengthen CCM\* Training

POSCO E&C provides trained personnel at the customer contact point, with knowledge of principles and knowhow of customer service to help them understand the changing construction service environment and cultivate a customer centered mindset.

In 2014, the company has centered monthly training based on each stage before and after move-in to provide the Onmaum Sharing Service, our customer response service. We have also provided other various services such as training for staff members in charge of AS at the center and CCM training for business partners, construction business headquarters, and relevant groups.

\* CCM: Customer Centered Management

Support CCM for Business Partners

POSCO E&C supports CCM establishment at SMEs with insufficient CCM process and organization to enhance customer satisfaction level and build a positive brand image. The company supports not only CCM consulting to help business partners to receive CCM certification but also calculates CCM operation performances by business partners on a weekly, monthly, and quarterly basis. In addition, we have continuously made efforts to reinforce CCM for business partners by analyzing VOC reported by business partners, providing results, and providing training on CCM to business headquarters and relevant departments (ethics, quality, safety, and environment, etc.).

CCM Training Hours and the Number of Participants

Classification	Unit	2012	2013	2014
Total training hours	Hour	6,953	8,848	9,128
Total participants	Person	869	1,106	1,032
Total training hours	Hour	484	513	528
(Business partners)				
Total participants	Person	58	64	66
(Business partners)				

Future Plan

In 2015, POSCO E&C conducted quality checks for 28 projects and aims to achieve a score of 93 in the move-in satisfaction level for 6,767 household units in six apartment complexes. Through our efforts, we have been able to keep our position in the first rank of Korea Standard-Quality Excellence Index (KS-QEI) for seven consecutive years. Furthermore, we will provide preventive training for construction types with frequent defects and conduct a defect-zero campaign so that we can achieve improvement in quality as well as reduce cases of defects to fewer than 2,000 in 71,087 household units. We will also improve our response speed by dealing with defect management more proactively from the point of completion of construction and achieve a score of 88 in AS satisfaction level by continuously offering CCM training to employees at the contact point.

Design Considering Customer Safety and Convenience

Provide Pleasant and Safe Residential Space

Realize Landscaping with Value

POSCO E&C realizes “value landscaping” whose value grows with time on the basis of our love for human beings and respect for nature. With this model, the company intends to provide space that is more than just residential space, but a space where customers can enjoy healthy lives. For instance, we have installed various landscaping facilities which bring the beauty of nature, such as botanical gardens by designing a Healing Park, an apartment-centered convergence cultural park, so that occupants can get recharged and healing amidst nature. The company also encourages customers to enjoy life in harmony with nature by creating a place for various species of trees, plants, and observation points to watch birds that inhabit in the apartment complex. We also provide a variety of facilities to improve the quality of customers’ lives, including a Farm Garden for proactive exchange by occupants with neighbors, multi-complex playground for children, Mom’s Café where parents can spend time with their children and rest, and a Book Garden.

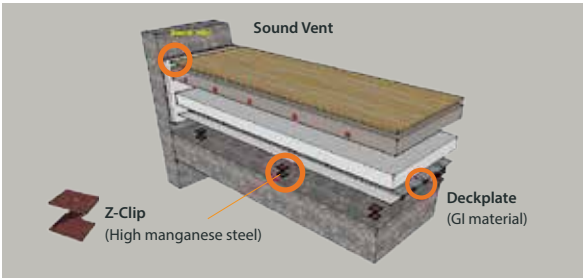


01. View of Realizing Value Landscaping  
02. The Sharp Farm Garden

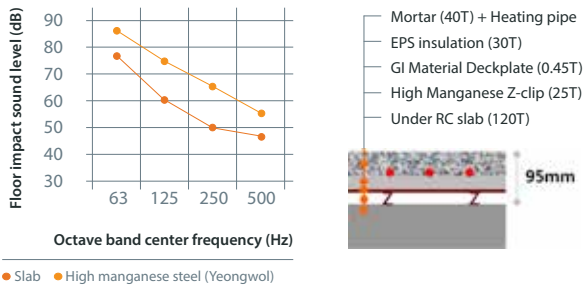
Improve Floor Insulation to Reduce Noise

POSCO E&C is developing high manganese steel floor plate to address the floor impact noise issue in collaboration with group companies and business partners. As a steel material with ten times better vibration prevention performance than regular steel, high manganese steel can significantly reduce noise. As the maximum thickness of high manganese steel floor plate slab is 120mm, it has been demonstrated that when this plate is used for the construction of thin floors in apartments, floor impact noise is reduced by 13dB (single value sound pressure level), which is quieter than existing concrete floors.

Floor Plate with Improved Performance by Applying High Manganese Steel



Structure and Performance of High Manganese Steel Floor Plate



Apply PIR Flame Retardant Insulation

As recent damage due to massive fire accidents has continuously occurred, POSCO E&C applies PIR flame retardant insulation to each household unit. PIR, or “Semi-rigid Polyurethane Foam Type No. 1 and Unit No. 3,” (Polyisocyanurate) is a fireproof material that prevents fire from spreading by forming a charring layer in fire. As its insulation performance is better than regular insulation by 60% or more, this material can significantly reduce loss in building energy.



Flame Retardant Urethane (PIR)      Regular Urethane (PUR)

Develop ‘The Sharp Jiki-me’ Integrated Security Solution

POSCO E&C has developed ‘The Sharp Jiki-me’ Integrated Security Solution to protect women and children customers from crimes in a safe manner. The company established a systemic security and defense system for each sector by dividing the space from the apartment entrance to household unit entrance into three-stage sectors, including an apartment complex internal section, external section, and household unit internal section. We have improved the security function by applying



specialized security systems such as “security system for women and children,” “security system for children,” “school zone,” and “emergency bell system for underground parking lot.” We have applied not only high-definition CCTV video system to identify objects via video monitoring more accurately but also an emergency bell system for underground parking lots so that an automatic warning broadcast is provided in case of emergency to prevent damage from spreading.

Operate Amenities for Customers

Operate The Sharp Field

For a pleasant and open residential space, POSCO E&C has installed and operated “The Sharp Field (central grass garden)” in the center of the apartments. The size of a soccer field and bigger, The Sharp Field enhances customer convenience with specialized landscaping facilities such as a grass square, playground for children, kids pool, and camping garden, and provides the function of connecting the common facilities of occupants and external space.



View of The Sharp Field

Operate ‘Mom’s Café’

POSCO E&C operates “Mom’s Café,” a community for emotional development for households with children. It is composed of an external playground, Tea House, playground for kids, external paddling pool, and small library in the forest. It has been created as a place for children to develop their social skills, emotions, and creativity and for parents to spend time with their children in a safe and convenient way.



Bird’s-eye View of Mom’s Cafe

Install Safety Bus Station

POSCO E&C designs bus stations and waiting stations where people can wait for buses, and bus stops for children to improve transportation convenience and safety. For the safety of children, the company separately provides bus stops for them so that they can wait for school buses inside the station.

Provide Additional Facilities Considering Space and Convenience

For better convenience in daily life, POSCO E&C enhances connectivity between apartment spaces with additional facilities in the apartment complex. The fitness center creates a pleasant environment that is designed to provide good lighting and a beautiful view. A bike station is installed for the security and repair of bicycles in the apartment complex, providing more uses than just bicycle storage.



Bird’s-eye View of Bike Station

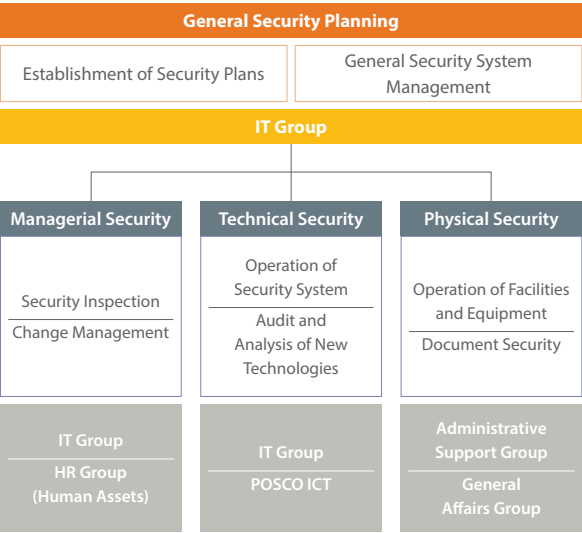
Future Plan

POSCO E&C will help occupants enjoy pleasant and happy lives by developing additional facilities with convergence functions so they can benefit from both convenience and leisure. We will create a place where daily life and cultural life coexist by applying a “Social Garden”, which serves as a venue where the community can enjoy cultural content, garden, place for parties, flower garden, and playground. The company will also provide occupants with beautiful residential areas by creating a Pocket Garden, a story-themed garden, and Memory Hills, where special trees representing the apartments are planted. We plan to create a forest experience school in the apartment complex so that children can live in an eco-friendly space.

Personal Information Protection System

As social issues regarding information protection such as personal information leakage incidents have recently occurred, many companies strive to protect customer personal information. POSCO E&C has also reinforced a system for preventing personal information leakage incidents, acquired the international standard ISO27001 certification, and dealt with external hacking attacks.

Personal Information Protection System



Enhance the Level of Information Security

Conduct Information Protection Audit for POSCO Group Companies

POSCO Group conducts audits for group companies based on the rate of compliance with international standards, results of mock hacking, and the rate of participation a cooperative manner for information protection. In the audit for group company information protection for 2014, POSCO E&C achieved a score of 95.9 through network transmission section encryption (SSL) and personal information guide pop-ups.

Result of Information Protection Audit for POSCO Group Companies (Unit: Score)



Passed the International Standard Certification Evaluation for Information Protection

In 2014, POSCO E&C passed the ISO27001 certification evaluation. This achievement proves that the company established an information protection system suitable for international standards, thus securing a competitive edge in bidding overseas



projects. We have also enhanced our corporate image by establishing a customer centered information protection system.

Install and Improve Security, Reduce Vulnerability

To install and improve security by reducing vulnerability through comprehensive system analysis, POSCO E&C conducted mock hacking and source code audit for 23 web pages. The company carried out checks for possibility of internal information leaks and control of major system by outside hackers; we found 36 cases from mock hacking and 99,509 cases from source code audit, and then reduced these vulnerabilities.

Reinforce Protection and Management of Personal Information

As common houses frequently have different purchasers and actual occupants, POSCO E&C conducts AS tasks after acquiring consent for utilizing personal information from actual occupants. To prevent personal information from leaking, the company protects personal information by applying a policy at a similar level of POSCO E&C’s internal security to PCs that are used in doing tasks for move-in management. We also notify customers about our list of uses for personal information and delete information that is not used for a long time to comply with the Personal Information Protection Act. In 2014, the company conducted examinations for 37 organizations, including responsible departments, sub contracted parties, and drew and improved upon 88 cases of vulnerabilities.

Future Plan

POSCO E&C will strengthen security by conducting personal information encryption for not only existing computing systems but also newly developed systems and implement continuous mock hacking and audit of source code. With the aim of preventing important knowledge assets from leaking, we will establish a monitoring system for internal information leaks and further improve our information security system by performing follow-up review for international security certification. The company will offer training continuously for departments in managing personal information, including business partners, to reinforce security activities.



# Human Resource Management

Boosting executives and employees’ work satisfaction level and improving and sufficiently exercising individual capabilities lead to enhancing the productivity of the entire company. POSCO E&C raises our company’s competitiveness by recruiting personnel in a fair and transparent way and systemically cultivating human resources and establishing labor-management relations in communication and harmony by collecting opinions from executives and employees and operating our welfare system.

### RELATED CSR RISKS

#### Labor-management Relations

Conflicts between the labor union and management and lack of communication can undermine the employees’ work satisfaction level for the company. POSCO E&C pursues smooth and cooperative labor-management relations through various communication activities such as holding a labor-management council on a regular basis.

#### Working Environment

A working environment that respects executives and employees’ human rights and considers a healthy work-life balance can enhance the satisfaction level for the company and create a positive corporate culture. POSCO E&C provides training regarding human rights to guarantee executives and employees’ basic human rights and operates a welfare system for work-life balance.

### 2014 KEY FIGURES



### System for Human Resource Management

POSCO E&C recruits employees suitable for the company’s human resource model. We seek people who are global, creative, and practical, and we foster personnel who have special expertise and lead positive change and innovation through systemic cultivation of human resources.

#### Human Resource Model for Global POSCO



### Implement Fair Recruitment

POSCO E&C establishes and operates a fair and systemic recruitment process to achieve sustainable growth through human resources, which are important assets for corporate development. The company recruits excellent personnel through the first and second interview process each year and selects creative and passionate people through internship recruitment.

#### Human Resource Recruitment Process

Classification	Content
Recruitment of experienced/new employees	Select through open recruitment once each year with first and second interview process
Challenge Internship Program	Operate by dividing into the passion track as a regular type and creativity track for document screening of self-introduction letters

#### Current Status of Personnel (Unit: Person)

Classification		2014
Total employees		4,074
Employment type	Full-time	3,602
	Contract	472
Gender	Male	3,848
	Full-time	3,390
	Contract	458
	Female	226
	Full-time	212
	Contract	14
Age	Under 30	503
	30 to 50	3,073
	Over 50	498
Executives		59
Total workforce		4,133
New employees	Male	62
	Female	4
Retirees	Male	63
	Female	6
Rate of new employees (%)		1.6
Turnover Rate (%)		1.7

### Improve Assessment System

#### Simplify Assessment System

With the aim of easing executives and employees’ burden on assessment and establishing an assessment system that reflects characteristics of the construction industry, POSCO E&C has abolished the existing regular performance management system and simplified our assessment system. The company also performs colleague assessment for employees at the executive and group leader position and above to enhance understanding among colleagues and present appropriate roles and direction for leaders.

#### Introduce Matrix Assessment System

As for sales and PMO (Project Management Office), assessments on cooperation had limitations, even though close cooperation exists between departments and project sites. To address this issue, POSCO E&C has adopted a matrix assessment system to enhance collaboration and match the company-wide direction for matrix groups in need of a close cooperation system between departments with high work relevance. Matrix assessment is reflected in 30% of the final assessment results, and through these efforts, we have boosted collaboration between departments and improved our assessment system.

#### Rate of Implementing Regular Performance Assessment

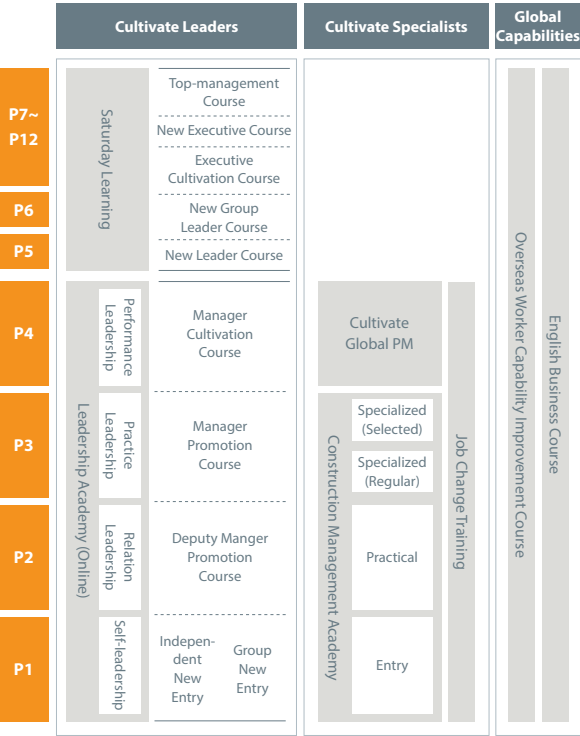
(Unit: %)

Classification	2012	2013	2014
Male	81.1	79.8	95.9
Female	79.3	82.8	92.9
Full-time	96.7	92.6	98.6
Contract	60	69.1	73.9

### Advance Human Resource Cultivation and Management System

POSCO E&C supports executives and employees to grow into specialists in their own sectors by performing systemic training for each level of position. We also provide training programs to help employees to become global leaders by reinforcing global capabilities.

#### System for Cultivating Human Resource



#### Introduce Job Specialist System

POSCO E&C has adopted a job specialist system expanding to the office sector by supplementing the weakness of the existing specialist system (Expert, Master), which was limited to technical work. Based on the dual ladder system, the company divides career growth paths for managerial leaders and specialists and presents a path for executives and employees to achieve the higher position without job appointment. Employees with high possibility to become job specialists are selected and managed as PCP

(POSCO Certified Professional). With personnel-related benefits, selected employees contribute to the company by continuously conducting tasks, creating financial results and jobs in a specific sector with professionalism. After two years, these employees go through the review process.

Change the Position System

In accordance with “Introduction of Group Integrated Position System and HR Advancement,” POSCO E&C has adopted the “P” position system, which is commonly used by all group companies. With this change, the company has prepared a standard for efficient personnel operation, such as personnel exchange between group companies, rewards, and training. In 2015, we will carry out concrete improvement in the system, including promotion, assessment, and reward.

Hours and Expenses for Training

Average training hours per employee (Unit: Hour)



Average training expenditure per employee (Unit: KRW 10,000)



\* Education expenses for each person in 2012 and 2013 are different from the previous report due to the change in the calculation standard.

Support for HR Management at Major Overseas Business Sites

For successful performance of overseas projects, POSCO E&C collects and analyzes labor issues and information in each country from the stage of preparing projects. For newly pioneered countries, newly and jointly pioneered countries, and high-risk countries, the company makes and manages DB for labor issue risks through consulting by external institutions. At the stage of on-site set-up for overseas business sites, we dispatch and support HR specialists to provide immediate support regarding HR management and establish a response system. For the Brazil CSP, a mega-project in an initially pioneered country, we offer support close to the project site to establish the personnel labor standard, support the recruitment of local people, and reinforce local labor-management relations. At the stage of business operation, the company establishes and operates organic work cooperation relations between the relevant department at headquarters and project site in order to recruit and manage the best-quality foreign personnel. Thanks to these efforts, the company prevented

unnecessary labor-management issues in the Formosa Steel Plant Project in Vietnam despite the riot by Vietnamese laborers due to the conflict over territory in the South China Sea between Vietnam and China.

Cultivate Global PM (Project Manager)

As pioneering efforts in the overseas market have expanded, more global project managers with capabilities to carry out overseas projects and manage construction business are required. The company has shifted the existing cultivation system, which focused on fostering SM based on domestic construction, to a global PM cultivation system to carry out the entire process from sales to EPC stage. We reinforced three major capabilities requested from global PMs: business, project business management, and management finance. In 2014, we selected the thirty-one best personnel in each business division and five personnel in sector branches and provided comprehensive learning such as theory for each education stage, practice for roles in non-experienced sectors, and overseas project simulation projects. Based on these efforts, the company has proactively secured global project managers with actual response ability.



Global PM Training

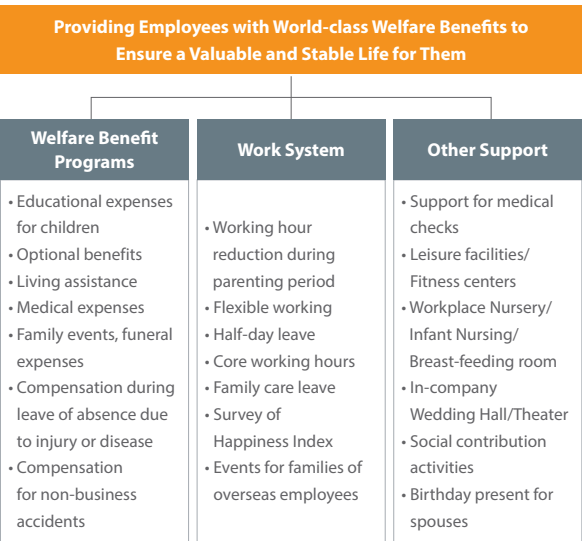
Future Plan

As the position system has changed, the assessment of executives and employees also changed in the direction toward reinforcing differentiation in performance in the overall system, including promotion, assessment, and reward. When it comes to human resource cultivation, we will focus on cultivating global construction leaders who are needed in pioneering the overseas market. To enhance core capabilities in overseas project management, the company will foster core specialists to successfully perform overseas projects by strengthening relevant subjects further such as contract management, claim, and process management. We will also share and spread methods to successfully conduct overseas projects by producing a guideline which reflects the characteristics of each business division and major risks directly by trainees and providing various education programs such as prior training for onsite overseas project workers.

Enhance Satisfaction Level of Executives and Employees

POSCO E&C strives to enhance the quality of life and work satisfaction level of executives and employees through various systems and programs.

Enhance Satisfaction Level of Executives and Employees



Improve Health Management for Executives and Employees

To promote the health of executives and employees, POSCO E&C has developed a health management system in which a massive amount of check-up data, such as targets for medical check-up and medical check-up statistics, can be systemized and managed. Through this system, employees can search for their personal check-up results and manage their health conditions. For all employees, the company conducts regular medical check-up on an annual basis as well as regular treatment with specialists who visit the company. We also support medical check-up for spouses on a biannual basis. Due to the recently tightened non-smoking policy, we have also implemented a non-smoking clinic and provided consultation on smoking cessation and the relevant supplements.

Support for Work-life Balance

POSCO E&C provides various programs such as the flexible working system, family-accompanying system, Family Care Leave System, and operation of daycare center to guarantee time for leisure and with family members and achieve a work-life balance. In December 2013, the company was selected as the “Best Family Friendly Management” based on the Best Family-friendly Management Certification Scheme by the Ministry of Gender Equality and Family. As we began to operate working hour reduction during parenting period, the company not only prevents career interruption for working moms with children

under the age of six, but also lets them spend more time with their children. By operating a workplace nursery for children from ages one to five, we relieve the burden of childcare for dual-income couples and support them in carrying out their jobs both at home and the workplace.

Programs for Supporting Work-life Balance

Classification	Content
Flexible working	Operate the flexible working system, half-day leave, core working hours, and working hour reduction during parenting period
Family-accompanying system	Support accompanying family members of employees who are supposed to work at overseas sites for over one year
Family care leave	Apply for leave for a maximum of 90 days when employees need to care for family members
For POSCO E&C Kidsvill	Operate a workplace nursery for children from ages one to five

Rate of Return to Work after Childcare Leave and Retention (Female) (Unit: Person)

Classification	2012	2013	2014
No. of targets for parental leave rights (No. of employees giving birth in the year)	17	10	12
No. of employees who used parental leave	15	8	12
No. of employees who did not return after parental leave	1	1	0
No. of employees working for over one year after returning to work	5	11	11
Rate of use (%)	88	80	100
Rate of return (%)	92	94	100
Rate of retention (%)	100	100	79

\* Data regarding parental leave are different from the previous report due to change in the calculation standard.

Improve Treatment for Overseas Workers

POSCO E&C strives to boost morale of executives and employees working at overseas project sites by providing customized support in consideration of their demands and the situation at each overseas project site.

Provide Welfare Support for Overseas Workers

POSCO E&C conveys domestic cultural content and news, which are difficult to bring to project sites, for employees working at overseas project sites. We also operate our welfare system by inviting family members to local project sites and supporting leave and board and lodging.



System for Employees Working at Overseas Project Sites
Send POSCO Family Newspaper
Supply books/DVDs to overseas project sites on a quarterly basis
Support IPTV device to help employees to watch TV with Korean
Send CEO letters to employees and family members during national holidays and end of year
Support leave for inviting family members and board and lodging
Supply Korean foods on a quarterly basis

Listen to Opinions from Overseas Workers

In 2014, POSCO E&C conducted labor-management joint onsite visits for isolated overseas sites such as Laos, Myanmar, and Vietnam, while the CEO visited overseas project sites in Southeast Asia, Middle East, and Latin America. Through these visits, the company was able to directly listen to grievances from overseas employees; usually, the opinions of overseas employees are difficult to collect due to geographical characteristics.



CEO Visiting the Construction Site for Angamos Plant, Chile

Provide Support for Later Life

POSCO E&C supports later life by operating a retirement pension system to help executives and employees enjoy leisurely lives after retirement. From 2011, the company has deposited retirees’ severance pay into a total of 16 financial institutions and managed and paid this money in a safe manner. As the Defined Benefit Retirement Pension (DB) system is currently in operation, we will introduce the Defined Contribution Retirement Pension (DC) system, depending on the stabilization of the retirement pension system.

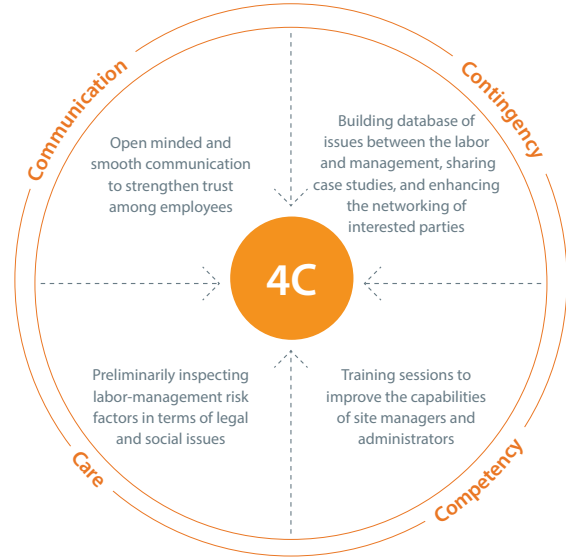
Future Plan

POSCO E&C will increase support for employees’ health management. The company prepares operation of programs for

stress and depression for physical and mental health management. The company will also proactively implement emotional communication with employees (sending a congratulatory message and flowers for female employees giving birth, SMS for employees with family events, and messages of appreciation for family members of overseas workers), which has been carried out since 2014.

System for Labor-Management Harmony

Stable labor-management relations based on communication and respect help to address conflicts smoothly, create a cooperative work atmosphere, boost productivity, and ultimately become the basis for sustainable development. POSCO E&C builds healthy labor-management relations based on 4C, which stands for Care (Pre-inspection), Communication, Competency (Labor-management capabilities), and Contingency (Crisis management).



Vitalize Labor-Management Communication

Collect Opinions from Executives and Employees

To vitalize labor-management communication by collecting opinions from executives and employees, POSCO E&C operates a regular Labor-Management Council meetings on a quarterly basis and explains issues regarding management to employee representatives. When it comes to issues that require the collected opinions from executives and employees, the company regularly holds consultations through a representative agency (labor-management council, labor union) and collects various opinions through other channels such as regular meetings.

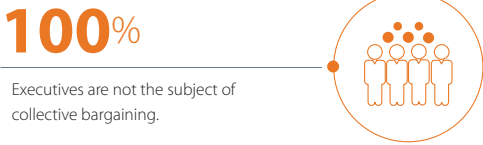
Other Activities to Collect Opinions from Executives and Employees

Classification	Content
Joint visits to project sites	Collect opinions by visiting sites with poor working conditions
Joint events	Encourage communication between the management and employees by holding various events
Operate internal pseudonym bulletin board	Reply to suggestions and inquiries by relevant departments as a channel for collecting opinions from employees



POSCO E&C Communication Forum

Collective Bargaining Application Rate



Deal with Grievances from Executives and Employees

POSCO E&C collects and deals with grievances from not only employees but also external stakeholders through the Online Reporting Bulletin. By operating an in-company pseudonym bulletin board, the company proactively collects employees’ grievances, suggestions for improvement, inquiries, and proposals for the company’s development and strives to reflect these messages in the company policy. As for opinions reported on the in-company bulletin board, we strive to give a reply within three days to ensure that employees’ complaints are treated swiftly and smoothly. In 2014, 247 cases of opinions in various sectors such as administration, HR, and IT were posted, and replies were given within 1.9 days on average.

Current Status of Dealing with Grievances from Executives and EmployeesGrievances from Executives and Employees

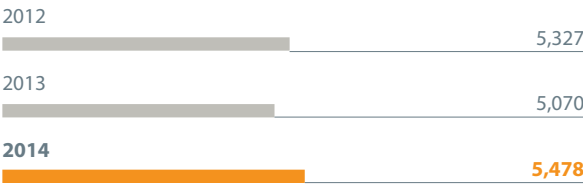


Respect Executives and Employees’ Human Rights Prevent Sexual Harassment

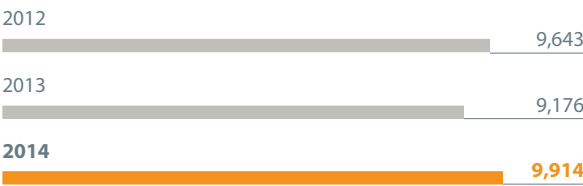
To prevent issues regarding sexual harassment, POSCO E&C has stipulated the prohibition of sexual harassment in the code of ethics and had all executives and employees strictly comply with it. Employees who violated this code are summoned by the personnel committee, and disciplinary actions such as dismissal and suspension are imposed, depending on the level of behavior. At the same time, when victims want to protect their identities, the company protects the executives and employees’ human rights by presenting alternatives such as transfer of department. Disciplinary actions due to sexual harassment over the past three years were carried out in two cases in 2013 and one case in 2014.

Current Status of Education for Preventing Sexual Harassment

Number of Participants (Unit: Person)



Training Hours (Unit: Hour)



Future Plan

To maintain sound labor-management relations based on communication, POSCO E&C will continuously hold joint events, regular councils, and meetings. We will also enhance the executives and employees’ satisfaction level by collecting their grievances and opinions through various channels such as our internal pseudonym bulletin board.



# Social Contribution

Activities for local communities contribute to developing areas where companies belong, help them to grow together with stakeholders, and enhance positive corporate images. POSCO E&C proactively offers help to places in need through strategic and systemic social contribution activities that reflect our business characteristics.

## RELATED CSR RISKS

### Address Issues of Local Communities

When social issues in local communities, which can happen in the business process, are not addressed, problems can occur in the successful performance of business. POSCO E&C identifies potential social issues in areas near domestic and overseas project sites, deals with these issues preemptively, and forms favorable relations with local communities through continuous social contribution activities, such as cultural exchange and support for education facilities. As a member of our local communities, we constantly make great efforts to deal with local issues.

## 2014 KEY FIGURES

28.5hours

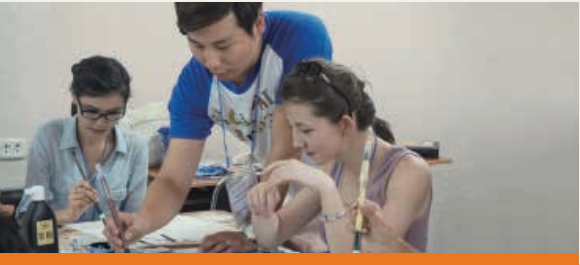
Hours of voluntary work for each executive and employee

KRW 540million

Total amount of donations by executives and employees through the 1% Sharing Campaign

MOU

Korea Foundation under the Ministry of Foreign Affairs



### System for Social Contribution Activities

POSCO E&C sets and operates the strategic direction for social contribution activities in each sector in line with domestic and overseas CSR trends and business characteristics. As a global company, we also reinforce overseas social contribution to proactively respond to CSR requests from local sites and owners.



### Spread of Donation Culture

POSCO E&C expands in-company sharing culture and helps the disadvantaged through not only company-wide donation but also voluntary donation by executives and employees.

### Implement the 1% Sharing Campaign

Since 2011, POSCO E&C has continuously engaged in the 1% Sharing Campaign, which is led by the POSCO Family. Through this activity, the company has vitalized in-company donation culture by encouraging executives and employees to participate in the activity voluntarily. The funds raised by this collection are used for various social contribution activities for local communities. In 2014, we conducted various activities for supporting local children centers, emergency relief, cold protection kits, vocational education for multicultural families, cultural sharing, and helping the disadvantaged with the funds raised in 2013. The total contribution in 2014 was KRW 1.08 billion, including contributions from executives and employees and the company matching grant funds. For efficient management and transparent use, these funds are used to support the disadvantaged at home and abroad through the POSCO 1% Sharing Foundation, established by the POSCO Family.

### Projects Utilizing the 1% Sharing Campaign Funds (2014)

**Support local children centers**

- Provide 50 local children centers in Incheon with support fund
- Conduct mentoring volunteer work by executives and employees
- Hold a choir competition for children with executives and employees

**Support emergency relief and cold protection kit**

- Produce and support emergency kit for domestic and overseas victims
- Supply 103 sets of cold protection kit during winter for the disadvantaged

**Support vocational education for multicultural families**

- Launch and operate multicultural children supporters for Incheon Asian Games
- Operate vocational education for female multicultural marriage migrants and young people

**Cultural sharing and support the disadvantaged**

- Convey presents in love for the disadvantaged in Chuseok holiday
- Hold a cultural concert and carry out volunteer activities for residents of Seokmodo Island
- Share briquettes with love

### Activities for Supporting the Local Disadvantaged

Since the foundation of POSCO E&C Social Volunteer Group in 2004, POSCO E&C has supported the disadvantaged in local communities through various social contribution activities with executives and employees. In 2014, the company contributed to addressing local community issues through various activities such as supporting local children centers, which is the company's representative social contribution activity, supporting multicultural families and carrying out activities for fire prevention and improving the residential environment.

### Operate Multicultural Children Supporters for Incheon Asian Games

In 2014, POSCO E&C launched and operated the program in which multicultural children cheered and performed in the



Parade to Wish for the Success of the Incheon Asian Games by Multicultural Children Supporters

Incheon Asian Games. Composed of 50 multicultural children living in Incheon, these supporters carried out performances to wish for the success of the Asian Games, cheered in the Asian Games, and held a parade at the Opening Ceremony to cultivate Korean pride and a sense of community and make it a special occasion to treasure in one's memory.

### Support Local Children Centers

Since 2010, 50 departments of POSCO E&C have made one & one ties with 50 local children centers in Incheon and provided support for various activities. As employees visit children centers from one to four times a month, they implement mentoring activities such as learning instruction for children and provide support for special activities such as attending concerts, physical education, five mandatory education for children, and leisure activities. In 2014, we continuously held a Children's Choir Competition for local children centers in Incheon, held since 2012, to boost communication between children at local children centers and POSCO E&C's executives and employees and promote emotional support and a sense of community.

### Prevent Fire and Improve Living Environment

With the aim of preventing fires due to poor safety facilities and promoting residential stability for the disadvantaged, POSCO E&C conducted activities for preventing fires and improving the residential environment with the Central Fire Service of the Ministry of Public Safety and Security. Through joint activities with nationwide project sites of POSCO E&C and fire stations in each region, the company carried out various activities such as checks for decrepit electricity facilities, repairs of internal facilities, providing suppliers for firefighting and safety, and supporting subscription of housing fire insurance. Through these efforts, we provided 40 disadvantaged households, which were exposed to fire risk, with a much safer residential environment.

### Produce Emergency Relief Kit in Preparation for Disasters

The POSCO E&C Volunteer Corps produces 1,000 sets of emergency relief kits in cooperation with Hope Bridge Korea Disaster Relief Association to prepare for damage caused by disasters. The emergency relief kit, which can be immediately used by victims, is composed of 19 types of daily supplies such as



Produce Emergency Relief Kits in Preparation of Disasters

medicine, blanket, underwear, detergent, and towel. In case of disaster, kits are distributed to the disaster site or transported to marginalized people in areas near POSCO E&C's overseas project sites. Kits produced in 2014 were supplied to 700 household units for victims in Gijang-gun, Busan, while the remaining 300 sets were sent to 300 disadvantaged households near Dong Nai, Vietnam.

Hold Cultural Concerts for Villages on Islands

POSCO E&C held a cultural concert with the talent donation of the volunteer corps by dispatching the POSCO E&C Volunteer Corps and Happy Builder, our college student volunteer corps, to Seokmodo Island, a place where it is difficult to enjoy cultural benefits due to its remoteness. We also visited the elderly who live alone and find it difficult to move, gave supplies for daily life, and conducted volunteer activities to provide a sense of companionship for the lonely. The company carried out other various activities for residents on Seokmodo Island, including support for career exploration program for young students.



01



02



03

01. Medical Aid in Vietnam  
02. Social Contribution Activity in Myanmar  
03. Social Contribution Activity for Public Diplomacy in Uzbekistan

Social Contribution Activities for Overseas Project Sites Support

Based on overseas project sites POSCO E&C realizes continuous sharing by carrying out social contribution activities suitable to the needs of each country, including cultural exchange activities, medical support, and operation of vocational schools.

Cultural Exchange for Overseas Project Sites and Activity for Supporting Education Facilities

After signing an MOU with the Ministry of Culture, Sports, and Tourism in 2012, POSCO E&C has conducted overseas social contribution activities each year; in 2014, by focusing on Happy Builder, college student volunteer group, the company carried out various activities to inform local communities near project sites in Myanmar and Chile about Korean culture. For local young people, we operated a cultural school with K-pop, choir, art class, dance, computer, and taekwondo activities and Korean traditional culture experiences. We also supplied books at this school, and held a contest for book reports. The cultural concert with Happy Builder and local volunteers especially enhanced mutual understanding with the locals.

The company installed a multimedia room where people can experience Korean culture content and provide computer education in Myanmar, Mongol, and Chile to improve the education environment for young local people.

Social Contribution Activity for Public Diplomacy

In 2014, POSCO E&C signed an MOU for overseas social contribution activities and public diplomacy with the Korea Foundation under the Ministry of Foreign Affairs. Based on this agreement and cooperation with the Korea Foundation, Happy Builder, which is a college student volunteer corps, and 50 volunteers selected in Uzbekistan carried out "Global Bridge," a social contribution activity for public diplomacy, in Korea and Uzbekistan. Through this activity, we not only promoted Korean traditional and popular culture in Uzbekistan and boosted exchange between our two countries, but also invited local volunteers to Korea and provided them with the opportunity to experience Korean culture.

Medical Aid for Overseas Isolated Areas

In cooperation with Inha University Hospital since 2011, POSCO E&C has offered professional medical service to residents in countries that are isolated from medical benefits due to insufficient medical infrastructure and economic hardship. In 2014, the company carried out medical support activities in Ha Tinh, Vietnam with Inha University Hospital, Incheon Yeonsu-gu Medical Association, and the Salvation Army Korea. For 1,500 residents in three villages of Ha Tinh, we provided treatment and medical aid in various sectors such as family medicine, ophthalmology, surgery, orthopedics, and pain clinic and provided 53 residents with the opportunity to be treated for cataracts through ophthalmic treatment.

Welder Training Center in Vietnam

As POSCO E&C was selected for the global CSR program hosted by the Korea International Cooperation Agency (KOICA) in December 2012, the company has continuously operated a Welder Training Center established by POSCO E&C Vietnam in 2013.

Social Contribution Activities for the Last Three Years

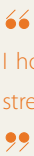
Classification	Country	Support
2012	Vietnam	• Medical aid, support for school renovations • Support for multimedia rooms, held cultural exchange festivals • Provided supplies for the disadvantaged
	Chile	• Provided supplies for the disadvantaged
	Indonesia	• Support for renovating schools • Support for multimedia rooms, held cultural exchange festivals
	Brazil	• Support for multimedia rooms
	Laos	• Support for renovating schools • Support for multimedia rooms, held cultural exchange festivals • Provided supplies for the disadvantaged
2013	Kazakhstan	• Support for renovating schools • Support for multimedia rooms, held cultural exchange festivals
	Vietnam	• Medical aid, established and operated welding schools
	Ecuador	• Support for multimedia rooms
2014	Myanmar	• Support for multimedia rooms, held cultural exchange festivals
	Mongol	• Support for multimedia rooms
	Chile	• Support for multimedia rooms, held cultural exchange festivals
	Vietnam	• Medical aid, provided supplies for the disadvantaged
	Uzbekistan	• Established local conference rooms, held cultural exchange festivals • Personal exchange programs such as activities for inviting to Korea

With this center established to help low-income young people in Dong Nai, Vietnam to achieve economic independence, we provided a total of 141 persons with systemic welding theory and practical education for two years and six months. As more than 90% of the trainees are employed by the industrial complex in POSCO E&C Vietnam and local companies, they contribute to vitalizing the local economy. With this performance recognized, the company received the Chairman of the People Prize in the sector for contribution to the local economy by the local government (people's council of the Nhon Trach District).

Future Plan

In 2015, POSCO E&C will reinforce overseas social contribution activities with the characteristics of the construction industry and specialties of cooperative institutions in connection with the Korea Foundation for International Culture Exchange and Korea Foundation. We will also return executives and employees' capabilities and talents acquired through the work for the local communities by launching a volunteer corps for talent donation. The company will spread an in-company sharing culture by expanding volunteer activities by executives and continuously participating in the 1% Sharing Campaign. POSCO E&C will carry out sharing management and grow together with local communities through sincere social contribution activities that are more than one-time activities and are done from the perspective of the beneficiaries.

Interview



I hope that continuous social contribution activities for public diplomacy lead to enhancing the national status and strengthen companies so that they can pioneer the global market."



As Korean culture has become more popular, the global community's interest in Korea is also increasing. Companies such as POSCO E&C, which conduct business in various countries, will put greater emphasis on the importance of building relations through exchange with countries. The business agreement for overseas social contribution activities for public diplomacy between Korea Foundation and POSCO E&C signifies that POSCO E&C has recognized the current situation and reflects its willingness to communicate with would-be project sites. This business agreement has significance in that public institutions and companies can utilize their different capabilities as much as possible to promote Korean culture and arts and carry out various social contribution activities based on these efforts to enhance the positive images of Korea. I hope that continuous social contribution activities for public diplomacy lead to enhancing the national status and strengthen companies so that they can pioneer the global market.

Seong-Gi Mun, Culture & Arts Department, Korea Foundation



# Win-win Growth

Our business partners’ stable growth and remarkable technology are important to POSCO E&C’s business competitiveness. Problems such as inferior quality can happen if we neglect the management of potential risks or do not proactively provide support. To ensure Win-Win growth with business partners, POSCO E&C establishes fair trade relations and strives to give various forms of support.

### RELATED CSR RISKS

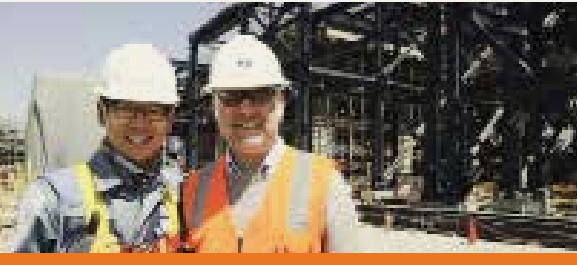
#### Management of Environment, Safety, and Health for Business Partners

Because cooperation with our business partners is integral in the construction industry, their management of environment, safety, and health directly affects POSCO E&C’s performance. We therefore provide our support through training and assessment to improve our business partners’ CSR level, including environment.

#### Business Partner Worker’s Human Rights

Smaller business partners tend to have less awareness of workers’ human rights, leading to workers’ rights problems at some of our business partner’s project sites. POSCO E&C thus enhanced our business partners’ awareness of human rights. We also include human rights provisions in all contracts and provide relevant training at project sites.

### 2014 KEY FIGURES



### Win-win Growth System

For win-win growth with business partners, POSCO E&C has set four major directions—Fair Trade, Financial Support, Technical Support, and Education Support—and helped business partners to stand on their feet and grow for themselves based on these directions.



### Win-win Growth through Mutual Cooperation

#### Fair Trade

For fair and transparent trade with business partners, POSCO E&C has launched four major guidelines and opened them on the company’s procurement portal website. The company also uses the standard subcontract to settle a fair trade order.

Four Major Guidelines for Fair Trade
Guideline on desirable conclusion of contract for mutual cooperation between large companies and SMEs
Guideline on desirable issuance and preservation of written statements in subcontracts
Guideline on fair selection (registration) of business partners
Guideline on installation and operation of the internal review committee for subcontracts

### Financial Support

POSCO E&C supports commission for guarantee to reduce financial expenses by SMEs, while business partners receive support from financial institutions through Network Loan. The company has also supported Innovation Industry 3.0 after concluding an agreement for a win-win growth investment fund with the Korea Commission for Corporate Partnership and consulted about financing investment funds worth KRW 22 billion by developing types of benefit sharing compensation suitable for construction companies.

#### Performance of Financial Support (Unit: KRW 100 million)

Classification	Content
Support commission for guarantee	7.1
Support Performance Compensation	134.4
Win-win Growth Fund	366.0
Investment fund for win-win growth	3.2

### Technical Support

POSCO E&C prepares registration and commercialization of common patents for technology jointly developed by business partners. We provide technical support to give development expenses through the Small and Medium Business Administration and guarantee procurement by POSCO E&C for a certain period of time. As a company with a certified benefit sharing system, we conduct tasks such as development of joint technology with SMEs and share such performances. In 2014, the company performed 15 cases of tasks with 13 companies and provided SMEs with procurement reward worth KRW 13.4 billion.

#### Performance of Technical Support

Classification	Performance
Joint R&D	9 cases for 12 companies
Apply and register common patents	27 cases
Transfer technology with owned patent	20 cases for 23 companies
Operate Benefit Sharing System	15 cases for 13 companies
Provide free technology consulting and research facilities	6 cases for 9 companies

### Education Support

To improve the technological competitiveness of business partners, POSCO E&C implements “Job Training Consortium Education for SMEs” to provide customized education design such as technology, IT, and management office tasks. With the aim of preventing unethical practices by business partners, we also conduct education for corporate ethics and implement safety management training to improve safety management. Moreover, we have engaged in Industry Innovation 3.0 and supported innovation activities such as identifying managerial issues and helping to address them. As a result of listening to

opinions from companies participating in Industry Innovation 3.0, we received criticism over insufficient customized consulting for each company. To improve this issue, POSCO E&C offered manufacture site innovation consulting (QSS), which is necessary for SMEs, through agreement with the POSCO Human Resource Development Center and supported SMEs to ensure practical and efficient innovation management.

#### Performance of Education Support



### Reinforcement of Human Rights Management by Business Partners

To reinforce human rights management by business partners, POSCO E&C includes provisions on human rights protection and applies them to all contracts, reflecting global standards such as the Universal Declaration of Human Rights, Guiding Principles on Business and Human Rights, ILO, and ISO26000. Provisions on human rights protection are applied in the same way to all domestic and overseas projects with business partners, all overseas subsidiaries, branches, and offices of POSCO E&C.

#### Number and Percentage of Important Investment Contracts Containing Human Rights Articles or Conducting Human Rights Inspection (Unit: Case)

Classification	2014
No. of agreements or contracts with significance in the aspects of volume and strategy	3,241
No. of contracts conducting human rights inspection or containing human rights articles	1,096
(No. of contracts concluded after August 2013)	
Percentage (%)	33.8



CSR Management for Business Partners

POSCO E&C improves business partners’ capability of CSR management so that they can fulfill their social responsibilities and achieve sustainable development. As business partners’ safety, environment management, and quality level are included in the performance assessment items and the best business partners are selected and supported depending on assessment results, we are able to further reinforce their sustainability. In 2014, 105 business partners participated in the 1% Sharing Campaign, which used to only be implemented for executives and employees, and carried out social contribution activities together.

Reinforcement of Communication with Business Partners

Smooth communication with business partners can prevent potential risks in business performance and enhance their satisfaction level. POSCO E&C holds meetings, inviting business partners to listen their opinions and grievances, and conducts regular survey on business partners’ satisfaction level to reflect the results to the future direction of win-win growth. We also operate a consultation center for dealing with grievances from SMEs to swiftly handle inconveniences experienced by our business partners and provide an efficient procurement service.

Future Plan

To promote coexistence with business partners through fair and ethical trade, POSCO E&C will change the existing “Four Major Guidelines for Fair Trade” into “Four Major Items for Practice”. The company will also insert and improve the regulations of “Prohibition of Unfair Special Contract” in the practical item for conclusion of contract. We will also achieve win-win growth by providing various financial, technical, education, and managerial support for raising the competitiveness of our business partners. The company will enhance the sustainability of business partners by selecting the best business partners and conducting assessment of business partners on a regular basis. We will also improve their satisfaction level by operating a consultation center for dealing with grievances from SMEs.

Focus

Detailed Plan on Support for Business Partners in 2015

In 2015, POSCO E&C will help business partners to achieve management innovation by supporting QSS innovation consulting, providing investment finance for Industry Innovation 3.0, and operating Win-win Growth Supporters continuously. We will also carry out more systemic and professional win-win growth activities by operating a department in charge of win-win growth tasks. In addition, the company plans to offer financial support worth KRW 45.6 billion, including providing fi-

nances for technical development and investment in Industry Innovation 3.0 and a benefit sharing system, and support the win-win growth fund. We will also ease the financial burden of business partners by setting the cash payment ratio at 100% and improving the date of payment. We will expand technical support such as joint R&D, application and registration of joint patent, and the benefit sharing system.

Plan for Technical Support

Classification	Performance
Joint R&D	10 cases for 10 companies
Develop new products on the condition of procurement	5 cases for 5 companies
Apply for and register joint patent	28 cases
Transfer owned technology	21 cases for 21 companies
Benefit sharing system	16 cases for 16 companies
Techno-partnership	8 cases for 10 companies

Plan for Financial Support

Classification	Performance
Direct support	KRW 11.3 billion
Indirect support	Network Loan contract
Special support	KRW 3.8 billion
Combined support	KRW 30.5 billion
Total	KRW 45.6 billion

Case Study

Activities for Supporting Growth of Business Partners

POSCO E&C has recognized the fact that improving technical power and raising the competitiveness of business partners leads to raising its own competitiveness and operated various win-win growth programs to support technology for business partners and increase sales. As part of these efforts, the company has participated in Industry Innovation 3.0 by the Ministry of Trade, Industry, and Energy and provided business partners with support for their voluntary innovation. We also provide customized support as POSCO E&C’s executives visit business partners for themselves, listen to grievances, and present solutions by operating Win-win Growth Supporters. POSCO E&C will further strive to build trust to overcome difficulties with business partners.

Case for Industry Innovation 3.0 – Ujin Foam Tech Co., Ltd.

POSCO E&C has perfectly operated 3-rightness\* and 5S\*\* by applying resources owned by Ujin Foam Tech as efficiently as possible through Industry Innovation 3.0 and carried out innovation activities such as addressing the environmental and safety issues at worksites. We also shared successful cases of other companies and encouraged Ujin Foam Tech’s executives and employees to participate in innovation activities voluntarily. Thanks to these efforts, we were able to achieve tangible progress in various sectors, including reduction in production errors and improvement in the working environment.

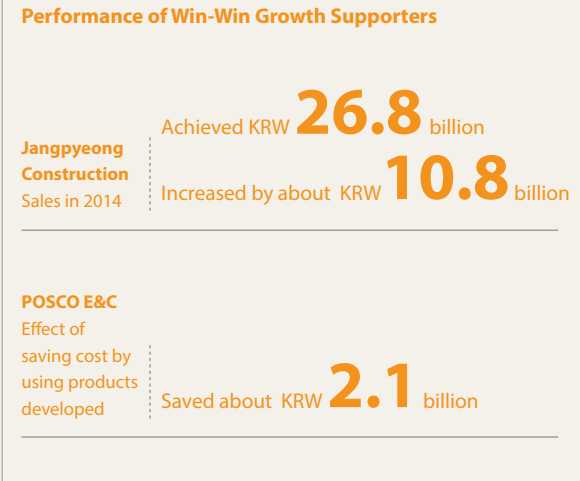
\*3-rightness: Right amount, Right location, and Right container  
\*\*5S: Organization, Arrangement, Cleaning, Cleanliness, and Habit Forming



Performance of Industry Innovation Movement 3.0				
Goal	Level before improvement	Goal for improvement	Performance of improvement	Compared to the goal
Improve production errors	KRW 30 million	KRW 0	KRW 0	100% ↑
Reduce waste by improving the working environment for the painting process	KRW 55 million	KRW 30 million	KRW 12 million	180% ↓
Save transportation expenses by optimizing package units	KRW 80 million	KRW 68 million	KRW 24 million	467% ↓
Establish 3-rightness-5S	-	50 cases	60 cases	120% ↑
Improve the process for company-wide tasks	-	30 cases	34 cases	113% ↑

Case of Operation of Win-Win Growth Supporters – Jangpyoung Construction Co., Ltd.

POSCO E&C carries out win-win growth activities with executives engaged together through Win-win Growth Supporters. In 2014, we conducted design support and technology review for new construction methods jointly developed by Jangpyoung Construction, applied these new construction methods to POSCO E&C’s project sites on priority basis, and implemented technology promotion. As a result, Jangpyoung Construction achieved better performance such as securing unique technology and a direct increase in sales, while POSCO E&C raised business competitiveness by reducing onsite costs.



# APPENDIX

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Awards & Association Membership	82

Northeast Asia Trade Tower in Incheon Songdo International City (NEAT TOWER)

## Financial Information

Consolidated Statement of Financial Position (Unit: KRW)

Item	2012	2013	2012
Assets			
I . Current assets	7,431,661,572,870	6,709,778,205,609	5,829,020,082,106
Cash and cash equivalents	954,069,813,437	1,021,637,150,821	370,766,199,255
Account receivable	1,868,336,452,908	1,834,813,198,062	2,067,723,471,591
Other financial assets	555,632,254,290	529,600,229,206	531,935,460,000
Unclaimed construction property	1,892,632,960,196	1,300,544,788,799	1,180,734,916,886
Inventories	1,260,848,092,450	1,124,817,872,500	1,070,019,039,431
Current income tax assets	6,260,207,822	13,923,523,918	22,420,872,525
Other current assets	893,881,791,767	884,441,442,303	585,420,122,418
II . Non-current assets	1,769,101,788,882	1,931,843,181,998	2,537,244,632,908
Investments in associates	113,714,140,312	117,876,566,517	112,651,783,891
Non-current account receivables	1,419,986,358	3,287,389,213	6,633,520,813
Other non-current financial assets	441,633,530,096	454,162,477,047	557,126,006,444
Tangible assets	400,014,289,351	439,046,779,354	196,550,542,427
Investments in real estate	272,281,713,952	265,186,808,866	787,721,293,971
Intangible assets	306,145,086,192	310,540,415,687	473,918,546,327
Deferred income tax assets	223,388,521,482	302,469,191,939	361,159,954,466
Other non-current assets	10,504,521,139	39,273,553,375	41,482,984,569
Total assets	9,200,763,361,752	8,641,621,387,607	8,366,264,715,014
Liabilities			
I . Current liabilities	4,969,750,155,983	4,735,004,281,122	4,059,558,170,297
Account payables	1,502,717,886,352	1,047,492,876,800	1,072,218,046,110
Borrowings	547,986,048,104	776,137,902,605	595,769,132,046
Other financial liabilities	542,438,364,463	709,883,828,175	763,452,596,469
Prepaid construction property	372,479,969,414	811,189,530,794	898,885,985,466
Current income tax liabilities	82,583,178,959	98,930,254,577	14,322,641,744
Provisions	25,819,056,914	44,762,078,425	9,965,069,522
Other current liabilities	1,895,725,651,777	1,246,607,809,746	704,944,698,940
II . Non-current liabilities	1,402,228,592,030	960,138,162,532	1,320,802,991,667
Non-current account payables	-	558,676,585	88,469,261,204
Non-current borrowings	914,712,373,583	542,811,665,744	907,095,440,245
Other non-current financial liabilities	54,708,041,242	29,770,976,405	43,976,587,597
Net defined benefit liabilities	45,047,660,616	67,864,942,364	65,392,712,603
Provisions	61,160,580,973	101,133,905,334	93,046,351,017
Deferred income tax liabilities	13,931,509,664	16,565,928,900	14,326,636,807
Other non-current liabilities	312,668,425,952	201,432,067,200	108,496,002,194
Total liabilities	6,371,978,748,013	5,695,142,443,654	5,380,361,161,964

Consolidated Statement of Financial Position (Unit: KRW)

Item	2012	2013	2014
Capital			
I . Equity attributable to the owner of the parent	2,786,432,584,408	2,894,059,135,717	2,948,386,191,999
Issued capital	183,615,000,000	183,615,000,000	183,615,000,000
Capital surplus	761,864,652,020	757,934,439,797	749,388,414,043
Reserves	-45,724,310,781	-48,307,688,274	-46,224,243,306
Retained earnings	1,886,677,243,169	2,000,817,384,194	2,061,607,021,262
II . Non-current interests	42,352,029,331	52,419,808,236	37,517,361,051
Total equity	2,828,784,613,739	2,946,478,943,953	2,985,903,553,050
<b>Total capital and liabilities</b>	<b>9,200,763,361,752</b>	<b>8,641,621,387,607</b>	<b>8,366,264,715,014</b>

Consolidated Statements of Comprehensive Income (Unit: KRW)

Item	2012	2013	2014
I . Sales	8,612,278,749,614	10,131,367,040,236	9,580,583,545,954
II . Cost of sales	-7,873,735,835,805	-9,263,811,875,157	-8,853,762,616,913
III . Gross profit	738,542,913,809	867,555,165,079	726,820,929,041
IV . Selling and administrative expenses	-429,325,720,122	-432,208,694,601	-403,827,231,663
Administrative expenses	-369,822,670,767	-387,890,358,492	-347,290,156,050
Selling and logistics expenses	-59,503,049,355	-44,318,336,109	-56,537,075,613
V . Operating profit	309,217,193,687	435,346,470,478	322,993,697,378
VI . Gain (loss) on investments in associates (net)	-33,340,149,910	-11,376,675,031	-8,471,404,052
VII . Financial income (loss, net)	76,894,374,450	-71,090,872,246	-115,080,962,118
Financial income	346,923,758,152	284,742,869,201	177,414,173,924
Financial cost	-270,029,383,702	-355,833,741,447	-292,495,136,042
VIII . Other non-operating income (loss, net)	14,042,414,575	-123,958,132,680	-145,984,584,841
Other non-operating income	62,983,379,483	48,006,068,640	41,473,644,847
Other non-operating costs	-48,940,964,908	-171,964,201,320	-187,458,229,688
IX . Profit for the period from continuing operations before deducting corporate tax	366,813,832,802	228,920,790,522	53,456,746,367
X . Corporate tax for continuing operations	-100,648,992,311	-91,283,662,057	-44,040,418,764
XI . Net profit for continuing operations	266,164,840,491	137,637,128,465	9,416,327,603
XII . Net profit for interrupted operations	13,367,959,885	9,529,867,287	63,341,600,450
XIII . Net income	279,532,800,376	147,166,995,752	72,757,928,053

Consolidated Statements of Comprehensive Income (Unit: KRW)

Item	2012	2013	2014
XIV . Other comprehensive income and loss (net)	-37,671,110,705	-2,816,715,735	11,951,094,885
1. Items that will not be reclassified to profit or loss	-9,222,852,636	-289,650,910	190,425,530
Actuarial gains and losses on post defined benefit pension plans	-9,222,852,636	-289,650,910	190,425,530
2. Items that will be reclassified to profit or loss	-28,448,258,069	-2,527,064,825	11,760,669,355
Net gain and loss on available-for-sale financial investments	-5,559,366,545	-4,112,709,377	2,011,086,629
Net income reclassification adjustment	551,534,969	21,020,741,139	4,199,295,148
Equity adjustments in equity method	-3,618,817,374	-80,751,177	1,019,595,272
Exchange differences on translation of foreign operations	-19,821,609,119	-19,354,345,410	4,530,692,306
XV . Total comprehensive income for the year	241,861,689,671	144,350,280,017	84,709,022,938
Net income attributable to:	279,532,800,376	147,166,995,752	72,757,928,053
The owner of the parent	289,260,849,854	143,416,083,317	78,619,786,148
Net profit of continuing operations	280,287,763,163	137,853,712,236	18,566,103,213
Net profit of interrupted operations	8,973,086,691	5,562,371,081	60,053,682,935
Non-controlling interests	-9,728,049,478	3,750,912,435	-5,861,858,095
Net losses of continuing operations	-14,122,922,672	-216,583,771	-9,149,775,610
Net profit of interrupted operations	4,394,873,194	3,967,496,206	3,287,917,515
Total comprehensive income attributable to:	241,861,689,671	144,350,280,017	84,709,022,938
The owner of the parent	253,741,712,852	140,574,269,148	88,667,608,281
Non-controlling interests	-11,880,023,181	3,776,010,869	-3,958,585,343
Earnings per share of the owner of the parent			
Basic and diluted earnings per share	7,877	3,905	2,141
Operating profits of continuing operations for basic and diluted earnings per share	7,633	3,754	506
Operating profits of interrupted operations for basic and diluted earnings per share	244	151	1,635



## GRI G4 Index

POSCO E&C has written this report by applying the GRI (Global Reporting Initiative) G4 Guideline Core Standard.

### General Standard Disclosures

Category	Index	Description	ISO 26000	Page
Strategy and Analysis	G4-1	CEO Message	6.2	4-5
Organizational Profile	G4-3	Name of the organization		6
	G4-4	Primary brands, products, and services		6
	G4-5	Location of the organization's headquarters		6
	G4-6	Number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report		7
	G4-7	Nature of ownership and legal form		6-7
	G4-8	Markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries)		6-7
	G4-9	Scale of the organization		6
	G4-10	Status of employment type, contract, and region		59
	G4-11	Percentage of total employees covered by collective bargaining agreements	6.3.10, 6.4, 6.4.3, 6.4.4, 6.4.5	63
	G4-12	Major characteristics of the supply chain with regard to major activities, products, and services by the reporting organization		68-71
	G4-13	Significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain		10
	G4-14	Precautionary approach or principle is addressed by the organization		18-23
	G4-15	Externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses	6.2	81
	G4-16	Memberships of associations (such as industry associations) and national or international advocacy organizations		82
Identified Material Aspects and Boundaries	G4-17	List of all entities including the organization's consolidated financial statements or equivalent documents	6.2	7
	G4-18	Process for defining the report content and the Aspect Boundaries		16-17
	G4-19	Material Aspects identified in the process for defining report content		16-17
	G4-20	Aspect Boundary within the organization		76-77
	G4-21	Aspect Boundary outside the organization		76-77
	G4-22	Effect of any restatements of information provided in previous reports, and the reasons for such restatements		60, 61
	G4-23	Significant changes from previous reporting periods in the Scope and Aspect Boundaries		Inner page of the front cover
Stakeholder Engagement	G4-24	List of stakeholder groups engaged by the organization	6.2	14-15
	G4-25	Basis for identification and selection of stakeholders with whom to engage		14-15
	G4-26	Organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process	6.2	14-15
	G4-27	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting		14-15
Report Profile	G4-28	Reporting period (such as fiscal or calendar year) for information provided		Inner page of the front cover
	G4-29	Date of most recent previous report (if any)		Inner page of the front cover
	G4-30	Reporting cycle (such as annual, biennial)		Inner page of the front cover
	G4-31	Contact point for questions regarding the report or its contents		3
	G4-32	The 'in accordance' option the organization has chosen		76-77
	G4-33	Organization's policy and current practice with regard to seeking external assurance for the report	07.5.3	78-79
	G4-34	Governance structure of the organization, including committees of the highest governance body	6.2	10
	G4-56	Internally arranged mission, core value, code of conduct, and principles regarding economic, environmental, and social performance and activities		12-13

### Specific Standard Disclosures

Category	Description	ISO 26000	Reporting page or contents	Boundary
Economic Performance	Generic DMA		28	POSCO E&C
EC1	Direct economic value generated and distributed	6.8, 6.8.3, 6.8.7, 6.8.9	73-75	
Indirect Economic Effect	Generic DMA & Aspect-Specific DMA		64-67	POSCO E&C,
	Development and impact of infrastructure investments and services supported	6.3.9, 6.8, 6.8.3, 6.8.4, 6.8.5, 6.8.6, 6.8.7, 6.8.9	64-67	Local communities
Energy	Generic DMA & Aspect-Specific DMA		38, 44	POSCO E&C,
EN3	Energy consumption within the organization	6.5, 6.5.4	45	Business partners
Biodiversity	Generic DMA & Aspect-Specific DMA		42	POSCO E&C,
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas		42	Local communities
EN13	Habitats protected or restored		42	

Verification for this report was carried out based on AA1000AS Type 1, and the principle of inclusivity, materiality, and responsiveness was identified.

## GRI G4 Index

### Specific Standard Disclosures

Category	Description	ISO 26000	Reporting page or contents	Boundary
Air Pollution	Generic DMA & Aspect-Specific DMA		38, 44	POSCO E&C,
EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	6.5, 6.5.5	45	Business partners
EN16	Indirect greenhouse gas (GHG) emissions (Scope 2)		45	
EN17	Other indirect greenhouse gas (GHG) emissions (Scope 3)		45	
CRE3	Building greenhouse gas emission intensity		45	
Effluents and Waste	Generic DMA		38	POSCO E&C,
EN23	Total weight of waste by type and disposal method	6.5, 6.5.3	43	Business partners
EN24	Total number and volume of significant spills		None	
Compliance	Generic DMA		38	POSCO E&C
EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	6.5	0 (zero) case	
Supplier Environmental Assessment	Generic DMA & Aspect-Specific DMA		41	POSCO E&C,
EN32	Percentage of new suppliers that were screened using environmental criteria		41	Business partners
EN33	Significant actual and potential negative environmental impacts in the supply chain and actions taken		41	
Employment	Generic DMA & Aspect-Specific DMA		58, 70	POSCO E&C,
LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	6.4, 6.4.3	59	Executives and employees
LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	6.4, 6.4.3, 6.4.4	61-62	
Occupational Health and Safety	Generic DMA & Aspect-Specific DMA		46-47	POSCO E&C,
LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of workrelated fatalities, by region and by gender	6.4.3, 6.4.4	46	Executives and employees,
CRE6	Percentage of the organization operating in verified compliance with an internationally recognized health and safety management system		48	Business partners
Training and Education	Generic DMA		59-60	POSCO E&C,
LA9	Average hours of training per year per employee by gender, and by employee category	6.4, 6.4.7	60	Executives and employees
LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category		59	
Labor Practices Grievances Mechanism	Generic DMA & Aspect-Specific DMA		58, 63	POSCO E&C,
LA16	Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms		63	Executives and employees
Investment	Generic DMA & Aspect-Specific DMA		58, 63, 69	POSCO E&C,
HR2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained		63	Executives and employees,
Human Rights Grievance Mechanisms	Generic DMA & Aspect-Specific DMA		58, 63, 69	Business partners
HR12	Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms		63	POSCO E&C,
Local Communities	Generic DMA & Aspect-Specific DMA		64-67	Executives and employees,
SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	6.3.9, 6.8, 6.8.5, 6.8.7, 6.6.7	64	Business partners
CRE7	Number of persons voluntarily and involuntarily displaced and/or resettled by development, broken down by project		Not Available	POSCO E&C,
Anti-corruption	Generic DMA & Aspect-Specific DMA		12-13	Executives and employees,
SO4	Communication and training on anti-corruption policies and procedures	6.6, 6.6.3	12	Business partners
Customer Health and Safety	Generic DMA & Aspect-Specific DMA		30, 52, 55	POSCO E&C,
PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	6.3.9, 6.6.6, 6.7, 6.7.4, 6.7.5	52	Customers
Product and Service Labeling	Generic DMA & Aspect-Specific DMA		53, 54	POSCO E&C,
PR5	Results of surveys measuring customer satisfaction	6.7, 6.7.4, 6.7.5, 6.7.6, 6.7.8, 6.7.9	53	Customers
CRE8	Type and number of sustainability certification, rating and labeling schemes for new construction, management, occupation and redevelopment		36 cases of green building certification, 13 cases of LEED certification	

\* CRE7 items are expected to be reported after the sustainability report for 2016.

Statement of Third-party Assurance

LRQA Assurance Statement  
Relating to POSCO Engineering & Construction Co., Ltd.'s Sustainability Report for the calendar year 2014

This Assurance Statement has been prepared for POSCO Engineering & Construction Co., Ltd. in accordance with our contract but is intended for the readers of this Report.

Terms of Engagement

Lloyd's Register Quality Assurance Ltd. (LRQA) was commissioned by POSCO Engineering & Construction Co., Ltd. (POSCO E&C) to provide independent assurance on its 'Sustainability Report 2014-15' ("the report") against the assurance criteria below to a moderate level of assurance using AccountAbility's AA1000AS (2008), where the scope was a Type 1 engagement.

- Our assurance engagement covered POSCO E&C's operations and activities in Korea and specifically the following requirements:
- Evaluating adherence to AA1000 AccountAbility Principles of Inclusivity, Materiality and Responsiveness
  - Confirming that the report is in accordance with GRI G4's reporting guidelines and core option, and
  - Reviewing whether the report has taken account of the Construction and Real Estate Sector Disclosures.

LRQA's responsibility is only to POSCO E&C. LRQA disclaims any liability or responsibility to others as explained in the end footnote. POSCO E&C's responsibility is for collecting, aggregating, analysing and presenting all the data and information within the report and for maintaining effective internal controls over the systems from which the report is derived. Ultimately, the report has been approved by, and remains the responsibility of POSCO E&C.

LRQA's Opinions

Based on LRQA's approach nothing has come to our attention that would cause us to believe that POSCO E&C has not:

- Met the requirements above
- Covered all the issues that are important to the stakeholders and readers of this report.

The opinion expressed is formed on the basis of a moderate level of assurance and at the materiality of the professional judgement of the verifier.

Note: The extent of evidence-gathering for a moderate level of assurance engagement is less than for a high level of assurance engagement. Moderate level of assurance engagements focus on aggregated data rather than physically checking source data at sites.

LRQA's Approach

LRQA's assurance engagements are carried out in accordance with AA1000AS (2008). The following tasks though were undertaken as part of the evidence gathering process for this assurance engagement:

- Assessing POSCO E&C's approach to stakeholder engagement to confirm that issues raised by stakeholders were captured correctly. We did this through reviewing documents and associated records.
- Reviewing POSCO E&C's process for identifying and determining material issues to confirm that the right issues were included in their report. We did this by comparing POSCO E&C's reported material issues against a report of their peer. We also tested the filters used in determining material issues to evaluate whether POSCO E&C makes informed business decisions that may create opportunities that contribute towards sustainable development.
- Visiting Songdo Office Building and Incheon Cultural Center construction site in order to review how POSCO E&C's sustainability management approaches are implemented at the corporate and site levels.
- Interviewing relevant personnel at two construction sites to confirm that POSCO E&C's sustainability management processes are implemented at site level located in Incheon Metropolitan City and Cheonan City.
- Checking that the GRI Content Index allows stakeholders to access sustainability performance indicators.

Observations

Further observations and findings, made during the assurance engagement, are:

• Stakeholder Inclusivity:

We are not aware of any key stakeholder groups that have been excluded from POSCO E&C's stakeholder engagement process. Especially, POSCO E&C has documented engagement procedures in place for communities nearby the construction sites in order to address sustainability issues during construction activities.

• Materiality:

We are not aware of any material issues concerning POSCO E&C's sustainability performance that have been excluded from the report. It should be noted that POSCO E&C has established extensive criteria for determining material issues/ aspects and that these criteria are not biased to POSCO E&C's management. However, POSCO E&C should be more familiar with the materiality test as defined in GRI's reporting guidelines in order to ensure that its material aspects are clearly defined.

• Responsiveness:

POSCO E&C has developed their sustainability management strategies in a broad spectrum. POSCO E&C has a plan to develop detailed action plans and targets aligning to those strategies. These progresses are presented in the report transparently.

LRQA's Competence and Independence

LRQA ensures the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent.

LRQA is POSCO E&C's certification body for ISO 9001, ISO 14001 and OHSAS 18001. We also provide POSCO E&C with a range of training services related to Management Systems. The verification and certification assessments, together with the training, are the only work undertaken by LRQA for POSCO E&C and as such does not compromise our independence or impartiality.


Signed



August 6, 2015  
Assurance Team Leader,  
**Tae-Kyoung Kim**

LRQA Lead Verifier  
On behalf of Lloyd's Register Quality Assurance Limited  
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LRQA Reference: SEO6020386

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 **Lloyd's Register**  
LRQA

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\* AA1000AS(2008): The AA1000 Assurance Standard (2008) is a global assurance standard established by AccountAbility and was developed to verify the reliability and quality of sustainable management performances and reports

## Statement of Assurance Report of Greenhouse Gas Emissions

### Assurance Scope

This assurance statement has been prepared at the request of POSCO Engineering & Construction.

At the request of POSCO Engineering & Construction, Lloyd’s Register Quality Assurance Ltd. (LRQA) has verified, as in Table 1 below, POSCO Engineering & Construction’s greenhouse gas and energy usage data and the greenhouse gas emission quantity recorded in the 2014 greenhouse emission quantity and energy usage statement prepared in accordance with the guidelines regarding POSCO Engineering & Construction’s greenhouse gas energy target management operations. This data deals with greenhouse gas direct and indirect emission quantities.

### Responsibility of Management

The management of POSCO Engineering & Construction bears responsibility for the preparation of the greenhouse gas report and for the maintenance of effective internal management of data and information. LRQA’s responsibility is restricted to the assurance engagement of the report in accordance with POSCO Engineering & Construction’s contract. The Report has ultimately been approved by POSCO Engineering & Construction, who shall bear responsibility for it.

### LRQA’s Assurance Methods

LRQA’s assurance engagement was performed in accordance with the guidelines regarding greenhouse gas energy target management operations. LRQA has verified at a rational guarantee standard that the greenhouse gas data of the POSCO Engineering & Construction greenhouse gas report have been prepared in accordance with the guidelines regarding greenhouse gas energy target management operations.

The following evaluation activities have been performed in order to derive the evaluation conclusions.

- On-site checks of equipment in the main workplace have been made and the processes regarding the management of greenhouse gas emission data and energy usage records have been reviewed.

- Interviews have been conducted with employees who are responsible for the management and maintenance of greenhouse gas emission and energy usage data.
- The data and information of POSCO Engineering & Construction’s 2014 greenhouse gas emission quantity and energy usage statements have been verified.

### Assurance Standards and Materiality

The assurance guarantee degree of this assurance statement is reasonable, and has been prepared at a materiality standard of 5%.

### LRQA’s Opinions

The evaluations following LRQA’s assurance methods have not found questionable items in the Materiality aspect regarding the greenhouse gas emission quantity and greenhouse gas data of the energy usage statement, and are therefore deemed “optimal”.

### Greenhouse gas emission quantity of the POSCO Engineering & Construction greenhouse gas report

Scope	2014
(Follows the guideline definitions of greenhouse gas energy target management operations, etc.)	
Direct greenhouse gas emission quantity	4,205.14
Energy indirect greenhouse gas emission quantity	26,112.85
Total greenhouse gas emission quantity	30,317.99

\*The above data is applicable to the converted tonnage of CO<sub>2</sub>



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LRQA reference number: SEO 6023834

April 14th, 2015  
**Sang-Geun Yu**

### Assurance Statement

This assurance statement is a greenhouse gas emission quantity and every consumption statement regarding the greenhouse gas energy target management operations.

### Third Party Liability of Compensation

LRQA, its related companies and subsidiary companies, and employees or representatives shall individually or collectively appear in this clause as ‘Lloyd Register Group’. Lloyd Register Group shall assume no responsibility whatsoever for any loss, damage, or expense that results from the reliance on the advice or information provided in this document or howsoever provided. The exception, however, shall be if a specific person enters into a contract with a member of Lloyd Register Group regarding the provision of this information or advice, and all responsibilities and liabilities in such a case shall entirely be in accordance with the conditions stipulated in that contract.

## UN Global Compact

POSCO E&C has announced its resolution to comply with ten major principles for social responsibilities including human rights, labor, environment, and anti-corruption by joining the UN Global Compact. The company’s current status of activities regarding the Ten Principles of the UN Global Compact can be identified in the table below.

Classification	Principle	POSCO E&C’s major activities	Page	GRI G4
Human Rights	1. We support and respect internationally declared human rights.	• Observance of 10 principles of UN Global Compact	76	HR1~6, 10
	2. We do not engage in any infringement of human rights.	• Observance of ILO rules		
		• Inclusion of provision of prohibition of sexual harassment in the code of ethics	61, 67	HR3, HR7
Labor		• Implementation of education on the prevention of sexual harassment		
		• Inclusion of provision on human rights protection in contract		
	3. We acknowledge the rights to freedom of association and collective bargaining.	• Observance of Labor Standard Act	60-61	HR4, G4-11, LA4
	4. We abolish all kinds of forced labor.	• Operation of labor union		
	5. We effectively abolish children’s labor.	• Operation of labor-management council		
	6. We abolish discrimination in both the employment process and actual work.	• Observance of laws regarding prohibition of child labor and forced labor	-	HR6
Environment		• Operation of fair recruitment process	56-57	HR3, LA1, LA9, LA12, LA13
		• Improvement and simplification of assessment system for executives and employees		
	7. We support a preventive approach to environmental issues.	• Operation of eco-friendly environment management system	39, 41-42	G4-14
		• Performance of environment management for overseas projects		
		• Analysis of duty of environment management and establishment of roles		
		• Compliance with environmental laws and regulations		
		• Support for grievances on the environment		
		• Performance of autonomous environmental improvement activities		
	8. We take the lead in taking bigger environmental responsibilities.	• Management of pollution and pollutants	42-45	EN12, EN13, EN19, EN22, EN23, EN27, EN31
		• Implementation of activities for preserving the ecosystem		
Anti-corruption		• Reuse and recycling of waste		
		• Examination of reliability of greenhouse gas data		
		• Management of GHG emissions from construction equipment of business partners		
		• Response to greenhouse gas regulation on construction industry		
	9. We support environmentally-friendly technology development and its distribution.	• Development of eco-friendly construction methods	40, 41, 43-45	EN6, EN7, EN10, EN19, EN27
		• Eco-friendly engineering		
		• Support business to expand environmental management into business partners		
		• Construction of eco-friendly houses		
		• Development of energy-saving technology		
	10. We strive to eradicate all kinds of corruption including unjust enrichment and bribery.	• Compliance with FCPA and implementation of relevant education	12-13	SO3, SO4, SO5
		• Implementation of ethical education for executives and employees		
		• Reinforcement of ethics management by business partners		
		• Departmental ethical practical assessments		



## Awards & Association Membership

### Awards in 2014

Date	Award Title/Description	Awarded by
July	Best Remodeling Prize in Hankyung Housing Culture Competition Best Awards in the First Half of 2014 (1st Apartment Unit in Maehwa Maeul, Bundang)	The Korea Economic Daily
July	Grand Prize in the 47th Presentation Contest for Best Cases for Zero-accident Movement for the Period of Emphasizing Industrial Health and Safety (Prize by the Minister of Employment and Labor)	Ministry of Employment and Labor, Korea Occupational Safety and Health Agency
July	Grand Prize in the 18th Awards for Best Apartment to Live (Songdo The Sharp Green Square)	Ministry of Land, Infrastructure and Transport, Maeil Business Newspaper
September	Acquired certification of ISO27001 (International Standard for Information Protection)	International Standard Organization (ISO)
September	1st Rank in Korea Standard-Quality Excellence (KS-QEI) for six consecutive years	Korean Standards Association
October	Korea Environmental Friendliness Awards 2014 (Industry Sector/New and Renewable Energy)	Korea Environmental Award Committee
October	Certification for Green Technology (LED automatic light control technology to maintain a certain level of illumination)	Ministry of Trade, Industry, and Energy
October	Grand Prize in the 12th Best Project for the Year (Plant Sector/Indonesia Steel Plant)	Korea Project Management Association
November	Innovation Prize in the Apartment Sector for Korea's Flagship Apartment Awards 2014 (1st and 2nd construction site for The Sharp Green Walk)	The Korea Economic TV
November	Grand Prize in Korea Eco-friendly Construction Awards (Seoul Forest The Sharp)	Ministry of Land, Infrastructure and Transport
November	Grand Prize in Eco-friendly Construction Sector for the 10th Korea's Best Civil Engineering and Construction Technology Awards (Seoul Forest The Sharp)	Maeil Business Newspaper
December	Nominated in the Construction Sector for Good Design 2014 the most (Three best prizes and eight nominated works)	Korea Institute of Design Promotion
December	Grand Prize in the Design Sector for the 5th Korea Green Construction Awards (The Sharp Green Forest)	Seoul Shinmun
December	Grand Prize in the Civil Engineering Sector for Korea Quality Management Best Awards 2014 (Construction site for No. 7 roadbed facility in the metropolitan high-speed railway (Suseo-Pyeongtaek))	Ministry of Land, Infrastructure and Transport

### Association Membership

Classification	Organization Name	Classification	Organization Name
Customers	Korea Construction Quality Research	Business Partners	Construction Outsourcing Association
	Korea Management Association	Environment	Korea Environment Construction Association
	Korea Standards Association		Korean GEO-Environmental Society
	Korea Construction Defect Management Association		Korean Society on Water Environment
Labor Relations	Korean Professional Engineer Association (HR)		Korean Society of Environmental Engineers
	(Former Construction Company Human Resource Manager Association)		Korea Water Resources Association
	Korea Construction Engineers Association		Korea Society Of Waste Management
	Maekyung Safety and Environment Institute (SEL Club)		Korea Carbon Capture and Storage Association (KCCS)
Safety and Health	Korean Association of Occupational Health Nurses		Korean Society of Coastal and Ocean Engineers
	Korea Fire Facility Association		
	Korea Fire Safety Association (Gyeongbuk)		
Ethics Management	The Institute of Internal Auditors		
Local Communities	Gwangyang Police Administration Advancement Committee		
	Saeul Foundation of Culture		
	Pohang Local Development Council		
	South Pohang Police Administration Advancement Committee		

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\* We sincerely appreciate all the people who helped to publish the sustainability report.

For more detailed information on our sustainability report, please visit our website, where you can download a PDF version.

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