

2014 Doosan E&C CSR Report



# **BUILDING YOUR TOMORROW TODAY**

# About this report

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## Reporting Standards and Principles

This report is Doosan E&C (Engineering & Construction)'s CSR report compiled in line with the Core Option of the Global Reporting Initiative (GRI) G4 Guidelines. We have referred to the IR Framework of the IIRC (International Integrated Reporting Council). Material issues were identified through the AA1000SES (AA1000 Stakeholder Engagement Standard) to satisfy the expectations and needs of stakeholders. This report will be published annually.

## Reporting Period and Boundary

This report covers Doosan E&C's performances and activities from January through December 2014, and for key performances, data of the three most recent fiscal years (from January 2012 through December 2014) were used to make trend analysis possible. The scope of the report covers our entire domestic worksites including the head office in Seoul and some overseas worksites. In the future, we plan to continuously expand the scope of the report.

## Assurance

IMCSR, an independent assurance agency, conducted verification on the report to enhance the transparency and reliability of the reporting process and contents. Pages 64 and 65 include the verification results.

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### For More Information

Contact the CSR Team

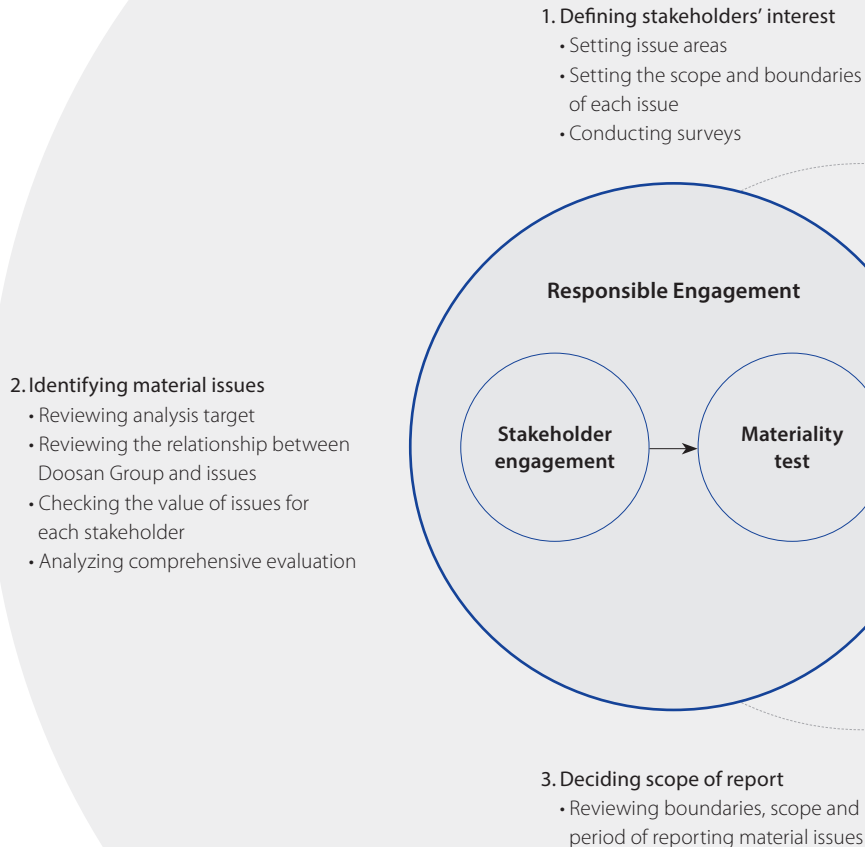
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# Doosan E&C's Second CSR Report

As the second CSR report being published after the first one last year, this report contains key areas and performances of Doosan E&C's Corporate Social Responsibility (CSR) in 2014. Internal and external stakeholders' interests are introduced in relation to Doosan Group's three strategic directions for CSR – Responsible Engagement, Developing People and Reliable Operating. We will continue to share our CSR performances and plans with stakeholders through the CSR report.



## Doosan E&C

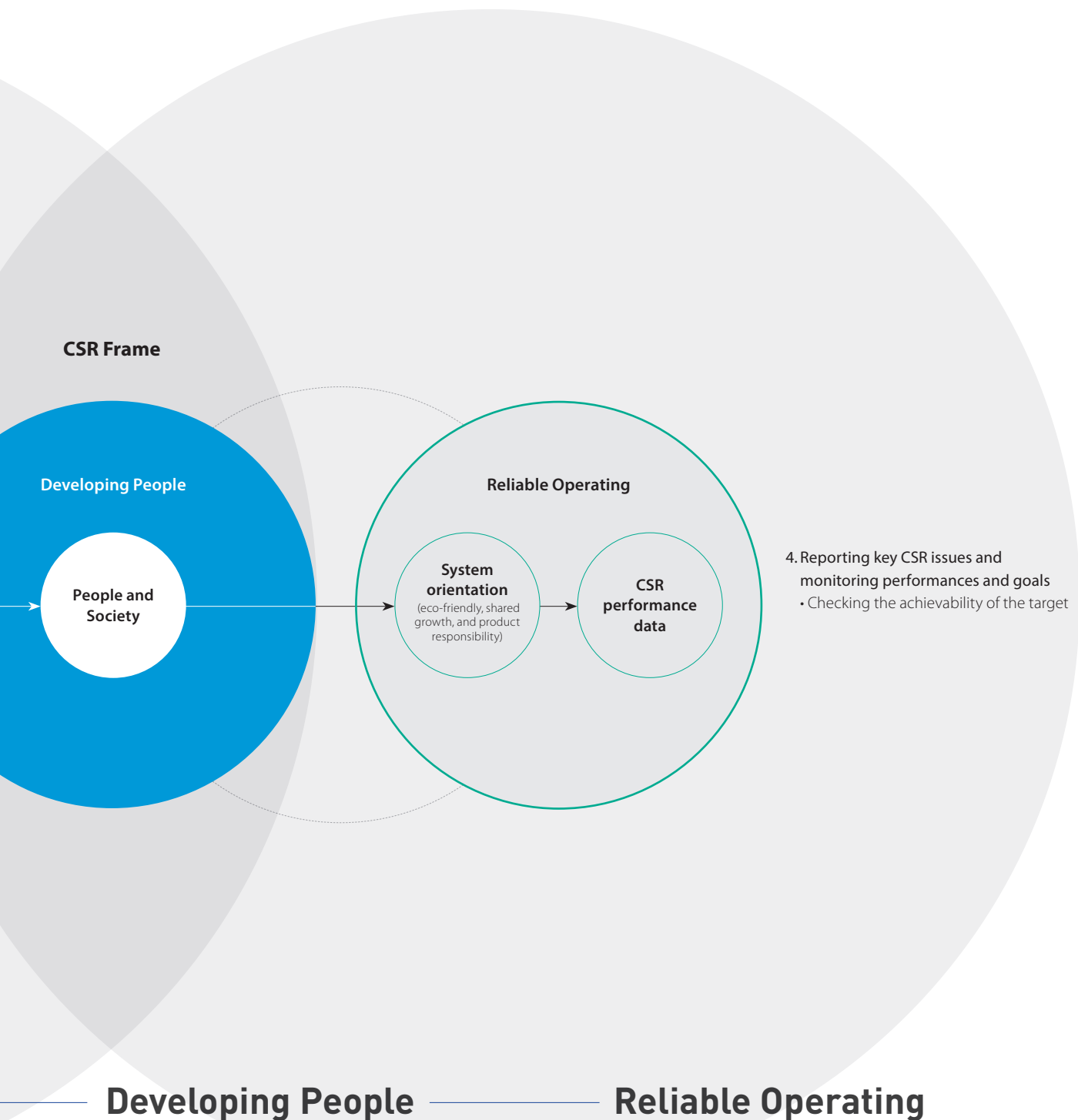
### Laying the Foundation for CSR Promotion

To meet the requirements of stakeholders both at home and abroad and fulfill our social responsibility, Doosan E&C builds CSR governance and strategic system and conducts CSR activities systematically.

## Responsible Engagement

### Reflecting the Opinions of Various Stakeholders

We select key CSR issues on the basis of stakeholder engagement to ensure sustainable growth. The selected material issues are reflected in our management activities and are transparently open to stakeholders.



### Conducting People-Centered CSR Activities

'People-centric' is our business philosophy. We believe that long-term, sustained success can only come through people. Cultivating talents comes first in all of our business activities as we believe that our competitiveness and sustainable growth depend on people.

### Developing CSR through the Growth of People

The growth of people lays the foundation for the growth of the company. Doosan E&C members have advanced scientific systems and processes, streamlining our work system through change and innovation with limitless aspiration. This ultimately leads to the growth of our business.

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# About Doosan Group

Doosan is the oldest company in Korea with a history of 119 years and the fastest-growing company for the past ten years. We have successfully made changes and realized growth based on people centered management and are now focusing on transforming our company for a second century of Proud Global Doosan.

## *Building Your Tomorrow Today*

### Creating a New Future beyond its 119-Year History

#### 1896~1949

The Foundation of Doosan

The history of Doosan for more than a century tells about changes, innovation, and dynamic progress. Doosan took the first step in its legendary history in 1896 when Park Seung-Jik opened Korea's first modern store in Baeogae, Jongno 4, Seoul. In 1946, Park Toopyung, the successor to Park Seung-jik, changed its name to the Doosan Store, heralding the beginning of Doosan's modern history.

#### 1950~1979

The Birth of Doosan Group

In the 1950s, Doosan Store started international trading and established Oriental Brewery. In the 1960s, Doosan expanded its business sectors including construction, food and beverages, machinery, media and cultural services and solidified the basis for Doosan Group with the introduction of professional executives and diversification. Partnerships with advanced international companies resulted in greater technological development, and the group secured internal stability by acquiring other relevant businesses in the 1970s.

#### 1980~1995

Growth and Leap

After the 1980s, Doosan made dramatic progress based on the capabilities it had developed in its early days. Doosan pushed ahead with business ventures in various related fields and new areas, such as brewery, construction, electronics, glass, machinery, and trading and developed overseas markets. This further developed the group's business areas both vertically and horizontally. In the 1990s, Doosan turned its attention to enhance technology in each business and to strengthen global competitiveness.

#### 1996~2005

Changes and Transformation

After our centennial in 1995, we established 2G strategy : Growth of People and Growth of Business - a foundation for another hundred years of growth. We saw dramatic growth in our infrastructure support business (ISB) by attracting foreign investment and acquiring companies with key technology.

#### 2006~Present

Global Growth

Since 2006, Doosan acquired top-tier ISB companies such as Bobcat, a construction machinery suppliers, and Skoda Power, a manufacturer of power generation equipment. As a result, we developed into a major global brand in the ISB industry.

### Pursuing Sustainable Growth through Elaborate Strategies and Daring Challenges

Doosan has been maintaining stable growth due to successful restructuring and the transformation into an ISB (Infrastructure Support Business)-oriented business. Doosan's corporate governance is stable and transparent. Doosan Corporation and its affiliates reinforced the BOD-driven management system. Moreover, Doosan is accelerating growth by focusing on core businesses for more profitable growth.

### Leapfrogging into a World Leader in the ISB Sector through Active Global Operations

We contribute to improving people's quality of life around the world through a variety of businesses. About 41,400 employees (as of the end of 2014) working in 38 countries are a driving force behind the growth of Doosan. Our global business is boosted by capitalizing on over 1,200 global sales networks and about 20,900 employees in overseas project sites, through which sales of KRW 13.02 trillion, more than a half of total sales, were generated in 2014. Doosan will continue to cultivate global talents, expand global sales networks, and introduce global standards to have the standing and honor of being a global player.

## 2014 Financial Highlights

(Unit : KRW in 100 millions)

Total assets **313,693** Total equity **89,023** Sales **204,682** Operating income **10,081**

\* Based on consolidated financial statements

## Affiliates &amp; Brands

We create a better life and future in various fields from all infrastructure support businesses such as industrial facilities, machinery, equipment and construction to consumer goods.

## ISB (Infrastructure Support Business) Companies

## Doosan Heavy Industries &amp; Construction

## Business Area

Power plant, Water, Casting, Construction, Transport facilities, Green Energy



## Doosan Infracore

## Business Area

Construction Machinery, Machine Tools, Engines, Engine Materials



## Doosan Engineering &amp; Construction

## Business Area

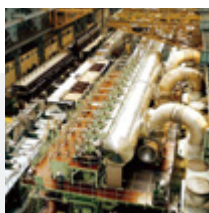
Civil Engineering, Architecture, Housing, CPE\*, HRSG\*\*



## Doosan Engine

## Business Area

Marine Diesel Engine, Power Diesel Engine, Diesel Power Plant, Engine parts



## Doosan DST

## Business Area

Armored Vehicle System, Air Defense System, Launcher System, Navigation and others

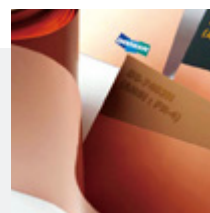


## Doosan Corporation

## Doosan Corporation Electro-Materials

## Business Area

CCL, Materials for Boards, Heat Preventing PCB, Masslam, OLED materials



## Doosan Corporation Industrial Vehicle

## Business Area

Engine-powered Forklifts, Electronic Forklifts, Parts and Services



## Doosan Corporation Mottrol

## Business Area

Hydraulic Equipment, Defense



## Doosan Fuel Cell

## Business Area

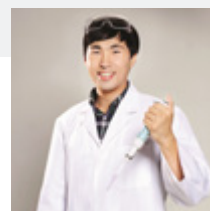
Residential / Building / Power Generation Fuel Cells



## Doosan Corporation Glonot

## Business Area

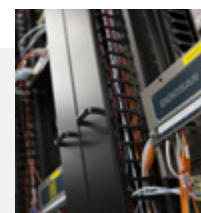
Bio business



## Doosan Corporation Information &amp; Communications

## Business Area

Consulting, Building and Managing IT systems, IT Infrastructure Operation



## CSB (Consumer &amp; Service Business) Companies

Company Name	Business Area
Doosan Capital	Installment Financing, Lease Financing, General Loans
Oricom	Advertising Campaigns, Brand Marketing, Media Services
Neoplux	Venture capital, PE (Private Equity) investment
Doosan Feed & Livestock	Scattering, Chickens, Pigs, Dairy Fattening, Ducks / Dogs
Doosan Tower	Fashion Mall
Doosan Bears	Professional Baseball Team
Doosan Cuvex	Golf Club
Doosan Magazine	Magazine

## Affiliated Organization

Company Name	Business Area
Doosan Yonkang Foundation	Scholarships, Research Funding, Teachers' Educational Overseas Trips, Educational Welfare, Sending Books and Cultural Projects
Doosan Art Center	Support Artistic Activities
DLI (Doosan Leadership Institute)	Educational Programs

\* CPE : Chemical Process Equipment

\*\* HRSG : Heat Recovery Steam Generator

# theDoosanWay

*Our story. Our vision.*

## PROUD PEOPLE, PROUD DOOSAN

The Doosan Way is our belief and philosophy to build the 'Proud Global Doosan'. As a member of Doosan that has grown continuously for more than a hundred years, Doosan E&C will play a significant role in offering products and services to enhance people's quality of life around the world by practicing the Doosan Credo and making the Group accelerate the momentum for a second century of Proud Global Doosan.

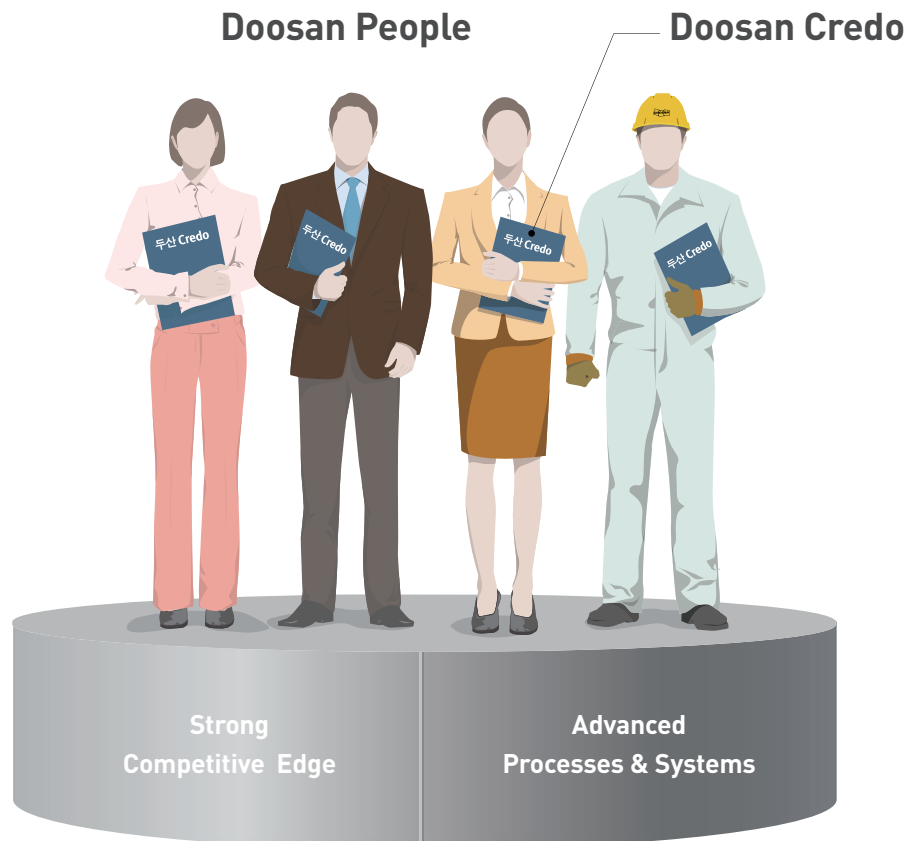
### The Doosan Credo

The Doosan Credo is a set of principles that represent Doosan's philosophies and our unique way of doing business. These principles have been the foundation of Doosan's success for the past century. The Doosan Credo consists of nine core values and is integral to every aspect of our businesses and people, clearly guiding our decisions and the way we do business. Through the realization of these values, Doosan accomplishes its ultimate goal. The Credo consists of Doosan's "Aspiration" and "Core Values".

\* The credo is a charter containing the unique value of Doosan on which all of our business activities and decision making should be based.

### Aspiration

Doosan's ultimate goal is the creation of a 'Proud Global Doosan'. In our Vision, each of our employees and all of our stakeholders will benefit from, and be proud of their association with, Doosan. Every employee takes great pride in being a member of Doosan. Each customer recognizes and appreciates Doosan's high-quality goods and services. Every shareholder values our fair and high levels of profit.





# Core Values

## Core Value

Doosan People practice the nine core values of the Doosan Credo everywhere we operate, every day, to build a "Proud Global Doosan". These values guide the way we do business, the way we treat each other and the way we work with all of our partners. The nine core values of the Doosan Credo are as follows:

People	Cultivating People	Integrity and Transparency
<i>Inhwa</i>	Customers	World-class Technology and Innovation
Profit	Social Responsibility	Safety and Environment

## Strategy

Behind the success of Doosan is its unwavering 'trust in people.' People have been the foundation of our success for the past century and will help us build our next hundred years. Such trust in our people lies at the very heart of Doosan's management philosophy. Doosan's strategy is based on the principle of "2G" – Growth of Business by Growth of People. 2G is a virtuous circle in which people drive business growth, which in turn provides our people the opportunity for advancement. Doosan believes that sustainable success can only come through people.

## Doosan People

Doosan People are those who keep the Doosan Credo in their hearts and practice Doosan's distinctive traits everywhere they operate. Traits of Doosan People are as follows:



Limitless Aspiration



Cultivating People



Inhwa



Open  
Communication



Tenacity &  
Drive



Prioritization  
& Focus

# theDoosanWay

*Our story. Our vision.*

## PRACTICE OF THE DOOSAN WAY IN 2014

The Doosan Way is our belief and philosophy to build the 'Proud Global Doosan'. As a member of Doosan that has grown continuously for more than 100 years, Doosan E&C will play a significant role in offering products and services to enhance people's quality of life around the world by practicing the Doosan Credo and making the Group accelerate the momentum for a second century of Proud Global Doosan.

### Doosan Way Survey and Presentation on Improvement Plans

The survey of the Doosan Way is implemented to find out whether all of our employees understand and apply the Doosan Way to their everyday works and whether the organization changes in the right direction. The 2013 survey was conducted on white color employees, while the 2014 survey was conducted on blue color employees. Based on the survey results, we reviewed the future direction of the Doosan Way and came up with improvement for the future establishing the foundation for One Doosan by holding a presentation on improvement plans and survey results for the production workers.

01



### Doosan Way Week

The Doosan Way Week is a time for employees to look back at themselves regarding the way of implementing the Doosan Way and to encourage each other. The Doosan Way Week aims to create synergies through communication between the organizations. There were various programs in the 2014 Doosan Way Week such as 'the Doosan Way Credo Remind Session', 'the Doosan Way Day', 'the Operation Excellence Conference' and 'the Doosan Way Family day'.

02



### Doosan Way Council

The Doosan Way Council is convened for in-depth discussions about various issues that arise from the internalization of the Doosan Way and the review the progress of the Doosan Way's major agendas. It is attended by the CEO, the COO, heads of each BG and division and executives in charge. The issues discussed here are also covered by Doosan Way Council in Doosan group, with the Chairman and top team of major affiliates in attendance.

03



## Change in Work through the Internalization of the Doosan Way

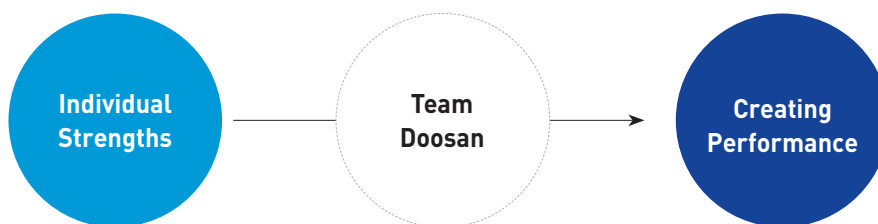
04

The year 2014 is a year marked by advancement of processes and systems through the internalization of the Doosan Way. First, we checked on the behavior and work approach of leaders that are expected from team members through the leadership survey, and we established and implemented the leader's action plan that reflected the result. The team members established behavior rules for realizing the Doosan Way and improving inefficient factors through various programs, including Building a Proud Team and Building a Smart Team.



### THE DOOSAN WAY IMPLEMENTATION PLAN FOR 2015

As a result of promoting the Doosan Way, it has become embedded in various forms in all of the employees. However, we all share the wish of striving for the future as a stronger unified team. This wish is reflected in Team Doosan as the keyword for the Doosan Way in 2015, showing the behaviors and work approach of our employees that create better results by integrating individual strengths into teamwork based on the Doosan Way.



### Creating Performance through Team Doosan

In 2015, Doosan E&C will focus on creating performance through Team Doosan by taking the work approach that has been internalized as a result of the Doosan Way. First, we plan to establish the goals of Team Doosan that we want to achieve and share them with our employees, so that the action plans for each division can be carried out.

### Developing a Strong Doosan E&C Members

Doosan E&C will secure competitiveness through its employees by striving to improve the competencies of Doosan E&C members in difficult market environment. Also, we will accelerate the internalization of the Doosan Way for production workers and overseas employees, to utilize our resources and capabilities fully as one team.

## CEO Message

**Doosan E&C is striving to grow into a sustainable company to build a better world in the new century.**



Dear Stakeholders,

Doosan E&C has published its second CSR report after the first one being published last year. I am very pleased to share our CSR activities, performances and future plans in the economic, social and environmental aspects with our stakeholders through this report.

The business environments recovered slowly due to the smooth recovery of the global economy and the government's economy-invigorating policy, but it is still difficult to expect a stable growth because of increased uncertainties and intense competition between companies. Therefore, we will achieve sustainable growth by improving our competitiveness in the existing construction business area and exploring new growth engine.

In order to establish the foundation for the new century under the vision of 'Infra Solutions Provider That Makes the World a Better Place', Doosan E&C is striving to strengthen the fundamental competitiveness, while also fulfilling its corporate social responsibilities.

**First, we will create future value by developing people.**

We believe that human resources have been our strength during the past half-century, as well as the strongest competitiveness for continued success for the next century. Based on the Doosan Way, we established an organizational culture where every employee can act and communicate according to fair rules. In addition to, we will establish a virtuous cycle to cultivate talent which will lead our future.

**Second, we will strengthen future competitiveness through reliable operating, such as reinforcing fundamental competitiveness and risk management.**

In order to achieve medium and long-term growth, it is important to secure fundamental competitiveness through differentiated technologies and acquire the ability to respond to uncertainties and risks. Doosan E&C will continue reliable operating by managing financial and non-financial risks through quality improvement and technology development, as well as shared growth with suppliers and stronger EHS (Environment, Health, and Safety) standards.

**Third, we will enhance the future competitiveness of local communities through responsible engagement.**

We will contribute to the society by achieving sustainable growth based on strong business ethics. By aiming for the mission of 'Enhancing Future Competitiveness of Communities and Corporate Value through Strategic Social Contribution Activities', we will develop social contribution programs and increase employee participation and talent donation from the long-term perspective of the business concept.

Doosan E&C will make concerted efforts on change and innovation to achieve its goal of 'Becoming a Leader in CSR in the World by 2020'.

We will also comply with the UNGC's 10 key principles and pursue shared growth with all stakeholders. I would like to thank our stakeholders for continuing interest and support for Doosan E&C.

President & CEO of Doosan E&C Byung-hwa Lee





# Highlights in 2014

## Won the HRSG Contract for Tung Hsiao Project in Taiwan

01

On February 24, 2014, Doosan E&C won the HRSG (Heat Recovery Steam Generator) contract for gas-fueled combined cycle power plants worth approximately KRW 140 billion. The client is Mitsubishi Hitachi Power Systems. Doosan will supply six units of HRSG as the main equipment of gas-fueled combined cycle power plants to be constructed in Tung Hsiao in the mid-western region of Taiwan, which is expected to be supplied for the next 16~30 months.



## Won the LNG Plant Construction Project of KRW 60 billion for the Yamal Peninsula in Russia

02

On May 14, 2014, Doosan E&C won the order for CPE (Chemical Process Equipment) field that supplies 39 units for the Yamal Peninsula in Russia. The Yamal project is a large-scale project of US\$ 26.9 billion that will construct LNG plants in Sabetta on the Yamal peninsula located in the Northwestern region of Siberia. The project owner is Technip France and the project supplies core components of LNG plants, including demethanizer and mercury absorber.



A photo of shipping absorbers to the Barzan project in Qatar in the past.

## Completion of the Icheon Bears Park

03

On August 6, 2014, the building & housing BG completed constructing the Bears Park as the practice ground for the Doosan Bears' minor league team. In order to systematically develop baseball rising stars, the Bears Park was reborn by undertaking expansion work on the Icheon Bears Field in Gyeonggi-do that had been in use since 2005.

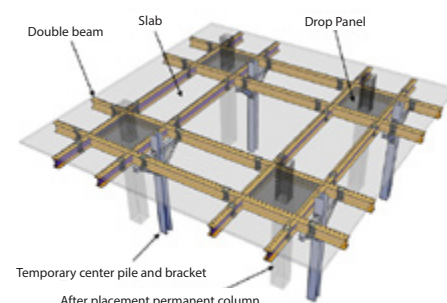
The main stadium with natural lawn has been established with safety fences and seats and a picnic zone for 673 persons. The supplementary stadium will be utilized as a practice field for infielders ordinarily, while also being used as the little league baseball field for the children in local communities. Also, there is an indoor practice field that is 24m high and 50m horizontally and vertically, which is considered as the key strength of the Bears Park.



## Designation of the DBS Top-Down Construction Method as New Technology 04

On September 30, 2014, Doosan E&C's top-down construction method proceeding downward to support the earth retaining wall by using a double vent steel beam and slab installed on temporary steel columns and temporary steel brackets, which were jointly developed with Doosan Heavy Industries & Construction, was designated as No.727 of construction new technology by the Ministry of Land, Infrastructure and Transport.

This technology is a top-down construction method that supports the earth retaining wall from the slab placed on temporary steel columns and steel beams for establishing underground structures. This construction method is characterized by the structure (DBS structure) consisting of a double vent steel beam that is horizontally and vertically in parallel with the surrounding columns.



## Won Orders for the Northern Pier and the Waste Water Treatment Plant at the Port of Donghae 05

On October 2, 2014, the infrastructure BG won the order for the reconstruction of the northern pier at the Port of Donghae (1<sup>st</sup> stage) from the Public Procurement Service. This construction is rebuilding the northern pier (dock of 681m) at the Port of Donghae in Daedong-ro, Donghae-si, Gangwon-do, which is expected to be completed by October 2018.

On October 31, 2014, we also won the order for the construction of the waste water treatment plant in Gumi Hi Tech Valley (1<sup>st</sup> stage). This order was made by the Korea Water Resources Corporation to construct the waste water treatment facility with a capacity of 19,000m<sup>3</sup>/day on 114-1, Dojung-ri, Sandong-myeon, Gumi-si, Gyeong-sangbuk-do, which is expected to be completed by April 2018.



## Won the Order for the Reconstruction of a Large-scale Apartment Project in Incheon Gajwa-dong 06

On December 23, 2014, the building & housing BG won the order for rebuilding the apartment complex in Incheon Gajwa-dong. This project is constructing a large-scale apartment complex consisting of 1,757 households and 16 buildings that are 27 stories high on a lot area of 75,024m<sup>2</sup> in No.308, Gajwa-dong, Seo-gu, Incheon-si, which is expected to be completed by 2018.

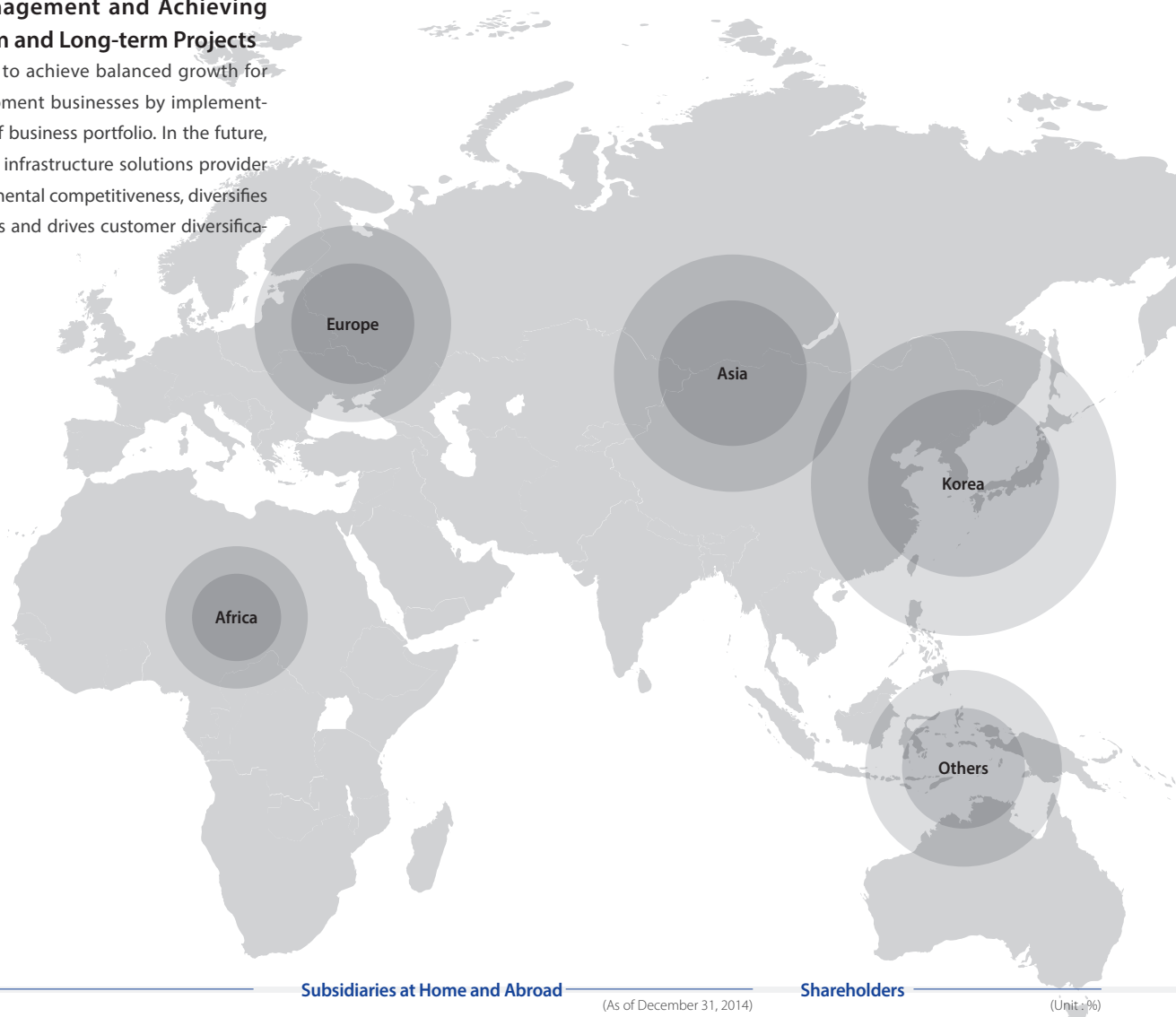
By winning the order for the Incheon Gajwa-dong reconstruction project, which is the largest scale among the city maintenance projects that were conducted since 2008, the building & housing BG forecasted that it will greatly contribute to winning housing orders in the future.



# Corporate Overview

## Internalizing Management and Achieving Growth for Medium and Long-term Projects

Doosan E&C is striving to achieve balanced growth for construction and equipment businesses by implementing the diversification of business portfolio. In the future, we will develop into an infrastructure solutions provider that strengthens fundamental competitiveness, diversifies products and businesses and drives customer diversification.



### Business Area

Position	Business Area
Civil Engineering	Roads, Bridges, Railways, Subways, Tunnels, Ports, Airports, Landfills, Environmental plants
Architecture	Business facilities, Commercial facilities, Public facilities, Hotels, Resorts, Apartments, Residential and Commercial complex, Office building, Remodeling
CPE*	Static equipment including towers, columns, reactors, pressure vessels, heat exchangers
HRSG**	Heat Recovery Steam Generator

\* Chemical Process Equipment

\*\* Heat Recovery Steam Generator

### Subsidiaries at Home and Abroad

(As of December 31, 2014)

Position	Company Name	Main Business
Domestic	Doosan Cuvex	Golf course and Condominium
Overseas	Doosan Heavy Industries Vietnam Haiphong Co., Ltd	Manufacturing business

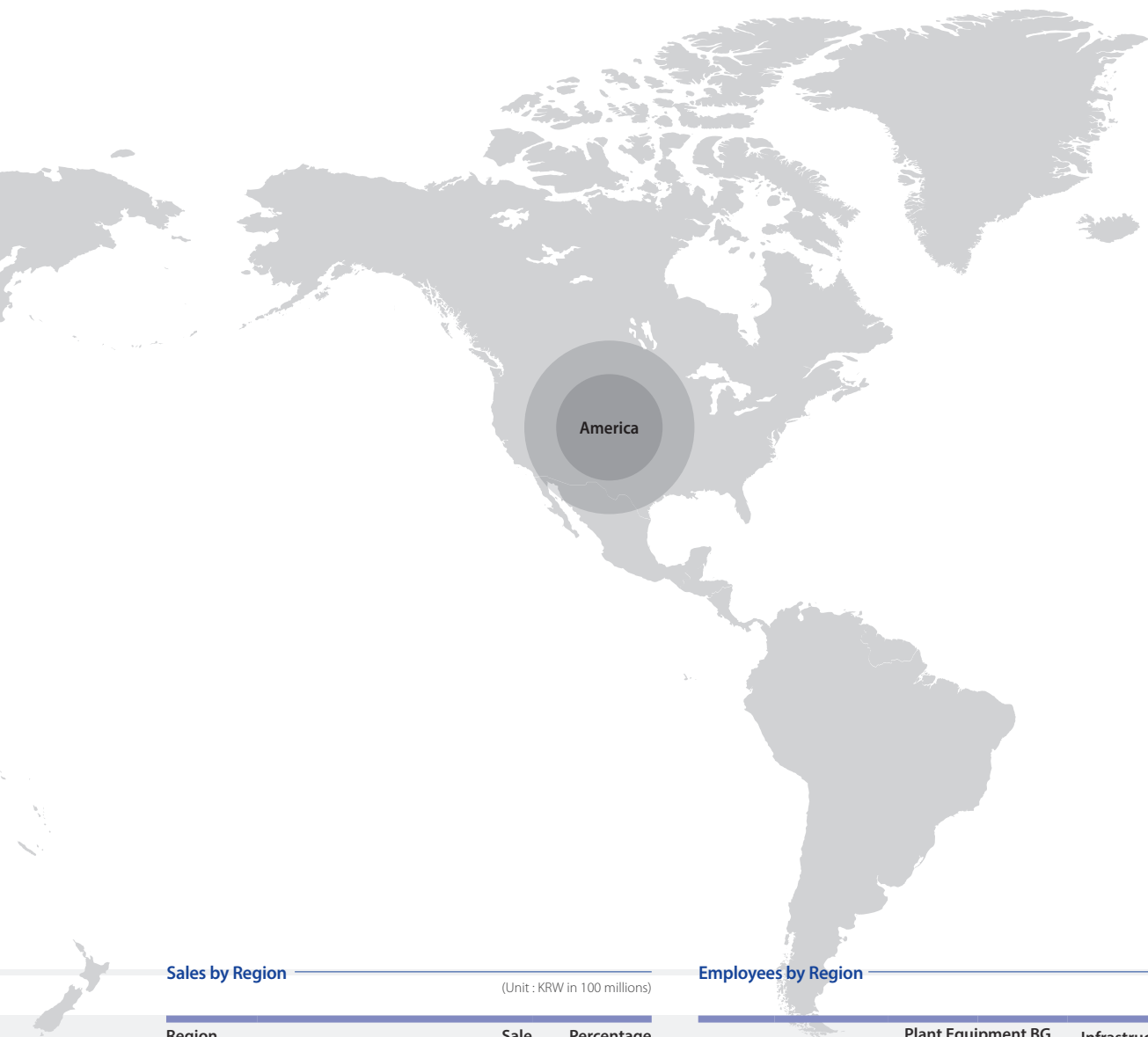
### Shareholders

(Unit: %)

Order	Company Name	Percentage
1	Doosan Heavy Industries & Construction Co., Ltd.	59.7
2	Specially Related Persons	2.2
3	Employee Stock Ownership	5.1
4	Others Shareholders	33.0

\* Based on the number of shares issued





Sales by Region

(Unit : KRW in 100 millions)

Region	Sale	Percentage
Korea	17,568	74.30%
Asia	1,777	7.50%
Europe	1,241	5.30%
America	828	3.50%
Africa	326	1.40%
Others	1,898	8.00%
Total	23,638	100%

Employees by Region

(Unit : Persons)

Region	Plant Equipment BG		Infrastruc- ture BG	Building & Housing BG
	CPE	HRSB		
Korea	392	239	384	463
Asia	Korean staff	6	14	
	Locally hired staff	386	1,523	
Total	784	1,776	384	463

# Business Area

01

## Infrastructure BG that Reforms the Landscape of Korea

The Infrastructure BG (Business Group) engages in design, construction, and maintenance in all civil engineering areas such as railway, subway, road, bridge, landfill and harbor. Its rich construction experience and technology will help create a better environment and future.



### Creating Socially Shared Value as a Leader in Privately Funded Infrastructure Projects

Doosan E&C is an avid participant in expanding key infrastructure such as roads, rails, subways, harbors, and environmental projects. In particular, the company has been developed many privately funded infrastructure projects. Starting from Ihwaryeong Tunnel, the first privately funded infrastructure project in Korea, the infrastructure BG has successfully completed many privately funded infrastructure projects and currently actively pursues the construction project of Shin-Bundang subway line which is also the first privately proposed railway project in Korea. The privately funded infrastructure project contributes to not only enhancing the convenience and efficiency of transportation facilities but is also emerging as a major profit-making business model.

### Demonstrating the Largest High-Speed Railroad Construction

The Infrastructure BG has contributed to the development of the national economy by building transportation infrastructure. In particular, we have completed six sections of the Seoul-Busan High Speed Railroad, and are conducting the construction of the Honam High Speed Railroad. We are proud to hold the longest high-speed railroad construction record with a total of 54KM in Korea.

#### Sales

(Unit : KRW in 100 millions)



#### Leading the Way in Privately Funded Infrastructure Projects

Based on rich experience and competitiveness in privately funded infrastructure projects, the Infrastructure BG will continue to grow in subway and high-speed railroad focusing on cutting-edge and green projects.

## 02

## Building & Housing BG to Complete the Urban Skyline

Based on advanced technology, creative thinking and perspective, the Building & Housing BG creates spaces with great artistic value and unique style.



### Brand with Creative Thinking and Higher Artistic Value

An apartment is not just a space for living. It should be a space to enrich people's lives. Our apartment brand 'Doosan We've' has led a high-quality residential culture to reflect the needs of our customers and raised their satisfaction. It also provides customers with unique and elegant residential spaces and enhances the status as landmarks in major cities.

### Providing Full Scope of Services in Architecture

World-class experts offer services ranging from the analysis and diagnosis of existing buildings to maintenance considering the entire process of a building's life cycle. In addition, we provide advanced technologies and services by constructing buildings in various fields, such as facilities for education, medical services, military and sports.

#### Sales

(Unit : KRW in 100 millions)



#### Pursuing Technology to Add Artistic Value to Spaces

Architecture is called another art to build a landmark through technology. Doosan E&C is striving to create space with artistic value through creative thinking and perspectives on the basis of state-of-the-art technology.

# Business Area

03

## 'Made by Doosan' CPE Business Division

The CPE Business Division supplies core chemical process equipments for oil & gas plants throughout the globe based on its world-class manufacturing capabilities and performance. The CPE Business Division will solidify its position as an industry leader on the basis of large-scale production facilities in Korea and Vietnam as well as technological competitiveness.



### World-Class Manufacturing Capabilities and Technological Competitiveness

Doosan E&C demonstrates world-class manufacturing capability in the chemical process equipment (CPE) field. The company is operating facilities to produce about 100 thousand tons per year in Korea and Vietnam and holds the biggest delivery record in the ultra large CPE field. Moreover, Doosan E&C's world-class technological prowess has been internationally recognized since the company received an order to manufacture technology-intensive PFRVs and delivered them for the first time in Korea.

### Enhancing Global Competitiveness

Through the strategy for customer diversification in the world, Doosan E&C is expanding its horizons into Brazil, Russia, Malaysia, China, India, Vietnam, and other emerging markets as well as the Middle East, Doosan's key market. On top of that, major national oil companies such as Aramco in Saudi Arabia, Petrobras in Brazil, and Rosneft in Russia registered Doosan E&C on their official equipment supplier list, paving the way for our market expansion. We also strengthened cost competitiveness by establishing Doosan Vina, a global production base in Vietnam, through joint investment with Doosan Heavy Industries and Construction.

### Sales

(Unit : KRW in 100 millions)



### Doosan E&C's CPE Business Division Focusing on Manufacturing Core Chemical Process Equipment for Oil & Gas Plants around the World

The CPE Business Division has the business know how and production records for half a century, while also securing business competitiveness based on its global customers. The CPE Business Division will expand market share through continuous technological improvement and contribute to the growth of Doosan E&C by entering the marine equipment business.



## HRSG Business Division to Take a Great Leap

04

The HRSG Business Division has accumulated know-how of raising the efficiency of plant under any condition that customers want by supplying more than 440 HRSGs to 39 countries around the world. Based on these experiences, the HRSG Business Division plays a role as a technical communication channel between project owners and EPC (Engineering, Procurement and Construction) companies and solidifies its position as a differentiated premium HRSG brand.



### Proprietary Technology, the Source of Competitiveness

As an Original Equipment Manufacturer (OEM) with an unique model named 'D-Top', the HRSG Business Division provides total solutions for the whole process of the HRSG plants construction from basic design to production, installation and maintenance. The HRSG Business Division was highly praised for on time delivery and prompt responses, which has been proven by ranking No.1 a total of five times in the global HRSG market share conducted in 2003, 2007~2009 and 2013.

- Source : McCoy Power Reports 2014

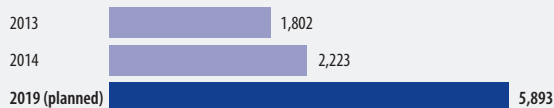
### Leading Company that Presents Vision for the Market

As a market leader, we are not only presenting the direction of the coming market but also concentrating on enhancing R&D capabilities based on proprietary technologies. In addition, we are establishing long term plans to develop new sectors and preoccupy the market.

We are at the stage of completing developing the market specialization model, and we have established local business footholds in major cities in the US and Europe. In order to ensure stable expansion and increase synergies, we are preparing for businesses related to HRSG proprietary and engineering technologies.

### Sales

(Unit : KRW in 100 millions)



\* The figure in 2013 includes performance before April 2013.

### Global Top-Tier HRSG Business Division

The business transfer to Doosan E&C was a milestone for the HRSG Business Division. We will make the HRSG Business Division play a significant role for our growth and take-off by focusing on developing new technologies and creating the synergy with existing engineering and construction business.

# CSR Strategy

## Doosan E&C's Corporate Social Responsibilities of Growing into a Global Sustainable Company

### Doosan's Social Responsibilities and Sustainability

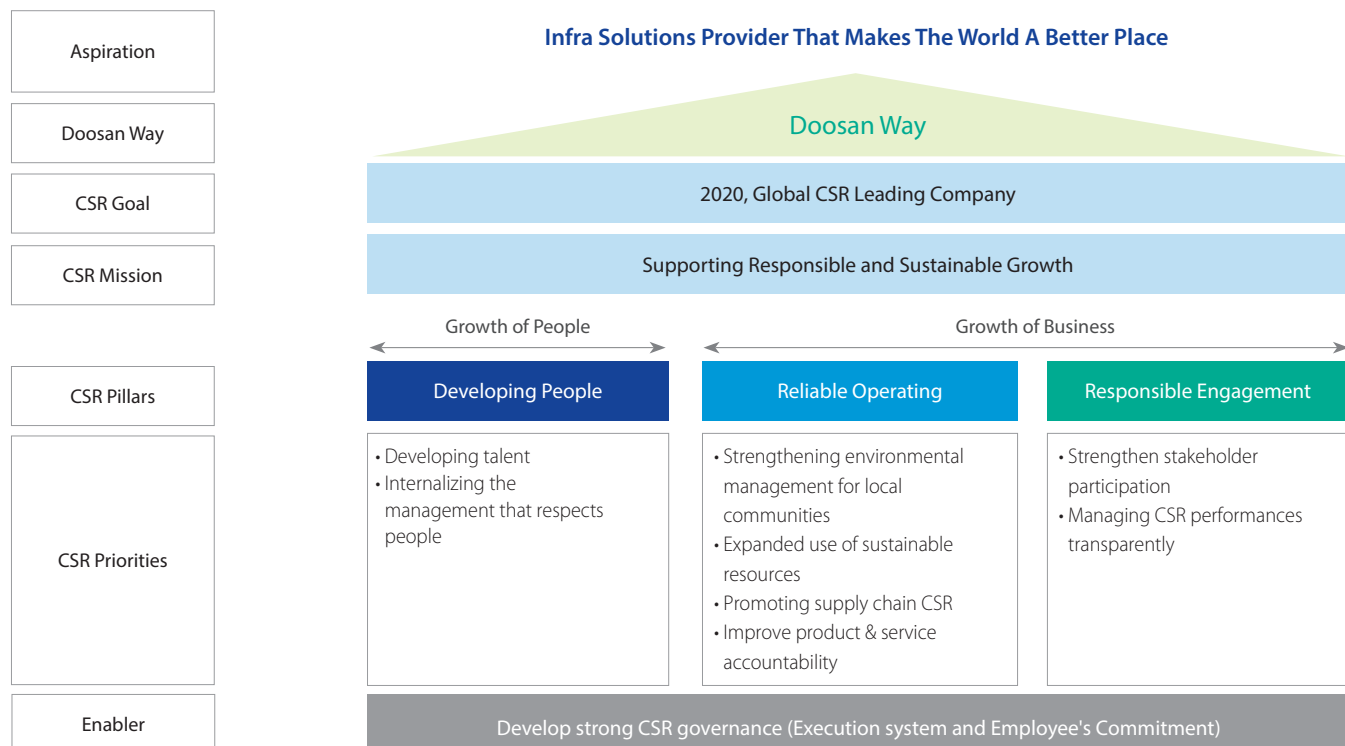
Doosan's CSR strategy system aims to achieve the goal of 'Becoming a Leader in CSR in the World by 2020' by realizing the vision of 'Proud Global Doosan', which consists of 3 CSR strategic directions and 7 top priority tasks. There is great significance that our stakeholders participated in the process of establishing Doosan's CSR strategy system to derive CSR material issues and came up with strategies based on them.

Companies and the society have to grow together. In order to grow into a sustainable company, it is necessary to pursue a balanced development for the economy, environment and society. Based on diverse stakeholder engagement, Doosan E&C established the goal of becoming a global company that leads in CSR, as well as implementing sustainability management by strengthening the company-wide competencies.

### CSR Implementation System

Since 2013, Doosan E&C's CSR have been operated mainly by the CSR team directly under the CEO. The CSR Committee is the highest decision-making body relevant to CSR and makes decisions on the implementation direction of medium and long-term strategies. Also, a council consisting of working-level team leaders come up with detailed implementation plans and discuss about implementation tasks. The CSR team is in charge of handling duties related to CSR, including identifying stakeholders' issues, analyzing the internal level of CSR, establishing company-wide CSR tasks, conducting performance monitoring and publishing the report.

### CSR Strategy Framework



## CSR Assessment Tool

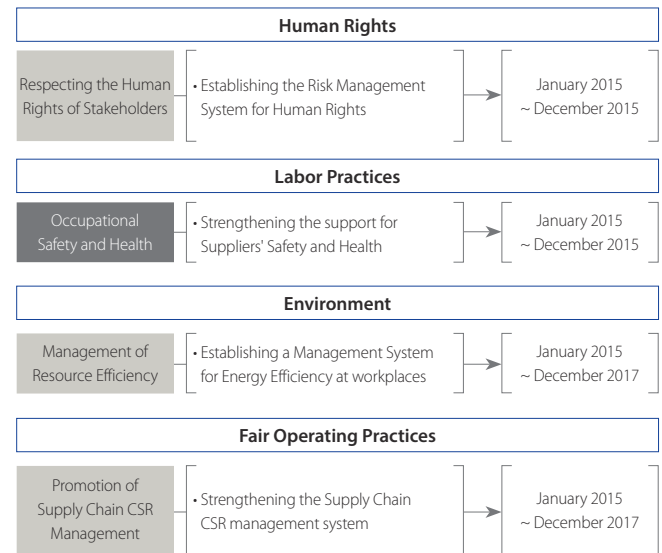
Doosan E&C has observed changes in the global social environment and reviewed how stakeholders are affected by sustainable products and services and to meet the social demand. In this regard, Doosan E&C utilized Doosan's CSR assessment tool to derive improvement tasks for monitoring the CSR levels and enhancing competencies. As a result, we established a roadmap for implementing various tasks that included three group common tasks and one implementation task for Doosan E&C in 2014.

### Doosan CSR Diagnosis Index (7 fields, 18 indexes)



## CSR Implementation Tasks

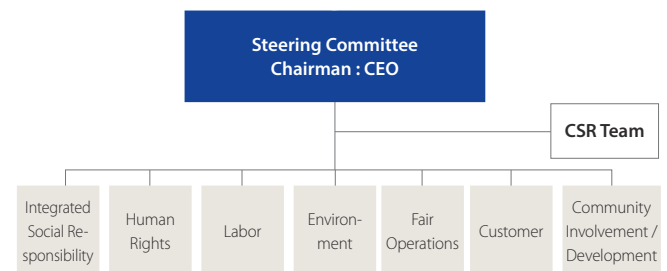
■ Group common tasks ■ Doosan E&C implementation tasks



## CSR Committee

In order to meet the internal and external stakeholders' demands and strongly fulfill the social responsibilities emphasized in the Doosan Way, Doosan E&C is running the CSR Committee consisting of the CEO and the management. The CSR Committee is the highest decision-making body related to CSR that discusses business risks resulting from changes in the CSR environment and establishes company-wide CSR strategy and policy, while also exploring business opportunities.

### CSR Committee



# Governance

## Independence and Transparency of the Board of Directors

### Composition and Operation of the BOD

The Board of Directors (BOD) of Doosan E&C consists of two inside directors and three outside directors to ensure the independence and transparency in the decision-making process. The CEO serves as the BOD Chairman and all outside directors are independent. The roles of the BOD include not only convening shareholders' meeting and deliberating financial issues but also establishing our company's basic management policies and comprehensive operation plans.

### Reinforcing the Independence of the BOD

Outside directors have not been members, affiliated persons, or financial traders of Doosan E&C and its affiliates for the past five years. They are appointed from among candidates with professional knowledge and experience in the fields of law, tax, and policy. They monitor and supervise management activities and fulfill their responsibilities as advisors to the company. We also provide them with necessary information and education to carry out their duties in an excellent manner.

### Transparent Disclosure of Information

The BOD regulations, roles, responsibilities and resolutions are reported on our website. The company also discloses BOD-related materials that should be made public on the DART of the Financial Supervisory Service.

### BOD Composition

Position	Name	Duty	Career
Standing Director	Byung-hwa Lee	CEO	Master's degree in architectural engineering at the Graduate School of Yeungnam University (Current) CEO of Doosan E&C
	Jeong-ho Song	CFO	Business administration at Chonbuk National University (Current) Vice President of Doosan E&C
Non-standing Director	Chang-seop Kim	Outside Director	(Former) Director at Tax Official Training Institute (Current) Head of Yell Tax Accounting
	Sang-mun Ham	Outside Director	(Former) Senior Researcher at Korea Institute of Finance (Current) Director at School of International Policy of KDI
	Jong-won Choi	Outside Director	(Former) Director of Graduate School of Public Administration at Seoul National University (Current) Professor of Graduate School of Public Administration at Seoul National University

Doosan E&C has established the BOD-driven advanced corporate governance, ensuring a transparent and reliable management system. We are also committed to getting much attention from investors and building a trust based and reliable relationship with stakeholders through strengthening our corporate competitiveness.

### BOD Operation

Classification	Unit	2012	2013	2014
Number of times BOD is held	Number of cases	10	17	13
Attendance rate of outside directors	%	89	81	94

### Committees under the BOD

The Internal Transaction Committee, the Audit Committee and the Outside Director Recommendation Committee were established under the BOD to raise the efficiency of decision-making. Each committee has only outside directors as members to ensure professionalism, fairness and independence in the operation.

#### Internal Transaction Committee

The Internal Transaction Committee is composed of three outside directors. The committee aims to raise the transparency of our management activities by operating the Compliance Program. The committee conducts preliminary reviews and approves large-scale internal transactions in accordance with the Clause 2 of Article 11 in the Monopoly Regulation and Fair Trade Act.

#### Audit Committee

The Audit Committee consists of three outside directors. The committee takes part in auditing procedures by holding quarterly and ad hoc meetings. Their roles include confirming balancing accounts, treating audit results, making decisions about appeals for reviews and stating opinions about the establishment, abolishment or interpretations of corporate regulations.

#### Outside Director Recommendation Committee

The Outside Director Recommendation Committee consists of three outside directors and recommends candidates for outside directors according to relevant laws, the article of association, and the BOD regulations.

### Evaluation and Compensation

Doosan E&C evaluates management goals and performances of the internal and outside directors regularly and gives compensation within the remuneration limits approved at the shareholders' meeting. More details are transparently disclosed on the DART of the Financial Supervisory Service.



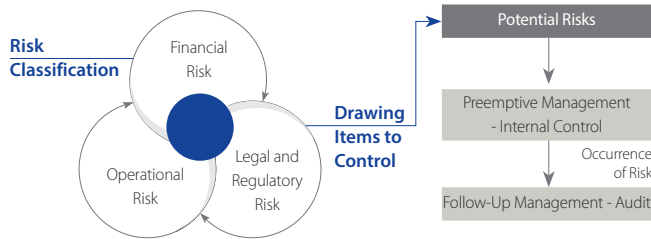
# Risk Management

## Strengthening Field-Centered Risk Management

### Integrated Risk Management Process

It is necessary to proactively analyze and respond to the effects of changing business environment for companies to survive. In this regard, the risk management team identifies the risks that could affect business environment by managing business performances, costs, bonds, safety and insolvency signs. The identified risks are evaluated on the future occurrence and the impact on the company when it actually occurs at the RM Council by field, while risks that are highly dangerous are comprehensively dealt with at the Management council.

#### Process to Cope with Internal Control Risk



The construction sector and manufacturing sector have a similar value chain as industries which produce on order. Therefore, we comprehensively manage various risks that might occur from each stage out of a total of six stages.

### Risk Management at Construction Sites

The risk management at construction sites is based on the whole process of the project. We classified the management items according to different stages of bidding and construction management, as well as measured and analyzed the expected risks in stages, to manage all stages of the project.

The construction and manufacturing businesses face various financial, environmental and social risks. In addition, changes in business conditions driven by diversification and entrance into new markets may bring about difficulties in efficiently managing risks. Therefore, we ensure practical responses to risks that cause economic losses and impede corporate values by managing financial and non-financial risks and devising a reporting system.

	Bidding Stages			Implementation Stages		
	1 <sup>st</sup> stage Selecting the project for participation	2 <sup>nd</sup> stage Making a bid proposal	3 <sup>rd</sup> stage Signing the contract	4 <sup>th</sup> stage Preparing for the project	5 <sup>th</sup> stage Conducting the project	6 <sup>th</sup> stage Settlement of the project
Core Activities	<ul style="list-style-type: none"> <li>Review rough profits and losses</li> <li>Review participating projects</li> </ul>	<ul style="list-style-type: none"> <li>Review rough conditions</li> <li>Review of P &amp; L</li> <li>Review of sales and demand</li> <li>Analyze risks</li> </ul>	<ul style="list-style-type: none"> <li>Signing contracts</li> <li>Review of terms and conditions</li> <li>Set the target cost rate</li> <li>Proceed with licensing</li> <li>Conditions of sales</li> </ul>	<ul style="list-style-type: none"> <li>Complete the handing over of the project</li> <li>Complete the handing over between sales team and on site</li> <li>Manage SPC investments</li> </ul>	<ul style="list-style-type: none"> <li>Establish the implementation plan and carry out construction for the project</li> <li>Discuss about risks</li> <li>Make an interim report on business profits and losses</li> <li>Manage residents</li> </ul>	<ul style="list-style-type: none"> <li>Complete the report on the project</li> </ul>

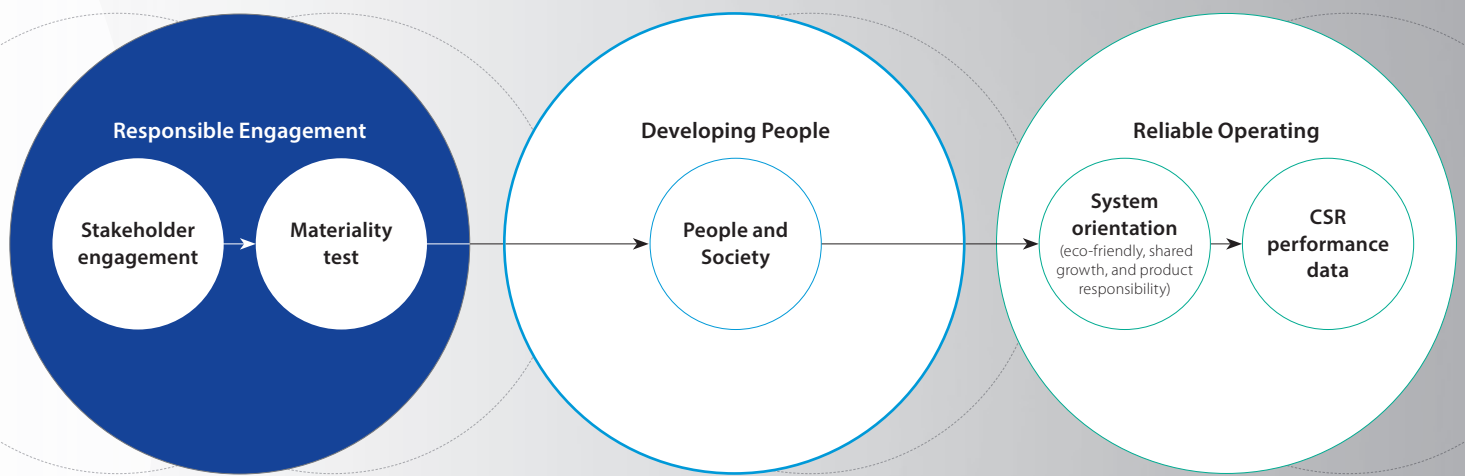
### Risk Management at Manufacturing Sites

Risk management at manufacturing sites is conducted through consultation with responsible staff members under the supervision of the PM team. We manage the risks related to the safety and product quality of work sites in advance by regularly monitoring and checking them.

	Bidding Stages			Implementation Stages		
	1 <sup>st</sup> stage Selecting the project for participation	2 <sup>nd</sup> stage Making a bid proposal	3 <sup>rd</sup> stage Signing the contract	4 <sup>th</sup> stage Preparing for the project	5 <sup>th</sup> stage Conducting the project	6 <sup>th</sup> stage Settlement of the project
Core Activities	<ul style="list-style-type: none"> <li>Estimation</li> <li>For bidding</li> <li>For orders</li> <li>Review projects</li> </ul>	<ul style="list-style-type: none"> <li>Review rough conditions</li> <li>Payment conditions</li> <li>Guarantee conditions</li> <li>Tax, compensation conditions, etc.</li> <li>Decide on bidding prices</li> <li>Finalize business implementation</li> </ul>	<ul style="list-style-type: none"> <li>Signing contracts</li> <li>Notify order performances</li> <li>Register the baseline</li> <li>Finalize target budgets</li> </ul>	<ul style="list-style-type: none"> <li>Review the strategy for project implementation</li> <li>Finalize the persons in charge, including PM and PE</li> <li>Establish the implementation plan</li> </ul>	<ul style="list-style-type: none"> <li>Finalize and produce the implementation plan for project</li> </ul>	<ul style="list-style-type: none"> <li>Complete the report on the project</li> </ul>



# Responsible Engagement



‘Communication’ ‘Direction’  
‘Real Voice’

## Responsible Engagement

1. Defining the Range of Stakeholder Interest







2. Identifying Material Issues and Reporting Issues

3. Material Issues and Reporting Contents

# Defining the Range of Stakeholder Interest

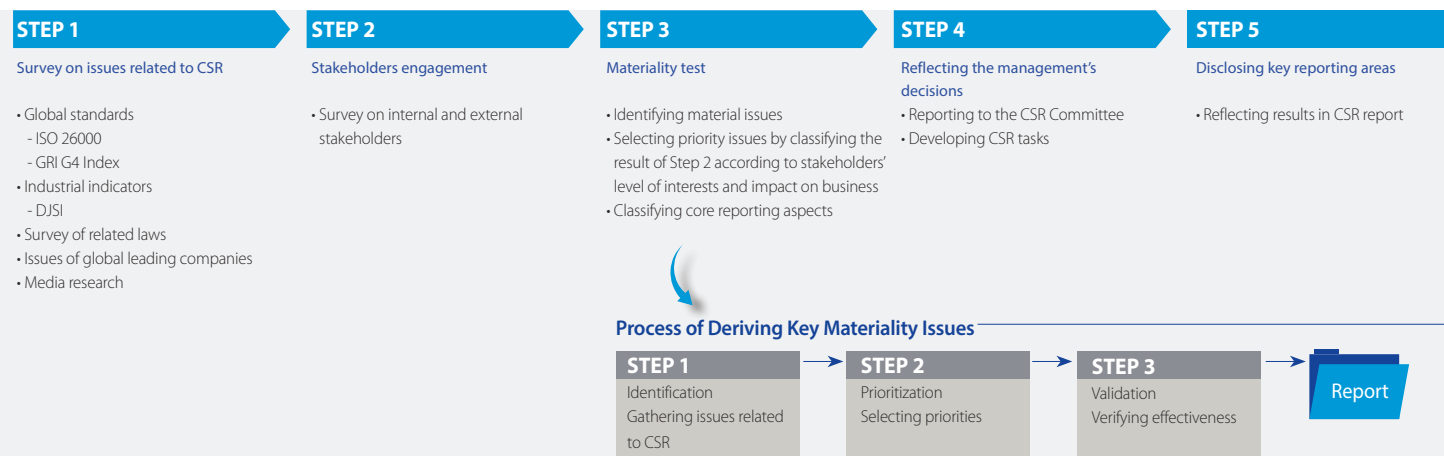
Doosan E&C established communication channels with all internal and external stakeholders, including customers, employees, shareholders and investors, suppliers, local communities, the government and academia, to gather diverse opinions and reflect them in the overall business activities.

## Communication with Stakeholders and Performances

Customers 1	Employees 2	Shareholders and Investors 3
<b>Definition of Stakeholders</b> <ul style="list-style-type: none"> <li>Source of the creation of economic value for the company</li> </ul>	 <ul style="list-style-type: none"> <li>Key members for sustainable growth</li> </ul>	 <ul style="list-style-type: none"> <li>Support for economic capital to implement sustainability management</li> </ul>
<b>Communication Channels</b> <ul style="list-style-type: none"> <li>Customer Satisfaction Center</li> <li>Customer Satisfaction Survey</li> </ul>	 <ul style="list-style-type: none"> <li>Conversations with the CEO</li> <li>Employee Survey</li> <li>Meetings</li> <li>Labor-Management Council</li> </ul>	<ul style="list-style-type: none"> <li>General Shareholders Meeting</li> <li>IR presentation</li> <li>Annual Report</li> <li>Brochure</li> </ul>
<b>Material Issues in Report</b> <ul style="list-style-type: none"> <li>Business activities that reflect customers' opinions</li> </ul>	<ul style="list-style-type: none"> <li>Management of occupational accidents and disasters</li> </ul>	<ul style="list-style-type: none"> <li>Diversifying economic value creation through business expansion</li> <li>Creation and distribution of economic value</li> <li>Ensuring soundness of corporate governance</li> <li>Strengthening integrated risk management activities</li> </ul>
Suppliers 4	Local Communities 5	Government and Academia 6
<b>Definition of Stakeholders</b> <ul style="list-style-type: none"> <li>Partner that cooperates for mutual prosperity</li> </ul>	 <ul style="list-style-type: none"> <li>Foundation and base for sustainable business activities</li> </ul>	 <ul style="list-style-type: none"> <li>Provision of systematic and social foundation where the company can grow</li> </ul>
<b>Communication Channels</b> <ul style="list-style-type: none"> <li>Shared Growth Council</li> <li>Regular meetings</li> <li>Workshops</li> </ul>	 <ul style="list-style-type: none"> <li>Community meetings</li> <li>Social contribution activities</li> </ul>	<ul style="list-style-type: none"> <li>Taking part in Government Councils</li> <li>Regulation and Evaluation</li> </ul>
<b>Material Issues in Report</b> <ul style="list-style-type: none"> <li>Systematic management of supply chain CSR</li> </ul>	<ul style="list-style-type: none"> <li>Minimizing negative impacts on local communities</li> </ul>	<ul style="list-style-type: none"> <li>Analyzing corruption risks</li> <li>Complying with the Code of Ethics</li> <li>Eco-friendly construction and design</li> </ul>

The material test process organizes the issue pool through the review of global CSR standards, industrial indicators, and issues of global leading companies, and media research. After that, we identified material issues through interviews with and assessment by internal and external experts.

## Materiality Evaluation Process



# Identifying Material Issues and Reporting Issues

**We report material issues that stakeholders concern the most.**

Doosan E&C selects important CSR issues based on the survey result of internal and external stakeholders and disclose them through the CSR report after going through internal review.

## Materiality Test

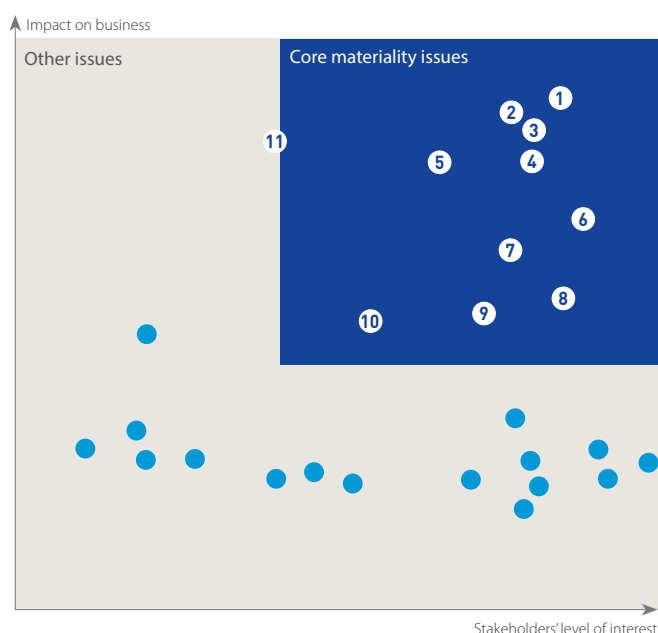
Doosan E&C's materiality test aims to identify stakeholders' core areas of interest by reflecting urgency and strategic importance of issues in corporate operations. After identifying 27 issues related to Doosan E&C by analyzing the CSR issues reported by competitors domestically and internationally, the media reports and related laws, we selected a total of 11 core issues through the surveys on stakeholders.

## Reflecting in the Decision-Making Process

The CSR Committee attended by Doosan E&C's CEO and the top management reviews key CSR issues drawn by the materiality test and reflects them in the decision-making processes. Key materiality issues derived are mainly managed at the council consisting of working-level team leaders, while optimal performances are made through the existing on-site activities and site operations between working-level divisions.

## Reporting Materiality Issues

Key CSR issues drawn by the materiality test and reflected in the decision-making management activities are reclassified by each aspect of the GRI G4 guideline for systematic reporting. We transparently disclose the results of related policies and activities through the CSR report and corporate homepage's sustainability management section. Also, stakeholders' feedback is reflected in the following year's report.



## Core Materiality Issues

Issues	Page
1 Complying with the Code of Ethics	57
2 Analyzing corruption risk factors for work sites	57
3 Strengthening integrated risk management activities	21
4 Creating and distributing economic values	13~17
5 Diversifying economic value creation through business expansion	13~17
6 Management of occupational accidents and disasters	34~36
7 Ensuring soundness of corporate governance	20
8 Minimizing negative impacts on local communities	39~40
9 Implementing management activities that reflect customers' opinions	52~56
10 Eco-friendly construction and design	45
11 Systematic management of supply chain CSR	49~51

# Material Issues and Reporting Contents

**We will establish goals for sustainability management and strive to achieve them.**

Doosan E&C analyzed crisis and opportunity elements surrounding the company in the fields of economy, environment, and society, and rearranged key materiality issues derived by each aspect of the GRI guideline. The derived backgrounds, strategic responses, current levels and goals are summarized in the table below.

## Doosan E&C

Contents	Economic Performances	Governance
Core Issue	<ul style="list-style-type: none"> <li>• Creating and distributing economic values ④</li> <li>• Diversifying economic value creation through business expansion ⑤</li> <li>• Strengthening integrated risk management activities ③</li> </ul>	<ul style="list-style-type: none"> <li>• Ensuring soundness of corporate governance ⑦</li> </ul>
Major Stakeholders	Shareholders and investors	Shareholders and investors
Backgrounds of Issues	In order to become a global construction and manufacturing company, we need to maximize profits through business expansion and new market entries, as well as effectively managing various crisis elements.	In order to promptly respond to the rapidly changing business environment, we need to enhance the transparency and efficiency of management and make optimal decisions based on the professionalism on the business.
Strategic Response Directions	We are upgrading technology competencies and actively entering into new markets through scientific approach and advancement of fundamental competitiveness and work methods. In addition, we strengthened integrated enterprise-wide risk management to respond to various risks.	We are improving stakeholders' level of interest by strengthening corporate competitiveness, while also establishing stable relationship of trust with stakeholders.
Current Level	We are addressing the risk factors of each business area by diversifying portfolios through the business expansion of equipment and establishing an integrated risk management strategy.	We established the BOD-driven corporate governance to ensure transparency of management and set up a reliable corporate governance.
Plans and Goals	<ul style="list-style-type: none"> <li>• Expanding business areas by maximizing core competencies and entering into new markets</li> <li>• Upgrading integrated risk management system</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthening the operation of the BOD and its subcommittees</li> </ul>
Reporting	p.13~17, p.21	p.20
GRI Index	Economic performance	Governance

## Developing People

Contents	Safe Work Environment	Sharing Activities
Core Issue	<ul style="list-style-type: none"> <li>• Management of occupational accidents and disasters ⑥</li> </ul>	<ul style="list-style-type: none"> <li>• Minimizing negative impacts on local communities ⑧</li> </ul>
Major Stakeholders	Employees, suppliers	Employees, suppliers, communities
Backgrounds of Issues	The recently occurring large-scale industrial accidents are the factors impeding corporate growth, and employees' safety and health issues derived are to prevent such accidents.	We need to fulfill our social responsibilities by resolving conflicts through communication with local communities and implementing community-based social contribution activities.
Strategic Response Directions	We prevent accidents by identifying risk factors for each process in advance and establishing countermeasures and improvements through strengthening the EHS management.	We strategically implement social contribution activities that suit industrial characteristics so that all stakeholders including local communities can achieve sustainable growth.
Current Level	We enhance the awareness on EHS and strengthen execution by holding the EHS forum and conduct safety and health programs.	We implement social contribution activities to enhance the future competitiveness of local communities based on Doosan E&C's core competencies led by the CSR team.
Plans and Goals	<ul style="list-style-type: none"> <li>• Improving safety and health programs</li> <li>• Collecting stakeholders' opinions about safety and health programs</li> <li>• Helping suppliers establish and practice safety and health policy</li> </ul>	<ul style="list-style-type: none"> <li>• Community benefit programs</li> <li>• Community value creation program</li> <li>• Community reliance improvement program</li> </ul>
Reporting	p.34~36	p.39~40
GRI Index	Occupational health and safety	Local communities

## Reliable Operating

Contents	Eco-friendly Design is the First Step of Environmental Management	Shared Growth with Partners
Core Issue	• Eco-friendly construction and design 10	• Systematic management of supply chain CSR 11
Major Stakeholders	Customers, local communities, government, academia	Suppliers
Backgrounds of Issues	Eco-friendly construction has become very important due to the increased social interests on eco-friendly issues.	We strive to prevent negative impacts by taking into consideration potential results of other organizations because it might affect other organizations during the process of value chain activities, including purchasing and procurement.
Strategic Response Directions	We are developing and applying optimal design plans to suit each purpose, including energy conservation, resource efficiency and eco-friendly residential environment.	In order to promote and internalize CSR within the supply chain based on the 'virtuous cycle partnership', we promote CSR policies and implementation plans and actively encourage the participation of suppliers.
Current Level	We are responding to regulations through accurate diagnosis and analysis of GHG emissions and establishing and operating energy efficiency management system for work sites.	We operate CP for suppliers led by the Shared Growth Promotion Team, while also striving to maintain and expand through post monitoring.
Plans and Goals	• Adding policies and regulations related to climate change to EHS strategy • Establishing a system to manage the information on GHG emissions	• Setting policies for shared growth with suppliers • Monitoring shared growth programs and feedback
Reporting	p.45	p.49~51
GRI Index	Products and services, emissions	Partnership

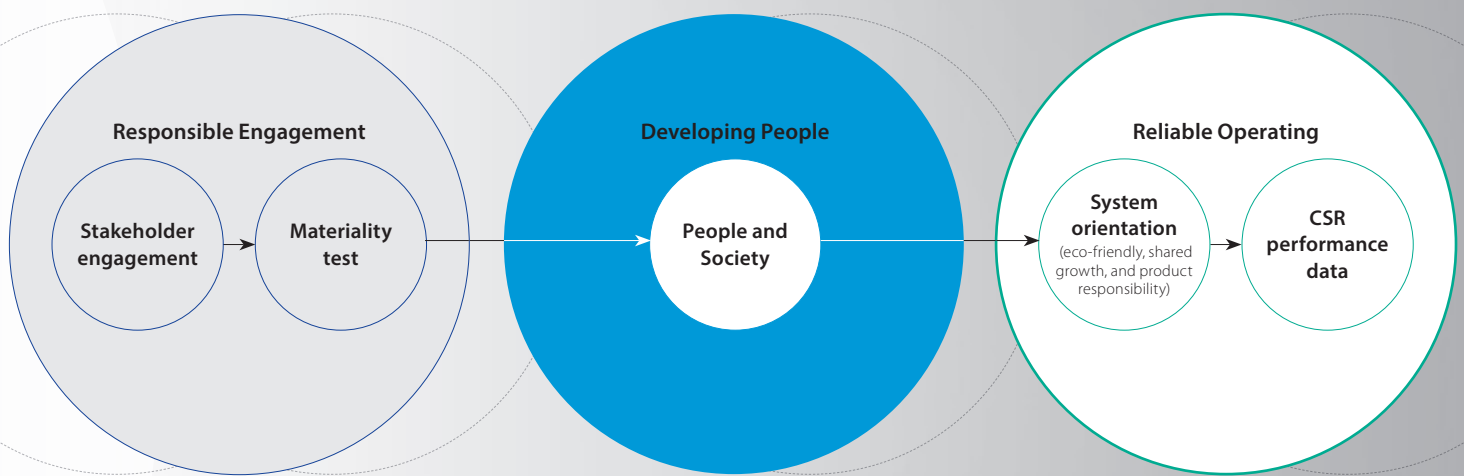
  

Contents	Strengthening Product and Service Responsibility	Ethical Management
Core Issue	• Management activities that reflect customers' opinions 9	• Complying with the Code of Ethics 1 • Analyzing corruptive risk factors for work sites 2
Major Stakeholders	Customers	Government and academia
Backgrounds of Issues	In order to satisfy various demands from customers, we are leading in the global market by providing the best products and services and securing quality competitiveness with differentiated standards.	The social demands for corporate transparency and ethical management have increased.
Strategic Response Directions	In order to realize the quality of world-class standards, we have established the quality management system to provide products and services that are superior to those of our competitors.	We strive to enhance the company's competitiveness by establishing the normative standards for management activities based on the society's ethical value and applying them to the overall impacts on the company.
Current Level	We established and operated the quality management system applied with the international quality standard of ISO 9001 to implement quality innovation activities and conduct pre and post management to strengthen customer satisfaction and quality.	We are raising the awareness on ethics by implementing enterprise-wide ethical education to respond to risk factors in advance by establishing the ethical management infrastructure.
Plans and Goals	• Developing 'Products with High Market Competitiveness Based on Engineering' through quality control activities	• Establishing a fair and transparent corporate culture through ethical management
Reporting	p.52~56	p.57
GRI Index	Product and service labeling	Compliance



# Developing People





‘Talent’ ‘People’ ‘Sharing’  
‘Growth’

## Developing People

### 1. Talent Development

#### G4 Aspect : Training and Education

- Recruiting Talents, the First Step of Doosan's Competitiveness
- System to Help New Employees Adapt to Organization
- Doosan E&C's Unique HR Development System
- Fair Evaluation and Compensation

### 2. Safe Work Environment

#### G4 Aspect : Occupational Health and Safety

- Respecting People through Safety and Health Management
- Efforts to Ensure Safety and Health

### 3. Human Rights

#### G4 Aspect : Employment, Diversity and Equal Opportunity

- Efforts to Guarantee Labor Rights
- Performances of Activities that Respect Human Rights

### 4. Sharing Activities

#### G4 Aspect : Local Communities

- Growing Together with Local Communities
- Doosan E&C's Flagship Social Contribution Activities
- Promoting Participation in Social Contribution Activities

### 5. Retirement and New Beginning

#### G4 Aspect : Training and Education

- New Beginning and Consistent Progress

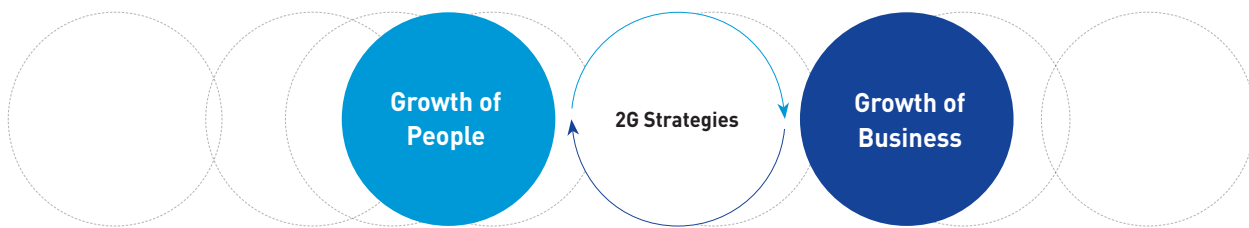
# Talent Development

## G4 Aspect : Training and Education

### HR Development that Doosan E&C Pursues

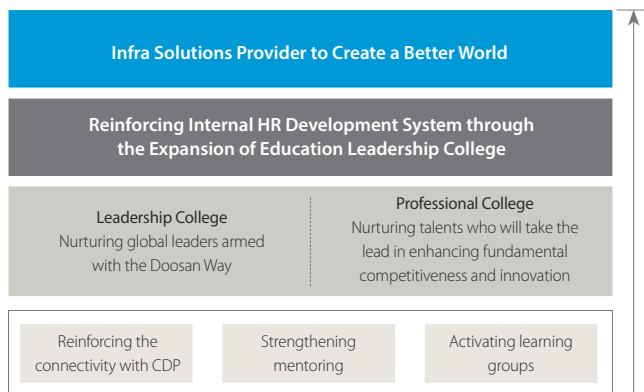
The growth engine that will lead the future of Doosan is 'People'. Also, investments on talents will enhance the company's sustainable growth and value competitiveness. Doosan has a passion for cultivating people. Above all, it is important to develop talented staff who realize our goal of 'Proud Global Doosan' and strengthen their competencies.

### 2G Strategies of Doosan Group - Growing Business through Growing People



### Doosan E&C's HRD Strategies and System

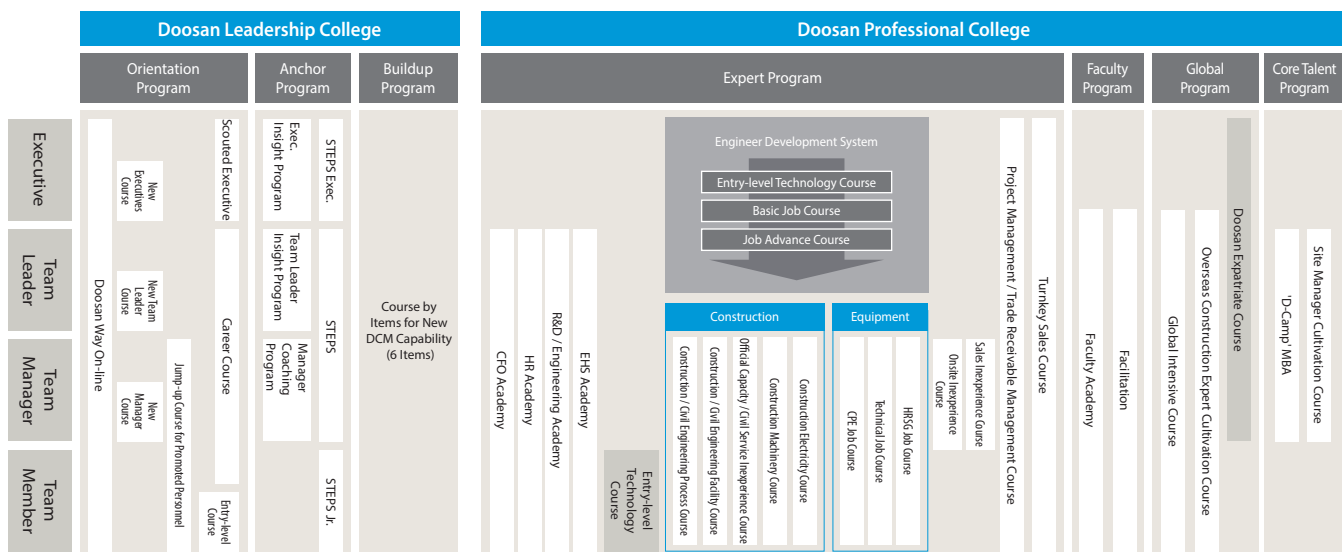
### Solutions



Doosan E&C is operating largely two types of HR development systems. One is Doosan Leadership College, which is a training program in stages for developing global leaders embedded with the Doosan Way and improving their own individual competencies. Also, another one is Doosan Professional College, which is a job-oriented training program that aims to cultivate professionals for each field by strengthening fundamental competitiveness and conducting innovations through the improvement of actual abilities.

Based on the Doosan Credo of 'HR Development is the Priority of All Investments and Everyone's Obligations', Doosan E&C is striving to develop 'Proud Global Doosan'.

### HR Development System



## HR Development, the First Step of Doosan's Competitiveness

Development of outstanding talent is the first step of becoming a member of Proud Global Doosan. We establish the foundation for becoming a global Doosan by hiring our employees based on individual competencies and growth potential and employing local persons who are customized to global locations.

### Open Recruitment

In order to ensure objective and fair employment without discrimination based on gender, academic ability, region, disability, etc., we are operating Doosan's unique employment policy. It applies the advanced employment tool for hiring talent which suits the traits of Doosan People, including document screening, the Doosan Bio-data Survey, the DCAT (Doosan Comprehensive Aptitude Test), the SI (Structured Interview) for measuring inborn capabilities, and the DISE (Doosan Integrated Simulation Exercise) interview for evaluating the analytical mindset and problem solving abilities. In particular, we are actively developing outstanding talent by having the top management participate in the final interview process for applicants.

### Hiring Workers on Flexible Time Schedule

We provide flexible time schedule without discrimination in work conditions while also enabling adjustment of working hours. It gives job opportunities to women who have career interruptions due to childcare by making working at home possible to achieve work-life balance and working and learning at the same time is possible for talented people who wish to earn and study at the same time.

### Overseas Recruiting

In order to acquire outstanding global talents, we have an employment policy that actively utilizes regional networks. We recruit outstanding persons through an employment process for local persons that focuses on acquiring talents with professionalism and global sense. We first hire applicants who live near the work site, while also attract outstanding talent in advance through internship and scholarships. Also, in the case of production workers as well as talent verified through the professor recommendation system, we acquire outstanding talent through signing MOU with local universities.

## Program for Organizational Adaptation of Newly Hired Employees

We are running programs for newly hired employees to quickly adapt to the organization and help them with building experience. We aim to provide a method of developing both senior and junior employees so that the newly hired employees' understanding of their duties and their adaptation to the organization are improved through exchanges with senior employees, while senior employees also learn about the role of being future leaders by caring for their junior employees and taking the lead.

### Program to Help New Employees Adapt to the Organization

In order to help newly hired employees become a member of Proud Doosan and quickly adapt to organization, we hold a company track meet and a pre-mentoring program. After joining the company and being assigned to a team at the end of orientation and OJT education, we provide mentoring and challenge programs. Mentoring is conducted through diverse activities to help the quick adaptation and development of mentees in the new environment at the company. Challenge program identifies areas that need improvement at work and develop the ability to solve problems together with the mentor, which provides the opportunity to learn from the mentor through close cooperation.

### Program to Help Experience Employees Adapt to the Organization

When experienced employees join the company, we conduct a mentoring program for them and provide a guide book for newly hired employees, so that they can quickly adapt in a short period of time. In case of experienced employees, we encourage organizational adaptation by sharing corporate systems and work methods. In order to improve the effect of the program, we also do a match between a new employee and a senior employee who has worked longer on the job in the team, to pass on business know-how.



Program to Help Experience Employees Adapt to Organization

# Talent Development

## G4 Aspect : Training and Education

### Doosan E&C's Unique HR Development System

In order to develop talented staff who will lead the future of the company and society, we need to provide more opportunities to enhance individual competencies and technologies. Doosan E&C will establish the foundation for employees to grow on their own.

### Introduction of Major Training Programs

#### Learning Credit

The learning credit system is for systematically developing Doosan People with leadership and professionalism. It establishes individual learning plans for employees and encouraging them to develop themselves according to the plans, by giving learning credits. It is Doosan Group's unique system that recognizes diverse forms of learning methods by giving learning credits, such as mentoring, reading books and MOOC (on-line public classes), making it different from the standardized learning activities in the rapidly changing environment and allowing employees to develop themselves while working at the same time.

#### D-tube Course

D-tube course is Doosan E&C's own on-line training program that utilizes internal lecturers to receive job training for each field through videos. Unlike the existing on-line training programs, we utilize internal experts because they can offer examples and training contents that are specialized to Doosan E&C to be applied directly at the working level. It is characterized by providing on-line training to field workers who are located all across the nation to ensure high accessibility. The program consists of courses on internal technologies and know-how, including basic technologies and actual construction examples.

#### Staff Development Course

The staff development course acts as a mechanism for promoting learning activities through the process of 'individual learning → team learning → organizational learning', which is a form of learning where employees can freely exchange the information and technologies that they have acquired, with other members. Since there is no restriction on learning methods and contents, it is possible to offer learning in diverse fields that include leadership and professional job duties. Also, it contributes to improving the competencies of employees by accumulating internal technology knowledge and increasing the scope of application, by systematically reorganizing training programs that used to be conducted by different teams.

Classification	Contents of Activities in 2014	Note
Learning Credit System	Achieving 86.3% (the first year of introduction)	29.2% of learning credits acquired credits through self-directed learning
D-tube Course	Operating 53 courses	
Staff Development Course	Developing and operating 56 courses	Participation by 958 persons

#### Site Manager Cultivation Course

This course was designed to generate capable site managers who are equipped with general management knowledge, leadership, coaching ability and the understanding of sites, which consists of a structure of virtuous cycle for site managers, including cultivation, appointment, competency enhancement and promotion. The total training period is four months and the course includes cost management, financial management, external affairs management and organizational management.

#### Job Training by Internal Experts

Experts in each job provide employees with job-oriented training courses specialized for each business in different stages from new employees to managers. The program is made up of three courses – entry level course, basic course and advanced course. We have internal lecturers to pass on their professional skills and know-how to their junior employees.

#### D-camp

D-camp, the in-house MBA course of Doosan E&C, aims to develop leaders to propel changes and innovations with a strategic management mind and business skills. The program is for a period of six months that includes courses on construction management and general management.

### Cultivating Local Employees in Overseas Business

#### Technical Education Center

The Technical Education Center offers largely two types of training courses to enhance job capability and leadership. The training programs for strengthening job capability include 9 hands-on job training sessions, including courses on welding and floor plan analysis. The leadership training is designed to develop management supervisors and middle managers, including courses on strategy understanding, problem solving, roles and responsibilities of leaders, time management, teamwork, presentation skills and computer use.

### Training of New Local Employees

We provide training programs that are run by the in-house technical education center, aimed at helping with new local employees to quickly adapt and improve their job capabilities. We are striving to ensure the new local employees quickly adapt through seven courses on basic design, understanding of businesses and products, safety, the environment and health.

### Developing Managers and Engineers

A total of about 30 programs in four areas of basic training, technical education, leadership and language are operated regularly to develop high-caliber managers and engineers, contributing to enhancing the competencies of local employees.

### Training at the Head Office (Korea) for Local Employees

In order to pass on the know-how on production and quality assurance at the head office, we select outstanding local employees (outstanding division for divisional activities) and send them for group training in Korea. The training at the head office in Korea is not only for engineers, but employees from all business areas, including management, finance, IT and production support, which contributes to enhancing technical and management capabilities and boosting their morale.



Educating Local Employees in Overseas Business

### Fair Evaluation and Compensation for Talent Management

Doosan E&C makes fair and reasonable evaluation to motivate employees to be more productive for growth. We provide systematic evaluation and development by allowing all employees to develop their capabilities and carry out development activities, so that they can develop into the next-generation leaders that endorse the Doosan Way. Starting from 2014, we are also running the fact-gathering system that frequently acquires evidences for evaluation to enhance the fairness of evaluation.

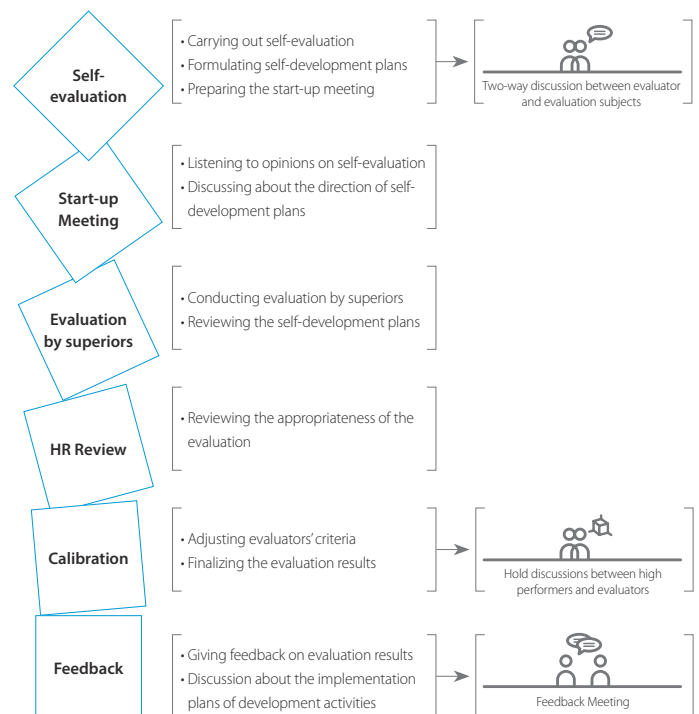
### Evaluation Method

There are largely two types of evaluation methods, including capability evaluation and performance evaluation. The capability evaluation evaluates on the inherent capabilities owned by employees individually, which evaluates individual level of capabilities through the competency model that reflects the desired ideal employee embedded with the Doosan Way called the DCM (Doosan Competency Model). The performance evaluation evaluates the level of achievements made based on the individual financial and strategic MOB (Management by Objectives) goals established at the beginning of the year, allowing the company to decide on the individual level of performance and contribution made to the company and organization.

### Evaluation Target and Period

In order to ensure an objective evaluation of capabilities and performances, we evaluate our employees who have worked for more than three months. We conduct the evaluation through a period of four months from December of every year until March of the following year, ensuring sufficient discussions are made between the evaluator and the persons who are subject to the evaluation during the evaluation period.

### Employee Evaluation Process



# Safe Work Environment G4 Aspect : Occupational Health and Safety

## Safe Work Environment that Doosan E&C Pursues

Large and small industrial accidents that occur frequently are the impeding factors for sustainable growth. Doosan E&C recognizes that the employees' individual safety and health are the basis for the company's stable growth and development to establish and implement a systematic management plan.

### Respecting People through Safety and Health Management

The creation of value through employees' ability requires a proper work environment. This is because employees can focus on their work only when they feel safe and health at their worksites. This is prerequisite not only for Doosan's value creation activities, but for the happiness of the employees and their families and society as a whole.

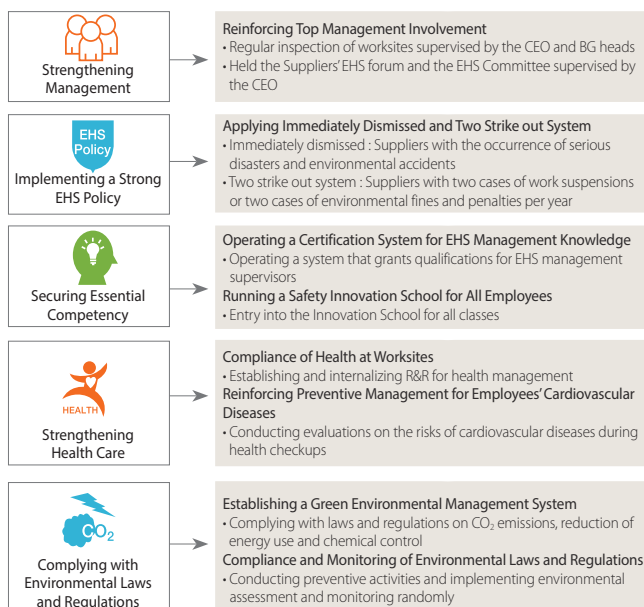
### Doosan E&C's Safety and Health Management Policies

Doosan E&C's safety and health management is rooted in the achievement of advanced EHS culture based on human oriented management, which coincides exactly with the management philosophy of Doosan Group. All employees are entitled to work at safe and constructive worksites and the company also place safety-first management on a priority basis.

### Doosan E&C's EHS Implementation Plan

Policy : • Implementing human oriented management • Establishing an advanced EHS culture

Goal : • Zero serious disasters • Zero environmental accidents



### Organizations Responsible for Safety and Health

Doosan E&C runs the Industrial Safety and Health Committee and the Industrial Safety and Health Councils for Suppliers as well as the EHS Team. These organizations contribute to the improvement of safety and health of employees.

### Industrial Safety and Health Committee

The Industrial Safety and Health Committee meeting is held at each worksite every quarter with the management, chairman, safety managers and health managers in attendance. It is operated for each worksite to discuss about all safety and health training session at sites and plants and ways to prevent potential risk factors. Through the discussion made at the committee meetings, various agendas are proposed regarding improving on-site ventilation system, enhancing the standards on quality and supply of work clothes, and introducing non-smoking and diet programs, which are reflected in management activities.

### Industrial Safety and Health Council for Suppliers

The Industrial Safety and Health Councils for Suppliers shares safety and health issues with suppliers and gathers their complaints and suggestions related to safety and health. The council also identifies hardships in practicing safety and health rules and discusses concrete countermeasures. We raise the workers' awareness about safety and health activities on the basis of matters discussed at the councils.

### Doosan E&C's Efforts Made to Implement Safety and Health Management Policies

As emphasized in the Doosan Credo, safety and health management is our belief and our priority value. Doosan E&C aims to create a safe working environment by strengthening execution and enhancing employees' awareness on EHS management through the motto of internalizing an advanced EHS culture based on human-oriented management.



## EHS Forum

Doosan E&C held a forum to promote the EHS upgrade plan and raise the awareness on safety, while also strengthening the EHS competencies of suppliers. We promoted the EHS implementation plan to Doosan E&C's executives, team leaders of relevant divisions and 45 outstanding suppliers, conducted EHS accident investigations, provided lectures on leadership, and shared best practices with suppliers. In the future, we plan to hold it regularly twice every year and apply major feedback to our job duties.



EHS Forum

## Safety Innovation School

As part of the efforts to upgrade the EHS management, Doosan E&C is operating the Safety Innovation School. It aims to strengthen training and execution in accordance with the post review result of KOSHA 18001, while also reinforcing the ability to derive risks related to the EHS essential competencies of management supervisors and unsafe works in advance. In 2015, we plan to run the Safety Innovation School with the goal of expanding the system for strengthening execution and raising the enterprise-wide EHS mind and enhancing the understanding on operating and implementing the EHS management system.



Safety Innovation School

Detailed Training Courses	2014	2015 (Plan)
Management Course	-	27 persons
On-site Supervisor Course	59 persons	61 persons
Management Supervisor Senior Course	180 persons	222 persons
Management Supervisor Junior Course	-	152 persons
Safety Manager Course	78 persons	84 persons
Suppliers' Employee Course	-	150 persons

## EHS Screen Saver

Doosan E&C promoted the EHS key implementation considerations, the EHS safety campaign and the EHS environmental campaign, and it also uploaded the cause of accident, progress and reoccurrence preventive measures. In 2014, we achieved many results, including conducting the EHS visual management that emphasizes the importance of EHS management to the management, implementing the Doosan Way's Credo, securing the EHS fundamental competitiveness, achieving the upgrading and scientific allocation of duties, and saving panel production costs at worksites through the EHS implementation plan (continuous reduction of more than KRW 30 million per year).

## Vibrant and Healthy Afternoon at Doosan

In order to manage the mental and physical health of employees, Doosan E&C is operating a stretching exercise program for preventing muscular skeletal diseases. We distributed well-being stretching equipment and educational videos to enable employees to do stretching exercises with vibrant music before starting the afternoon work. Through various EHS activities, we not only manage employees' health, but also raising employees' EHS awareness by increasing work efficiency and changing to a safety-oriented mindset.



# Safe Work Environment G4 Aspect : Occupational Health and Safety

## Implementing First Aid Training

In order to enhance employees' response to emergency due to the increased cases of sudden deaths, such as heart attacks, Doosan E&C is conducting First Aid training. The training is held by the EHS team in co-ordination with a professional training institute like the Korea Lifesaving Association, to learn about CPR (Cardiopulmonary Resuscitation), how to use defibrillator and respiratory obstruction. We expanded the training to be held not only at the Head Office in Seoul, the Changwon worksite and other sites across the nation, but also for our suppliers.



First Aid Training

Classification	Number of Employees	Persons Trained	Training Institute
Head Office in Seoul	514	450	Korea Lifesaving Association
Construction Site	687	687	Fire Station and others
CPE Business Division	502	502	Changwon Fire Station
HRSB Business Division	270	270	Changwon Fire Station
Rexcon BU	100	100	Fire Station and others
Total	2,073	2,009	

## Conducting Influenza Vaccination

Since influenza is a very contagious disease, Doosan E&C is conducting influenza vaccination programs during the in-between seasons every year to prevent being infected with influenza viruses. We provide the vaccination facility for our employees and their families, to minimize any manpower losses by preventing serious complications caused by influenza.

## Goals and Performances in Safe Work Environment

Aspect	Goals	Mid- to long-term Tasks	2014 Results	2015 Plans	2016 Plans
Safe Work Environment	Improving Safety and Health program operations	<b>Advancing EHS programs</b> <ul style="list-style-type: none"> <li>Analyzing status of Safety and Health program operation with in EHS strategies</li> </ul> <b>Operating EHS programs</b> <ul style="list-style-type: none"> <li>Safety and Health training for each class and feedback</li> <li>Cultivating and arranging Safety and Health Managers</li> <li>Setting and practicing Occupational Disease Management processes</li> </ul>	Strengthening EHS competencies by running the Safety Innovation School	Giving feedback on improved safety and health programs	Reviewing the effectiveness of EHS programs and establishing a new program plan
	Collecting stakeholders' opinions about safety and health program	<b>Collecting stakeholders' opinions about Safety and Health policies and programs</b> <ul style="list-style-type: none"> <li>Collecting suppliers' opinions (Meeting and Survey)</li> </ul> <b>Collecting internal and external stakeholders' opinions</b> <ul style="list-style-type: none"> <li>Giving feedback and reflecting it in business plans</li> </ul>	Receiving feedbacks and sharing opinions about EHS through the EHS forum	Considering whether to reflect stakeholders' opinions	Reviewing and applying the effectiveness of the progress made by gathering opinions
	Helping partners make and improve Safety and Health policies	<b>Diagnosing Safety and Health at Suppliers sites</b> <ul style="list-style-type: none"> <li>Analyzing implementation of Safety and Health policies</li> </ul> <b>Reviewing support programs for suppliers</b> <ul style="list-style-type: none"> <li>Developing support programs (Technology, System, Training)</li> </ul> <b>Implementing support programs for suppliers</b> <ul style="list-style-type: none"> <li>Supporting certification on suppliers' Safety and Health Management System</li> <li>Supporting training programs and give feedback</li> </ul>	Conducting the first aid training	Implementing Safety and Health programs for suppliers and giving feedback	Reviewing the effectiveness of Safety and Health programs for suppliers and conducting improvement measures



# Human Rights

## G4 Aspect : Employment, Diversity and Equal Opportunity

### Respect for Human Rights that Doosan E&C Pursues

Doosan E&C maintains stable and sound labor-management relations by ensuring employees' basic labor rights and establishing a smooth communication process. Also, we strive to respect the diversity of our employees by implementing various support systems for female and foreign workers and production workers who are on a continuous increase.

#### Efforts to Guarantee Labor Rights

Guaranteeing Labor Rights is a prerequisite for employees to be able to display their competency and manage their private lives. In order to guarantee the basic labor rights of our employees, we promote various policy reform activities in the systematic, policy-making, and cultural aspects.

#### Guaranteeing Union Activities

Our collective bargaining agreement entails protection of union activities, principles of collective bargaining, and information on strikes. Stipulated clauses describe free union activities for the labor rights of union members.

#### Labor-Management Meeting

Respect for human rights and related agendas are regularly discussed during the labor-management meeting. The meeting deals with welfare benefits and improvement of working conditions, and are used as a flexible discussion and negotiation channel between Labor and Management.

#### Labor-Management Council

The Labor-Management Council is held quarterly to discuss management system regarding employee grievances, safety and health, and work environment. The rights of employees are stipulated in the Labor-Management Council regulations in order to build a cooperative relationship between Labor and Management.

#### Field Manager Council

Doosan E&C operates the Field Manager Council, which is held once a month and participated by field managers that oversee the entire production site. The Council discusses opinions on ways to improve irrational work systems, safety facilities, production facilities, and welfare facilities. Site workers can suggest ideas for improvements and monitor the results to upgrade work environments centered on sites and workers.



Field Manager Council

### Doosan E&C's Goals for Respecting Human Rights

Aspect	Goals	Mid- to long-term Tasks	2014 Results	2015 Plans	2016 Plans
Establishing a System for Managing Human Rights Risks	Preventing the occurrence of human rights infringement in advance by establishing a culture and management program for respecting human rights	<p><b>Providing the present status and countermeasures on the infringement of human rights at worksites</b></p> <ul style="list-style-type: none"> <li>• Checking on the present status of human rights risks and deriving related issues</li> <li>• Establishing a guideline and coming up with improvement plans</li> </ul>	Adjusting working hours and providing flexible working hours for working moms	Analyzing the present status of the infringement of human rights at worksites and establishing and implementing countermeasures after checking on specific examples	Operating a system for continuously managing human rights risks and gathering employees' opinions on implementation plans

# Human Rights

## G4 Aspect : Employment, Diversity and Equal Opportunity

### Performance of Activities for Respecting Human Rights

Doosan E&C is conducting various activities to establish a working environment and create a corporate culture of respecting human rights across the company. By managing absenteeism and tardiness flexibly to suit the circumstances and characteristics of employees, we are pursuing work-life balance, while aiming to achieve the sustainable growth of the organization and individuals by operating a talent development system and various communication channels.

### Changing Head Office's Working Hours

Doosan E&C changed the Head Office's working hours because employees had difficulty in finding time for self-development during the morning hours, such as learning a new language and exercising, aiming to achieve work-life balance by delaying the morning arrival time to provide leisure time. In the future, we plan to receive additional opinions to continuously conduct improvement activities for morning working hours.

Classification	Implementation Activities by Stage
February	Conducting surveys on working hours
March~April	Reviewing the appropriateness, expected problems and changes related to working hours
May	Receiving the consent form to change the employment rule in accordance to the change
	Notifying and implementing the changed working hours

### Providing Flexible Working Hours for Working Moms

Since employees working at plants and construction sites have to arrive at an earlier time than at Head Office due to business characteristics, it is difficult for them to take their young children to school. Therefore, we are providing flexible working hours for working moms. In the future, we plan to expand working conditions to pursue work-life balance by making additional adjustment of working hours when an employee needs an adjustment.

Classification	Implementation Activities by Stage
May	Identifying the present status of female workers with children and listening to their opinions on improvement
	Identifying the needs for adjusting working hours (Identifying the expected persons who will use it)
	Notifying the changed working hours to the applicants and their team leaders and supervisors

### Establishing Talent Development System and Training for Production Workers

Doosan E&C established a system for strengthening job competencies and improving the corporate culture from a simplified one into a detailed process of developing production workers. In order to improve the corporate culture and strengthen competencies, we established the 2-track (technical experts (Meister), on-site leaders) and supported various development systems. Starting from 2015, we will realize the stabilization of the new system by continuously implementing the development channels and related systems.

Development Systems for Production Workers
Holding an explanatory session for the talent development of production workers and distributing the guide book
Establishing the support system for acquiring certificates by production workers
Establishing the Meister development system
Establishing the support system for acquiring Bachelor's degrees at universities
Establishing and implementing the dual mentoring system
Conducting an advanced job training for production workers

### Operating Part Leader Council for Production Workers

Doosan E&C is operating the Part Leader Council for production workers to encourage them to play a leading role in corporate culture and contribute to achieving the production goals through the stabilization and advancement of worksites. The Council Meeting is held on a monthly basis for each team and part to develop part leaders and establish a communication channel between the company and field workers. Also, we will implement activities to identify and improve losses that occur at the production sites.

# Sharing Activities

## G4 Aspect : Local Communities

### Sharing Activities that Doosan E&C Pursues

In order to grow into a sustainable company, it is necessary to fulfill the social responsibilities through close communication and ties with the society. Doosan E&C is contributing to the development of local communities by conducting social contribution activities under the mission to achieve 'Enhancing Future Competitiveness of Communities and Corporate Value through Strategic Social Contribution Activities'.

#### Growing Together with Local Communities

Doosan E&C develops and implements social contribution programs which are necessary for local communities and reflect our business features in order to grow together with all stakeholders. Based on relationships with local communities, we will carry out systematic and professional social contribution activities beyond mere supports for the underprivileged and sharing.

#### Doosan E&C's Social Contribution Activities

Doosan E&C is implementing social contribution activities that can help enhance the future competitiveness of local communities based on core competencies. To achieve this, we are expanding cooperative relationships with various regional institutions and groups.

#### Social Contribution Strategy

Vision	2020, Global CSR Leading Company*		
Mission	Enhancing Future Competitiveness of Communities and Corporate Value through Strategic Social Contribution Activities		
Promotion Principles	Community -centered	Link with Businesses	Link with Employees
Enabler	Social contribution framework / Employees' commitment		

\*Aligning with CSR strategy framework

#### Social Contribution Framework

Doosan E&C systematically operates the Volunteer Service Corps companywide. The CSR team under the CEO is responsible for overall contribution activities. As for each business group, activities are performed centered on BG Planning Team. The volunteer service corps was launched in 2011 and more than 93% of employees are participating in social contribution activities as of 2014.

#### Doosan Day of Community Service

The Doosan Day of Community Service is a day of volunteer works for Doosan People to fulfill corporate social responsibilities, which is one of Doosan Credo's core values. In order to reflect the business characteristics of developing the natural environment and the group's social contribution mission of 'enhancing the future competitiveness of communities', Doosan E&C is conducting activities to protect the natural environment, building love houses, and doing volunteer works for local communities mainly by the Head Office in Seoul, the Changwon work-site and other sites across the nation. In 2014, we implemented sharing activities that are needed by local communities with 764 employees that participated (41% of participation rate).



Facility Renovation of Hoa Phuong Orphanage in Vietnam

# Sharing Activities

## G4 Aspect : Local Communities

### Building Love House

Doosan E&C provides homeless families who are living in poor residential environments with houses, making the most of the ability and features of the construction business. 'Doowoohae', an association of our employees and our suppliers, donates their professional skills in building houses.

### Giving Hope to Pediatric Cancer Patients

Doosan E&C is proactive in giving hope to pediatric cancer patients. Major activities include removing prejudice against pediatric cancer, promoting blood donation campaigns, delivering blood donor cards, supporting medical expenses of low income patients, and operating psychological therapy programs to increase their self-esteem and sociality.

### Dream Sharing

The Dream Sharing is a mentoring program to help youngsters think about their dreams and future in order to map out their career path. In 2014, we contributed in developing the next-generation engineers by providing career mentoring by engineers in the business.

### Volunteer Services by Areas

The three BGs, including the Infrastructure BG, the Building & Housing BG, and the Plant Equipment BG, implemented volunteer services by area around their worksites. In particular, the CPE Business Division and the HRSG Business Division in the Plant Equipment BG continuously expanded their activities to grow with local communities, by conducting regular volunteer services for marginalized children, youngsters, and senior citizens in Changwon.

### Promoting Participation in Social Contribution Activities

In order to raise the awareness on social contribution and promote employees' participation, we established an on-line volunteer system to conduct joint volunteer services for each BG and part and award outstanding volunteers.

### Goals and Performances in Sharing Activities

Aspect	Goals	Mid- to long-term Tasks	2014 Results	2015 Plans	2016 Plans
Sharing Activities	Community Service Programs	<b>Devising and implementing community service programs</b> <ul style="list-style-type: none"> <li>Analyzing results of Community Service Programs operations</li> <li>Reviewing new and supplementary programs to support the underprivileged class</li> <li>Establishing activity schemes and carrying out programs</li> <li>Monitoring the result of program progress and reflecting on the feedback result</li> </ul>	Identifying improvements and supplements of social contribution programs	Conducting and monitoring new social contribution programs	-
	Community Income Creation Programs	<b>Devising and implementing community income creation programs</b> <ul style="list-style-type: none"> <li>Analyzing results of community income and value creation activities</li> <li>Reviewing programs (such as local purchase) for indirect value creation</li> <li>Figuring out demands from each construction site and manufacturing plant</li> <li>Operating by reflecting the budget of the responsible division</li> <li>Monitoring the result of program progress and reflecting on the feedback result</li> </ul>	Studying value creation programs suitable for each community	Devising value creation programs	-
	Community Reliance Improvement Programs	<b>Devising and implementing community self-reliance programs</b> <ul style="list-style-type: none"> <li>Surveying communities' efforts to wean themselves off reliance on firms</li> <li>Devising programs to reduce reliance on firms' support</li> <li>Operating programs and monitoring local communities at the same time</li> <li>Monitoring the result of program progress and reflecting on the feedback result</li> </ul>	Benchmarking CSR activities of advanced companies	Reviewing new programs	-

# Retirement and New Beginning

## G4 Aspect : Training and Education

### Retirement Planning Program that Doosan E&C Pursues

Korea is becoming an aging society and people are paying more attention to their lives after retirement. Thus, Doosan E&C has designed policies to ensure that the retirees can live in financial, psychological and social stability. These policies allow employees to focus on their jobs to enhance productivity and also keep them loyal to the company even after retirement.

#### New Beginning and Consistent Progress

Doosan E&C ensures stable life after retirement by giving financial support to employees through the retirement pension program, while also planning to provide a system where employees can get consulting on reemployment or start-ups through programs that support changing jobs when they reach the retirement age.

#### Deferred Retirement

Doosan E&C extended the retirement age to 60 years at the end of 2014 a step ahead of the government policy, while also introducing the salary peak system. Due to the extension of the retirement age, 12 employees who were expected to retire in 2014 and 2015 are guaranteed their job position for the next five years. As a result, we were able to maintain abundant experiences and technical skills of older employees, as well as establish the foundation for increasing the employment of new employees.

#### Retirement Pension

To ensure a more stable life after retirement, Doosan E&C runs the Retirement Pension Program since the end of 2012. As of the end of 2014, 1,692 persons have joined defined benefit plan and the pension fund amounts to about KRW 25.7 billion. Also, we are operating the program to ensure that employees to whom the salary peak system is applied, because of extending the retirement age, do not suffer losses on their retirement allowances by changing from the existing defined benefit plan to the defined contribution plan.

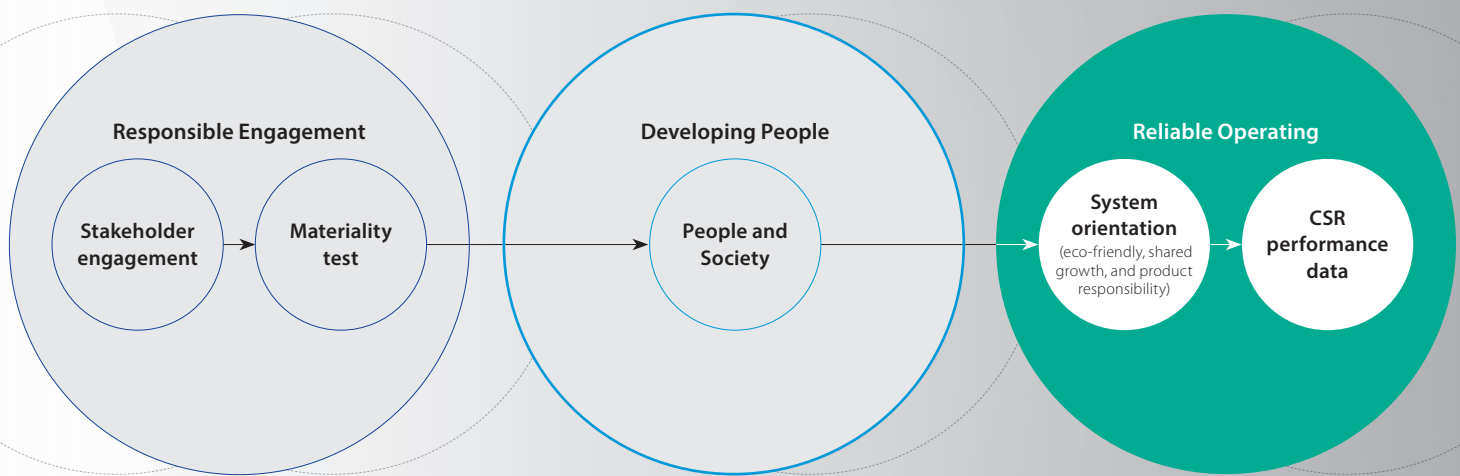
#### Retirement Management

If an employee has to retire involuntarily due to the company's management conditions, Doosan E&C operates a life-support program for employees, including providing mutual aid services for three years after retirement and supporting employees for three years by choosing children's school expenses or medical checkups. Also, we provide a program to applicants that supports the changing of career for one year. The program includes consulting and training on reemployment and startups and providing office supplies that lasts for a minimum of six months to a maximum of one year. As a result of the company's continuous support for employees who started a second life after their retirement, about 70% of the applicants in 2014 succeeded in getting a new job or starting their own business.

### Goals and Performances in Developing Programs to Support Retirees

Aspect	Goals	Mid- to long-term Tasks	2014 Results	2015 Plans	2016 Plans
Retirement and New Beginning	Early introduction of the deferred retirement system	<b>Introducing the deferred retirement system in early stage</b> <ul style="list-style-type: none"> <li>Collecting employee opinions about deferred retirement</li> <li>Benchmarking advanced companies and analyzing recent trends</li> <li>Devising and executing the system</li> </ul>	Extending the retirement age for employees (to 60 years) and introducing and operating the Salary Peak System	-	-
	Introducing and implementing a system for supporting change of career	<b>Introducing and implementing a system for supporting change of career</b> <ul style="list-style-type: none"> <li>Gathering the needs to support changing career</li> <li>Planning and conducting programs</li> </ul>	Implementing a system for supporting change of career (reemployment of 63 persons out of 90 persons)	Improving the system for supporting change of career and continuously implementing it	-

# Reliable Operating



‘Environment’ ‘Co-prosperity’  
‘Customer’

## Reliable Operating

### 1. Environmental Management (Energy and GHG)

**G4 Aspect : Products and Services, Emissions, Effluents and Waste, Energy**

- Environmental Management Framework
- Eco-Friendly Design
- Eco-Friendly Materials
- Preventing Environmental Pollution
- Healthy Planet, Eco-friendly Building Management

### 2. Shared Growth with Partners

**G4 Aspect : Partnership**

- People-Centered Shared Growth
- Operating the Compliance Program
- Other Activities for Shared Growth

### 3. Responsibility for Product and Customer Service

**G4 Aspect : Product and Service Labeling, Customer Privacy**

- Quality Management System
- Efforts for Better Quality of Our Infrastructure
- Extremely Careful Protection of Personal Information

### 4. Ethical Management

**G4 Aspect : Compliance**

- Code of Conduct
- Organization Responsible for Ethical Management
- Establishing the Infrastructure for Ethical Management



# Environmental Management (Energy and GHG\*)

## G4 Aspect : Products and Services, Effluents and Waste, Energy

(\* GHG : Green House Gas)

### Environmental Management that Doosan E&C Pursues

The world is facing global environmental risks such as climate change and energy shortage. In order to proactively respond to these environmental issues, Doosan E&C established the environmental management system and operated the environmental management processes, and also developed eco-friendly designs and technologies.

#### Environmental Management Policy

Doosan E&C complies with environmental laws and regulations faithfully. We are also proactive in establishing and implementing environmental goals and action plans for each job to minimize environmental impacts. Moreover, we have written environmental management system, fortified environmental capabilities through education, and performed activities to promote a better environment.

#### Environmental Management Framework

#### Environmental Management Plan

In order to provide an overall environmental management of construction and manufacturing sites, Doosan E&C is running its own monitoring system and environmental management system.

#### Initial Support to Set-up at Worksites

We have a system that ensures legitimate on-site management on the environment as a whole regarding the initial stage of construction sites, including on-site environmental management, overall and domestic documents and environmental management system.

#### Evaluation of Actual Conditions of

#### Environmental Management at Worksites

Doosan E&C has a system that conducts environmental inspections on all worksites to strengthen on-site environmental management competencies and prevent environmental accidents, which ensures an eco-friendly construction site that places the convenience of residents living around the worksites as its top priority, by conducting inspections and receiving feedbacks on the cause of environmental accidents for each area, including waste, air, noise and vibration, sewage and waste water, and underground water.

#### Job Training for Environmental Managers

Doosan E&C provides job training for on-site environmental managers, and trains high-level environmental experts by education and information regarding the recent environmental management trends, best practices of other companies' environmental management, and the enactment and amendment of environmental laws.

#### Maintaining ISO 14001 Certification



In order to establish the optimal environmental management system, we are applying the following to all worksites :

- Continuously reviewing and improving the effectiveness and efficiency of systems.
- Enhancing the standard to ensure the consistency and appropriateness of the environmental management system.
- Establishing implementation plans including environmental aspects, recent laws and regulations, on-site environmental goals, and detailed goals, to reflect in the ISO 14001 system.

## Eco-friendly Project Management that Doosan E&C Pursues

The interests on environmental issues around the globe increased regarding global warming and environmental pollution. In order to achieve environmental conservation, it is necessary to take preventive measures by systematically managing the environmental pollution factors and development processes. Doosan E&C identified environmental pollution factors through the whole process of business management that covers engineering, purchase, construction and pre-management, and implements the suitable activities to prevent environmental pollution in each stage.

### Environmental Management and Eco-Friendly Design

Doosan E&C is applying the concept of eco-friendly construction from the design stage. We are striving to realize eco-friendly architecture by establishing and implementing eco-friendly design plans according to different purposes, including energy efficiency, water resource management and creating pleasant residential spaces.

#### Energy-saving Design

Doosan E&C is striving to reduce energy consumption by installing the standby power cutoff and all lights-out devices in apartments. By preventing the unnecessary consumption of standby power and using one switch to turn off all of the lights out inside the house when going out, we prevent excessive consumption of power. This has been reflected in Doosan We've in Ansan Choji and Alphadom City. In the future, we plan to continuously apply it to other apartments.

#### Water-saving Design

Doosan E&C has actively adopted water-saving sanitary fixtures, rain-water recycling system and graywater facilities to buildings to save and recycle water. We installed the rainwater recycling system and graywater facilities in the Korea Hydro & Nuclear Power's office building and the Seoul National University Hospital BTL project, and plan to expand them in the future.

#### Design for Creating Eco-Friendly Outdoor Space

In order to create a pleasant and healthy environment, we established a landscape plan that secures a green space ratio of 10% or more when building green area and an ecological space ratio of 30% or more for apartments. Doosan E&C met the landscape standards notified by the Ministry of Land, Infrastructure and Transport, such as securing the green space ratio and the ecological space ratio for Doosan We've in Ansan Choji (38%, 68%) and We've G-well City (37%, 19%), and also provided the plans to plant a variety of species and establish a resting space to set up a landscape plan that suit the characteristics of the applicable site.

### Goals and Performances in Eco-friendly Design

Aspect	Goals	Mid- to long-term Tasks	2014 Results	2015 Plans	2016 Plans
Eco-Friendly Design	Adopting climate change policy and regulation to EHS strategy	<b>Building guidelines for GHG regulations</b> <ul style="list-style-type: none"> <li>Gathering information about GHG regulations (policy and trend)</li> <li>Establishing GHG policy, rule, and manual and reflecting them in company system</li> </ul>	Participated in the simultaneous investigation of GHG emissions at construction sites (supervised by the Ministry of Land, Infrastructure and Transport)	Establishing GHG management manual	Negotiating on reduction goals and establishing reduction plans
	Building GHG information management system	<b>Building GHG inventory and appointing responsible staff</b> <ul style="list-style-type: none"> <li>Appointing staff responsible for GHG inventory</li> <li>Identifying energy use of items</li> <li>Building GHG inventory</li> <li>Monitoring GHG inventory</li> </ul>	Acquiring the basic data on GHG emissions and energy consumption for each worksite	Establishing GHG inventory system	Verification of basic data by the third party and submitting the report on GHG emissions and energy consumptions

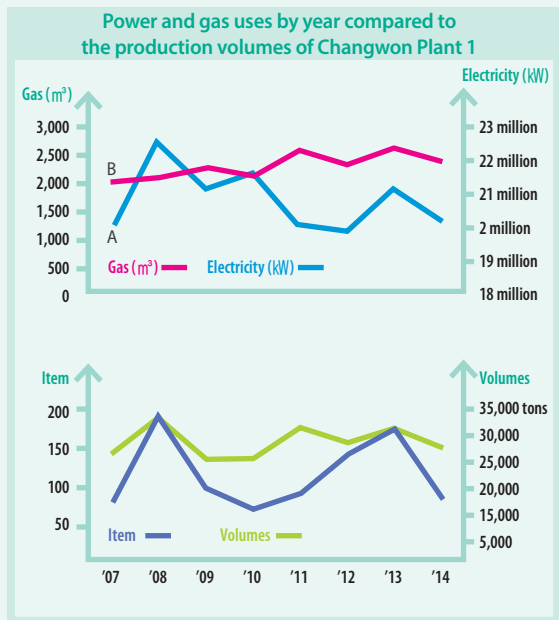
# Environmental Management (Energy and GHG)

## G4 Aspect : Products and Services, Effluents and Waste, Energy

### Analyzing Major Energy Uses of Changwon Plant 1

### Special Case

Doosan E&C acquired basic data to establish a system for managing the energy efficiency of worksites by collecting and analyzing major energy uses. We collected and analyzed the power and gas uses and production volumes at Changwon Plant 1 during the past seven years between 2007 and 2014, and came up with areas that need improvement through the connection analysis of uses and production volumes. In 2015, we analyzed the costs and intensity of using energy and established the infrastructure for specific lines, as well as analyzing investment costs and confirming the investment plans. In 2016, we plan to establish the management standards and systems for enhancing the efficiency of worksites. According to the analysis result of Changwon Plant 1, electricity requires the improvement of outdated facilities and standby / pick management since it is highly connected with production volumes, while it is necessary to improve facilities to eliminate wasteful use due to the gradual increase of using gases every year regardless of production volumes.



### Implication

#### A. Showing the curved line between electricity consumption and production volume

Inference: Electricity consumption is decided according to the production volume

#### Implementation levers

- Removing strategic losses through the overhaul of outdated facilities
- Standby / pick management by measuring power use of major facilities
- Implementing activities to manage idle power when patrolling at the worksite for SE Part

#### B. Showing the curved line between production volumes (weight) for gas consumption

Inference: More gases used due to preheating and post heating for thick plates (Increases after 2011 are due to extension of large-sized heat treating furnace)

#### Implementation levers

- Removing gas losses through the overhaul of outdated facilities
- Implementing on-site improvement activities for facilities with heat losses from preheating burners, etc.

#### Additional reviews

- Operating the council on energy inefficiency supervised by the holding company's VM (ICT consulting and benchmarking of advanced companies)
- Exploring saving potential by measuring major energy uses

### Participating in simultaneous investigation of GHG emissions at construction sites and Developing the GHG inventory system (A comprehensive management system for GHG emissions and energy consumption)

We plan to establish strategies for eco-friendly business and sustainability business management to respond to climate change regulations by conducting accurate analysis of basic data from the past and expected volumes of GHG emissions and energy consumption in accordance with future project outlooks. The construction business established the reduction goal of 7.1% compared to BAU by 2020, while Doosan E&C has been designated as a company under regulation by simultaneous investigation on GHG emissions in the construction industry. In this regard, we plan to establish an efficient management system by setting up an IT system to respond to GHG and energy management system (by government) and the information release (CSR report, CDP, etc.).

Dates	October 2014 ~ March 2015	April 2015 ~ May 2015	June 2015 ~ July 2015
Implementation Status	<b>Simultaneous investigation on GHG emissions in the construction industry</b> <ul style="list-style-type: none"> <li>Supervised by : Korea Infrastructure Safety Corporation (An agency of the Ministry of Land, Infrastructure and Transport)</li> <li>Object : 6 construction companies (Construction company ranking 9<sup>th</sup>~13<sup>th</sup>)</li> <li>Investigation items : Buildings, sites, plant's fuel (oil / electricity) and gas consumption</li> </ul>	<b>Conducted the verification on emission report by the third party</b> <ul style="list-style-type: none"> <li>Period : April 15~April 16, 2014</li> <li>Verified by : LRQA (Lloyd's Register Quality Assurance)</li> <li>Purpose : Objective verification of data, final briefing session of simultaneous investigation (May 8, 2015)</li> </ul>	<b>Designated as a company subject to emissions investigation</b>
	Doosan Building, Bucheon Building, Doosan Leadership Institute, Hapcheon Training Center, all worksites (only sites which Doosan E&C is leading), Changwon Plant 1&2, HRSG Plant, Rexcon Plants (5)		

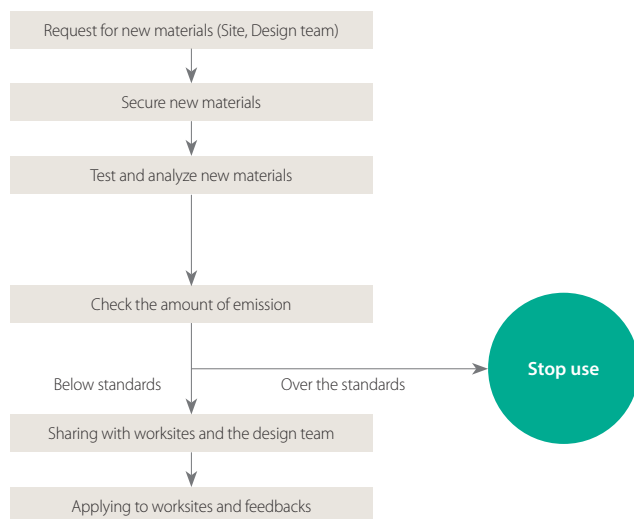
	Common Requirements	Site	Buildings
Future Goals	<ul style="list-style-type: none"> <li>Negotiating on reduction goals and establishing implementation plans for reduction</li> <li>Developing an IT system for GHG inventory</li> <li>Reviewing the introduction of hybrid vehicles by renting cars</li> <li>Implementing the energy reduction target system (reflecting BG evaluation)</li> <li>Establishing a roadmap for medium and long-term energy reduction</li> </ul>	<ul style="list-style-type: none"> <li>Developing energy-saving construction methods and guidelines</li> <li>Using renewable energy for long-term offices at worksites</li> <li>Developing standards for establishing temporary offices (insulation, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>Improving energy efficiency of existing facilities</li> <li>Replacing outdated facilities with high efficiency facilities (Refrigeration, pump motors, boilers, etc.)</li> <li>Replacing lighting with LED lights</li> <li>Installing power-saving sensors in common areas</li> <li>Controlling lighting at offices (power supply), etc.</li> </ul>

## Use of Eco-Friendly Materials

Doosan E&C try not to use materials that emit lots of pollutants by analyzing them in advance. We perform strict environmental impact assessment on newly introduced materials that have environmental issues. Only the materials that meet the standards are used at our construction sites.

### Eco-friendly Purchase

Doosan E&C is striving to reduce the use of energies and resources and minimizes wastes at all stages of construction by the purchase of eco-friendly materials. We purchased eco-friendly interior materials of apartments. In particular, we encourage the use of quality materials with the HB (Healthy Building Material) mark, which is graded by the level of organic compound emissions.



## Pre-management of Environmental Pollution

Doosan E&C has built onsite environmental management process, through which each site is systematically conducting pollution prevention activities such as air and water quality improvement. We will continue to invest in environmental facilities.

### Air Quality Management

To deal with air, Doosan E&C installs tire washers around the gates of construction sites and manufacturing plants, and operates sprinkler vehicles in the process of storing, loading, and disassembling materials. We also use sprinkler, dust covers, movable dust collectors, and vacuum sweeper trucks to control air quality.

### Water Quality Management

Doosan E&C is preventing water pollution and treating processed waste water and domestic sewage below the emission standard by installing waste water treatment facilities and individual sewage treatment facilities (sewage treatment facilities, septic tanks). We installed silt protectors and oil fences in order to protect the water ecosystem and streams around the worksite. We try to prevent the spread of water quality pollution, while also installing temporary drain and settling basin to manage non-point pollution sources. Also, we established a strict management and audit system to monitor water quality pollutants by pre-monitoring and checklist.

### Noise and Vibration Management

Doosan E&C is implementing measures to reduce noise and vibration that suit the characteristics of each worksite, as well as complying with the regulatory standards set by the Noise and Vibration Control Act. In particular, our construction sites install noise barriers, mobile air domes and dust-proof and sound-proof mats to reduce noise and adjust working time for residents living around the construction site. Also, we developed the floor structure that meets the standards for preventing floor noise of apartments.

### Air Quality Management

In order to remove air quality pollutants that might arise during the tasks of painting, shot-blasting and acid treatment, we installed facilities for preventing air pollution, including bag filter, activated carbon, and wet scrubber. Also, we are creating a pleasant air environment by conducting self-measurements regularly and replacing environmental consumables periodically.

# Environmental Management (Energy and GHG)

G4 Aspect : Products and Services, Effluents and Waste, Energy

## Eco-friendly Building Management that Doosan E&C Pursues

Doosan E&C is conducting various R&D related to

new and renewable energies to ensure eco-friendly construction. We are working towards developing buildings that take into consideration of economic profits and environmental values that enable operating eco-friendly buildings, while also continuously developing new and renewable energies by using pollution free eco-friendly energy sources, such as solar lights and geothermal heats.

### Healthy Planet, Eco-friendly Building Management

Doosan E&C takes a lead in developing eco-friendly technologies to optimize energy and resource consumption and adopt new and renewable energy not only in designing and constructing but also in maintaining completed buildings.

### Development of New and Renewable Energy

#### Geothermal-Energy Using System

The geothermal-energy using system has the effect of reducing energy use by approximately 20 to 40% for heating and cooling by using a system that uses ground heat with almost no change in temperatures all year round. We apply the geothermal system to Cheongdam-dong hotel, Chung-Ang University's dormitory and Chung-Ang University's 310 building, with plans to continuously apply them in future projects.

#### Photovoltaic Power Generation

The photovoltaic power generation uses semiconductor to turn solar light energy into electric power, which consists of solar battery module and power conversion device. We use the clean and pollution-free energy source of the sun to enable unmanned operation. It is applied at Chung-Ang University's dormitory, and we plan to include in the design for apartments in Wolgye 4 area.

#### Fuel cell System

The fuel cell system is an eco-friendly power generation system without the emission of any pollutants by using a system that produces both electricity and heat at the same time to directly change energies made from the chemical reaction of hydrogen and oxygen into electric energies. Doosan Group acquired a fuel cell company in 2014 to develop it into a new growth engine, and the major products include PAFC\* 400 kW and PEMFC\*\* 1 kW and 10 kW. We apply them to Seoul National University Hospital's BTL project, the Chuncheon Training Center project and the Doosan R&D Center project, and we plan to continuously increase the application in future projects.

\*PAFC : Phosphoric Acid Fuel Cell

\*\*PEMFC : Polymer Electrolyte Membrane Fuel Cell

#### Solar Hot Water System

The solar hot water system absorbs solar radiation and changes it into thermal energy to be utilized for the building's supply of hot water. The solar hot water system consists mainly of technologies for solar collector, thermal storage, system control and engineering. Solar power is pollution-free and offers an unlimited clean energy source for new and renewable energies. We have applied it to the Korea Hydro & Nuclear Power's office building project.

## Goals and Performances in Eco-friendly Building Management

Aspect	Goals	Mid- to long-term Tasks	2014 Results	2015 Plans	2016 Plans
Healthy Planet, Eco-friendly Building Management	Expanding the use of new and renewable energy	<b>Developing technologies to use new and renewable energy</b> <ul style="list-style-type: none"> <li>• Surveying related technologies</li> <li>• Monitoring project sites to be applied and setting ways to apply the technologies</li> </ul>	Completed the construction of three cases, including the geothermal system for Cheongdam-dong hotel	Increasing the application of new and renewable energies at worksites	Monitoring sites where new and renewable energy is used

# Shared Growth with Partners

G4 Aspect : Partnership

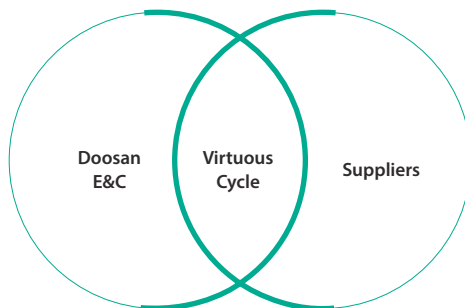
## Shared Growth that Doosan E&C Pursues

In order to grow into a leading global company, Doosan E&C needs to establish partnership with suppliers to achieve shared growth. Since it is inevitable to establish business relationships with many companies, strategies and competencies are required that can efficiently manage them and achieve a balanced development. In order to strengthen its competitiveness, Doosan E&C established the CSR system with suppliers with the philosophy of achieving shared growth based on virtuous relationships with suppliers.

### People-Centered Shared Growth

With the mid to long-term perspective, we established the Shared Growth Team to enhance suppliers' competencies and to put the philosophy of shared growth into practice. Considering the feature of the construction business with a high level of dependence on suppliers, we provide them with financial aids, opportunities for capability and productivity enhancement, and efficient communication.

### Philosophy of Shared Growth

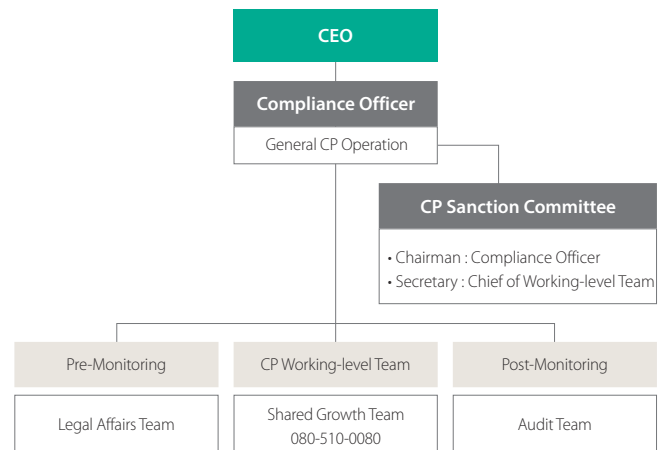


Doosan E&C's corporate philosophy of shared growth is based on a 'virtuous cycle partnership'. The virtuous cycle partnership means Doosan E&C and partners work as a unit to operate the distinctive technology, product quality, and management system. Through this partnership operation, Doosan E&C share its technological capabilities and sophisticated business systems with suppliers to boost their growth because we believe their growth results in our growth. To materialize the virtuous cycle partnership, we promote detailed action plans and reflect them in our business plans. The results also have effects on evaluation of the management. Shared growth with suppliers will be further improved and promoted by continuously monitoring action plans and results.

### Operating the Compliance Program

The Compliance Program is operating to voluntarily conform to Fair trade related regulations. It contributes to preventing violations of laws and regulations and creating stronger trust in our ethical management.

#### Organization for the Compliance Program



#### Compliance Program Operation in 2014

Classification	Performances
CP Operation Policy	Report on CP achievements to the BOD Collection of written pledges on the CP from all executives and staff
Supports by the Top Management	Notice on the CEO's message about CP Event to declare suppliers' CP adoption
Education Program	Education on subcontract to site and plant employees Entrusted training on fair trade (internal transactions, etc.) Training by external experts Cyber training on CP
Pre-Monitoring	Monitoring of violations of subcontract laws for suppliers Inspections on the compliance with the Subcontracting Act at worksites and plants
Sanction & Incentive	Awards to exemplary employees in CP / Reflection of CP achievements in MBO
Evaluation and Improvement of the CP	Education and survey on CP recognition



# Shared Growth with Partners

## G4 Aspect : Partnership

### Other Activities for Shared Growth

Shared growth has become an unavoidable issue to create more values within the supply chain in the construction business. Doosan E&C seeks sustainable win-win relationships with its suppliers through fair and open transactions with them.

### Educational Support to Suppliers

Systematic training programs are provided to the employees of suppliers to enhance their competitiveness. Those programs include working-level capability enhancement education, special education on EHS, partnership seminar and other special courses.

### Education to Improve Capability of Suppliers' Working-level Staff

We provide more than 400 employees of suppliers every year with educations on labor management, cost management, the Framework Act on the Construction Industry, and Fair Contracting in Subcontracting Act.

### Education on Quality Innovation

Employees of suppliers in the manufacturing business are provided with education on quality innovation. For better productivity, we teach them about the importance of quality management and capability and skills for quality innovation.

### Financial Support

Doosan E&C is providing financial support for its suppliers to help them secure stronger competitiveness. In 2014, Doosan E&C and Doosan Group's affiliates provide loans of funds amounting to KRW 2 billion for suppliers with favorable transaction results when issuing collateralized loan obligations.

Also, we participated in the Industrial Innovation Movement 3.0 conducted by the Ministry of Trade, Industry and Energy to make contributions of KRW 100 million annually for five years, which supported innovation activities that included the management of suppliers, consulting on production technologies and assistance on facility investments.

### Partnership Seminar

A seminar is held to build better partnerships with suppliers, in which their CEOs and executives participate. Major themes have included labor management and desirable labor-management relations, and relevant operation system improvement at construction sites. In addition, credibility management under the New Basel Accord and safety at the construction site have been dealt with at the seminar.

### Consulting about HR and Labor Relations of Suppliers

We provide consulting services about HR management, labor relations and other matters to suppliers in Changwon. The certified labor attorneys of Doosan E&C teach them about labor affairs such as the Labor Standards Act and HR management that are liable to be missed. The labor attorneys visit project sites to meet suppliers' CEOs and site managers and to listen to their difficulties and suggest solutions.



Education to Improve Capability of Suppliers' Working-level Staff



Doosan E&C & Best Partner's Day

## Welfare Facilities for Suppliers' Employees

Doosan E&C offers a free dormitory with modern facilities for a hundred foreign workers of suppliers for the first time in the Changwon Industrial Complex. We also expanded business facilities such as office, conference room, and training room, and opened a fitness center and a lounge.



Safety Patrol Event of Suppliers

## Doowoöhe

The 'Doowoöhe', an association of our excellent supplier, was launched to promote friendship and exchange information among the member companies. It is composed of 26 suppliers including one Chair company and six operation member companies as of 2014, and holds a regular annual meeting and special meetings to talk about current issues and major policies. Doosan E&C supports their workshops and safety campaigns, solidifying the partnership.

### Major Activities of the Doowoöhe

Activities	Frequency	Description
Workshop	Once a year	• Education and rally for stronger unity
Community Service	Once a year	• Services at rural areas • Habitat activities
Safety Campaign	Once a year	Instillation of Safety Consciousness together with the CEO and all employees
Discussion Meeting	As needed	• After events and activities

## Goals and Performances in Shared Growth

Aspect	Goals	Mid- to long-term Tasks	2014 Results	2015 Plans	2016 Plans
Shared Growth with Partners	Setting up shared growth policies	<b>Devising shared growth policies and identifying improvement plans</b> <ul style="list-style-type: none"> <li>• Benchmarking advanced companies and trend analysis</li> <li>• Collecting opinions from relevant stakeholders</li> <li>• Devising and practicing shared growth policies</li> </ul>	Collecting stakeholders' opinions about shared growth	Devising and practicing improvement plans for shared growth	Conducting improvement activities and internalizing through expansion
	Monitoring shared growth programs and building a feedback process	<b>Monitoring shared growth practices and building a feedback system</b> <ul style="list-style-type: none"> <li>• Benchmarking advanced companies</li> <li>• Collecting opinions from stakeholders like partners</li> <li>• Preparing for monitoring and feedback system for shared growth</li> </ul>	Collecting opinions from stakeholders including suppliers	Reflecting opinions of stakeholders and planning monitoring process	Strengthening long-term partnership by continuously reflecting the needs of suppliers

# Responsibility for Product and Service

## G4 Aspect : Customer Privacy

### Enhancement of Quality that Doosan E&C Pursues

Doosan E&C will be there for the clients in the present and future.

All of our activities are being implemented to deliver higher value and more satisfaction to our customers. We are striving to secure fundamental competitiveness and acquire advanced technologies and innovative products to provide excellent standards of value that can satisfy our customers.

#### Customer-centered R&D Activities of Doosan Group

Through the uses of world-class technology and innovation, Doosan E&C wants to improve the quality of products and services, which will then improve entire local communities and people's quality of life. Furthermore, we dedicate ourselves to provide differentiated customer values. We are also striving to provide customers with products and services with excellent function, durability, convenience, and stability.

#### Doosan E&C's Quality Management Policy

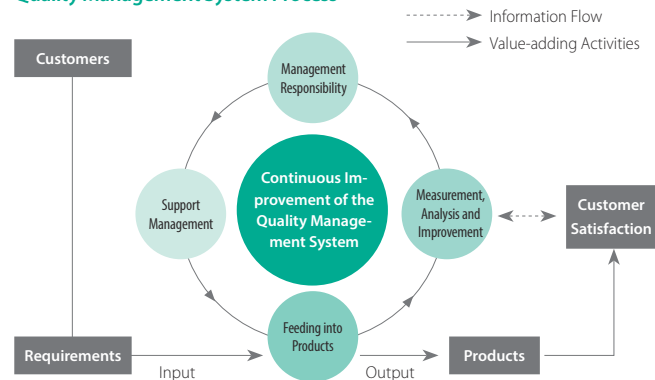
Doosan E&C established the quality management policy of 'Infra Solutions Provider that Makes the World a Better Place' as the company's aspiration to ensure high level of quality that can meet customer satisfaction. We are strengthening our education and inspections for improving quality by recognizing the customers' requests made throughout the whole process.

### Quality Management System

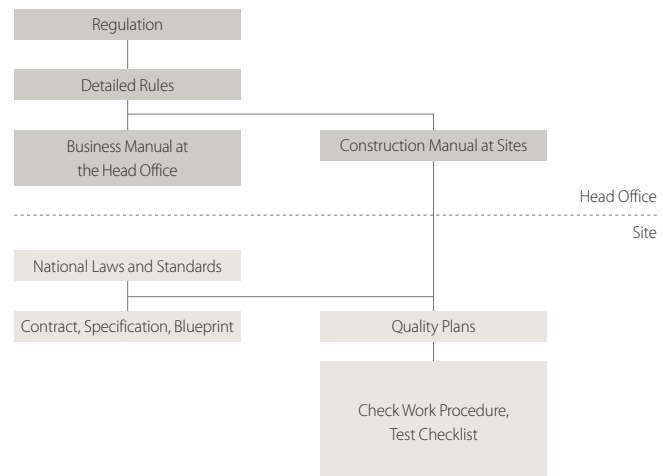
We deliver the best products and services meeting customer expectations by building and improving the quality management system based on the international quality standard, ISO 9001:2008.

#### Quality Management System

##### Quality Management System Process



##### Map of Standard Documents for Quality Management System



## Efforts for Better Quality Our Infrastructure

We have set a very special standard to deal with customer complaints about our products and services per BG (Building & Housing, Infrastructure, Plant Equipment). With our quality and customer satisfaction DB, we can efficiently handle customer complaints.

### Operational Status of the Quality Management System

#### 1. Maintaining the ISO 9001 Certification

- 1.1 Optimal quality management system
- 1.2 Renewing the certification

#### 2. Planning and Implementing Internal Quality Audits

- 2.1 Hold internal quality audits regularly at the head office, worksites and plants according to the annual quality audit plan (more than once every year)
- 2.2 Conducting special quality audits following orders from the management

#### 3. Training and Education

- 3.1 Holding in-house and circuit education for all employees who may affect the quality
- 3.2 Improving the construction methods and contents according to the effectiveness evaluation of education

#### 4. Implementation and Preventive Measures

- 4.1 Adjustments made according to the analysis of internal quality audit results
- 4.2 Reflecting the internal quality audit results in management activities

#### 5. Maintaining and Improving the Quality System

- 5.1 Managing the quality plans and the plant plans drawn up
- 5.2 Reporting on PCM drawn up after construction
- 5.3 Implementing K.O.M for each construction type during construction
- 5.4 Conducting the real-name construction system
- 5.5 Giving feedback through internal quality audits

#### 6. Establishing and Managing Processes

Establishing and operating efficient processes through various approaches

#### 7. Establishing Site Work and Technical Standardization

Improving work efficiency after drawing up standard documents, including quality plans, inspection and testing plans, etc

#### 8. Improving the Quality of Suppliers

- 8.1 Encouraging the acquisition of ISO 9001 certifications to improve the quality of suppliers
- 8.2 Giving additional points to companies with ISO 9001 certification when selecting the supplier

### Present Status of Quality Certifications Acquired

#### ISO 9001 (Architecture / Civil engineering) – Name of worksite : Doosan E&C

- Initial date of acquisition : February 24, 1999
- Effective period : February 23, 2017
- Certificate authority : Korean Foundation for Quality (KFQ)

#### ISO 9001 (HRSG) – Name of worksite : Doosan E&C's HRSG Plant

- Initial date of acquisition : May 26, 2000
- Effective period : May 25, 2018
- Certificate authority : Bureau Veritas Korea

#### ISO 9001 (CPE · OSS) – Name of worksite : Doosan E&C's Changwon Plant 1, 2 & 3

- Initial date of acquisition : November 30, 1998
- Effective period : November 30, 2016
- Certificate authority : HSB Registration Services

#### ISO 9001 (Ready Mixed Concrete) – Name of worksite : Doosan E&C's Rexcon BU

- Initial date of acquisition : April 2, 2008
- Effective period : April 1, 2017
- Certificate authority : Korean Standards Association (KSA)



ISO 9001 (Architecture/  
Civil engineering)



ISO 9001 HRSG



ISO 9001 CPE



ISO 9001 Rexcon

# Responsibility for Product and Service

## G4 Aspect : Customer Privacy

### Reviewing Defect Prevention Technologies and Establishing Standards

#### TCC\* Defect Management Committee

Doosan E&C is enhancing customer satisfaction and improving technologies by preventing defects of construction types where defects mostly occur. The TCC (Technology Core Coordination) Defect Management Committee analyzes the cause of defects and comes up with countermeasures. Also, we establish construction standards to be commonly applied at all worksites to prevent defects during construction.

\*TCC : Technology Core Coordination

### Reinforcing Quality Inspections at Construction Sites

#### Quality Inspections of Technology Support Teams

Doosan E&C conducts quality inspections on teams related to technology support for construction sites to suggest ways to prevent defects, while also coming up with improvement measures for projects to be implemented in the future. We conduct inspections through an internal organization equipped with technical expertise on construction projects with various conditions and designs to encourage the prevention of defects in technology policies. In 2014, we derived improvement areas for future projects and areas that need improvement immediately by conducting inspections on a total of 4 sites (Osong Centium, Dapsip-ri 16, Haeundae Centum, Haeundae AID).

#### Overall Inspection before Handing Over to the User

Doosan E&C minimizes defects by conducting on-site quality inspections and making improvements internally before handing over the building to the user. In 2014, we conducted inspections on a total of about 400 items for ten worksites (Hallym University R&D Center, Cheongdam Hotel, Korea University Ansan Hospital, Hankuk University of Foreign Studies' Multi-Purpose Center, Osong Centium, DI Integrated R&D Center, Bears Park, major repair of Doosan Tower, Dapsip-ri 16, Haeundae Centum). As a result, we came up with 350 areas that need improvement immediately and 50 areas that need improvement in the future to minimize the user's inconvenience from defects.

### Prior Inspection of Residents

As the last stage of quality inspections, we invite customers to inspect our company's products in person to provide the best output that meet our customer's expectation. In 2014, the users confirmed defects in person at a total of 4 worksites (Osong Centium, Dapsip-ri 16, Haeundae Centum, Haeundae AID) to complete repairs before entering into the place.

### Encouraging Quality Improvement through Internal Education

#### Education on Defect Examples at Construction Sites

By educating about defect examples to field workers, Doosan E&C prevents the possibility of defects occurring during construction in advance. In 2014, we reviewed 15 items (8 items on architecture, 5 items on machinery and 2 items on electricity) for Dapsip-ri 16 again to make further improvements.

### Future Goal

Doosan E&C aims to achieve the goal of developing products with price competitiveness based on engineering. We plan to continuously strengthen our quality inspections to produce economic output, as well as provide the quality desired by our customers.

## Technology-based Capability of Doosan in the Global Market

## Special Case

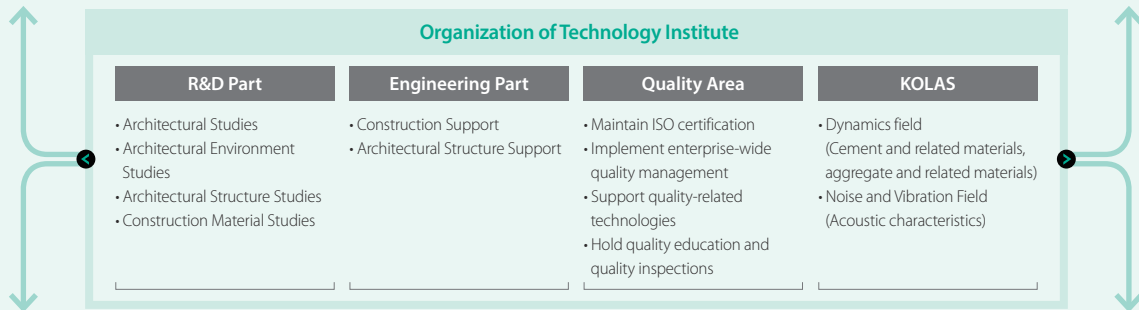
The competitiveness of Doosan E&C comes from our long construction experience and continuous R&D. Some R&D results are shared with the suppliers to help them attain higher competitiveness and technology development.

### Shotcrete Construction Method Using Powdery Admixture and Alkali-free Accelerator

The shotcrete construction method provides the function of more than 40MPa compression strength for 28 days and more than 1MPa compression strength for 3 hours by using powdery admixture and alkali-free accelerator to improve economic feasibility and durability. It is a high-function construction method that achieves high strengths and secures durability. When constructing a tunnel, we can ensure the safety of the grounds we are excavating and its surrounding areas by supporting the external force on unsafe ground conditions through shotcrete construction method, enabling us to prevent the collapse of tunnels and land collapse accidents. It has been designated as a construction new technology for reducing the shotcrete width.

### Construction Method of Enhancing High-Strength Concrete

As a method of revolving the problem of low fire resistance, such as the burst phenomenon of high-strength concretes during a fire, the heat-melting temperature and diameter are different from each other when producing high-strength concretes and an appropriate amount of two types of organic fibers are mixed with high-strength concretes. It is a construction method that eases the internal stress of fused furnace concretes consecutively during a fire to prevent the burst phenomenon. We minimized the decrease of strength and flexibility by reducing half of the amount of fiber mixed, and also designated and certified as a new construction technology for being Korea's first 60MPa high-strength concrete with fire resistance of 3 hours.



### QE Wave II (Establishing the Foundation for QE System)

In order to raise the awareness on quality and strengthen competencies, Doosan E&C utilized the status board and SO card, promoted coaching programs for suppliers, and provided the Q-Academy. Also, we strengthened our responses to quality issues by developing facilitators and establishing the RCA training system. In 2015, we will focus on implementing activities to prevent accidents and prevent reoccurrences to minimize costs arising from quality losses, including maintaining the QE Wave II Framework, developing RCA experts for each team through OJT, promoting RCA executions, establishing the process for calculating the costs of failed NCR related to Traveller, and improving the system.

### Developing New D-top Model

Doosan E&C will take the lead in the HRSG trend by conducting R&D activities and securing fundamental technology competitiveness instead of being satisfying as a HRSG company that possesses fundamental technology and Korea's independent model. We are in the process of developing the New D-top Model that improves the problems of the existing D-top Model through collaboration with Korea's prestigious university R&D institutes and Doosan Heavy Industries & Construction's R&D Center. The new model places top priority on cost competitiveness, and we plan to strengthen the product lineup in the direction of satisfying the needs of customers and the technology trends of HRSG, such as taking rapid responses, utilizing low-grade fuel, responding to super-size gas turbines and producing products specialized for the US market.



# Responsibility for Product and Service

## G4 Aspect : Customer Privacy

### Personal Information Protection that Doosan E&C Pursues

Recently, the laws and regulations have been strengthened to respond to damages caused by leakages of customers' personal information. Doosan E&C upgraded the management system to protect customer information and will provide private information security education on all employees and improvement of security systems.

#### High level Security of Personal Information

Doosan E&C takes responsibility for security of personal information. To show our care towards security of Personal information strongly, we have set regulations, an inspection system, and a security system. We also run an education course to change employees' concepts regarding personal information.

#### Personal Information Protection Regulation

Doosan E&C has its own regulations to protect personal information in accordance with relevant laws. An executive officer appointed by the CEO is responsible for the information management department. We always make sure that the personal information of our customers is properly managed and protected through regular internal and external inspections.

#### Personal Information Management System

We perform a company-wide inspection each quarter per year. In that inspection, we check the responsibilities to be observed by each department based on the guidelines of personal information protection. To guarantee safer personal information management, we have been inspected annually by an external body since 2011.

#### Personal Information Security System

We have established Private Information Security Education. The information saved in the system is encoded to prevent leaks. To prevent illegal access to the information database, the access history is managed.

#### Education on Personal Information

Doosan E&C carry out private information education once a year. It is operated as a required course; some 2,000 people completed the education in 2013. Special education is given to major work sites such as construction sites, plants, and apartment-selling offices to remind the responsible people of the importance of managing personal information.

### Objectives and Achievement of Personal Information Protection

Goals	Major Activities	2014 Results	2015 Plans
Strengthening the Safety of Operating Customer Information and Resolving Various Risks of Law Violations	<ul style="list-style-type: none"> <li>Analyzing whether or not there are relevant laws that can be utilized through law firms regarding acquiring residential registration numbers and identifying related duties</li> <li>Establishing enterprise-wide work guidelines and implementing activities to promote it internally</li> <li>Establishing an enterprise-wide standard contracts supervised by the legal team and conducting improvement activities</li> <li>Holding internal education on ways to protect personal information at worksites for site managers</li> <li>Providing post monitoring and conducting self-inspections ever quarter</li> </ul>	<div> Fundamentally removing factors violating the Personal Information Protection Act by revising the enterprise-wide standard contracts and forms </div> <div> Upgrading the enterprise-wide management levels for protecting personal information by conducting regular monitoring activities and raising the awareness on employees' mindset on protecting personal information </div>	<div> Introducing the system for monitoring using personal information for all printed documents </div>

# Ethical Management

## Establishing a Healthy Corporate Culture through Ethical Management

Based on the CEO's strong and clear

intention of promoting ethical management, Doosan E&C is striving to raise employees' awareness of business ethics and share the value of ethics with stakeholders in order to establish a transparent and healthy corporate culture.

### Code of Conduct

Doosan E&C has put harmony among the members, customer-centered management philosophy, and open and innovative management into practice to realize its unceasing growth and to fulfill social responsibilities. Therefore, we created a Code of Conduct, which applies to all business activities of our employees. We encourage our partners to follow this Code of Conduct.

#### Major Contents of the Code of Conduct

Inhwa
Our people are at the heart of our growth and success. We recognize individual differences and treat each other with respect. We understand "Inhwa" as teamwork in the truest sense based on fairness, openness and camaraderie.
Integrity and Transparency
Integrity and transparency must be applied to every aspect of Doosan's organization and business.
Fair Competition
Doosan competes fairly. Doosan is committed to complying with the relevant antitrust and competition laws and regulations where it conducts business.
Focus on Our Customers, Innovation, Growth
Our customers are the reason we exist. Our business decisions and activities are thoroughly customer focused.
Social Responsibility
We are committed to building Doosan as a trusted company that grows with our community. As responsible members of our communities, it is our duty to safeguard the life and safety of everyone in our communities and protect the environment.

### Responsible Organization

The Audit Team under the CEO carries out self-inspection, operating cyber reporting center, and education on ethics so that all employees are able to engage in their jobs fairly and transparently. It also monitors possible ethical management risks, responds to them, and implements regular inspections.

### Infrastructure for Ethical Management

We believe that integrity and transparency are essential to raise our corporate value. The 'Guidelines for Employees' Duties and Transactions' serve as the standards of judgment in their jobs, which helps to improve relationships with all stakeholders.

### Cyber Reporting Center

Doosan E&C runs the Cyber Reporting Center to receive reports on unethical behaviors of executives and staff such as taking bribes, unfair performance, and corruption. The reporter's information is strictly protected and the report is treated quickly in accordance with the standard procedure. The results are informed to the reporter and, at the same time, shared with all employees through an in-house program in order to prevent reoccurrence and raise the awareness of business ethics.

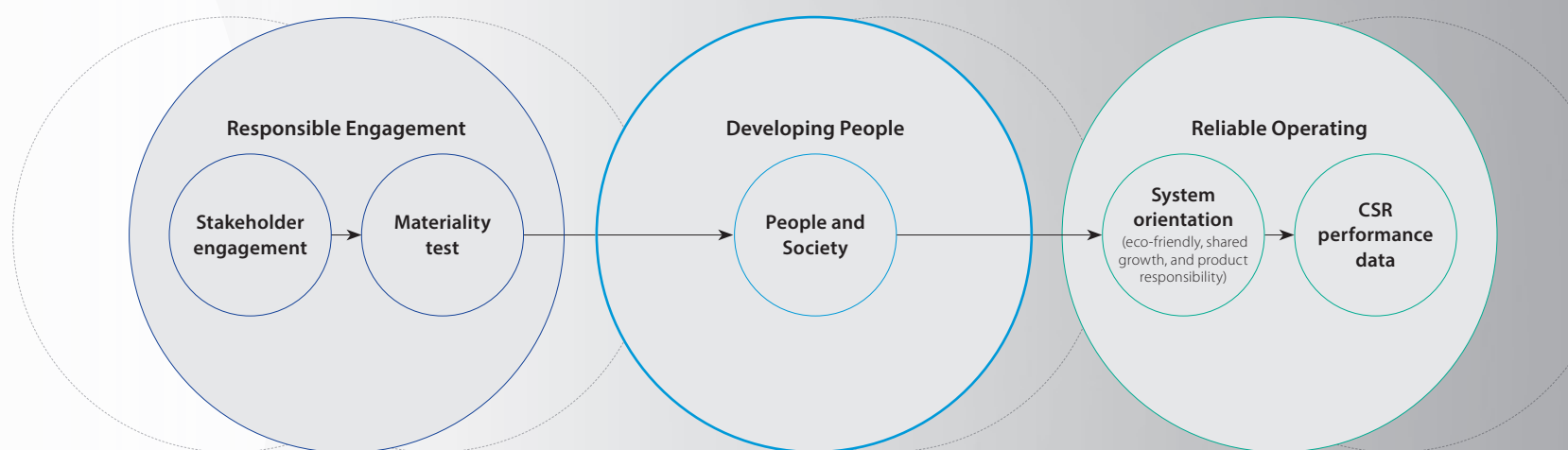
### Ethical Management Activities

The CEO's letter to request business ethics has been delivered to all employees every year in order to remind them of the importance of ethical management and to encourage faithful practices. All employees take a pledge to conduct business ethics, while writing the stakeholder statement is compulsory for members above the level of team leaders and site managers.

In addition, we conduct a regular survey targeting suppliers on whether Doosan E&C's employees faithfully complied with the Code of Conduct or not, enabling us to inspect problems that might arise from doing business and transactions to prevent corruption and irregularity.

# Appendix





‘Economic Performance’  
 ‘Social Performance’  
 ‘Environmental Performance’

This section contains quantitative performances of Doosan E&C’s CSR activities.

The data include our quantitative performances in the aspects of  
 economy, environment, and society for recent three years.

## Appendix

### 1. Appendix

- CSR Performances
- Independent Assurance Statement
- UNGC
- GRI G4 Index

# CSR Performances

## Organizational Profile

### Scale of the Organization

#### Separate Financial Statement

(Unit : KRW in millions)

Classification	2012	2013	2014
Current assets	2,369,703	2,421,651	2,459,346
Non-current assets	1,540,136	2,324,134	2,551,779
Total assets	3,909,839	4,745,785	5,011,125
Current liabilities	2,726,129	2,201,433	2,541,307
Non-current liabilities	578,667	534,977	460,604
Total liabilities	3,304,796	2,736,410	3,001,911
Total equity	605,043	2,009,375	2,009,214
Sales	2,229,066	2,188,154	2,288,266
Operating profit	(453,521)	55,584	144,855
Net profit	(614,847)	(33,676)	(48,937)

#### Consolidated Financial Statement

(Unit : KRW in millions)

Classification	2012	2013	2014
Current assets	2,427,888	2,534,636	2,557,120
Non-current assets	1,637,855	2,415,780	2,575,970
Total assets	4,065,743	4,950,416	5,133,091
Current liabilities	2,795,129	2,308,227	2,648,666
Non-current liabilities	662,826	626,746	521,828
Total liabilities	3,457,955	2,934,973	3,170,495
Total equity	607,788	2,015,443	1,962,596
Sales	2,377,208	2,355,215	2,363,892
Operating profit	(449,136)	57,370	142,968
Net profit	(654,077)	(60,325)	(68,580)

#### New Orders

(Unit : KRW in 100 millions)

Classification	2012	2013	2014
New orders	15,333	12,867	19,145

### The Percentage of Total Employees Covered by Collective Bargaining Agreements

2012					
Classification	Unit	Building & Housing (Gosan)	Building & Housing (Doosan)	Plant Equipment (CPE)	Plant Equipment (HRSG)
No. of employees covered by the labor union	Persons	1,191	1,418	159	-
No. of employees joining the labor union		96	10	135	-
Percentage of unionized workforce	%	8.1	0.7	84.9	-

2013					
Classification	Unit	Building & Housing (Gosan)	Building & Housing (Doosan)	Plant Equipment (CPE)	Plant Equipment (HRSG)
No. of employees covered by the labor union	Persons	1,091	1,309	195	117
No. of employees joining the labor union		89	10	152	63
Percentage of unionized workforce	%	8.2	0.8	77.9	53.8

2014						
Classification	Unit	Building & Housing (Gosan)	Building & Housing (Doosan)	Plant Equipment (CPE)	Plant Equipment (HRSG)	Rexcon
No. of employees covered by the labor union	Persons	1,090	1,288	190	121	24
No. of employees joining the labor union		73	9	187	62	23
Percentage of unionized workforce	%	6.7	0.7	98.4	51.2	95.8

※ As of the month when collective bargaining was required

## Aspect : Energy

### EN3. Energy Consumption within the Organization

(Unit : GJ)

Classification	Energy Source	Data Gathering Scope	2012	2013	2014
Direct energy	Diesel (vehicle)	Doosan E&C	290.70	234.23	78,434.39
	Gasoline (vehicle)		420.41	516.81	10,835.61
	City gas		156,386.62	161,855.76	320,247.13
	Diesel (construction equipment)	Doosan E&C, Suppliers	10,171.72	9,737.34	199,367.19
Indirect energy	Electricity	Doosan E&C	425,184.60	427,271.83	1,165,667.00

※ Data for 2014 –Including construction and ready mixed concrete

Classification	2012	2013	2014
Total energy use (GJ)	592,454.05	599,615.97	1,184,909.00
Basic unit energy use*	26.60	27.40	51.78

\*GJ / Sales (KRW in 100 millions)

※ Data for 2014 –Including construction and ready mixed concrete

## Aspect : Effluents and Waste

### EN15-18. GHG emissions

(Unit : tCO<sub>2</sub>e)

Classification	Scope of Data Collection	2014
Direct GHG emissions (Scope 1)	Buildings	966.37
	Construction	4,025.63
	Equipment	11,512.50
	Ready mixed concrete	13,846.83
	Subtotal	30,351.24
Indirect GHG emissions (Scope 2)	Buildings	3,181.11
	Construction	8,989.31
	Equipment	20,603.58
	Ready mixed concrete	3,146.38
	Subtotal	35,920.38
Total		66,271.49

### EN22. Waste Water Generation

(Unit : m<sup>3</sup>)

Worksite	Method of Treating Waste Water	2012	2013	2014	Note
CPE Plant 1	Entrusted (evaporative concentration)	421.48	488.47	1,404.00	
CPE Plant 2	Entrusted (evaporative concentration)	663.38	650.77	744.71	
HRSO Plant	Heavy Industries Entrusted			2,952.41	
	Outside Entrusted			2.11	Photographic Wastewater
Total discharge		1,084.86	1,139.24	5,103.23	

※ Collected the amount of acidic waste water discharge

### EN23. Total Weight of Waste by Type and Disposal Method

(Unit : ton)

Classification	2012	2013	2014
Onsite waste	Recycled	3,047	2,400
	Entrusted	73,025	52,674
	Subtotal	76,072	55,074
Designated waste	Entrusted	214	160
	Subtotal	214	160
Total	76,286	55,234	4,085

(Unit : %)

Classification	2012	2013	2014
(Recycled waste / total waste) x 100	3.99	4.34	33.87

※ Scope of data : System performance of domestic construction sites and the Plant Equipment BG's CPE Business Division of Changwon Plant 1 &amp; 2

- The data of recycled waste include the amount of waste recycled by entrusted firms



# CSR Performances

## Aspect : Employment

### Total Number and Rates of Employee Turnover by Age Group, Gender, and Region

Doosan E&C is operating the Retention program for staff and assistant manager positions to reduce turnover rate. Our executives visit project sites once a month to listen to opinions of site workers and solve problems, which helps raise their satisfaction.

(Unit : %)

Classification		2012	2013	2014
Gender	Male	9.7	18.3	13.4
	Female	7.3	23.2	9.6
Age group	20s	8.2	9.1	15.2
	30s	8.6	14.6	11.2
	40s	9.3	26.7	18.8
	50s and over	17.2	20.3	9.1

### Return to Work and Retention Rates after Parental Leave, by Gender

(Unit : %)

Classification		2012	2013	2014
Rate of employees who took parental leave	Male	-	-	-
	Female	100	100	100
Rate of return to work after parental leave	Male	-	-	-
	Female	63.2	69.2	33.4*
Rate of over 1-year retention after return to work	Male	-	-	-
	Female	63.2	69.2	0

※ The number of reappointed employees compared to the previous year decreased by one person, but a huge ratio difference occurred due to the small number of the parameter (3 persons)

## Aspect : Occupational Health and Safety

### Type of Injury and Rates of Injury, Occupational Diseases, Lost Days, and Absenteeism, and Total Number of Work- Related Fatalities, by Region

Classification	Unit	2012	2013	2014
Total employees	Persons	18,144	12,252	10,669
Industrial victims		40,21	63.71	42.67
Industrial injury rate	%	0.29	0.52	0.40

※ Total employees = Regular employees

Industrial victims = No. of converted industrial victims

Industrial injury rate = Converted industrial injury rate

2013 : Data announced by the Korea Occupational Safety and Health Agency

2014 : Expected data under review by the Korea Occupational Safety and Health Agency (expected to be announced in July 2015)

## Aspect : Training and Education

### Average Hours of Training Per Year Per Employee by Gender, and by Employee Category

Classification	Unit	2012	2013	2014
Total training hours for executives	Hours	792	1,024	613
Total training hours for employees		108,372	100,760	134,468
Annual average hours of training per employee (total hours / total employees)		68.98	67.13	72
Average costs of training per employee (total costs / total employees)	KRW	872,000	666,000	367,602

### Percentage of Employees Receiving Regular Performance and Career Development Reviews, by Gender and by Employee Category

(Unit : Persons)

Classification		2012	2013	2014
Percentage of regular performance and career development reviews	Total employees (LA1)	1,829	1,787	1,832
	No. of employees received regular performance reviews	1,427	1,257	1,392

## Aspect : Diversity and Equal Opportunity

### Composition of the BOD and Employees

(Unit : Persons)

Classification			2012	2013	2014
Break-down of executives	BOD members	Inside director	2	2	2
		Outside director	4	4	4
	Executives between 30s and 50s		-	-	-
	Male		-	-	-
	Female		-	-	-
	Executives over 50s		6	6	6
	Male		6	6	6
	Female		-	-	-

※ Outside directors are not included in the calculation of total number of employees.

(Unit : Persons)

Classification			2012	2013	2014
Total employees			1,829	1,787	1,849
Employment type	Regular		1,571	1,553	1,642
	Non-regular		258	234	207
Socially marginalized	Female		124	125	133
	Disabled		25	24	29
	Veterans		23	23	24
Age group	20s		245	243	194
	30s		776	717	752
	40s		645	600	643
	50s and over		163	227	260
Position	Executive		37	37	32
	Senior manager		229	193	206
	Manager		689	640	696
	Assistant manager		418	379	356
	Staff		274	256	230
	Others		182	282	329

(Unit : Persons)

Classification			2012	2013	2014
Breakdown of employees	Total employees		1,829	1,787	1,849
	Under 30s		245	243	194
	Male		189	181	143
	Female		56	62	51
	30s~50s		1,421	1,317	1,395
	Male		1,355	1,254	1,313
	Female		66	63	82
	Over 50s		163	227	260
	Male		161	227	260
	Female		2	-	-

## Aspect : Local Communities

### Percentage of Operations with Implemented Local Community Engagement, Impact Assessments, and Development Programs

Classification	Details	Unit	2012	2013	2014
Investments in social contribution	Donation	KRW in thousands	966,386	196,380	247,548
Participation in social contribution	No. of social contribution programs	No.	25	41	121
	No. of employees participated in social contribution	Persons	536	800	1,884

# Independent Assurance Statement

## To : The Stakeholders of Doosan E&C

### Introduction and objectives of work

IMCSR (the 'assurance provider' hereafter) has been engaged by Doosan E&C to conduct an independent assurance of its 2014 Doosan E&C CSR Report (the 'Report' hereafter). This assurance statement applies to the related information included within the scope of work described below. This information and its presentation in the Report are the sole responsibility of the management of Doosan E&C. The assurance provider was not involved in the drafting of the Report. Our sole responsibility was to provide independent assurance on its content.

### Scope of work

The assurance process was conducted in line with the requirements of the Assurance Standard AA1000AS (2008) Type1 assurance. The scope of work included:

- Data and information included in the Report for the reporting period;
- Appropriateness and robustness of underlying reporting systems and processes, used to collect, analyze and review the information reported;
- Evaluation of the Report against the main principles of the AA1000 Assurance Standard (2008);
  - Inclusivity
  - Materiality
  - Responsiveness
- Evaluation against GRI G4 'In Accordance' Criteria;

The moderate level of assurance has been applied.

### Methodology

As part of its independent assurance, the assurance provider undertook the following activities:

- Interviews with relevant personnel of Doosan E&C;
- Review of documentary evidence produced by Doosan E&C;
- Audit of performance data;
- Site visits;
- Review of data and information systems for collection, aggregation, analysis and review;
- Review of stakeholder engagement activities;

Our work was conducted against standard procedures and guidelines for external assurance of CSR reports.

### Our findings

The assurance provider reviewed the report draft and presented our opinions, and made amendments of the report when necessary. On the basis of our methodology and the activities described above, it is our opinion that :

- Doosan E&C has established appropriate systems for the collection, aggregation and analysis of relevant information. The assurance provider arrived at the conclusion that the content of this Report is accurate and reliable, and reflects the CSR management performance void of significant errors or biases. The information is presented in a clear, understandable and accessible manner, and allows stakeholders to form a balanced opinion over CSR performances of Doosan E&C during the reporting period;
- The Report properly reflects the organization's alignment to and implementation of the AA1000 Assurance Standard (2008) principles of Inclusivity, Materiality and Responsiveness in its operations. Further detail is provided below;

### Alignment with the principles of AA1000AS (2008)

#### Inclusivity

Doosan E&C is operating appropriate processes and channels to ensure stakeholder engagement. Doosan E&C has gathered major concerns and opinions from key stakeholders, including its customers, employees, shareholders, investors, business partners, local communities and government through stakeholder communication channels.

#### Materiality

The Report addresses the range of environmental, social and economic issues of concern that Doosan E&C has identified as being of highest material importance. The identification of material issues has considered both internal assessments of risks and opportunities to the business, as well as stakeholders' views and concerns.

## Responsiveness

Doosan E&C has responded to those issues it has identified as material. The Report presents related performances in its Disclosures on Management Approach (DMA) sections. In particular, it is highly evaluated that Doosan E&C has set goals and strategies, implemented management system and programs, measured performance, and managed change.

- Based on our work, it is our opinion that the Report has been prepared in accordance with the 'Core Option' of GRI G4. Further detail is provided below;

## General Standard Disclosures

The assurance provider reviewed General Standard Disclosures, and believes that the Report meets the Core Option requirements of General Standard Disclosures.

## Specific Standard Disclosures

The assurance provider reviewed Material Aspects, DMAs and Indicators, and believes that the Report meets the Core Option requirements of Specific Standard Disclosures.

## Key areas for ongoing development

Based on the work conducted, we recommend Doosan E&C to consider the following :

- Doosan E&C is advised to consider development of CSR Key Performance Indicators against areas and issues of concern where they do not already exist and incorporating or refining existing performance measures through the use of reporting guidelines such as the GRI G4;
- Doosan E&C is advised to implement more strategic stakeholder engagement programs by identifying key stakeholders, and build the management system in order to manage and report stakeholder engagement performance;

## Limitations and Exclusions

Excluded from the scope of our work is any assurance of information relating to:

- Activities outside the defined assurance period;
- Expressions of opinion, belief, aim or future intention by Doosan E&C and statements of future commitment;

## Statement of independence, impartiality and competence


No member of the assurance team has a business relationship with Doosan E&C. We have conducted this assurance independently, and there has been no conflict of interest.

The assurance team has extensive experience in conducting assurance over environmental, social, ethical and health and safety information, systems and processes, and an excellent understanding of standard methodology for the assurance of CSR reports.



June, 2015

Hyun Lee, CEO&Founder, IMCSR



# UNGC

## UN Global Compact

### Compliance with Principles

On April 30, 2014, Doosan E&C joined the UN Global Compact, which is a voluntary corporate initiative that promotes and encourages corporate social responsibilities, to comply with ten principles on human rights, labor, the environment and anti-corruption. This reaffirmed our commitment to participate in global standards on corporate social responsibilities and our willingness to fulfill sustainability management domestically and internationally. We will continue to make a concerted effort to comply with the UNGC's ten key principles by respecting rights of human and labor, developing eco-friendly technologies and products, and raising the bar of management and inspection for the eradication of misconducts.

Classification	Principle	Activities of Doosan E&C
Human Rights	1. We support and respect internationally declared Human Rights.	We comply with the Labor Standard Act and ILO Rules and operate the whistle-blowing system and grievance treatment system to ensure the rights of employees.
	2. We do not engage in infringement of Human Rights.	
Labor	3. We acknowledge rights to freedom of association and collective bargaining.	We guarantee union activities of employees and operate the Labor-Management Council and meetings.
	4. We abolish all kinds of forced labors.	We prohibit all kinds of forced and children's labor in compliance of the Labor Standard Act and ILO Rules.
	5. We effectively abolish children's labor.	
	6. We effectively abolish children's labor.	We have fair employment and performance evaluation policies and processes and prohibit wage discrimination by gender.
Environment	7. We support preventative approach to environmental issues.	We developed an integrated energy management system and established GHG inventory to respond to global warming issues. Also, we installed the standby power cutoff and all lights-out devices to reduce power consumption and introduced rainwater reusing system to cut down on the use of water.
	8. We take the lead in taking bigger environmental responsibilities.	We obtained the green building certification and eco-friendly building certification and encourage the purchasing of construction materials with the eco-friendly mark.
	9. We support environmentally-friendly technology development and its diffusion.	In order to operate eco-friendly architecture and building, we are developing technologies that uses new and renewable energies by taking into consideration geothermal-using system and solar hot water system.
Anticorruption	10. We strive to eradicate all kinds of corruption including unjust enrichment and bribe.	We have the Code of Ethics and operate the Compliance Management Committee and Compliance Management Bureau to faithfully monitor and inspect ethical management activities.

# GRI G4 INDEX

## General Standard Disclosures

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G4-4	The primary brands, products, and services	14~17	64~65
G4-5	The location of the organization's headquarters	0	64~65
G4-6	The 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	12~13	64~65
G4-7	The nature of ownership and legal form	12	64~65
G4-8	The markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries)	12~13	64~65
G4-9	Scale of the organization	60, 63	64~65
G4-10	Status of employment type, contract, and region	63, 13	64~65
G4-11	The percentage of total employees covered by collective bargaining agreements	60	64~65
G4-12	The organization's supply chain	49~51	64~65
G4-13	Any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain	12	64~65
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G4-15	List Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses	66	64~65
G4-16	Memberships in associations (such as industry associations) and / or national / international advocacy organizations in which the organization	69	64~65
<b>Identified Material Aspects and Boundaries</b>			
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G4-19	List all the material Aspects identified in the process for defining report content	26~27	64~65
G4-20	For each material Aspect, report Aspect Boundary within the organization	24~27	64~65
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G4-23	Significant changes from previous reporting periods in the Scope and Aspect Boundaries	0	64~65
<b>Stakeholder Engagement</b>			
G4-24	List of stakeholder groups engaged by the organization	24~25	64~65
G4-25	Basis for identification and selection of stakeholders with whom to engage	24~25	64~65
G4-26	Organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group	24~25	64~65
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	24~25	64~65
<b>Report Profile</b>			
G4-28	Reporting period (such as fiscal or calendar year) for information provided	0	64~65
G4-29	Date of most recent previous report (if any)	9	64~65
G4-30	Reporting cycle such as annual, biannual	0	64~65
G4-31	Provide the contact point for questions regarding the report or its contents	0	64~65
G4-32	Report the 'in accordance' option the organization has chosen	67~69	64~65
G4-33	Report the organization's policy and current practice with regard to seeking external assurance for the report	64~65	64~65
<b>Governance</b>			
G4-34	Report the governance structure of the organization, including committees of the highest governance body	20	64~65
<b>Ethics and Integrity</b>			
G4-56	Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics	18	64~65

# GRI G4 INDEX

## Specific Standard Disclosures

### CATEGORY : ENVIRONMENTAL

Code	Code Description	Page	External Assurance
<b>Energy</b>			
	Generic DMA	45	64~65
EN3	Energy consumption within the organization	46, 61	64~65
EN4	Energy consumption outside of the organization	46, 61	64~65
EN5	Energy intensity	61	64~65
EN6	Reduction of energy consumption	61	64~65
EN7	Reductions in energy requirements of products and services	46, 61	64~65
<b>Effluents and Waste</b>			
	Generic DMA	45	64~65
EN22	Total water discharge by quality and destination	61	64~65
EN23	Total weight of waste by type and disposal method	61	64~65
<b>Products and Services</b>			
	Generic DMA	44	64~65
EN27	Extent of impact mitigation of environmental impacts of products and services	44~48	64~65

### CATEGORY : SOCIAL LABOR PRACTICES AND DECENT WORK

Code	Code Description	Page	External Assurance
<b>Employment</b>			
	Generic DMA	30	64~65
LA1	Total number and rates of new employee hires and employee turnover by age group, gender, and region	62	64~65
LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	62	64~65
LA3	Return to work and retention rates after parental leave, by gender	62	64~65
<b>Occupational Health and Safety</b>			
	Generic DMA	34	64~65
LA5	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	34	64~65
LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	62	64~65
LA7	Workers with high incidence or high risk of diseases related to their occupation	34~35	64~65
LA8	Health and safety topics covered in formal agreements with trade unions	34	64~65
<b>Training and Education</b>			
	Generic DMA	30	64~65
LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	41	64~65
LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	62	64~65
<b>Diversity and Equal Opportunity</b>			
	Generic DMA	37	64~65
LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	63	64~65



## Specific Standard Disclosures

### CATEGORY : SOCIAL SOCIETY

Code	Code Description	Page	External Assurance
<b>Local Communities</b>			
	Generic DMA	39	64~65
SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	39~40, 63	64~65

### CATEGORY : SOCIAL PRODUCT RESPONSIBILITY

Code	Code Description	Page	External Assurance
<b>Customer Privacy</b>			
	Generic DMA	52	64~65
PR5	Results of surveys measuring customer satisfaction	53	64~65
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	There is no Complaints.	64~65

## Association Membership

Association			
Korean Association of Construction Complaints Control (Civil Engineering)	Korean Society of Transportation	The Korean Steel Structure Association	Changwon Branch of Korea Industrial Safety Association
	Incheon Smart City Association	Korea Listed Companies Association	Gyeongnam Branch of Korean Nurses Association
Korea Society of Water Environment	Korea Institute for Structural Maintenance Inspection	Korea IR Service	Ulsan and Gyeongnam Branch of Korea Environmental Preservation Association
Construction Association of Korea	Korea Water Resource Association	Korea Construction Procurement Part Association	Gyeongnam Environmental Engineer Association
Korea Fire Facility Association	Korean Tunneling and Underground Space Association	Korea International Trade Association	Korea Fire Safety Association
Korea Electrical Contractors Association	Korean Society for Rock Mechanics	Seoul Chamber of Commerce & Industry	Korea Federation of Construction Contractors
Korea Information & Communication Construction Association	Korean Road Forum	The Korea Chamber of Commerce & Industry	Korea Mecenat Association
	Korea National Committee on Large Dams	Korea Employers Federation	Korea Facility Management
Korea Specialty Contractors Association	The Korean National Committee of World Road Association	Korea Economic Research Institute	The Korean Society for Noise and Vibration Engineering
Korea Mech Const Contractors Association	Korea Developer Association	Korea Industrial Technology Association	Korean Institute of Fire Science & Engineering
The Construction Management Association of Korea	Korea Remodeling Association	Korean-American Association	Korea Green Building Council
The Korea Railway Association	Korea Housing Association	Changwon Chamber of Commerce & Industry	Korean Association of Air Conditioning Refrigerating and Sanitary Engineers
Korea Road & Transportation Association	Construction & Residence Study Group	Integrated Defense Association of Changwon Industrial Complex	Korea Construction Value Engineering Research Institute
The Korean Society for Railway	Korean Military Supply Union	Plant Manager Association	The Korea Construction Transport New Technology Association
Korean Society for Advanced Composite Structures	The Society of Air-conditioning and Refrigerating Engineers of Korea	Gyeongnam Employers Federation	The Korea Institute of Building Construction
Korean Society of Hazard Mitigation	The Korean Institute of Electrical Engineers	PR Association of Changwon Industrial Complex	Architectural Institute of Korea
Computational Structural Engineering Institute of Korea	The Korean Institute of Electrical and Electronic Materials Engineers	Gyeongnam Industrial Security Association	Fair Competition Federation
Korea Society of Civil Engineering	The Korean Railway Electricity Technology Association	Korea Standards Association	The Korean Regional Development Association
Korean Railway Construction Engineering Association		Association of Construction Safety	
Korean Society for GeoSpatial Information System		Maekyung Safety & Environment Institute (SEL Club)	
The Korean Society of Disaster Information		Association of KOSHA 18001 for Construction Business	
Korea River Association	The Korean Institute of Illuminating and Electrical Installation Engineers	The Korean Association of Construction Environment	
Korean Society of Water and Wastewater	Construction Business CS Council	Association of Construction Safety Manager	
Korean Society of Road Engineers	Korea Association of Machinery Industry	Education Development Association	
Construction Vision Forum	Wings of Happiness Council	Korea Environmental Preservation Association	
Korean Geotechnical Society	Seongjohe – Hydrocarbon Machinery Department		
Korea Concrete Institute			



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