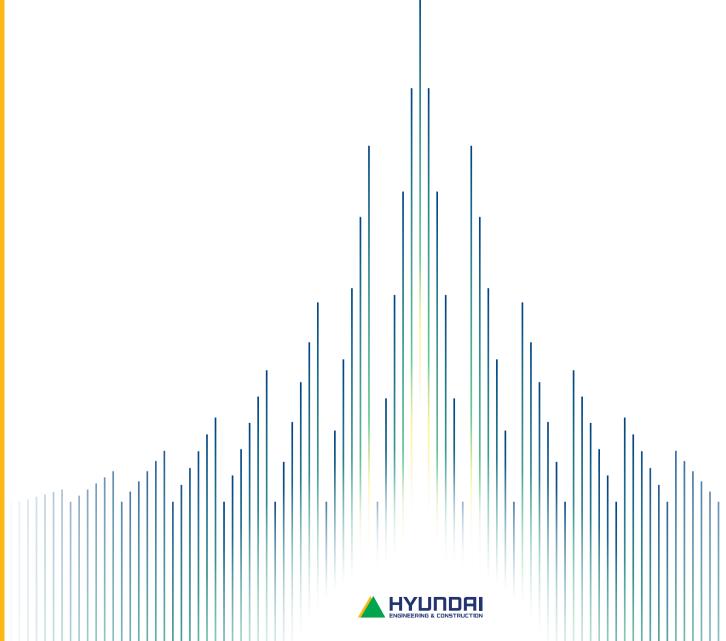
2018 HYUNDAI ENGINEERING & CONSTRUCTION

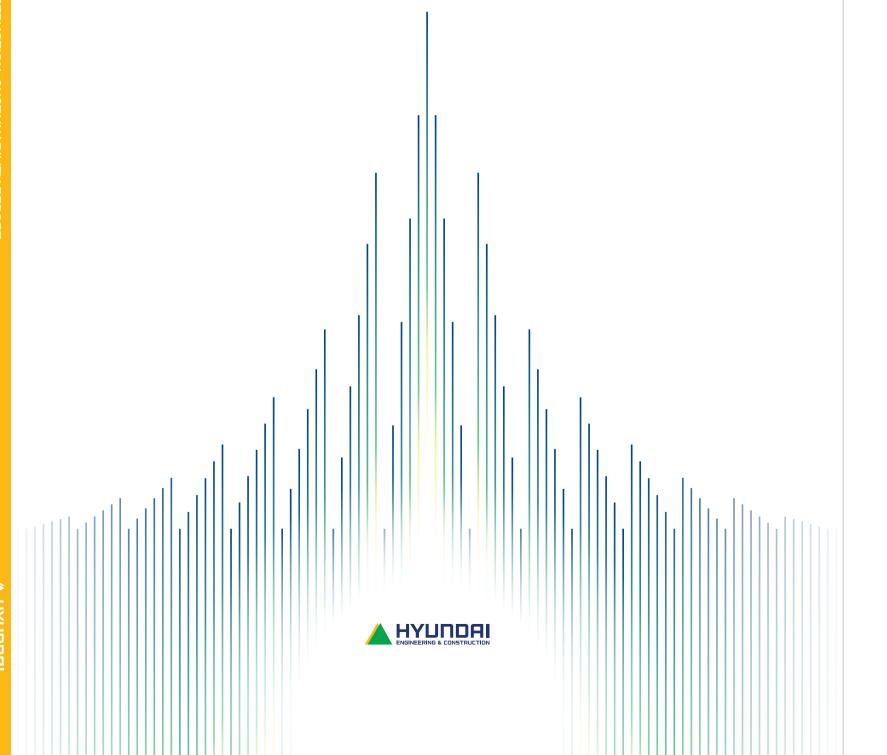
## **SUSTAINABILITY REPORT**



2018

HYUNDAI ENGINEERING & CONSTRUCTION

## **SUSTAINABILITY REPORT**



#### **ABOUT THIS REPORT**

#### **CHARACTERISTICS OF THIS REPORT**

This report is the ninth Sustainability Report of Hyundai E&C which presents the corporate-wide strategy for its sustainability management implementations. It consists of value creation cases as well as key activities and performances by divisions in economic, environmental, and social aspects. In particular, we try to include our efforts to promote stakeholders' understanding by disclosing value creation methodologies of major business divisions and reporting our implementation strategies and performance indicators for sustainable value empowerment.

#### **REPORTING PERIOD & BOUNDARY**

This report covers Hyundai E&C's economic, environmental, and social activities and performances of the headquarters as well as domestic and overseas sites from 1 JAN 2017 to 31 DEC 2017. In addition, we partially included activities and performances until MAY 2018 that have significant impacts on our business. For the quantitative performance, data of the recent 3 years is reported so that the yearly development can be analyzed.

#### **REPORTING STANDARD**

This report has been written according to the Comprehensive option of the Global Reporting Initiative (GRI) Standards 100-400. It is reflecting the ten principles of the UN Global Compact and the main agenda of ISO 26000 as well. For the financial performance, Hyundai E&C reports its financial data based on the Korean International Financial Reporting Standards (K-IFRS).

#### THIRD PARTY ASSURANCE

In order to secure the credibility and fairness of the writing process and contents of the report, a third-party assurance was conducted by an external, independent specialized agency and the results are available on p. 72~73 of this report.



#### 2018 COVER STORY

As a global sustainability management leader. Hyundai E&C has been leading the value creation in Now, we have visualized the cohesiveness of Hyundai E&C, which is moving beyond value creation to the era of value empowement, is rising in the form of value for building a sustainable world.

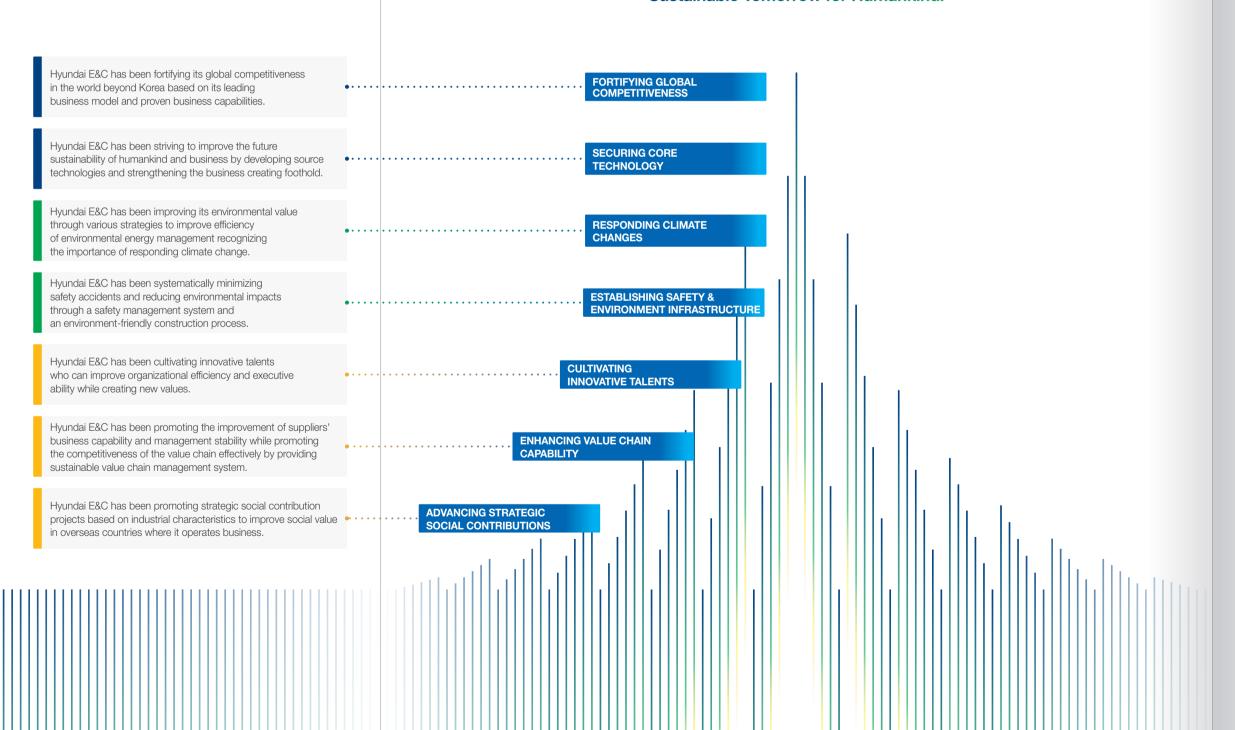
#### **WE BUILD TOMORROW**

Backed by the indomitable challenging spirit, Hyundai E&C is building a sustainable tomorrow for humankind through its sustainable construction products and environment-friendly technology services.

# SUSTAINABLE VALUE CREATOIN

Creating Shared Value

Hyundai E&C Is Building
Sustainable Tomorrow for Humankind.



#### 2018 CONTENTS **HYUNDAI ENGINEERING & CONSTRUCTION SUSTAINABILITY REPORT 02** Message from the CEO 04 Company Overview 06 Management Philosophy & Vision 10 Value Creation 1 INFRASTRUCTURE WORKS : Challenge 08 HDEC 12 Value Creation 2 BUILDING WORKS: Imagination **VALUE** CREATION 14 Value Creation 3 PLANT WORKS : Future 18 Value Empowerment Strategy & Performance 16 HDEC 20 Strategy 1 Fortifying Global Competitiveness **VALUE EMPOWERMENT** 24 Strategy 2 Securing Core Technology 28 Strategy 3 Responding Climate Changes 32 Strategy 4 Establishing Safety & Environment Infrastructure 38 Strategy 5 Cultivating Innovative Talents 42 Strategy 6 Enhancing Value Chain Capability 46 Strategy 7 Advancing Strategic Social Contributions **52 Principle 1** Propelling Corporate-wide Sustainability Management 50 HDEC **56 Principle 2** Securing Sound Governance **VALUE 60 Principle 3** Internalizing Ethics & Compliance Management PRINCIPLE 62 Principle 4 Managing Risks Proactively 64 Principle 5 Protecting Human Rights in Value Chain **67** Financial Performance 66 **APPENDIX 68** Key Sustainability Indicators 71 Greenhouse Gas Verification Statement 72 Third Party Assurance Report 74 GRI Standards Index 78 Global Sustainability Leadership 79 Major Awards and Accolades / Memberships

## **MESSAGE** FROM THE CEO

#### Toward a 'Global Top-tier' with Creating New Values

Hyundai E&C is taking a grand step toward 'Global Top-tier'. The global market where top-tier companies are competing is our stage to expand. As a representative global engineering company, we are striving to create new added value and quality growth. We will advance to the global top-tier with advanced technology and differentiated services in all areas of the construction industry from design, construction to planning, engineering and operation.

Sustainability management is another ultimate destination of ours. Beyond short-term business performance, our goal is to create shared values of mutual benefits from a macro perspective. For securing to expand financial, environmental and social values, we will strive to maximize the added value of all stakeholders including shareholders, customers, cooperating partners, communities and governments.

#### **Substantial Growth with Internal Stability**

Hyundai E&C's capabilities are becoming more prominent with a glow in the era of recession. We have achieved new orders worth KRW 21,713.6 billion (consolidated) despite a decline in overseas order quantity in 2017 and a contraction in the domestic construction market. We have secured solid capability of receiving domestic and overseas orders, including the Redevelopment of the 1st Banpo LH Apartment Complex, which is the largest reconstruction project in the country and the Korea University Anam Advanced Convergence Hospital, Women's Hospital Safety Improvement Project in Qatar, and Tuas Terminal Phase 2 (Finger 3) in Singapore.

Moreover, there have been great achievements in strengthening our substantiality. Last year, Hyundai E&C has achieved an operating profit of KRW 986.1 billion by improving its financial structure, focusing on profitability and operating balanced business portfolios. We have been maintaining top profitability in the industry by securing high-quality orders through continuous competitiveness enhancement of technology as well as profitability.

#### **DJSI Industry Leader for the Five Consecutive Years**

In 2017, Hyundai E&C was honored the Industry Leader of the Construction & Engineering industry in the Dow Jones Sustainability Index for the five consecutive years since 2013, achieving listed in the DJSI World Index for the eighth consecutive years as first in the domestic construction industry. We believe it is the result of the efforts that each one of our employees made to become the best in their field with a sense of calling, as a member of a global leader company.

We will continue to strive to become a global leader in sustainability management. We will do our best to establish a new milestone in sustainable management through transparent corporate management, environment-friendly business operation, and shared growth management with our suppliers.

Thank you.

President & CEO of Hyundai E&C





KRW 16.887.1 billion

KRW 986\_1 billion

APPENDIX

#### **COMPANY OVERVIEW**

#### **Company Profile**

Hyundai E&C has opened a new era of the global integrated engineering around the globe with its advanced technology and business execution ability widely proven. Based on solid business foundations in the Middle East and Asia that has been established since our first overseas project in 1965, we have taken a substantial leap as a promising and competitive company expanding the business into emerging markets in Latin America, Africa, and Commonwealth of Independent States (CIS).

As of APR 2018, total 8,863 employees are working at 160 domestic and 68 overseas sites centered on 2 domestic branches as well as 25 overseas branches and offices.

#### MAY 1947 **APR 1982 NOV 1965 JUL 1970** Completed Gyeongbu Foundation of Hyundai E&C Received the order of Achieved USD 10 billion Pattani-Narathiwat Highway, Expressway, Korea in accumulative Thailand overseas orders

#### **CORPORATE HISTORY**

Hyundai E&C will open up a new era in the construction industry.

Since its foundation in 1947, Hyundai E&C has been leading the development of the country and economic development as a driving force of the Korea's growth history centered on its Infrastructure, Building and Plant Works. In addition, we have been the first Korean construction company to enter the overseas market and have made the world to recognize the technology-driven superiority of Korea. Hyundai E&C is now driving the paradigm shift in the construction industry by creating top-shelf synergies in convergence and diversification amongst relevant industry sectors including automobile and steel of Hyundai Motor Group.



#### **INFRASTRUCTURE WORKS**

Hyundai E&C will challenge the infinite possibility in the world.

With the top-notch technology and abundant experiences accumulated for the past 71 years, the Infrastructure Works Division has significantly contributed to the national basic industries and the economic development of diverse nations by successfully executing land development, port, railway, road, bridge, and water environment & treatment. We will continue to develop into a Core Infra Solution Leader who provides the global core infrastructure construction based on the advanced technology.



#### **Key Financial Performance in 2017**



AA-Credit Rating\*

\* Credit rating from Korea Ratings Corporation, NICE Information Service, and Korea Investors Service

#### APR 2010 APR 2011

Received the order of Nuclear Power Plant, UAE

#### NOV 2013

Became an affiliate of Hyundai Motor Group

R&D

**HDEC Organization** 

Achieved USD 100 billion in accumulative overseas orders

#### MAY 2017

Finance and

**Economy Division** 

Division

The 70th anniversary of foundation

#### **BUILDING WORKS**

Hyundai E&C will realize a future space that is at the forefront of the era.

The Building Works Division is turning imaginary cutting-edge space where the humankind, information, the environment, and technology coexist in the reality through its immense creativity and imagination. As we construct representative landmarks in various countries, our outstanding technology and business execution ability have been highly valued. We are leading the building paradigm including environment-friendly green building, high-rise building and complex development project. We will persistently grow into a Constructor & Developer that leads the construction culture by expanding business areas including mega projects and CM businesses.



#### **PLANT WORKS**

frastructure Works

**Building Works** 

Hyundai E&C will lead the global plant market with the accumulated technology and experiences.

Based on performances accumulated in overseas markets and advanced technology capability, the Plant Works Division has been recognized as top level of project execution in the world in the areas of building global petrochemical, gas, refinery plants, and power & energy.

In order to lead the global plant and energy market continuously, we will penetrate into new high value-added markets by securing core technologies and establish Future-oriented Portfolio by expanding new growth businesses.



#### Overview

INTRO

The spirit and vision of Hyundai E&C is a source of distinctive competitiveness and a driving force for sustainable growth. In addition, Hyundai E&C has internalized the management philosophy and core values of the Hyundai Motor Group and further has strengthened its future competitiveness through organic cooperation with related industries in Group including automobile and steel.

APPENDIX

#### **TOGETHER FOR A BETTER FUTURE**

#### **Group Vision**

Vision of Hyundai Motor Group, "Together for a Better Future" is a firm commitment to deliver the best satisfaction to customers beyond the external growth of the company. Synergy created by the Hyundai Motor Group is realizing new values through innovation in various parts of our lives.

#### **Group Core Values**

For accomplishing the Group's vision, Hyundai E&C internalizes the five core values of Group. The five core values are standards of our action and decision making to reinforce the creative corporate culture that respects customers and employees, accomplish challenges and cooperation, and strengthen our capability for global business.



#### **Group Management Philosophy**

Based on the Group's management philosophy, "to realize the dream of humanity by creating a new future through creative thinking and endless challenges," Hyundai E&C leading sustainable development of global construction industry

#### Unlimited Sense of Responsibility

Our unlimited sense of responsibility for the safety and happiness of the customer is realized in our quality management, which leads to the creation of unlimited value for our society.

#### Realization of Possibilities

We always move forward to the next goal after each success, and create a bigger future with an entrepreneurial spirit to take the risk of failure

#### Respect for Mankind

We offer value, better products and better services that help people to live more conveniently, and make their lives more

#### **WE BUILD TOMORROW**

#### Hyundai E&C Spirit

Hyundai E&C is ahead of its era with a "Hyundai E&C spirit" that does not fear change.

We pursue creative perspective based on future-oriented thinking, pioneer the future with positive thinking, and move toward Global Top Tier through its unwavering drives.

#### Hyundai E&C Vision

As a global leading provider of high-value engineering solutions,

Hyundai E&C will create the foundation for a better life through cross-business synergy

and convergence with future technologies.



#### Hyundai E&C's Three Strategic Directions

Striving to realize the future vision, Hyundai E&C has defined the three strategic directions of 'enhancement of business structure,' 'advancing into new growth field' and 'globalization of management infrastructure.'

Enhancement of Business Structure
Business portfolio enhancement
High value-added business model

#### Advancing into New Growth Field

Selecting new growth power businesses
Advancing into new markets
Maximizing the synergies effect with affiliates

#### Globalization of Management Infrastructure

Building an effective global organization
Training global talents
Establishing global cost price & quality control system



## CHALLENGE

The Infrastructure Works are continuously challenging to the environment for better life generating fruits from nothing.

The Infrastructure Works Division of Hyundai E&C, which has added technology and imagination to its passion and efforts to make the impossible possible, has been bringing new value to the earth by building core infrastructures that enrich human life.

#### **UN SDG Implementation**

UN SDG 09 Industry, Innovation and Infrastructure

UN SDG 06 Clean Water and Sanitation

Sheikh Jaber Al Ahmed Al Sabah Causeway, Kuwait

#### The First

The world's first cable-stayed suspension bridge

he Third Bosporus Bridge, Turkey

The world's first hybrid bridge combined with cable-stayed and suspension

#### The Biggest

The largest oil storage cavern in Southeast Asia

Jurong Rock Cavern Phase 1 Project, Singapore

Southeast Asia's largest crude oil storage of



The world's most construction

records of caissons

Business







HDEC Approach

Proposed Reclamation at Tuas Finger One, Singapore

Unrivaled accumulative records of 901 caissons

#### **HDEC VALUE CREATION Infrastructure Works**

## CHALLENGE

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#### **UN SDG Implementation**

UN SDG 09 Industry, Innovation and Infrastructure

UN SDG 06 Clean Water and Sanitation

Sheikh Jaber Al Ahmed Al Sabah Causeway, Kuwait

Outlooks



World population surpassing 8.5 billion (in 2035) **UN Population Division** 



60% of world population living in cities (in 2030) **UN Population Division** 



Social

39% increase in Water shortage population (in 2030) 2030 Water Resource Group

Competence

**Maritime Port, Underground Space, Long Span Bridge** 

Strengthening technology competitiveness and production cost competitiveness for major business

New Growth

**Offshore Wind Power, Hydroelectric Power** 

Securing capability to expand new business High Value

**Underground Living Space,** Floating-type Structure, Overseas PPPs, Etc.

Excavating & promoting future new business, and expanding high value-

added business area

HDEC

#### HDEC VALUE CREATION

#### **Building Works**

## MAGINATION

Through imagination considering the humankind first, the Building Works have created whole new spaces that will go down in the history.

Hyundai E&C, which has been leading the cutting-edge space building coexisting with people, information, environment and technology, presents the value of building for tomorrow beyond the existing architecture areas.

#### **UN SDG Implementation**

• UN SDG 07 Affordable and Clean Energy

LIN SDG 11 Sustainable Cities and Communities





Values

Business

Competence The First The first building in Korea realized with large scale hanging floor and mega truss

Amorepacific Headquarters, Korea

Aesthetics of space maximized by the advanced engineering superiority



Qatar National Museum New Construction Site, Qatar

A monumental state-of-the art architecture inspired by the "desert rose"



Gramercy Park, Singapore Merit in Construction Excellence Award (CEA) at the BCA Awards 2018







Approach

#### **HDEC VALUE CREATION**

#### **Building Works**

## MAGINATION

Through imagination considering the humankind first, the Building Works have created whole new spaces that will go down in the history.

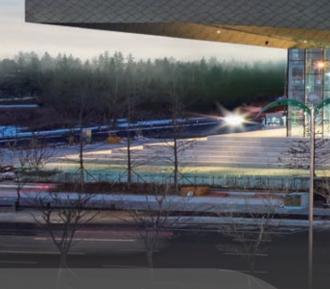
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#### **UN SDG Implementation**

• UN SDG 07 Affordable and Clean Energy

LIN SDG 11 Sustainable Cities and Communities







Approach

## **Outlooks**



44% increase in urban population (in 2030)

**UN Population Division** 



Widespread expansion of ICT technology (in 2030) Kerr



33% increase in world's primary energy demands (in 2030) IEA

Social

Values

**Enhancing Labor Saving & Engineering Management** Capability

Competence

Strengthening EPC competitiveness

#### New Technology

**Smart City, Smart Construction** 

Excavating and applying future new technologies

#### Emerging Business

**Overseas Investment Development, Construction** Responsible-type CM, Etc.

Establishing technical

foundation for new business

#### **Plant Works**

## #UTURE

The Plant Works are performing the composite art which establishes an abundant future by realizing dreams for joyful life of the humankind.

The Plant Works Division of Hyundai E&C, which has brought enrichment of energy to humankind with its world-class technology and abundant experience, has been expanding its value with sustainable energy that can be used for a long time.

#### **UN SDG Implementation**

UN SDG 09 Industry, Innovation and Infrastructure

#### Competence

Ma'aden Alumina Refinery Project, Saudi Arabia

Carrying out all processes from engineering to construction by 3D modeling (smart plant)

ime among large-scale plants in the world

#### South Pars Phase 4 & 5 Project, Iran

The largest single overseas plant order among domestic construction companies 34% of water desalination in Qatar



overing Engineering, Procurement and Construction (EPC)

#### Ras Laffan C IWPP Project, Qatar

Generating 64% of total power plants and



New Growth



High Value



Approach

#### **Plant Works**

## #WUTURE

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#### **UN SDG Implementation**

UN SDG 09 Industry, Innovation and Infrastructure

• UN SDG 07 Affordable and Clean Energy

Barakah Nuclear Power Plant, UAE





Climate Change Acceleration

Material Resource Scarcity

cial Values

Strengthening
Oil & Gas Business
Competitiveness

Competence

New Growth

Electric Power Transfers, Nuclear Decommissioning & Aged Power Plant Improvements High Value

un wimmin

Hydrogen Industry,
Renewable Energy

33% increase in world's primary energy demands (in 2030)

IEA

20% increase in GHG emissions (in 2030)

IEA

Resource extraction scale increase to 83 billion tons (in 2030)

Establishing bid engineering capabilities and strengthening execution competitiveness

Diversifying overseas market & securing capability to advance into new business area Excavating and promoting future new business, and expanding high value-added business area



#### HDEC VALUE EMPOWERMENT

## **Strategy & Performance**

Driving Strategy	Driving Approach	Implementing Strategy	2017 Performance	Sustainability Management Goal	Key Sustainability Indicators	2015	2016	2017	2018 (Target / Estimation)
Fortifying Global Competitiveness	Hyundai E&C has been fortifying its global competitiveness in the world beyond Korea based on its leading business model and proven business capabilities.	Creating global economic values     Strengthening global business competitiveness     Expanding future-oriented portfolios     Providing future-oriented total services	Achieved KRW 21,713.6 billion in receiving new orders Ranked 1st in Korea (14th in the world) of ENR Int'l 250 Secured order backlog of KRW 66,758.0 billion Achieved 39.93% of environment-friendly business sales	Increasing the proportion of sales of environment-friendly products to more than 45% against total revenues by 2020	Revenues (KRW in 100 millions, consolidated) • • • • • • • • • • • • • • • • • • •	192,332 107,163 39.15 85.0	188,250 110,411 40.39 84.8	168,871 101,680 39.93 85.3	176,000 108,000 41.62 85.5
Securing Core Technology	Hyundai E&C has been striving to improve the future sustainability of humankind and business by developing source technologies and strengthening the business creating foothold.	Innovating R&D strategy     Enhancing R&D infrastructure     Strengthening core technology networks     Creating economic values through R&D	Invested KRW 23.5 billion for R&D     Contributed KRW 159.7 billion of technology-based profitability and receiving orders     Promoted 25 cooperative R&D organizations worldwide     Obtained the Environmental Technology Verification (ETV) technology from the Ministry of Environment for technology converting sludge sewage into energy through thermal hydrolysis	Investing KRW 118.8 billion in securing core environment-friendly and high-efficient technologies by 2020	R&D investment (KRW in 100 millions)	234 181 83 1,642	226 178 71 1,942	222 165 68 1,564	235 141 72 1,597
Responding Climate Changes	Hyundai E&C has been improving its environmental value through various strategies to improve efficiency of environmental energy management recognizing the importance of responding climate change.	1. Promoting environment & energy management policy 2. Implementing integrated environment & energy management 3. Expanding environment & energy management activities 4. Advancing carbon management	Selected as a member of CDP Carbon Management Honors Club for 4 consecutive years     Reduced GHG emissions of 95,679.23 tCO₂-e     Reduced energy consumptions of 91.45 TJ     Applied for a patent on the System for Predicting GHG Emissions and Warning Overuse	Reducing GHG emissions by 2.1% per year compared to baseline year 2015 until 2020	Scope 1 GHG emissions (tCO <sub>2</sub> -e) · · · · · · · · · · · · · · · · · · ·	20,043 53,885 74,149 1,399	12,812 61,362 93,711 1,451	19,439 52,444 95,679 1,359	18,253 49,245 97,688 1,276
Establishing Safety & Environment Infrastructure	Hyundai E&C has been systematically minimizing safety accidents and reducing environmental impacts through a safety management system and an environment-friendly construction process.	I. Improving safety management infrastructure (safety management strategy, organization, performance management system, inspections and training)     Leading environment-friendly construction process (environment-friendly engineering, procurement, transportation, demolition and operation)	Achieved the accident rate of 0.31%     Increased safety activities (inspection, training, information) by 178.5%     Reduced 66,967.1 tons of wastes     Environmental protection expenditure and investment cost of KRW 59.8 billion	Decreasing the Lost Time Incident Rate (LTIR) by 40% until 2018 compared to the level of 2014	On-site safety inspection (cases) • • • Accident rate (%) • • Waste generation (ton) • • Water usage (thousand ton) • • •	3,833 0.21 635,939 940.2	3,742 0.28 422,877 717.0	3,028 0.31 355,910 781.9	3,330 0.15 352,350 774.0
Cultivating Innovative Talents	Hyundai E&C has been cultivating innovative talents who can improve organizational efficiency and executive ability while creating new values.	Selecting talents without discrimination     Developing capability of talents     Advancing innovative organization     Pursuing employees' happiness	Achieved 4.51 points in educational satisfaction (out of 5 points) Increased job capability evaluation score by 8 points Increased 16 hours of training time per full-time employee Increased 7.1 times in male employees using paid parental leave	Strengthening capability of talents and cultivating global construction experts	Recruitment (persons) · · · · · · Percentage of women among total employees (%) · · · · · · Training satisfaction (points) · · · · · · Job capability evaluation (points) · · · · · · · · · ·	364 6.13 4.40 81	281 5.76 4.50 81	183 5.46 4.51 89	171 6.00 4.50 90
Enhancing Value Chain Capability	Hyundai E&C has been promoting the improvement of suppliers' business capability and management stability while promoting the competitiveness of the value chain effectively by providing sustainable value chain management system.	1. Enhancing shared growth cooperation with suppliers (supporting training, finance, technology and communication for suppliers) 2. Managing sustainable supply chain (sustainable supply chain policy, management strategy and evaluation)	Generated sales of KRW 136 billion through Overseas Expansion Training Program Increased KRW 7.1 billion in financial support for suppliers Concluded agreement to promote sustainable management between Hyundai E&C and its suppliers Identified risks from 0.88% of suppliers and took corrective action	Improving sustainability management evaluation and risk management system	Number of benefitting suppliers of Overseas Expansion Training Program (suppliers) Revenue generation due to Overseas Expansion Training Program (KRW in 100 millions) Amount of Shared Growth Fund (KRW in 100 millions) Supplier satisfaction level of operation (points)	122 1,312 173.0 81.5	75 446 148.0 82.5	53 1,360 180.0 82.4	53 1,360 250.0 83.0
Advancing Strategic Social Contributions	Hyundai E&C has been promoting strategic social contribution projects based on industrial characteristics to improve social value in overseas countries where it operates business.	Strengthening social contribution system     Expanding global social contribution     Implementing UN Sustainable Development Goals through social contribution	Increased donations at headquarters by KRW 2.25 billion Invested KRW 750 million in overseas social contribution Increased 12 overseas social contribution projects Achieved 10.7 points of social contribution mileage (out of 10)	Expanding global social contribution and implementing the UN Sustainable Development Goals	Donations at headquarters (KRW in 100 millions)  Scale of Overseas Social Contribution Projects (KRW in 100 millions) Overseas social contribution countries (countries)  Annual corporate-wide goal of employees' volunteer mileage program (mile per person)	37.3 5.0 15 10.0	26.0 7.0 15 10.8	48.5 7.5 18 10.7	49.6 10.0 18 11.0

Strategy 1

## **Fortifying** Global **Competitiveness**

The world is an open stage where Hyundai E&C follows its dreams and it is a land of infinite possibilities. Based on our leading business model and proven business capabilities, we have been fortifying our global competitiveness in the world beyond Korea.

In addition, we have been strengthening our global value chain to provide future-oriented integrated services in all areas of the value chain and create a new history of the Value Creator.

Value Empowering Strategy



#### **Creating Global Economic Values**

· Diversifying global markets · Expanding into global markets



#### Strengthening Global Business Competitiveness

- · Expanding global value chain organization
- · Enhancing global procurement management



#### **Expanding Future-oriented Portfolios**

- Enhancing competitiveness of technology sector in the short term
- · Expanding business areas and shaping up future industry in the mid- to long-term



#### **Providing Future-oriented Total Services**

· Providing total services in all areas of construction industry value chain to respond to changes in global construction market environment

Value Empowering Story

#### **Proving Solid Capability of Receiving Orders**

Hyundai E&C has achieved new orders of KRW 21,713.6 billion (consolidated), which is higher than the previous year despite difficulties such as a decline in order quantity due to the continuation of low oil prices in 2017 and contraction in the domestic construction market. It is the result of proving the solid capability of receiving orders for domestic housing including redevelopment of the 1st Banpo LH Apartment Complex, the largest reconstruction project in the country, and large-scale overseas projects such as Matabari Coal Fired Power Plant Port Offshore in Bangladesh and Al-bustan Street in Qatar. Hyundai E&C, which has achieved an international reputation as the first Korean construction company to achieve overseas accumulative orders of USD 100 billion, is improving its economic value by accelerating to receive overseas orders as order quantity in the Middle East region, which is traditionally its strong region, is expected to increase in 2018.



Performance in Receiving Overseas Orders

100 USD in billions Achieved USD 100 billion in accumulative overseas orders for the first time as domestic

construction company (in 2013)

Annual overseas receiving orders exceeded USD 10 billion for three consecutive years (in 2014)

#### **Raising Reputation of Korean Construction** in Emerging Markets

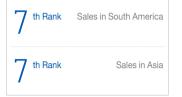
Hyundai E&C has expanded its global construction territory since 2011 by entering into emerging markets including 11 new countries in CIS, Latin America, and sub-Saharan Africa based on its accumulated construction technology and experience in the Middle East and Asia. In particular, we have entered Uzbekistan for the first time by winning orders for the construction of the Talimarjan Combined Cycle Power Plant worth of USD 819 million in 2013 and we have completed in 2017. Therefore, a bridgehead for expanding into emerging markets was built successfully. We will continue to develop optimized strategies for each country and expand economic value in the world by entering emerging markets.



Talimarian Combined Cycle Power Plant, Uzbekistar

#### **Creating Global Economic Values**

Sales Ranks in Global Construction Industry (As of 2017 / Official Announcement by the ENR)



#### **Proven Stability in Global Growths**

Hyundai E&C has been demonstrating stable growth capabilities in the entire world far beyond the boundary of Korea through its solid business model and corporate competitiveness highly recognized. Since the first overseas project in 1965 to construct Pattani-Narathiwat Highway in Thailand, Hyundai E&C has been writing a new history of the global construction renewing the first and best records for about past 50 years; in 2010, we won overseas orders worth more than USD 10 billion for the first among domestic construction companies. Following the achievement to receive overseas orders of which the total amount accumulated exceeded USD 100 billion in 2013, we also achieved a record of receiving overseas orders worth more than USD 10 billion in 2014 again for three consecutive years. Despite the business environment in the domestic and overseas worsened due to global low-growth, low oil prices, and a decline in the real estate market, we have achieved an operating profit of KRW 986.1 billion through profitabilityoriented financial structure and a well-balanced business portfolio.

#### **Diversifying Global Markets**

Engineering News-Records (ENR, United States), the worldwide renowned engineering and construction magazine, nominated Hyundai E&C for the 14th on 'Top 250 International Contractors 2017'; it is also the highest rank among domestic construction companies. Hyundai E&C is ranked among the top 10 construction companies in sales performance in Latin America and Asia as outstanding as other global preeminent companies.

#### **Expanding into Global Markets**

In order to cope with the rapidly changing global market environment flexibly, Hyundai Engineering and Construction has operated 25 overseas branches and offices worldwide, accelerating its expansion. In particular, we have endeavored to expand our target markets in emerging countries defining Latin America, Sub-Saharan Africa, and Commonwealth of Independent States (CIS) as major emerging markets with an aim to apply our business experience all over the world. In addition, The PRM Strategy Office is centered on a pre-assessment system for legal, accounting, labor and regional backgrounds in order to proactively minimize and prevent business risks that can occur while

Despite the difficulties including low oil prices in the Middle East in 2017, we received orders including Matabari Coal Fired Power Plant Port Offshore of 1,200 MW in Bangladesh worth of USD 598 billion, Landfill in the West of the Tuas Area in Singapore worth of USD 161 million, and Renovation Works of Transmission System of 230kV Myanmar worth of USD 84 million. In 2018, we will focus on promising target countries among emerging markets and countries without our branch having high growth potential. In addition, we will strengthen our project finance and investment development businesses by enhancing partnerships and development & financial marketing organization's capabilities. Furthermore, in order to respond to changes in the market environment and the competitive environment, we plan to increase our technical sales competencies and expand cultivation of local talents.

Landfill in the West of the Tuas Area.

Regional Strategies for Overseas Markets



Status of Hyundai E&C's Overseas Entry Records (As of MAY 2018, accumulative)

Continents

#### Middle East & Africa

· Establishing pre-partnerships to participate in oil & gas construction centered on Saudi Arabia and UAE and promoting re-entry into Iran and Irag marke

· Expanding sales on Multilateral Development Bank (MDB) financing construction in Africa domestic and Japanese trading companies

#### Asia

 Promoting strategic agreements with trading. technical, and main equipment companies for Japan International Cooperation Agency (JICA)-funded transmission and transformation of electric power projects

Expanding loan projects including JICA, Economic Development Cooperation Fund

#### CIS

· Collaborating with Russian oil major companies and promoting preemptive sales activities in preparation for development in

Advancing into the power grid modernization business utilizing the strengths and records of other construction type in Uzbekistan

#### Americas

Establishing win-win relationship with Spanish companies that have high market share in Latin America and financial

Looking for ways to cooperate with European & Chinese companies to promote project finance

21

#### Strengthening **Global Business** Competitiveness

#### **Increasing Cost Competitiveness**

Hyundai Engineering & Construction is stepping up its cost competitiveness with the aim of generating profits through maximizing the value added. To achieve this aim, Hyundai E&C defined core construction projects by each business division and set a target of 10% cost reduction in 2018. We are also implementing customised strategies to increase cost competitiveness and lead to higher quality orders.

Furthermore, we are constantly preparing cost reduction measures by presenting alternative bidding, improving the construction method, identifying production cost reduction cases, and building database for projects while applying and verifying reduction plans, and securing excellent practices of leading companies. Besides, we are increasing production cost competitiveness by improving business management and execution method.

#### **Expanding Global Value Chain Organization**

Hyundai E&C's 25 overseas branches offices around the world have been taking significant roles to convey management infrastructure to sites and efficiently connect the headquarters and sites for the successful execution of global business. In order to increase competitiveness in receiving overseas orders and execution, the overseas branches are functioning as the main drivers in identifying local suppliers, managing the pool of overseas suppliers, and managing sites.

In 2018, we plan to strengthen our business portfolio effectively by establishing a dedicated organization to strengthen overseas investment development business and project finance. At the same time, we will increase the proportion of local talents in existing branches and enhance the efficiency of business operations by utilizing the global network of

#### **Enhancing Global Procurement Management**

Based on the advanced material and subcontract management system (e-Procurement & e-Subcontract System), Hyundai E&C have been managing the integrated procurement information about bidding, transport, financing as well as supplier assessment, contract and payment. In addition, we have been operating the unit price contract program and simplified local payment system at overseas sites and branches to improve the procurement work efficiently. In addition, we have been contributing to reduce costs and increase sales of local suppliers by assigning responsible procurement personnel to Singapore, Dubai, Kuwait, and Doha branches and purchasing materials and goods required for international business and operating branches. Moreover, we have sent out newsletters in English to our

#### **Expanding Future-oriented Portfolios**

#### **Business Portfolio Strategy**

overseas suppliers to build the closer partnership.

Hyundai E&C has been implementing a business portfolio strategy based on competency analysis by business division, market characteristics and future market prospects. By entering various business fields in both domestic and overseas markets, we operate a balanced business portfolio by region and type of business. In the mid- to longterm, we have been expanding our business portfolio by excavating future new businesses. Hyundai E&C's balanced business portfolio strategy is a driving force for stable growth in the external environment changes such as falling oil prices and exchange rate fluctuations.

#### Hi-oT (Hillstate IoT Smart Home System)



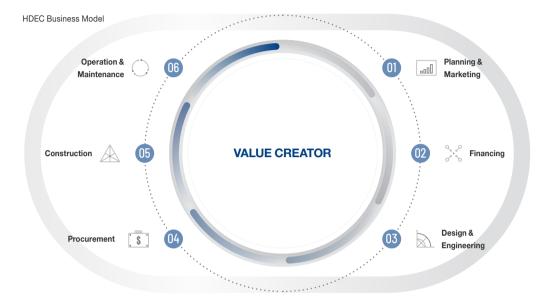
#### **Excavating Future New Business**

Hyundai E&C is excavating and promoting future new business, a fostering business that can lead the future, to effectively respond to changes in the construction industry environment and create new revenue sources. We conducts a detailed market analysis centered on the Strategic Planning Group and constant monitoring on market trends to excavate business opportunities considering social and economic changes of megatrends including the oil price fluctuation, global warming, and aging phenomenon. Based on this, we promote business strategy stage by stage to create substantial results for each business division.

In response to the global construction trend, which is rapidly transforming into the 4th Industrial Revolution, we plan to enhance our profitability by expanding high-value-added business areas in 2018, including Smart City based on EPC (Engineering, Procurement, Construction) capabilities that combine IoT, big data, and artificial intelligence. In addition, we will continue to explore areas that can be commercialized in the mid- to long-term, such as underground living space, modular housing, and the hydrogen industry.

#### **Providing Future-oriented Total Services**

In the construction market environment around the globe swiftly changes, Total Service Provider is becoming more competitive to provide the future-oriented integrated service throughout the entire value chain of the construction industry, including business planning, financing, engineering, procurement, construction, and operation & maintenance. Accordingly, we have met needs of customers by advancing the business model through our differentiated technology and abundant business experiences accumulated in 71 years. We have been penetrating into high value-added businesses and have been growing into a global company that creates various added value.



#### 01 Planning & Marketing

Hyundai E&C establishes the best integrated solutions within the budget, such as guaranteeing the highest quality observing the construction schedule, and securing the safety, through the cost minimization and profit maximization by conducting a strict review. Moreover, the best values are being generated by Hyundai E&C throughout the entire life cycle of the construction industry.

#### 04 Procurement

Hyundai E&C has established the global procurement system and found appropriate local suppliers while signing partnerships with material and equipment suppliers and acquiring procurement experts. Consequently, provides the best quality to its customers the efficiency in the procurement have been maximized.

#### 02 Financing

During the financing phase, Hyundai E&C analyzes risks of all business processes thoroughly, and presents a financial structure. and conditions. In addition, we support to secure finances based on the stable credibility of the company

#### 05 Construction

The impeccable construction is the most crucial factor of a successful business. Through the constant technology development and cultivation of talents, Hyundai E&C applying solutions optimized for on-site condition.

#### 03 Design & Engineering

We provide optimized design and engineering solutions by predicting all stages from the early designing stage to construction and operation stages based on our balanced business portfolio and experiences accumulated for 71

#### 06 Operation & Maintenance

Hyundai E&C have accumulated business experiences in various areas such as complex building, transportational infrastructure, environmental plant, and power plant while striving to offer the Operating and Maintenance (O&M) service of the world's best level in the areas.

#### Establishing Synergy Foundation for Successful Leaps to Become a Developer

Hyundai E&C has been actively pursuing complex development projects that utilize the idle land of the government, local governments, and the private sector in order to overcome the market environment including the real estate market polarization in the capital area and the local and the decrease in the volume of public housing. In April 2018, in order to establish synergy foundation for successful leap to be a developer\*, we have concluded a Memorandum of Understanding (MOU) for the complex development projects with the Korea Asset Management Institute (KAMI), a leader in domestic real estate consulting. Hyundai E&C and the KAMI agreed on various matters related to excavating and implementing projects for complex development projects, promoting and providing marketing support for projects, planning & consulting and advisory services. We plan to actively cooperate in excavating and promoting excellent business sites.

It is expected that our opportunities for complex development projects will expand through cooperation between Hyundai E&C, which secures the best experience in construction technology, financial soundness and experience with self-development projects through large-scale projects, and KAMI, which has excellent development planning consulting capability and network.



MOU for Promoting Complex Development Project, Hyundai E&C and Korea Asset Management Institute

\* Developer: A company that performs all the processes of real estate development including real estate site purchase, planning, engineering construction, marketing, and post management

Strategy 2 http://en.hdec.kr/EN/InnoTech/InnoRnd.aspx

# Securing Core Technology

Technology is the basis to realize the future of Hyundai E&C, and it is a solution to solve the problems that the Earth is confronted. Hyundai E&C is devoting its best to secure core technology through R&D investment, convergence technology development based on the Group synergy and global R&D cooperation network.

Thus, we are striving to improve the future sustainability of humankind and business by developing source technologies and strengthening our business creating foothold.

Value Empowering Strategy



#### **Innovating R&D Strategy**

- Analyzing construction industry and megatrend of construction market
- Enhancing competitiveness in executing projects, improving competitiveness in receiving orders, and identifying and promoting future new business



#### **Enhancing R&D Infrastructure**

- Transforming to speedy and performance-oriented technology innovation by reorganizing to be function-oriented R&D organization
- · Expanding R&D Investments



#### Strengthening Core Technology Networks

- · Developing convergence technology based on the synergy of Group affiliates
- · Expanding global B&D cooperation
- · Expanding Hyundai E&C Technical Forum



#### Creating Economic Values Through R&D

- · Creating business through technology application
- · Contributing to improving profitability and receiving orders through technological support

Value Empowering Story

#### Creating Economic Values with Technology Superiority

Hyundai E&C has been developing its cutting-edge construction technology and applying it to construction sites to enhance its competitiveness in receiving orders and executing projects. In 2017, HDEC R&D Division has contributed to KRW 31.6 billion in profitability improvement by preventing the increase of construction costs and replacing specialized suppliers as well as KRW 124.8 billion in increasing the competitiveness of receiving orders.



#### Opening a New Chapter in Environment-friendly Bio Energy Technology

A technology converting sludge sewage into energy through thermal hydrolysis developed by Hyundai E&C has proved its performance and stability for commercialization technological expertise by obtaining the Environmental Technology Verification (ETV) from the Ministry of Environment. It is another remarkable result following the new technology certification in 2014. The technology is top-notch environment-friendly bio energy technology that a few global leading companies have secured. In addition, it is an innovative technology that increases the production of biogas by 50% and reduces the amount of sludge waste by 30% by thermally hydrolyzing the sewage sludge, which is the waste generated during sewage treatment, at high temperature and high pressure. We will continue to lead the investment and development type of new business in the sludge field with this verification.

Technology Effects of Converting Sludge Sewage into Energy Through Thermal Hydrolysis





The Sludge Sewage Demonstration Plant, Hyundai E&C

#### **Innovating R&D Strategy**

Hyundai E&C, in order to lead the market as a global construction leader, has defined 2015 as the starting point of the R&D innovation. In addition, Hyundai E&C has been striving to acquire the core technology capability by setting R&D strategy based on the analysis of the megatrends that are closely related to the construction industry: urbanization, energy & fuel, resource depletion, water scarcity & pollution. In 2017, we have strengthened our technical competitiveness in existing businesses and implemented 2-track technology strategies to secure new business technologies for the future. We have provided differentiated solutions by business division, secured smart construction and smart city technology, and promoted the commercialization of technology infrastructure for new and renewable energy as well as promoted commercialization of environmental restoration, water, and renewable energy. In 2018, we will maximize our business capabilities by establishing and implementing eight strategies for three R&D targets: enhancing competitiveness in receiving orders, improving competitiveness in executing projects, identifying and promoting future new growth businesses.

VALUE EMPOWERMENT

APPENDIX

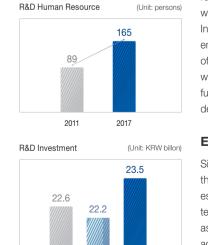
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#### 2018 R&D Strategy



<sup>\*</sup> GBC: Global Business Center

## Enhancing R&D Infrastructure



2017 2018 (Plan)

2016

#### Improving Competitveness of R&D Organization

Under the goal of 'Securing Technologies to become a Global Construction Leader Based on Engineering,' we reorganized and expanded the research institute to the 'Research and Development (R&D) Division' in 2011. Since then, we have continuously innovated our R&D organization strengthening our future growth capability based on technology. In addition, we are persistently establishing plans to hire overseas outstanding human resources. The number of employees working in the HDEC R&D Division as of December 2017 is 165, increased by 85.4% compared to the figure of 2011 (89 employees). In 2018, in order to transforming to speedy and performance-oriented technology innovation, we reorganized R&D organization centered on division (infrastructure, building, energy & environment) to focus on function (technical support, future identification, commercialization, task implementation). Furthermore, we established department for technology commercialization and exclusively responsible department for convergence technology.

#### **Expanding R&D Investments**

Since 2011, in order to secure the top-notch future technology in the world, Hyundai E&C has continued to expand the investment in securing the R&D facility and thus enhanced the R&D infrastructure by diverse efforts such as establishing new research & demonstration facilities, enlarging laboratories, and changing equipment. We have three test laboratory: structural test laboratory, environmental test laboratory, and Green Smart Innovation Center as well as have operated eight additional demonstration centers. In particular, in 2017, Green Smart Innovation Center have acquired the first grade of BEMS installation verification for the first time in Korea. Furthermore, we have tried to receive research services and orders based on contaminated soil remediation demonstration facilities operated at Singapore. In 2018, we plan to raise our R&D investments to KRW 23.5 billion from KRW 22.2 billion in the previous year.

#### Enhancing **R&D** Infrastructure

#### **Creating R&D-driven Business Values**

Hyundai E&C is accelerating business value creations by securing technical competitiveness through demonstration of core technology based on R&D infrastructure. In particular, our self-developed contaminated & dredged soil remediation and recycling technology will be applied to Singapore's contaminated soil remediation project and the environment purification project for returning US bases after the demonstration phase. In addition, wastewater reusing technology is expected to be used as core technology for wastewater reuse construction project of Hyundai Steel. In 2017, Hyundai E&C have expanded technology territories by applying for 56 patents, registering 68 patents, and acquiring 2 new technologies.

#### R&D-driven Business Values Creation Process

	R&D Stage	Demonstration Stage	Commercialization stage
Soil Remediation	Development of Contaminated & Dredged Soil Remediation and Recycling Technology (18 patents, 2 new technologies)	JTC Pilot Plant Phase 2 for the Treatment of Land Based Contaminated Materials (28 MAR 2018)	Remediation Works in Kampong Bugis, Singapore (ordered in 19 APR 2018)     Contaminated Soil Remediation Project, Singapore (scheduled for 2019)
Wastewater Reusing	Development of Wastewater Reusing Technology (6 patents)	Non-discharge Wastewater Treatment Demonstration of Hyundai Steel (2016~2019)	Environment Purification Project for Returning US Bases (scheduled for 2019)     Starting to Construct Wastewater Reusing Commercial Facility of Hyundai Steel (scheduled for 2020)

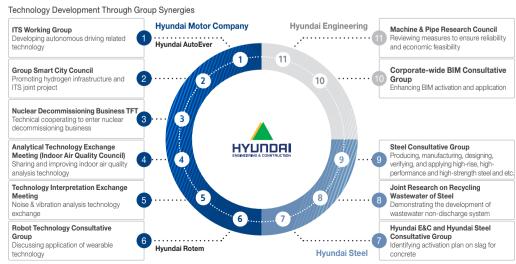
#### **Expanding Core Technology Networks**

#### **Developing Convergence Technology Based on Group Synergies**

Based on strengths of Group affiliates, Hyundai E&C has been promoted the development of convergence technology in diverse fields such as transportation, environment, energy and smart city by joint researches that can create synergies. Through the Connectivity Subcommittee under the Hyundai Motor Group R&D Strategy Committee, we consolidated the R&D cooperation with Group affiliates while operating thirteen consultative groups.

In 2017, we developed 'Smart Home & Car' technology that connects cars and smart homes with the effort of the Connectivity Subcommittee. In particular, we received great attention by presenting 'Connected Mobility' for the first time as a construction company with Hyundai Motor Company at the Customer Electronic Show (CES) exhibition held in Las Vegas, USA. In addition, in cooperation with Hyundai Steel, we are promoting commercialization of wastewater recycling system that can secure the quantity and quality of industrial water stably through reuse of wastewater after development and demonstration. Furthermore, in cooperation with Hyundai Motor Company, we have lead the environment-friendly construction by developing 'Semi-transparent BIPV\* commercialization technology for automobile & building convergence system.' In 2018, we established Group smart city strategy jointly by participating Group Smart City Council and implementation tasks that planned for strengthening internal capabilities and securing track-record are underway. In addition, along with Hyundai Motor and Hyundai AutoEver, we plan to develop commercialization models to expand hydrogen energy consumption and promote demonstration of C-ITS\*\* in connection with the service of autonomous driving support roads. \*BIPV: Building Integrated Photovoltaic System \*\*C-ITS: Cooperative Intelligent Transport System (unlike ITS technology, which provides information mainly by the center, it is a system that enables quick and active response to unexpected situations such as sudden stop and falling object through real-time information sharing between vehicles and vehicles, and between vehicles and roads)



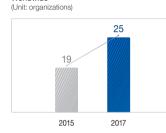


#### **Expanding Core Technology Networks**

#### MOU, Hyundai E&C and 3M



Number of Cooperative R&D Organizations Worldwide



#### **Enhancing Technology Competitiveness Based on Global R&D Cooperation**

In order to secure top-class future core technology, we have established a R&D network with world's leading agencies and companies and promoted global joint researches. Furthermore, we are engaging in strategic alliances with global advanced companies to create new business opportunities through technical commercialization and expansion of the value chain.

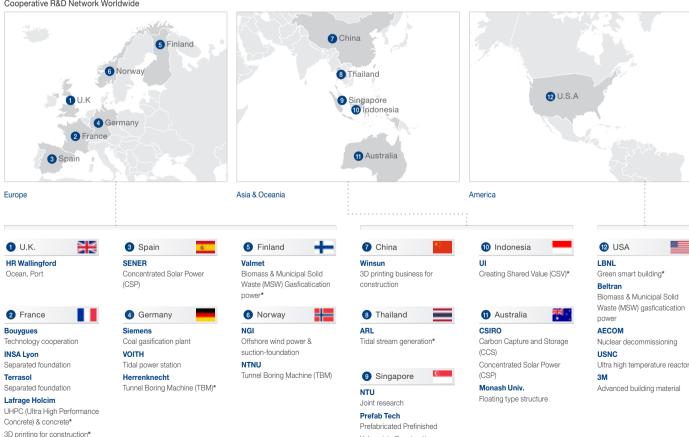
In 2017, we conducted localized joint research in Singapore including contaminated soil remediation at the NTU-Hyundai Urban System Centre, established with Nanyang technical University (NTU), a prestigious university in Singapore. Based on this efforts, we have worked closely with Government agencies such as JTC and A\*STAR to receive new orders in Singapore. In addition, we entered into an agreement with the Norwegian Geotechnical Institute (NGI), a specialized offshore wind power company, and signed technology agreements with the Atlantis Resources Limited (ARL) to strengthen technical competitiveness in the renewable energy market. Furthermore, we have concluded agreements with leading companies such as XtreeE and Lafarge Holcim to collaborate on cutting edge materials and 3D printing related technology, and discussed for joint research. In 2018. in order to cope with the rapidly changing market due to the 4th Industrial Revolution, we will take the lead in maximizing technical synergy and enhancing competitiveness based on technology convergence with other industries beyond the construction industry.

#### **Expanding Hyundai E&C Technical Forum**

Hyundai E&C excavates innovative technologies and ideas in the construction field by holding the 'Hyundai E&C Technical Forum'; the Forum is the only technology competition held by a domestic construction company. In 2017, the Forum have expanded the university sector, which had been limited to domestic, to Singapore, and invited 1 team of the 9 award winning teams to Korea. We received 77 applies in university sector and 48 applies in corporate sector in 2017. Six award-winning companies are registering as our suppliers and six teams of award-winning university students will receive incentives if they apply to enter Hyundai E&C.

#### Cooperative R&D Network Worldwide

3D printing for construction



Volumetric Construction

(PPVC)

VISION

Environment & Energy

Management Roadman

## Responding Climate **Changes**

Responding climate changes is a challenge for a sustainable planet and a future growth engine creating new businesses. Recognizing the importance of responding climate changes, Hyundai E&C has been improving its environmental value through various strategies to enhance efficiency of environmental energy management.

In addition, we have consolidated our foothold as a global environment-friendly construction company by leading carbon management linked to national greenhouse gas (GHG) reduction goals.

Value Empowering Strategy



#### **Promoting Environment & Energy Management Policy**

- · Establishing long-term environment-friendly roadmap by 2030
- · Establishing corporate-wide and site environment & energy policies and targets annually



#### **Implementing Integrated Environment & Energy Management**

- · Operating integrated environment & energy system
- in accordance with international standards · Integrating environmental performance management



#### **Expanding Environment & Energy Management Activities**

- · Enhancing environment & energy management inspection
- · Expanding customized environmental training



#### **Advancing Carbon Management**

- · Implementing mid- to long-term carbon management strategy
- · Managing GHG emissions targets
- · Innovating integrated GHG management system
- · Reducing GHG emissions activities
- · Leading carbon management in construction industry

Value Empowering Story

http://en.hdec.kr/EN/Sustainability/GreenSafty.aspx

#### Included in CDP Carbon Management Honors Club for **Four Consecutive Years**

In October 2017, Hyundai E&C was selected as a member of 'Carbon Management Honors Club' for four consecutive years which is an award given to outstanding companies and 'Carbon Management Sector Winners' in the industrial material sector for six consecutive years, from Carbon Disclosure Project (CDP), the most reliable sustainability management index in the world with Dow Jones Sustainability Index and Bloomberg Indexes. It annually evaluates, analyzes, and reports the climate change action of key listed companies.

In this evaluation, Hyundai E&C accomplished the 'Leadership A' for high score in climate change response strategy, GHG reduction efforts, and GHG management. We will continue to contribute to the empowerment of environmental value by promoting active GHG reduction strategy.



2017 CDP Korea Carbon Management Honors Club Award

Headquarters

#### **Creating Value Through Carbon Management Activities**

Carbon management activities of Hyundai E&C have generated actual values. Through the Green Campaign, the representative GHG reduction campaign, we are striving to reduce GHG emissions while saving costs not only at the headquarters but also at all sites. In particular, reduction items that can be immediately applied to works are being constantly excavated for a lower energy consumption at sites where most energy are consumed. At the headquarters, daily reduction activities are being promoted including maintaining the proper indoor temperature, saving electricity for lights, air conditioners, and heaters, and changing elevators. In 2017, Hyundai E&C's annual GHG reductions are 69.610.44tCO<sub>2</sub>-e, and the cost reductions are about KRW 32.657 billion\*.

Vehicle

i leauquai ters	Vernole	Oite
Maintaining optimal indoor temperature	· Using hybrid cars for the corporate fleet	· Using steam at existing factories when curing concrete
Turning off lights and cooling & heating equipments  Using stairs and reducing the number of elevator use	Using public transportation or commuter buses for commuting to/from work	Using automatic lighting control system     Installing remote mobile control device for tower cranes     Implementing car-sharing
Shutting down computers or setting them to sleep mode Using personal mugs instead		Checking vehicles regularly     Prohibiting sudden acceleration,
of paper cups and encouraging the use of scrap papers	S.	sudden braking, and idling within sites - Adjusting tire pressure of construction equipment to improve fuel efficiency
		· Encouraging use of bicycles within sites

The number indicates the cost saved by GHG emissions reduction activities only Please refer to CDP (https://www.cdp.net) for details.

#### **Promoting Environment** & Energy Management **Policy**

2018 Environment & Energy Management

Environment & Energy

Management Policy

Environment & Energy Management Goals

· Realizing Sustainable Company Through

Environment & Energy Management

Energy-friendly Culture

· 5% GHG Reduction

· 7FRO Environmental Penalties

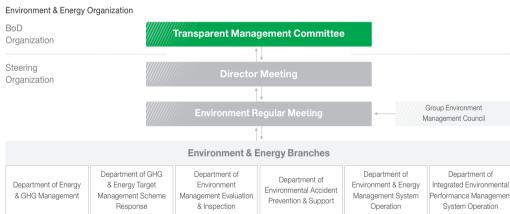
· Establishing Environment-friendly and

Policy & Goals

Aiming to accomplish the environment & energy management vision of 'Global Green One Pioneer,' Hyundai E&C has established the long-term environmental management roadmap and promoted various environment & energy policies. Hence, we have established environmental management system for all business stages: technology development, procurement, transportation, construction, and deconstruction. In addition, we have managed environment & energy policies and targets for corporate-wide and each site according to detailed implementation plan. In 2018, In order to maximize the efficiency of environment & energy management, we plan to establish 'Realizing Sustainable Company Through Environment & Energy Management' and 'Establishing Environment-friendly and Energy-friendly Culture' as our environment & energy policy.

**Global Green One Pioneer** 





#### Implementing Integrated **Environment & Energy** Management

#### **Improving Integrated Environment & Energy System**

Since 2013. Hyundai E&C has been operating an integrated environment system for efficient environmental & energy management including its performances. In 2017, we applied the ISO 14001: 2015 standard and simplified the system in order to maximize the site availability of the integrated system and improve the environment & energy management system in accordance with the improved international standards. In addition, we have established 1 environmental & energy management manual, 14 internal regulations and 4 processes for smooth operation of environment & energy management system.

Integrated Environmental Performance Management System

· GHG Management	· ISO 14001
· Waste Management	Managemen
· ERP Interworking	· ISO 50001

Management

H-PMS

#### **Integrating Environmental Performance Management**

In 2017, we have completed the development of the Hyundai-Project Management System (H-PMS), an IT-based Integrated Environmental Performance Management System. H-PMS manages environmental performance of all Hyundai E&C sites, including energy consumption, GHG emissions, waste generation, water usage, emission allowance (BOD, COD, SS, scattered dust, etc.) in an efficient manner by integrating the management of various systems such as ISO 14001 (environment management system), ISO 50001 (energy management system), and Enterprise Resource Planning (ERP). We have been managing all environmental pollutants including water, energy, GHG, waste, air pollutants (scattered dust) that are generated during our construction work.

## Implementing Integrated Environment & Energy Management

#### **Enhancing Environmental & Energy Inspections**

Hyundai E&C conducts regular inspections for all domestic and overseas sites on an annual basis in order to reinforce the capability in the environment & energy management. The inspection results are reflected in KPIs including the evaluation of the completion, and we are raising awareness and interest in environment & energy management by expanding the assessment and establishing task improvement plans for vulnerable sectors. In 2017, we have inspected 46 sites in domestic and overseas. In addition, in order to respond to Comprehensive Measures for Fine Dust established by the Ministry of Environment, we have carried out a special inspection of scattered dust at 55 sites on a sudden basis and have been informed of the improvement measures to the pointed factors. Moreover, we have improved efficiency of environmental system evaluation by conducting it at the headquarters through IT system.

In 2018, in order to reflect the importance of seasonal environmental issues to the inspection, we plan to carry out a special inspection by environmental themes that focuses on scattered dusts in spring and autumn, and soil erosion and water quality management during the rainy season in summer.

#### Process of Special Inspection on Scattered Dust



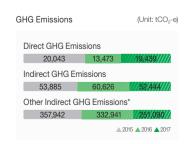
#### Expanding Customized Environmental Training and Responding Environmental Accidents

Through systematic environmental training programs, we have been promoting the understanding of employees about the environment as well as encouraging the participation of employees into the related activities. In 2017, we implemented trainings for employees relevant to the on-site environment management, such as site managers, administrators, and technicians. We also developed curriculums customized for each duty to accomplish qualitative improvement. In addition, each site provide environmental training autonomously twice a year to ensure on-site environment management capabilities. Hyundai E&C provided dedicated environmental trainings for business divisions and skill groups in 2017. In 2018, we will select on-site environment managers and create mandatory special training to enhance integrated environment management capacity and knowledge. Hyundai E&C has been operating a system to respond to environment and energy accidents based on international standards. In compliance with the system, all sites should execute emergency drills twice a year (once every six months) or more. In case of an environmental accident, all sites are supposed to report and respond in accordance with environmental accident prevention and response guidelines.

## Advancing Carbon Management

#### Implementing Mid- to Long-term Carbon Management Strategy

For achieving the vision of 'Global Green One Pioneer' and contributing to the national GHG reduction target, we have actively promoted the carbon management strategy aiming to reduce the emissions by 5.9% until 2030 and by 52.5% until 2040 compared to the emissions of 2015 (domestic scope 1, 2). It is to proactively cooperate with the Intended Nationally Determined Contribution (INDC) for Korea determined by the Conference Of the Parties (COP21) in December 2015, which is to reduce the GHG emissions by 37% compared to the Business As Usual (BAU) until 2030. In responding to this proactively, Hyundai E&C selected representative sites by business units and analyzed the GHG reduction potential of each site in 2013. Based on the analysis, the corporate-wide strategy was set to deal with the GHG & Energy Target Management Scheme in 2014. Additionally, we plan to reduce GHG emissions by 52.5% (domestic and overseas scope 1, 2 and 3) until 2040 compared to the emissions of 2015, and respond to climate change preemptively. Furthermore, we have linked our GHG reduction performance to KPI of headquarters and director in charge to reduce GHG emissions more efficiently.



\* Other indirect GHG emissions are of the supplier's construction equipment

#### Managing GHG Emissions Targets

Hyundai E&C, which is subject to the GHG & Energy Target Management Scheme according to the Framework Act On Low Carbon, Green Growth, has been endeavoring to reduce the GHG emissions by voluntarily managing the overseas emissions and comprehensive Scope 3 as well as Scope 1 and 2 beyond the government requirement for construction companies.

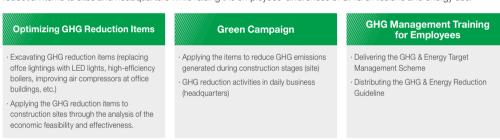
In 2015, the GHG emissions data from 2011 to 2014 was recalculated as the 'Monitoring, Reporting and Verification (MRV) Guideline of GHG Emissions for Construction Industry' was enacted. We have used the recalculated data to establish the estimation model of GHG emissions as a means of reducing GHG. Furthermore, in order to check the GHG emissions status, we have been calculating the corporate-wide emissions on an annual basis and conducting Government assigned third-party verification for the GHG emissions data and management. In 2018, we will revise the GHG reduction manual and add more GHG reduction items available at sites.

## Advancing Carbon Management



#### **Activities for Reducing GHG Emissions**

GHG reduction activities of Hyundai E&C are conducted in three areas: optimizing GHG reduction items, Green Campaign, and training on the GHG management. Through these efforts, we have been effectively excavating and applying GHG emissions reduction items to sites and headquarters while raising the employees' awareness of GHG emissions and energy use.

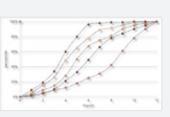


#### **Leading Carbon Management in the Construction Industry**

Hyundai E&C has been opening a new page of the carbon management by joining the Climate Disclosure Standard Board (CDSB) Working Group in 2012. Moreover, we have significantly contributed to setting the GHG management guideline for the construction industry as an advisory member of the GHG & Energy Target Management Scheme's council. In 2014, we have participated in the GHG & Energy Target Management Scheme pilot project conducted by the Korea Infrastructure Safety & Technology Corporation and revised the 'Monitoring, Reporting and Verification (MRV) Manual of GHG Emissions for Construction Industry.' In 2015, we have actively delivered the GHG & Energy Target Management Scheme of the Government. In 2018, we plan to participate in the revision project to add GHG reduction items in the 'GHG Reduction Manual.'

#### **Presenting the Future of Integrated GHG Management System**

Established the GHG inventory system in 2010, Hyundai E&C has been implementing the pacesetting carbon management through various ways such as introducing and applying ISO 50001 (Energy Management System) certification to sites in 2012 for the first among all construction companies around the world. Annually, we have been reviewing the energy consumption of all construction stages, and conducting monthly inspections for the energy reduction targets. Furthermore, the energy management at site has become more efficient because the GHG management system has been managed in the H-PMS, an integrated site management system, operated since 2014; every energy data including GHG emissions and the energy consumption by energy sources is gathered and analyzed at sites in real time. In 2017, in particular, we applied for a patent on the 'System for Predicting GHG Emissions and Warning Overuse' based on deep learning and big data. Thereby, we have minimized GHG emissions and strengthened compliance with the GHG & Energy Target Management Scheme through precise prediction and monitor of GHG emissions. Hyundai E&C will continue to advance the GHG management system and lead the GHG management standard in global construction industry.



Annual Prediction Modeling for Site GHG Emission Progress Based on Deep Learning and Big Data

(Unit: cases)

## **Establishing Safety & Environment** Infrastructure

Safety & environment infrastructure is prerequisites and essential elements for the sustainability of our employees and business.

Hyundai E&C has been systematically minimizing safety accidents and reducing environmental impact by operating a safety management system according to international standards and our environment-friendly construction process that covers the entire construction stages.

Value Empowering Strategy



#### Improving Safety Management Infrastructure

- · Propelling safety management strategy
- · Strengthening safety management organization
- · Advancing safety performance management system
- · Implementing safety inspections
- · Enhancing safety & health training



#### **Leading Environment-friendly Construction Process**

- · Expanding environment-friendly engineering
- · Executing environment-friendly procurement
- · Promoting environment-friendly transportation · Advancing environment-friendly construction system
- · Complying with environment-friendly demolition guidelines
- · Promoting environment-friendly operation

Value Empowering Story

http://en.hdec.kr/EN/Sustainability/GreenSafty.aspx

#### **Strengthening Executives-driven Safety Management**

In order to maintain sustainable business, Hyundai E&C has been promoting the internalization of safety consciousness and carrying out safety inspection by the leadership. In 2017, a total of 1,533 executives conducted domestic and overseas safety injections. In the Safety Leadership Education for the second half of 2017. attended by over 200 executives including the CEO and team leaders, we raised our safety awareness by reminding that safety issues are highlighting as a key risk that shakes the foundations of management. In particular, since the second half of 2017, Hyundai E&C has been taking the lead in strengthening on-site safety management through on-site inspections with by executives of headquarters and suppliers while using new IT technology to realize real-time control of risk factors on the sites.



Safety Leadership Traning for the Second Half of 2017

#### Honored the Platinum in Quality Excellence Award & for Three Consecutive Years at the BCA\* Awards



Hyundai E&C became the first Korean construction company to receive the Platinum in Quality Excellence Award for three consecutive years and Merit in Construction Excellence Award for two consecutive years at 2018 Singapore BCA Awards held by the Singaporean government; Singapore BCA Awards is the most authoritative construction-related award that evaluates projects completed or being executed in the country in various areas including construction, environment-friendliness, engineering, safety and quality. Since 1997, Hyundai E&C has won total 27 awards including BCA Green Mark Awards with its outstanding construction capability. These achievements prove that our differentiated technology and construction capability are highly valued in the world, which will lead us to dominate an advantageous position in receiving overseas orders.

\* BCA: Building and Construction Authority



2018 BCA Awards

#### **Improving Safety Management** Infrastructure

#### **Propelling Safety Management Strategy**

With the safety management as the first goal of the corporate management, Hyundai E&C has been strategically creating a safety culture and operating a safety management system according to international standards by obtaining OHSAS 18001 certification, the international safety and health standard. In 2015, we have established comprehensive safety management plan and mid- to long-term goals and strategies to decrease the LTIR\* by 40% until 2018 compared to the level of 2014 and we have set safety management target annually. In 2017, in order to strengthen our active and self-regulated safety system, we focused on maximizing the internalization of HDEC 12 Safety Golden Rules, enacted in 2016, by linking safety systems, education and inspection.

\* LTIR: Lost Time Incident Rate

#### HDEC 12 Safety Golden Rules Poster



#### Mid- to Long-term Safety Management Strategy

Mid- to Long-term Target	Accomplishing a target to decrease LTIR by 40% until 2018 compared to the level of 2014 Achieving the "Global Best" LTIR in 2018		
Mid- to Long-term Strategy	Establishing HDEC's own safety culture with 「SAFETY」 as the top priority "We Build Safe Tommorrow Together"		
Key Tasks	Innovating Safety Awareness  · Enacting HDEC Safety Fundamentals		

HDEC Safety Fundamentals Establishing Safety & Health System of Global Top Level

· Establishing advanced integrated Safety & Health System

Promoting corporate-wide campaign to advance safety awareness based on

· Improving IT-based Safety & Health System

Safety Systems	Safety Training	Safety Inspection
Linking special safety education for violation of safety rules and discontinuing work system to HDEC 12 Safety Golden Rules	Developing standard promotion draft, standard multilingual instruction (9 languages), and training employees & workers	Evaluating the level of safety standards and Implementing patrol inspection

#### Safety Management Organization



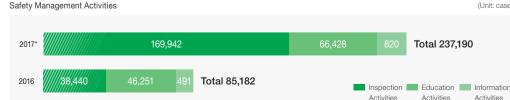


#### **Strengthening Safety Management Organization**

Hyundai E&C identifies safety risks in advance by operating the Safety Team for each business division, which are dedicated for the safety management. For a efficient management of sites, we have been operating a safety & health integrated management system since 2012. In addition, we are encouraging the establishment of a self-regulated safety & health system by mandating suppliers to assign safety managers. In 2017, we have established a technical safety organization to serve as a control tower for technical safety work and expanded the number of technology employees in each sector, and hired more safety experts to strengthen management of construction equipment.

#### **Advancing Safety Performance Management System**

Hyundai E&C has been promoting the participation of all employees in safety control by applying the safety management KPIs not only to on-site employees but also to the headquarters. In 2017, in order to strengthen the precautionary safety prevention system in addition to the post evaluation of accident rate, we implemented the safety management mileage system to link evaluation and compensation about individual safety management activities. As a result, safety activities such as inspection, education and information activities increased by 178.5% from the previous year. Our LTIR in 2017 was 0.31%, decreased by 20.5% from the previous year.



<sup>\*</sup> Implemented the safety management mileage system

#### **Expanding Safety Management Activities**

#### **Implementing Safety Inspections**

In order to monitor the safety management at domestic and overseas sites and to prevent accidents, we have been reinforcing the safety inspection. In 2017, total 1,533 cases of safety inspections for the executives including the top management were conducted.

In addition, we continuously conducted 'Monthly Safety Campaign' at all sites around the world with the top management attending. At the campaign, Hyundai E&C not simply inspects the on-site safety management but also increases the awareness of the accident prevention and encourages active participation delivering its strong will to realize the zero-accident.

#### Monthly Safety Campaign



Major Cases of CEO Site Safety Inspection in 2017

Sites	Inspection Points	
Proposed Reclamation at Tuas Finger One, Singapore	Identifying access classification for workers and vehicle     Identifying whether signal man is arranged at     equipment section	Identifying the installation of opening cover at the working section     Identifying control of the surroundings and safety measures when salvaging heavy objects
Energy from Waste Project, Singapore	· Inspecting worker access control status during test period	· Inspecting the installation condition of various machinery and equipment LOTO*
Land Reclamation at Changi East, Singapore	Inspecting the status of workers' fall prevention measures Inspecting the status of barge safety installation	Inspecting the status of securing worker's moving lines     Inspecting the status of arranging signal man and taking measures of preventing worker collision
Proposed Cecil Street Office Building (Frasers Tower), Singapore	Inspecting winches for lifting (wire ropes, safety devices, etc.)     Inspecting the buckling the safety belt up and the control of lower part	Identifying lifting plan (equipment, signal man, etc.)     Inspecting the prevention of falling accidents
Amorepacific New Headquarters, Korea	· Inspecting the winch for glass lifting (chain block, etc.) · Inspecting the buckling the safety belt up and he thorough control of lower part	Inspecting the fixed condition of pre-installed glass     Securing moving lines according to complex process     Inspecting the fire prevention considering use of fire

Top Managements-driven Safety Inspections in 2017

\* LOTO: Lock Out Tag Out

#### **Cultivating Safety Awareness by Top Managements**

Centered on top management, Hyundai E&C have been striving to establish a management culture that focuses on safety first. We hold the Safety Check Meeting for the top executives on a quarterly basis analyzing the corporate-wide safety performance, preparing measures, and establishing corporate-wide key safety plans. In addition, we conduct safety leadership training half-yearly to raise awareness of safety management continuously.

Monthly Monthly Safety Campaign Quarterly Safety Check M for the Top Execution	/Half-vearly
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#### Improving the Permit to Work (PTW) System

The Permit to Work (PTW), an accident prevention system of Hyundai E&C, requires to obtain a permit to work in advance by establishing a safety measure for all possible risk factors of every work executed at sites. If a work did not receive the PTW or execute safety measures as stated in the PTW document, it is subject to restrictions such as an immediate halt. In 2016, we added the daily check function of PTW document in mobile HSE applications to enhance the efficiency of the PTW. In 2018, we plan to develop a PTW daily monitoring system (e-mail service) to increase its effectiveness.

#### Satisfaction Rate of Safety Job Training Operation in 2017

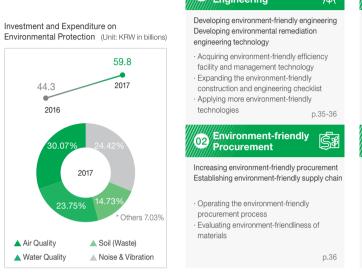
#### **Enhancing Safety & Health Training**

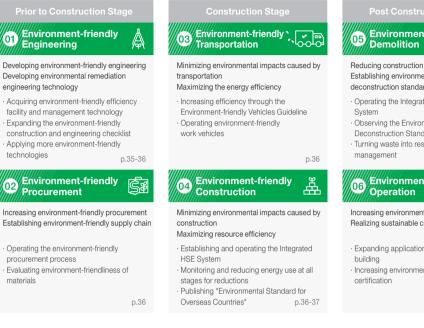
We are implementing regular safety & health trainings for all employees and subcontractors with an aim to advance the awareness of the safety & health. In 2017, we provided safety training for a total of 3,030 employees, increased by 30.7% compared to the figure of previous year (2,319 employees).

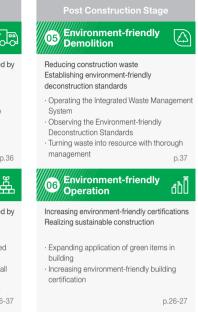
In addition, in order to enhance the safety education for foreign workers, we developed a virtual safety experience program for the 6 major risky tasks and 10 types of special safety education standard textbooks. We translated the textbooks into 9 languages and provided to the sites. In addition, we have enhanced the safety and health education by establishing an education network on monthly excellent & failure cases through the introduction of training system by site managers. In 2017, the satisfaction rate of safety job training operation was 93.7%.

#### **Environment-friendly Construction Process**

By establishing the environment-friendly process, Hyundai E&C has been focusing all its capabilities on minimizing the environmental impact during all construction all stages: engineering, procurement, transportation, construction, deconstruction and operation.







#### **Environment-friendly Engineering & Procurement**

Performance in BEMS Technology Research



#### **Expanding Environment-friendly Engineering**

Hyundai E&C has defined energy reduction, water saving, consideration for the ecosystem, and comfortable living environment as the four factors of the environment-friendly engineering and applied them from the engineering stage. In addition, centered on the Green Smart Innovation Center, established in 2014, we have expanded the high-efficiency environment-friendly engineering to build the 100% energy-saving house by applying renewable energy, energy storage systems, and indoor air quality improvement technology. In FEB 2017, we acquired the first grade of Building Energy Management System (BEMS) installation confirmation which is the core technology of zero energy building era for the first time in Korea. In addition, we responded preemptively to the mandatory installation of the BEMS scheme for public institutions that began in 2017. Furthermore, in order to expand the scope of zero energy realization from buildings to cities, we are upgrading environment-friendly engineering from aspect of smart city. There are a total of 25 projects that will be applied to environment-friendly engineering in 2018.

#### Considerations Factors for Environment-friendly Engineering

Category	Design Factors Under Consideration	Key Technology
Energy Reduction	Efficiency: Thermal insulation methods, thermal-insulating materials, energy-efficient windows and doors, waste heat recovery ventilation system, high-efficiency system, etc.  Renewable energy generation: Photovoltaic solar, tidal, wind, geothermal, biogas, hydrogen fuel cell, etc.	Building Integrated Photovoltaic (BIPV) system that ensures visibility     Hyundai Energy Recovery Ventilation (HERV)     Control & operation technology for micro energy grid     Smart Building Energy Management System (BEMS)
Water Saving	Conservation: Water-efficient toilets, greywater recycling systems, rainwater harvesting systems, decompression valves, etc.  Reuse: High-pressure filters, reuse of wastewater, ammonia stripping, collection of high-concentration liquid compound fertilizers, etc.	Rainwater harvesting system     Wastewater reuse system
onsideration for the Ecosystem	Topography: Fertile soil yard, contaminated soil washing technology, prevention of land subsidence, etc.  Water quality: Installation of water shield, treatment of water contaminated from washing processes, treatment of organic wastewater, etc.  Natural habitat: Recycling of damaged plants and trees, creation of escape paths, ecological wetlands, island of artificial plants, river ecosystem, etc.	Clearing technology for contaminated soil     Environment-friendly construction and soil dredging technology     Restoration technology for river ecosystem
omfortable Living nvironment	Indoor air quality: Functional materials, composite sensors, energy-environment management system, etc.  Ventilation: Nature-friendly arrangements, topographic consideration, wind-resistant structure evaluation, etc.  Thermal insulation: Thermal-insulating compound materials, external heat insulation systems, lining thermal insulation, etc.  Noise: Acknowledge floor structure development, noise control, window, noise shield capability predicting technology, etc.	Household Total Energy & Environment Management System (TEEMS)     Harmful substance absorbable functional wallpaper     Technology for reducing floor shock noise

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#### **Environment-friendly Engineering & Procurement**

#### **Responding Environment-friendly Building Certifications**

Being operated, buildings consume more energy after the construction than during the construction period, which means that high-efficient buildings directly contributes to reducing the operational cost of customers and environmental impacts. Hyundai E&C is leading the engineering of high-efficiency buildings by reflecting the requirements of the certification system from the engineering stage in response to the environment-friendly certification, which is being reinforced by the global expansion of energy regulations. There are a total of 12 completed construction buildings that have been certified as environment-friendly in 2017.

#### **Executing Environment-friendly Procurement**

Hyundai E&C has evaluated the environment-friendliness of materials during the selection stage since 1997 to put a priority on the procurement of environment-friendly materials, which can help minimizing environmental impacts of using materials. Likewise, we support the environmental management of suppliers for encouraging the development and production of environment-friendly materials. We also devote for producing and procuring environment-friendly products through the continuous enhancement of the environment-friendly procurement process by signing the 'Voluntary Agreement on Environment-friendly Procurement' with the Ministry of Environment.

With the Hyundai Environmental Goods Standard (HEGS) established in 2010, we have been stimulated the procurement of environment-friendly products and materials at the corporate-wide level while operating a system to gather and manage the relevant data. All environment-friendly materials procured by Hyundai E&C are classified into eight codes (HEGS 1~8); a HEGS code of a material to be purchased is entered into the Environment-friendly Procurement System when charging or ordering. Furthermore, we encourage the environment-friendly procurement by managing the data of each code as individual performance of site & procurement managers. In addition, Hyundai E&C is making every effort to minimize the environmental impact of using materials by encouraging environment-friendly material purchases for MRO\* items. For a case when a material is classified as a highly harmful material, we try to minimize environmental impacts by providing environmental harmfulness reduction training and excavating alternative materials or elements.

\* Maintenance, Repair and Operation

#### Environment-friendliness **Environment-friendly Procurement Process**

· Destruction of ecosystem

1. Evaluate Environment- friendliness of Material	2. Request and Order Materials	3. Monitor Record of Environment friendly Procurement	4. Goals
· Evaluate harmfulness of materials according to three standards of harmfulness,	Input the HEGS* code of a given material through the Environment- friendly Procurement System	· Monitor each site	<ul> <li>Promote minimization of environmental impact from material use</li> </ul>
infringement of regulations, and usage amount			· Encourage the use of environment-friendly products
HEGS-1 Environmental mark-certification	fied goods HEGS-4 Energy saving	gs mark-certified goods HEGS-7	GMS*** certified companies' goods
HEGS-2 GR** mark-certified good	s HEGS-5 Foreign enviro	onment mark-certified goods HEGS-8	Carbon labelling certified goods
HEGS-3 1st rated energy efficiency	y goods HEGS-6 Clean produc	tion goods	

#### **Environment-friendly Transportation &** Construction

· Average usage amount of all sites

Assessment of Materials

Harmfulnes

Poisonous

Usage volume

Non-degradable

Infringement of regulations

· Fire services act · Toxic chemicals control act

#### **Promoting Environment-friendly Transportation**

\*HEGS: Hyundai Environmental Goods Standard \*\*GB: Good Recycled \*\*\* GMS: Green Management System

Hyundai E&C is reducing the GHG emissions generated during transporting materials and operating heavy equipment by operating environment-friendly vehicles. In particular, we have established the vehicles guideline in 2010 and defined total 11 items and the detailed guideline for the economic driving of work vehicles. Hyundai E&C complies with the guideline when operating vehicles and heavy equipment at the headquarters and all sites. In addition, we have contributed to the domestic and overseas efforts toward the GHG reduction by replacing existing work vehicles with energy-efficient hybrid cars since 2012 in order to reduce GHG emissions.



#### Advancing Environment-friendly Construction System

With the Building Information Modeling (BIM), a cutting-edge construction information system, we are realizing the environment-friendly construction through efficient resource management by preventing the unnecessary use of materials through the exact calculation of volume and cost required for the construction. In addition, in order to reduce the water consumption at site, we have installed rainwater storages and de-watering equipment that uses underground water. Instead of a water tank car to prevent dust, in addition, we use sprinklers to consume less water during the construction.

#### **Environment-friendly Transportation &** Construction

#### On-site Management of Environmental Factors

#### Air Quality

· Establish air pollutant emissions and abatement facility installation standards · Install dust barriers and automatic sprinklers

#### Water Quality

· Operate wastewater treatment facilities such as retaining walls, tunnels, and batch plants · Conduct regular audit of wastewate management facilities and water quality Install diversion channels and grit chambers Strictly manage oil facilities

#### Soil (Waste)

· Prohibit any equipment repair & maintenance work and oil change work within sites Develop contaminated soil washing technology (Environmental Technology Verification No. 92) Six patents and two utility models related to remediation of contaminated soil

#### Noise & Vibration

· Install sound-proof and vibration-proof facilities · Use low-noise equipment · Operate vehicles at low speed within sites · Install sound-proof walls around sites · Establish standards for emissions of air polluting materials and install restraining facilities

#### **Environment-friendly Demolition**

#### Inspecting & Managing for Environment-friendly Construction

Hyundai E&C annually conducts independent external inspections (the 3rd party inspection) and internal inspections by experts for all domestic and overseas sites while managing sites systemically by identifying risks and opportunities by sites. In addition, we have strived to minimize the environmental impacts incurred at sites by categorizing them into environmental elements: air, water quality, soil, and noise & vibration. Besides, we reduce the pollution through the strict management of the quality of wastewater by operating the wastewater purification facility and conducting the constant water quality check for wastewater generation sites. In 2017, we have carefully managed a total of 65 sites including sites requested environmental management initially and and sites managing scattered dust intensively through onsite support. In addition, considering the fact that domestic environmental risk factors such as establishment of Comprehensive Measures for Fine Dust are continuously increasing, environmental risk grade evaluation will be conducted for all domestic sites to differentiate management standards and focus on key sites in 2018.

#### **Protecting the Ecosystem**

Climate change and environmental pollution are expected to reduce global biodiversity by as much as 17% by 2030. Therefore, complying with the Nagoya Protocol in a faithful manner, Hyundai E&C has applied strict standards to protect the biodiversity around sites. In particular, we proactively analyze possible impacts on the environment from the planning stage as well as develop and apply engineering and construction methods that can help to maintain the biodiversity and topographic changes.

#### **Ecosystem Protection Activities**



#### Protected Species Around Sites

ncheon New Port	Han River Restoration	Haman - Jinju Section of	Changwon - Busan	Icheon - Mungyeong
Container	Project, Section 6	Gyeongjeon Line	Highway	Railway
Oystercatcher, Saunders' gull, Far Eastern Curlew, Kestrel, Spoonbill	Polygonatum stenophyllum max, Aster altaicus Willd. var. uchiyamai (Nakai) Kitamura, Mongolian racerunner	Kestrel	Terrapin, Wildcat, Buzzard, Kite, Hen harrier	Copper-winged bat (newly protected)

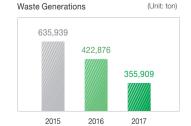
#### **Complying with Environment-friendly Demolition Guidelines**

To minimize environmental impacts and deterioration of workers' health incurred during deconstruction and demolition processes, we have established and complied Waste Management Guidelines, Chemical Substance Management Guidelines and Air Quality Management Guidelines. In particular, we have been setting targets for the waste disposal and material recycling by sites where generate a significant amount of waste or are subject to the special management. In addition, we sold recyclable wastes to recycling plants for the resource utilization and put priority on purchasing recycled materials and cyclic aggregate.

Furthermore, complying with the Chemical Substance Management Guidelines, the head of the site establishes a plan to prevent damage from chemical substances and supervises the implementation and the environmental manager identifies the types of chemical substances and establishes precautions for use and storage standards while training employees and inspecting management status. Especially, we check the possible containment of harmful substances such as asbestos in advance of the deconstruction so that our employees are not directly exposed to danger. If the asbestos containment exceeds the standards of Occupational Safety and Health Act and Asbestos Safety Management Act, we treat it safely by entrusting to a specialized company of asbestos removal and waste.

#### **Upgrading the Waste Management System**

Since 2012, Hyundai E&C has delivered an effective waste management through the Waste Management System that connects 'Allbaro System,' a waste management system of the Ministry of Environment and Hyundai-Project Management System (H-PMS), and Integrated Environmental Performance Management System. Therefore, we have been able to prevent the violation against regulations and gather the data about total waste amount and cost by business units, processes & work types, companies, and waste types in real time; the data collected is used as a reference for receiving of order, bidding, and budget compilation. The waste management system was further segmented to clarify the tasks of each department to improve the efficiency of waste management and the appropriateness of disposal in 2016. In 2018, we plan to strengthen the capacity of waste statistics management and analysis by upgrading the waste management system to improve the stability and usability of linked database (DB) Waste generation in 2017 were 355,909 tons, decreased 15.8% from the previous year



## **Cultivating Innovative Talents**

Innovative talents are essential assets and driving forces for Hyundai E&C to strengthen its competitiveness.

Hyundai E&C recruits excellent domestic and overseas talents, conducts systemic appraisal and talent development programs, and enhances smart working environment. Hence, we foster core talents who can improve organizational efficiency and execution while creating new values.

Value Empowering Strategy



#### **Recruiting Talents without Discrimination**

- · Conducting fair employment
- Securing human diversity



#### **Cultivating the Capability of Innovative Talents**

- · Enhancing the capability of innovative talents
- Maximizing talent capacity through appraisal and compensation



#### **Advancing Innovative Organization**

- · Improving organizational efficiency
- · Expanding employee communications



#### **Pursuing Employees' Happiness**

- · Expanding benefit program
- · Supporting healthcare
- Reducing childcare burden
- · Building trust between labor and management

Value Empowering Story

http://en.hdec.kr/EN/Recruit/ConsPersonnel.aspx

#### **Raising International Competitiveness by Fostering Excellent Foreign Employees**

Hyundai E&C has been raising its international competitiveness by expanding the cultivation of local foreign employees to cope with the global business environment in which fierce competition is taking place. In particular, the 'Global Talent Program,' which has been holding annually since 2015, offers a variety of courses to enhance understanding and loyalty to the company through selection of excellent foreign employees. In the 2017 program, a total of 20 employees attended, we have gained a good response from our employees by expanding sessions to identify our technical capabilities such as job training, business division meetings visiting R&D Division and Hyundai Motor Company Asan Plant.



2017 Global Talent Program



"Hyundai E&C has great potential. Because Hyundai E&C also regards us foreign workers as a part of the company."

Mohammad Aslam Asadullah Shaikh SARB offshore crude oil and gas treatment facility construction site, UAE

#### **Enhancing Communications with the Next Leader Board**

The Next Leader Board is a representative organization of employees to lead the management innovation and improve the corporate culture. In 2016, we changed the name of the Junior Board, which has operated since 1990, to Next Leader Board, and it has been playing an important role in fostering core talents and creating a trust-based corporate culture. In particular, it has been taking a pivotal role for communication within the organization at management meeting by spreading the management philosophy and policy, and employees' opinions and suggestions throughout the company. In addition, it has been taking educational programs including excavating future business items and discovering excellent corporate cultures, training for capacity building, internal & external seminars, and participating in volunteer activities and major events in the company. Through these activities, members of the board are cultivating their qualities that young leaders are supposed to possess. In 2017, newly-elected 20 members of Next Leader Board, increased the proportion of female employees and selected foreign employees for the first time, are making effort to listen attentively to more various voices



Next Leader Board

#### **Innovative Talents** Strategy

#### The Ideal Employee of Hyundai E&C

In order to lead the global construction market, it is important to secure talented people who can demonstrate challenging spirit and creativity, create synergies within the organization, and play an active role in the world with a

We have been enthusiastically hiring and managing human resources who are suitable for our ideal employee: 'to create unrivaled value, the talents we want achieve what many think is impossible and strive to be the best in unexplored areas.' Based on the challenge spirit, creativity and communication competency, employees of Hyundai E&C are stepping forward to becoming global talents that create innovative values.

To create unrivaled value, the talents we want achieve what many think is impossible and strive to be the best in unexplored areas

Value Creator

Synergy Builder

Global Developer



A talent who creates new value by meeting challenges head-on, not resting on their laurels, and utilizing their creativity



A talent who creates synergy through diverse stakeholders



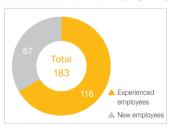
A talent who can realize their potential on the global stage, driven by a global perspective, openness and understanding of diversity

#### **Fostering Self-completed Talents**

Hyundai E&C has been accelerating the cultivation of self-completed talents in order to secure human competitiveness and enhance business execution capability. We define self-completed talents as outstanding individuals who has the highest level of business knowledge in responsible area and accomplishes tasks with utmost efforts while voluntarily acquiring task related knowledge such has laws, contracts and technologies and pursuing personal competitiveness. In addition, they have to do their best to accomplish their mission by taking full advantage of their own capabilities and utilizing internal and external networks. Furthermore, they should have the courage to recognize their own faults and mistakes and spirit not to repeat such situations. In this way, Hyundai E&C will be able to demonstrate its capabilities to the top level in the world by leading the corporate culture centered on self-completed talents.

#### **Recruiting Talents** without Discrimination

Status of Recruitment in 2017 (Unit: persons)



2017 Public Employment Notice for the Handicapped



#### **Conducting Fair Employment**

Hyundai E&C recruits talents in a fair and transparent manner. In 2017, we recruited 67 new employees and 116 experienced employees. Besides, considering characteristics of the construction industry, we hire contract workers and treat them equally according to relevant regulations.

#### **Securing Human Diversity**

Hyundai E&C have recognized human diversity as the basis for enhancing competitiveness and realizing social responsibility and have made effort to recruit females, foreign workers, persons of national merit, and the handicapped. As a part of these sincere efforts, we have been requiring every new domestic sites to recruit at least one individual with disabilities since 2014. Besides, we have been hiring more local talents at overseas sites to execute projects successfully and secure global advanced technologies. Moreover, we further expanded the local recruitment for manager positions through a newly-established Global Human Resources Management System in 2015.

#### Status of Employees in 2017 (As of 31 DEC 2017)

(Unit: persons)

Category		Total	Male	Female	Proportion of Female	Status of Social Minorities Total :		Proportion of Social Minorities	
D <sub>1</sub>	Full-time employees	4,424	4,159	265	5.99%		Foreigners at headquarters	18	0.35%
By Contract Type						By Type	The Handicapped	104	2.01%
	Contract workers	760	742	18	2.37%	Persons of national merit	83	1.60%	
Total of En	nployees	5,184	4,901	283	5.46%	Total of	Social Minorities	205	3.95%

#### Enhancing the Capability of Innovative Talents

#### Full-time Employee Training Performance Average Training Expenditures



Average Training Hours per Person



## Advancing Innovative Organization

Market Intelligence System (MIS)



#### H · Dudrim



https://dudrim.hdec.co.kr/Partner/Intro.aspx?g=

#### **Cultivating Global Leaders**

For the successful execution of overseas projects, Hyundai E&C is striving for enhancing the global capability of employees through language education. In particular, we put emphasis on employees to learn foreign language by operating language classes of Spanish and special English educations. In addition, we help our employees grow into global leaders through global job training, overseas workers training, leadership training and global leading company training program. In 2017, we have conducted global ethics awareness building course in accordance with global standards and newly developed video education course. Employees who have taken the trainings in 2017 was a total of 9,502. In 2018, we plan to support the training of foreign workers on a regular basis at overseas sites by developing video job training courses and lecture materials for foreign employees.



#### **Nurturing Construction Experts**

We are cultivating the world's best construction experts by establishing the advanced education system and providing mandatory training programs by jobs and positions contributing to the enhancement of the basic skills and execution specialty throughout the project. Besides, we have endeavored to develop our employees into in-house lecturers sharing the expertise acquired from the works. In 2017, we have carried out a total of 150 training courses for employees. We focused on enhancing our competencies in process, claims, CM, and investment development in order to diversify our business and strengthen human capacity for new business expenditures. In addition, we have developed 72 video training courses for employees working at overseas sites, and have established a regular training system for strengthening job competencies overseas sites. In 2018, we will further develop new courses in the case, process, and design areas to implement balanced job training and expand specialized training programs such as intensive training for process, claim and investment development staffs. Furthermore, we plan to develop additional technology-specific curriculum to continuously respond to future technology changes and strengthen our project management capabilities.

#### Improving Organizational Efficiency

Hyundai E&C enhances the efficiency of the company by creating the efficient working environment and supports employees to achieve a balance of work and life by improving the work engagement. In 2017, we have established and operated a Market Intelligence System (MIS) to help employees recognize and respond to the latest overseas trends. In addition, we have promoted the use of BizPhone, a self-developed application that enables users to easily search for contact number as well as make and get a call from headquarters and domestic & overseas sites. At the same time, we have enhanced our work efficiency by improving the system efficiency, including the process of dispatching external official document using electronic approval, and automatic notification mailing when department of employees are changed. In 2018, to maximize business efficiency, we eliminated business practices that had been practiced as formalities, and restructured job performance system centering on businesses that are highly relevant to value creation. In addition, we encourage our employees to operate their time and resources efficiently with a sense of ownership. Furthermore, in order to prevent the loss of work efficiency and loss risk due to delays in decision making, we simplified reporting and approval, raised efficiency of meetings and conventions including the implementation of 'No-meeting day' and abolition of customary protocols.

#### **Expanding Employee Communications**

Based on the creative, human-centered corporate culture that prioritizes the communication and trust, Hyundai E&C has been supporting to resolve grievances and enhancing emotional competencies of employees implements systematic activities to by expanding the communication within the company. In particular, through the annual Two-day Workshop for all employees at the headquarters, we identify improvement points intensively and gathering diverse opinions and thus endeavor to create happier workplace. Besides, we have been operating an Employee Assistance Program (EAP), an on & offline counseling center for employees Since 2015, and E-Suggestion, a communication channel in the company's intranet in order to gather and support employees' difficulties and suggestions in 2017. In 2018, we plan to manage employees' grievances more effectively through H · Dudrim, an integrated internal and external complaint settlement window.

## Maximizing Talent Capacity through Appraisal and Compensation

#### Appraisal

Since introduced a HR system based on the Management by Objective (MBO) in 2012, Hyundai E&C has been developing capabilities of employees in aspect of performance achieved, strength, and improvement. We have been providing a performance management training to key relevant personnel for the fair appraisal as well. Moreover, we have established an environment of the accurate appraisal by advancing performance management processes such as 'goal-setting,' 'mid-term check,' and 'final evaluation.' In addition, the fairness of appraisal has been strengthened by introducing a Fact Gathering, which is used by the appraiser every month to appraise the performance and capabilities of appraisee. In 2017, we have established a confirmation procedure for the 1:1 interview between the first appraiser and the appraisee during the goal setting to improve the acceptance of the goal-setting. In 2018, we plan to strengthen the performance-oriented personnel management system by expanding quantitative results of site manager.

#### Compensation

Hyundai E&C has been promoting the development of its employees' capabilities through compensation system based on performance evaluation. We have been implementing Promotion Point System so that employees can promote fairly in terms of achievement and capability. In addition, we have been motivating our employees by increasing the amount of incentives in accordance with evaluation results and expanding division performances to incentives. Besides, we guarantee the gender equality; the individual wage may vary depending on one's position and working condition.

## Pursuing Employees' Happiness

#### **Expanding Benefit Programs**

We have been expanding our benefit system to help employees realize a happy. Our employee benefit point system is being operated for all employees while they can choose diverse benefits according to their needs, such as health management, self-development, and culture & leisure programs. Furthermore, we opened an online Employee Benefit Mall and thus increased convenience for employees to use their benefit points at online. In 2017, we increased cyber money for the Mall from KRW 100,000 to KRW 150,000 to enable employee to buy more gifts at the online mall and introduced a mobile gift request service so that employees' family can request for gifts conveniently on behalf of their employees. In addition, through the agreement with Kangwon Land, we developed a residual recreation site application system so that our employees can enjoy the resort inexpensively without purchasing memberships.

# Supporting Medical Check-up for Employee & Spouse (As of 2017) 6,092 persons Beneficiaries 1.99 KRW Support expenditures



#### **Supporting Healthcare**

Hyundai E&C conducts regular health checkup for employees, and operates an in-house medical center where professional nurses reside to ensure that employees can check their health status immediately. In 2017, we have added two centers for health check-ups and have improved benefits for staff and assistant manager who work at overseas sites where there is a shortage of medical facilities by providing comprehensive health checkup every two years. Furthermore, we have conducted a campaign to provide colorectal cancer self-diagnostic kits to promote prevention of colorectal cancer and improvement of eating habits of employees.

#### **Reducing Childcare Burdens**

The social demands for reducing the burden of childcare are increasing. Hyundai E&C supports financial supports to married couple having difficulty to get pregnant, childbirth, parental leave, and school expenses so that its employees can raise their children happily throughout their life cycle. Since 2015, Hyundai E&C has provided financial supports to 74 employees having difficulty to get pregnant so that 30 employees could enjoy the joy of childbirth. In 2017, 17 female employees used the 90-day parental leave and 9 employees returned to work after the leave, the returning rate was 53%. In addition, through internal encouragement, the number of male employees using paid parental leave increased by 7.1 times from the previous year to 214. In addition, we support Hyundai Dasom Daycare Center, a company daycare center for children, to help women work and care their children. Through the childbirth grant program, we support school expenses of KRW 100,000 per child in middle school monthly, KRW 467,000 won per child in high school and KRW 4,000,000 per child in university quarterly.

#### **Building Trust Between Labor and Management**

We have devoted for the corporate culture that considers harmony and trust between labor and management as one of top priorities. Thus, we guarantees an employee's right to join or withdrawal freely from the Labor Union based on Article 5 of the Collective Agreement in the Labor Union Act. It is a compulsory principle to immediately give notice to the labor union in advance regarding significant changes in the business such as organizational restructuring. As of DEC 2017, the number of employees covered by the collective bargaining agreement is 3,888, who is below the rank of the general manager and 87.9% of the full-time employees. The number of employees who are protected by collective bargaining rights by joining the Labor Union is 783. The figure counts 17.7% of the full-time employees.

APPENDIX

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# Enhancing Value Chain Capability

Suppliers are the key partners and the foundation for sustainable growth of Hyundai E&C. We have been promoting the improvement of suppliers' business capability and management stability by supporting training, technology development, financing, and strengthening communication.

In addition, by operating sustainable supply chain management system, we have been providing sustainability standards to suppliers and evaluating them in order to promote the competitiveness of the value chain effectively.

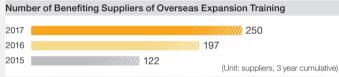
Value Empowering Story

http://en.hdec.kr/EN/Sustainability/WinWin.aspx

#### **Leading the Global Market with Suppliers**

Hyundai E&C has been opening the way to overseas expansion with suppliers and strengthening its capability to lead global construction. In particular, since 2009, we have selected suppliers with excellent construction capabilities every year and operate Overseas Sites Trip Program for Suppliers. Through this, we provide knowhow of overseas sites operation and hold briefing session to help enter the relevant country, and support the understanding local construction market trends. In 2017, we have conducted Overseas Site Trips for 17 suppliers in Indonesia and Singapore, contributing to generate suppliers' new overseas sales of KRW 103.2 billion.





#### Taking a Leap forward into the Global Construction Top Tier with Suppliers

In MAR 2018, Hyundai E&C held the H Leaders Regular General Meeting and Management Seminar in Jeju Island. Having been progressing every year since 2011, the H Leaders Regular General Meeting was more meaningful in 2018 with participation of eleven engineering partner companies, and 161 suppliers which was increased 6 compared to from last year. At the welcome reception, suppliers have commented for improvements and requirements with open-mindness and the occasion was filled with full of events such as regular general meeting, excellent supplier award, special lecture, and membership strengthening event.

In particular, Park Dong-Wook, the CEO of Hyundai E&C has raised the fervent response of participants by expressing his firm will about shared growth with three plans to enhance the added value and competitiveness of suppliers in his greetings.

#### Plans to Enhance the Added Value and Competitiveness of Suppliers

- Paying 100% in cash (within 10 days from the billing statement) for outstanding suppliers starting from JUL 2018
- Establishing integrated complaints window
- Realizing ZERO serious disaster (employing 100% of safety managers as permanent position)

"This H Leaders Regular General Meeting and

Management Seminar was a time to confirm

the solid camaraderie between Hyundai E&C

and Namwoong Construction."

Best Supplier, Namwoong Construction

Hwang Woong (CEO)

## N

2/10

Value Empowering Strategy

## · Supporting communication for suppliers Managing Sustainable Supply Chain

· Supporting technology development for suppliers

· Propelling supply chain management policy for sustainability

**Enhancing Shared Growth Cooperation with Suppliers** 

· Managing supply chain strategically

· Supporting training for suppliers

· Supporting finance for suppliers

· Assessing supply chain sustainability

2018 H Leaders Regular General Meeting



Supporting Training for Suppliers in 2017

Number of Training Benefitting Suppliers Course Name Contents Special lecture on procurement policy in 2017 Suppliers' Council General Special lecture on change of construction industry environment 152 Meeting and Management Seminar and safety management Procurement H Members Meeting · Strengthening communication with suppliers 49 Listening suggestions & difficulties and deriving improvements by Department Procurement H Members Meeting · Strengthening communication with suppliers 84 by Construction Type Listening suggestions & difficulties and deriving improvements Outsourcing H Members Meeting · Enhancing communication including gathering VOC of suppliers 101 · Sharing industry trends by department by Department **Outsourcing H Members Meeting**  Notice for H Members 233 by Construction Type · Listening to suggestions & difficulties from suppliers H Leaders Overseas Sites Trip to major sites in Indonesia and Singapore 17 Trip Program · Holding overseas expansion briefing session Shared Growth Seminar Presenting status of actions for VOC 3 338 for Outsourcing Suppliers Guidance and special lecture on our shared growth program Introducina our outsourcina service systen Shared Growth Seminar 138 · Enhancing communication including guidance of our shared for Technical Service Suppliers growth program Providing training specialized in Saudi Arabia and Vietnam Overseas Expansion Training · Overseas system, accounting, customs clearance and mobilization for Outsourcing Suppliers manpower, etc. Total 1.178

Enhancing Shared
Growth Cooperation
with Suppliers

Hyundai E&C has been pursuing shared growth with suppliers through various supports. Supporting education and finance, cooperating technology development have been leading to the enhancement of suppliers' competitiveness, and close and systematic communication program has been building constructive partnership. Thanks to diverse efforts, Hyundai E&C has achieved an award from the Minister of Land, Transport, and Maritime Affairs at the 'Awards for the Promotion of the Construction Industry's Cooperation 2012, the highest rating at the 'Evaluation of Joint Cooperation among Construction Companies 2013' for two consecutive years, and the 'Awards for the Promotion of the Construction Industry's Cooperation 2015.'

#### Activities for Shared Growth Management

#### Realizing Shared Growth Through Cooperation **Training Support Technology Support Communication Support** Finance Support Fostering on-site global Arranging Shared Growth Fund · Delivering shared growth through Bidding, contract, payment and quarantee tasks on-line through construction technology talents by technology transfer and share Providing fund directly operating construction technical information system for cooperatio Supporting research fund and Shortening the payment date education institute Establishing annual shared growth 50% exemption of contract deposit Training on Health, Safety & plan through supplier satisfaction Supporting patent application. for outstanding suppliers (planning Environment (HSE) and quality for applying for joint patent suppliers Assisting suppliers to settle ethical Adopting new technology and Operating welfare programs for · Supporting entering overseas management system and gathering making a related subcontracting suppliers' employees market training and Overseas Site Trip Program

#### 1018 H Leaders Regular General Meeting and Management Seminar

## Supporting Training for Suppliers For assisting the substantial growth of suppliers

For assisting the substantial growth of suppliers, Hyundai E&C provides various practical training programs such as quality, construction, and Health, Safety & Environment (HSE). In addition, we have been fostering site-friendly global construction technology talents through the Hyundai Technical Education Institute, the only construction technology specialized training center in the construction industry. Furthermore, we provide various trainings required for the entering overseas markets, such as taxation, finance, and overseas sites trip program by countries.

In 2017, we provided training for a total of 1,178 suppliers In particular, nine of the partner companies participated in the Training for Overseas Advancement generated KRW 136 billion in new overseas sales. Besides, we contributed to lighten the burden of talent training of suppliers thanks to 125 graduates of Hyundai Technical Education Institute were employeed by our suppliers.

#### Overseas Sites Trip Program for Suppliers



#### **Enhancing Shared Growth Cooperation** with Suppliers

#### Finance Support for Suppliers (Unit: KRW in billions)



#### Hyundai F&C Technical Forum



#### **Supporting Finance for Suppliers**

Hyundai E&C has been reducing the financial burden on suppliers by providing various financial supports since signed the 'Joint Cooperation and Fair Trade Agreement' with suppliers in 2010. We have made payment to subcontracts within 13 days, have helped financial institutions provide financial institutions with loans that are lower than the standard interest rate for their financial institutions by managing network loan, and have helped our suppliers overcome financial difficulties by creating and operating Shared Growth Fund with commercial banks. Furthermore, we provide health check-ups and funeral support services to suppliers' employees to contribute to reducing welfare benefit costs of suppliers. We are strengthening the overall sustainability by monitoring whether payments paid to the primary suppliers are paid to the secondary suppliers within a reasonable days.

In 2017, we greatly expanded the amount of financial support for our suppliers. We raised KRW 30 billion in Shared Growth Fund with KRW 10 billion increase from the previous year, and loaned KRW 18 billion. In addition, we newly created KRW 30 billion of direct funds and loaned KRW 3.8 billion. In addition, we donated KRW 70 million to the Shared Growth Guarantee Fund to support suppliers' loans or payment guarantees. In 2018, we will raise the ratio of reduction of contract deposit for outstanding suppliers to 100% from 50%.

#### **Supporting Technology Development for Suppliers**

Hyundai E&C has been promoting joint technology development with its suppliers or suppliers' own technology development and strengthening mutual competitiveness through technology transfer. In particular, we hold Hyundai E&C Technical Forum every year to offer a platform supporting the technology development in an 'Open Innovation' way. It is the only technology competition for the shared growth in domestic construction companies. Winning suppliers are awarded R&D funds and incentives to be registered as our new suppliers. In 2017, we provided KRW 500 million in R&D funds to its our suppliers and implemented a benefit sharing program. In addition, we adopted 27 new technologies and concluded subcontracting contracts, and shared 27 patents that we own to our suppliers free of charge.

#### **Supporting Communication for Suppliers**

Hyundai E&C has been making efforts to create a greater synergy generated through efficient partnerships and a strong sympathy with suppliers. The Suppliers' Council is a regular consultative group to communicate with suppliers and composed of five subcommittees. It is responsible for improving supplier system by communicating with suppliers on a regular basis. Moreover, we conduct the shared growth seminar for all suppliers and carefully listen to their opinions through separate brief meetings by construction types and visiting suppliers. In addition, we are strengthening our bond with suppliers by sending Newsletter for Suppliers quarterly, including news from Hyundai E&C and exciting issues at domestic and overseas. Furthermore, we operate a Shared Growth Support Center within the 'Hi-Partner' portal for gathering grievances and suggestions of suppliers.

#### Supplier Communication Channel



#### **Promoting Supplier Satisfaction Survey**

We have been pursuing the shared growth management by regularly conducting the supplier satisfaction survey since 2009 to gather suppliers' requests and apply them to the management. Hyundai E&C developed its own survey system using VOC and IPA methods and optimized it to respond suppliers' actual needs and difficulties. The supplier satisfaction survey is carried out on a half-yearly basis; each supplier evaluates and gives opinions about Hyundai E&C according to provided indicators which cover from the selection phase to the payment phase; in the first half of 2017, the satisfaction level of the operation for suppliers rose to 82,4 points, 0.8 point up from the last first half of the year. Satisfaction level of support & cultivation for suppliers increased to 77.7 points, 0.4 points up from the last first half of the year. Hyundai E&C has been improving system for shared growth management systemically through analysis of satisfaction survey result; classifying priority improvement targets, progressive improvement targets, and continuation of current status targets.

#### Managing Sustainable **Supply Chain**

HDEC Supplier Sustainability Charter

http://en.hdec.kr/EN/Sustainability/HDEC\_Supplier

#### **Supply Chain Management Policy for Sustainability**

For the first among domestic construction companies, Hyundai E&C has enacted the 'HDEC Supplier Sustainability Charter' in October 2014 for the systematic and sustainable supply chain management. In MAY 2017, we revised the guideline to strengthen human rights management in the domestic and overseas supply chains in accordance with the 'HDEC Human Rights Policy.' The charter consists of three chapters: responsibility for sustainable business, responsibility for environment, and responsibility for stakeholders. Covering 67 items in 14 areas, it defines standards of the sustainability management which Hyundai E&C requires from suppliers.

#### **Supply Chain Management Strategy**

In JUN 2018. Hyundai E&C concluded a sustainability management agreement with its supplier to fulfill the compliance and implementation of HDEC Supplier Sustainability Charter while improving the overall competitiveness and minimizing risks of the overall supply chain. Furthermore, we have been encouraging suppliers to participate in promoting sustainability management by selecting environmental safety and health compliance as a contract prerequisite when selecting suppliers. Hyundai E&C's suppliers are divided largely into material delivery suppliers and construction suppliers. Among these, we are maximizing the efficiency of supply chain management by regularly selecting and supporting high quality suppliers that meet strict evaluation and auditing standards including financial stability, quality capability and safety & health level.

Spend Analysis of Supply Chain

(As of 31 DEC 2017)

Supplier Category		Number of Suppliers (companies)	Proportion of Suppliers (%)	Proportion of Purchase (%)	Number of Critical Suppliers (companies)
Tion 1 Complians	Materials suppliers	2,457	78.80	49.61	946
Tier 1 Suppliers	Construction contractors	661	21.20	50.39	115
Non-tier 1 Suppliers	3	0	0.0	0.0	0
Total		3,118	100.0	100.0	1,061

#### **Supply Chain Sustainability Assessment**

In order to apply the 'HDEC Supplier Sustainability Charter' to actual tasks effectively, we developed the 'Supplier Sustainability Assessment Framework' and have been evaluating and managing the economic, environmental and social aspects of our primary suppliers in a comprehensive manner annually since 2014. From an economic aspects, we assess the general status of business sites, quality capability, and credit rating. In regard of the environmental aspects, we evaluate compliance with environmental regulations and the level of pollutant management, and acquisition of ISO 14001 certification to measure the level of environmental management. In terms of social aspects, we evaluate the level of safety and health management, acquisition of ISO 18001, OSHAS and KOSHA certification, and delayed payment of employee's wage. In addition, we have been regularly improving the assessment indicators by reflecting the global trends from consultation with external experts to ensure the accuracy and reliability of the assessment.

Results of Supplier Assessment and Corrective Actions

(As of 31 DEC 2017)

	Risk Category		Risk Assessment		Risk Identifica	tion	Risk Mitigaiton	
Category	Key Risk Factors	Risk Level	Scope	%	Identification Results	%	Corrective Actions / Termination	%
	Violation of the principle of ethics and anti-corruption	High	3,118	100%	0	0.00%	0	0.00%
	Ethical breaches and collusion	High	3,118	100%	0	0.00%	0	0.00%
	Delay in payments to tier 2 suppliers	High	3,118	100%	0	0.00%	0	0.00%
Economic Risks	Financial structure deterioration including credit rating	Medium-high	3,118	100%	6	0.19%	6	0.19%
	Refusal of credit rating renewal	Medium-high	3,118	100%	1	0.03%	1	0.03%
	Lack of suppliers' capability	High	3,118	100%	11	0.35%	11	0.35%
	Other economic risks	Medium-high	3,118	100%	1	0.03%	1	0.03%
	Violation of environmental regulations	High	3,118	100%	0	0.00%	0	0.00%
Environmental Risks	Occurrence of environmental accident during construction	High	3,118	100%	0	0.00%	0	0.00%
	Other environmental risks	Medium-high	3,118	100%	0	0.00%	0	0.00%
	Occurrence of disputes and litigation	Medium-high	3,118	100%	0	0.00%	0	0.00%
Social Risks	Violation of labor and safety regulations	High	3,118	100%	0	0.00%	0	0.00%
	Other social risks	Medium-high	3,118	100%	5	0.16%	5	0.16%
Total			3,118		24	0.77%	24	0.77%

Satisfaction 76.0 77.3 79.6 77.7 Support &

82.4 82.5 81 6 82.5 82.4

Level of

Strategy 7

## **Advancing Strategic Social Contributions**

Local community is the business foundation and the key stakeholder group of Hyundai E&C. As a global leading construction company, we have been promoting strategic social contribution projects based on industrial characteristics to improve social values in overseas countries where we operate business.

In particular, our global creating shared value projects present sustainable community support models for the construction industry by providing local infrastructures while improving our business competitiveness.

Value Empowering Strategy



#### Strengthening Social Contribution System

- · Establishing three sharing activities
- Improving group connectivity of social contribution
- Promoting social contribution performance management



#### **Expanding Global Social Contribution**

- · Expanding scale of overseas social contributions
- · Leading CSV in the global construction industry
- · Launching technology exchange type overseas volunteer corps



#### Implementing UN Sustainable Development **Goals Through Social Contribution**

- · Implementing the UN Sustainable Development Goals through three sharing activities
- · Linking regions of global social contributions to the UN Sustainable Goals

Value Empowering Story

#### **Leading CSV in the Global Construction Industry**

Since 2015, we have developed the local community and cultivated construction talents simultaneously by providing not only equipment for practices but also safety and piping & welding experts' professional education based on the Vietnam Hyundai & KOICA Dream Center, the first CSV\* project in the construction industry. In addition, it has led to the creation of group synergy by cooperating with Hyundai Motor Company to foster construction safety and automobile maintenance experts at the university.

\* CSV: Creating Shared Value

#### 2017 Performance

We have completed a total of 2,100 hours of plant piping and construction welding training course based on the Hyundai & KOICA Dream Center 2nd Campus, which was opened in Vietnam in the Construction Department of Vietnam Construction Department in 2017. In addition, we have conducted special lectures on technology for the Vietnam Ministry of Construction and construction college students, and received favorable comment that it was excellent examples of technical cooperation from Hyundai and Korea from Vice Minister of Ministry of Construction. We will continue to create new values to contribute for the company and the society to grow further together by identifying global CSV projects specialized in construction.

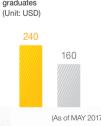


DREAM MOVE (Hyundai & KOICA Dream Center 2nd Campus)

#### Completion and Employment Status of Hyundai & KOICA Dream Center Vietnam Proportion of students who









Average monthly income of



"We have developed the intensive plant piping and welding training course for the new curriculum of Hyundai & KOICA Dream Center 2nd Campus, and have educated about 20 professors of local construction college. They were so enthusiastic that we felt the training and the theory and practice hours short. We hope that the synergy between Hyundai E&C and the faculty will cultivate great construction talents in Vietnam."

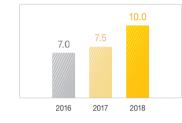
Kang Na-Kyung (Assistant Manager) Hyundai Technical Education Institue

#### **Expanding Global Social Contributions**

NEXT MOVE (H-CONTECH Corps Technology Exchange Activity)



Scale of Overseas Social Contribution Projects (Unit: KRW in 100 millions)



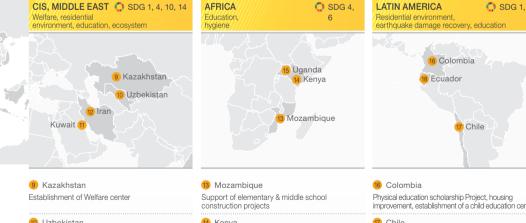
Hyundai E&C has been continuously expanding its overseas social contribution to realize its social responsibility as a global construction company. Starting from the establishment of a community center for the low income class in Philippines in 2011, Hyundai E&C has actively promoted 35 social contribution activities in 18 countries. Also, we gradually increased the budget for the overseas social contribution activities which reached KRW 750 million in 2017 from KRW 320 million in 2013. Our activities include health hygiene, scholarships, cultural exchange, and relief for the poor in developing countries including Iran, Indonesia, Philippines, Bangladesh, Myanmar, Sri Lanka.

In particular, we have taken social contribution to higher level by launching H CONTECH, the first overseas technology type volunteer group in the domestic construction industry. H CONTECH has hold a technical seminar in connection with major engineering universities and national institutions in overseas developing countries, has excavated appropriate technology items and has established public facilities. In 2018, we plan to reflect mandatory social contribution budgets obligatory within the order budget at sites in the developing countries, and implementation of on-site social contribution activities in the division KPI within 1 year after the start of construction. In addition, we continue to operate overseas social contribution activities in consideration of the characteristics of the region in which we have received opinions from international development NGOs and departments related overseas countries such as Bangladesh, Vietnam, Myanmar and Uzbekistan.

(2011~2017)

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#### **Strengthening Social Contribution System**

#### **Social Contribution System**

Launched the Community Service Corps in 2009 where employees and employee families participate altogether, we have actively implemented systematic social contribution activities in Korea and in foreign countries where we operate business. In addition, Hyundai E&C has been promoting social contribution projects in the six MOVE activities of Hyundai Motor Group to make a better world with customers and society. Moreover, we consolidated a social contribution system in accordance with the KPIs established for each Hyundai Motor Group's affiliate. Furthermore, we plan to reorganize our existing three social contribution strategies into six MOVE themes to strengthen Group connectivity and expand our social contribution areas of safety, environment and mobility from 2018.

Hyundai Motor Group Social Contribution System

Group Social Contribution Vision	for Today	orthy Partne y & Tomorro	Con	ip Social tribution logan	함께 <sub>움직이는</sub> 네싱	d Together
	2 DREAM MOVE	2 NEXT MOVE	2 EASY MOVE	2 SAFE MOVE	2 HAPPY MOVE	2 GREEN MOVE
Group Six MOVE Activities	Generating jobs to assist independence	Conducting social contribution business using corporate capability	Improving mobility of the underprivileged in social & traffic aspects	Promoting safe traffic and society	Encouraging employee and customer engagement	Protecting environment and responding to climate change

#### Hyundai E&C Social Contribution Committee



Hyundai E&C Social Contribution Organization



Hyundai Motor Group Social Contribution Consultative Group

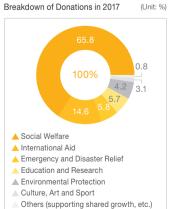
Social Contribution Part of General Affairs Team
Planning and operating social contribution projects     Managing social contribution performance

#### Hyundai E&C Social Contribution Committee Collecting social contribution advisory opinions and reflecting them in social contribution improvement

Increasing transparency in donation

#### **Social Contribution Performance Management**

In order to strengthen the employee's participation and systemicity Hyundai E&C has executed the volunteer mileage program and reflected the performance to divisional KPIs since 2010. In 2016, points given by the KPI evaluation further increased to 2 to 4 points from 1 point and thus inspire more employees to volunteer. Moreover, we achieved the corporate average of 10.7 miles exceeding the annual goal of average 10 miles in 2017. In 2018, we will continue to conduct a split evaluation twice a year in the first and the second half of the year to implement corporate-wide social contribution activities evenly.



Employees' Social Contribution Activities in 2017

Title of Activity	Term	Contents
Keeper for Cultural Asset	MAR~JUN (First half), SEP~NOV (Second half)	· Old building repair and environmental cleanup activities (14 times in 2017, 440 employees participated)
Lunchboxes of Hope	JUL~SEP (Summer) DEC~JAN (Winter)	Support underfed children every vacation in local community (119 employees participated in 2017, supported 42 underfed children in 22 households)     Delivery of lunch to children of low-income family in Jongno-gu, Seodaemungu and Jung-gu
Hillstate Dream Mentoring Corps	OCT 2016~JUL 2017	Academic mentoring and career counseling for teenagers of low-income family     Annual Activities (20 high school students, 20 university students and 20 employees participated, 940 times and 1,880 hours of learning and career mentoring activities)
Baking Service of Love	MAR-DEC	Social contribution activities by department (4th Thursday)     Baking and packing at Jongno-gu and Jung-gu Red Cross Community Center (made 4,000 breads in 2017)     Family can participate in the 3rd Saturday
Improvement of Scenery in Bukchon Village Project	APR, OCT	Installed tour guide map     Painted wall murals behind Daedong Taxation High School in Gahoe-dong
Blood Donation Campaign	Once a quarter (MAR, JUN, SEP and NOV)	Blood Donation Campaign for employees at the headquarters (150 persons participated each time)

#### **Social Contribution** Strategy

Hyundai E&C has been systemically contributed to local communities through its three sharing activities to fulfill the corporate social responsibility. In addition to the launch of a Community Service Corps for the first in the construction industry in 2009, the sharing activities are being executed in three key areas: 'Love Builder' to advance the social welfare and to improve the living environment in the overseas developing countries, 'Hope Builder' to support underfed children and education of young people by mentoring talent donation, and 'Culture Builder' to introduce the Korean history and culture and support art business.

#### Hyundai E&C's Three Sharing Activities

#### **Love Builder**



#### Support for Social Welfare and the Overseas Developing Countries

- Social contribution activities in developing countries Improvement of facilities and education in developing countries and exchanging technology overseas volunteer corps
- Collecting Coins of Love campaign

#### SDG 11. Sustainable Cities and Communities

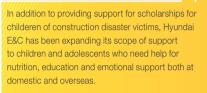
Making sustainable cities and human settlements by ensuring access to housing, improving transport systems, and enhancing urbanization by 2030

#### H-CONTECH Overseas Volunteer Corps



In 2017, Hyundai E&C launched 'H-CONTECH', the first technology exchange type overseas volunteer corps for the first in the domestic construction industry. The 1st H-CONTECH Volunteer Corps contributed to the enhancement of technological exchanges by holding construction technology seminars on the theme of 'Energy and Smart City' in connection with the national universities of Indonesia, one of the developing countries that Hyundai E&C has entered into. In addition, the corps implemented construction of local village amenities and science education in local school. Furthermore, we will consider the feasibility and availability of appropriate technology items derived from exchanging opinions with local university students to solve community issues.

#### **Hope Builder**



#### Support for Education & Scholarship

Support of underfed children in local communities Mentoring activity by talent donation for local community

#### SDG 04. Quality Education

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all by 2030

#### of the scenery of Bukchon village.

**Culture Builder** 

- Protection of Cultural Assets Restoration work for cultural assets.
- · Establishment of volunteer centers in national

Based on the capacity of the construction industry, Hyundai E&C has signed the 'One Keeper for Every

Cultural Asset' agreement with the Culture Heritage

Administration to support the preservation of major

facilities in Changdeok Palace annually, and contribute

to the protection of natural heritage and improvement

· Improvement of scenery in Bukchon village

#### SDG 16. Peace, Justice and Strong Institutions

Promote peaceful and inclusive societies and institutions for sustainable development by 2030



#### Activities for Cultural Asset & Improvement of Scenery in Bukchon Village



In 2017, Hyundai E&C has conducted volunteer activities at Changdeok Palace, a world heritage in 14 times, 435 employees and their families participate in the improvement, repair, and clean-up activities in the palace. Furthermore, we executed a restoration construction of Geumcheongyo, a bridge within the Changdeok Palace and provided automatic ticket machines and electric trains for emergency patients. Besides, we have been further developing the 'Improvement of Scenery in Bukchon Village' project by various activities: setting up Bukchon Tourist Map in front of the Gye-dong Hyundai E&C building in connection with tourist business department of Seoul, painting murals on the alleyway of Gahoe-dong.

### **Dream Mentoring Corps**

Hillstate



'Hillstate Dream Mentoring Corps' was launched in 2014 as a volunteering group which is run by the cooperation of Hyundai E&C and science and engineering major college students for the frst in the domestic construction industry. Hyundai E&C collaborates with college students and teenagers composing one team of a mentee, a mentor, and an employee mentor to providing long-term mentoring programs. In particular, the 4th Volunteer Corps, which was launched following the 3rd Volunteer Corps ended in JUL 2017, expanded the number of group members by 2 employees, 3 college students, and 3 high school students from the existing three-person group system. to explore careers and experience activities in various ways.



Principle 3

Principle 4

Principle 5

Principle 1

Principle 2

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#### **Propelling Corporate-wide Sustainability Management**

Management Principle

Hyundai E&C has been implementing corporate-wide sustainability management as a core foundation for maximizing the value of stakeholders business. Hyundai E&C has established the system based on the Creating Shared Value (CSV) model and set long-term sustainability management goals and Key Sustainability Indicators for 2020 to secure the effectiveness. In addition, we analyze sustainability management issues and gather opinions through diverse communication channels for each stakeholder group and reflect them in our management policies.

#### **HYUNDAI E&C Sustainability** Management

#### **HYUNDAI E&C Sustainability Strategy**

Humankind faces crisis due to global changes that are a combination of global climate change, change of world demographics, urbanization, water scarcity, environmental pollution, and intensifying energy & resource depletion. As a global construction company, Hyundai E&C aims to provide future solutions for sustainable future through its sustainable construction products and environment-friendly construction technology with the sustainability management vision of 'Sustainable Habitat for Human.' In May 2014, therefore, we have established the sustainability management system based on the Creating Shared Value (CSV) model for the first in the global construction industry. Furthermore, we have been promoting corporate-wide sustainability management centered on seven driving strategies in the five sustainability areas: and sustainability management targets.



Long-te	erm Sustainability Target	Indicator	Link to UN SDGs
	Increasing the Proportion of Environment-friendly Products	Increasing the proportion of sales of environment-friendly products to more than 45% against total revenues by 2020  Proportion of total environment-friendly products (%) 45.0  Proportion of environment-friendly in Infrastructure Works Division (%) 2.0  Proportion of environment-friendly products in Building Works Division (%) 29.0  Proportion of environment-friendly products in Plant Works Division (%) 14.0	<b>G</b> Goal 11, 12, 13
	Securing Core Environment-friendly and High-efficiency Technologies	Investing KRW 118.8 billion in securing core environment-friendly and high-effciency technologies by 2020  R&D investments (KRW in billions) 24  R&D human resources (persons) 185  Patent applications (cases) 80  Contribution to improving profitability and to receiving orders (KRW in billions) 166.2	<b>(</b> ) Goal 6, 9, 12
CO2	Reducing GHG Emissions	Reducing GHG emissions by 2.1% per year compared to baseline year 2015 by 2020  Total GHG emissions reduction (tCO <sub>2</sub> -e) 101,834.49  GHG emissions reduction by energy efficiency (tCO <sub>2</sub> -e) 100,897.45  GHG emissions reduction by energy saving campaigns (tCO <sub>2</sub> -e) 926.94  GHG emissions reduction by operating environment-friendly vehicles (tCO <sub>2</sub> -e) 10.10	<b>G</b> Goal 12, 13

- \* Definition of environment-friendly products: Energy plants, products of green business, green buildings, and high-effciency buildings
- \*\* Definition of R&D investments: Investments in operation of R&D human resources, R&D expenses, and acquisition of R&D assets

#### DJSI Sustainability Award Logo



#### **Global Sustainability Leader**

In the Dow Jones Sustainability Index (DJSI), the most authoritative sustainability index in the world, Hyundai E&C was honored to be selected as the Industry Leader of the Construction & Engineering Industry in 2017. It is the first in the global construction industry for a company to become the Industry Leader for five consecutive years. This meaningful achievement is proving that the future value of Hyundai E&C as the global No. 1 construction company

The DJSI is the investment index developed by Dow Jones, the largest financial information company, and RobecoSAM, a Swiss assessment company. It annually evaluates the economic, environmental, and social sustainability of the top 2,500 companies in market capitalization by industries and thus announces the evaluation result. The DJSI, therefore, has demonstrated the competitiveness of Hyundai E&C is substantially competitive in the industry. It is expected to contribute to securing the liquidity and penetrating into new markets. In addition, Hyundai E&C, which has lead the industry by developing implementation model for UN Sustainable Development Goals and Creating Shared Value strategy for the first time as a global construction company, will continue to exert a positive influence as a global sustainability leader.

#### **Stakeholder Engagement**

Distribution of Stakeholder Interests (Unit: KRW in billions)

,
Government Corporate tax payments
183.27
Employees Total annual compensations
508.38
Suppliers Procurement and subcontracting expenses
6,216.38
Local Communities Social contribution expenditures
4.86
Shareholders & Investors Dividends and interests

132.55

It is essential to understand and communicate with stakeholders in order to maximize the value of stakeholders and realize the sustainable growth and development. Accordingly, we have defined the six major stakeholder groups who can influence the company either directly or indirectly while operating various communications channels for gathering opinions. Likewise, we are generating shared values by distributing economic outcomes to stakeholders in a fair manner

#### Communication Channels

Government, Media and Association	Employee	Customer
Communication Channels  · Public Hearings  · Press Release  · Association Activities	Communication Channels Intranet, HDEC Newsletter, SNS, Blog Next Leader Board, Discussion with CEO Employee Engagement Survey H·Dudrim	Communication Channels  Call Center, Customer Center (web), SNS, Blog  Customer Satisfaction Survey  Hillstate Styler  H-Dudrim
Engagement Policies  Participate in the government's policy and comply with regulations  Transparently disclose via media  Build a constructive relationship with relevant associations	Engagement Policies Provide fair appraisal and compensation Support innovative capability Pursue work and life balance	Engagement Policies  Maximize customer satisfaction through technologies Increase customers' trust and improve communication Construct a comfortable residential environment

#### **HYUNDAI E&C**

Communication Channels

Supplier	Society	Shareholder and Investor
Communication Channels  · Hi-partner System  · Joint Cooperation Committee, Win-win Growth Support Center  · Supplier satisfaction survey  · H-Dudrim	Communication Channels  · Social contribution activities  · Community meeting	Communication Channels  · General shareholders' meeting  · Investment presentation  · Public disclosure
Engagement Policies	Engagement Policies	Engagement Policies
Establish fair and transparent business relations     Share information and technologies     Realize the shared growth and win-win management	Protect the environment around sites     Enhance three major social contribution activities     Actively communicate with local communities	Establish a sound governance     Continuously enhance the corporate competitiveness     Maximize the value of shareholders and investors

#### **Key Sustainability Issues**

Hyundai E&C selects and reports key sustainability issues affecting the corporate sustainability management in accordance with the international standards for sustainability reporting, GRI Standards. Additionally, we reflected principles of the inclusiveness, materiality, and responsiveness which AA 1000 standard requires for the accountability of the issue selection process and evaluation result.

Materiality Test Process

#### STEP 01.

## Identification Identifying sustainab

Identifying sustainability issues through analysis of internal and external environment and other construction companies' issues

#### STEP 02.

#### Prioritization

Identifying key issues through stakeholder engagement and impact assessment

#### STEP 03.

#### Validation

Verifying validity of key issues

#### STEP 01.

#### Identification

## Identification of Sustainability Issues through Internal and External Environment Analysis PRINCIPLE: Inclusiveness

Hyundai E&C created the sustainability management issue-pool (includes total 332 construction sector issues) through the benchmarking of global guidelines, review on the domestic and global construction industry, media research, and review on the internal management data. As a result, we identified total 35 sustainability issues that have a high relevance to the managerial activities of Hyundai E&C.

#### Benchmarking of Global Standards

Conduct benchmarking on key sustainability management trends by analysis on GRI Standards, ISO 26000, UNGC and DJSI

#### Reviews on Domestic and Global Construction Industry

Identify material issues in relevant industry by analyzing sustainability issues that domestic and overseas construction companies report

#### Media Research

Analyze total 5,325 articles that the domestic press reported in 2017 in order to understand the society's expectation for Hyundai E&C

#### Reviews on Internal Management Data and Interview

Review the internal management data and interview responsible personnel in order to reflect internally material issues about the managerial environment

#### STEP 02.

Prioritization

#### **Prioritization of Issues Identified through the Materiality Test**

#### **PRINCIPLE:** Materiality

Hyundai E&C analyzed the materiality of each issue in aspects of external interest and internal impact by conducting the online survey about the Hyundai E&C sustainability issues, which total 2,565 internal and external stakeholders participated in.

#### Stakeholder Survey

- · Purpose: To identify major interests and expectations of various stakeholders
- · Period: 25 APR 2018~9 MAY 2018 (total 15 days)
- · Utilization: Establishment of long-term sustainability goals; review on the sustainability management approach; development of the Sustainability Report

#### STEP 03.

#### Validation

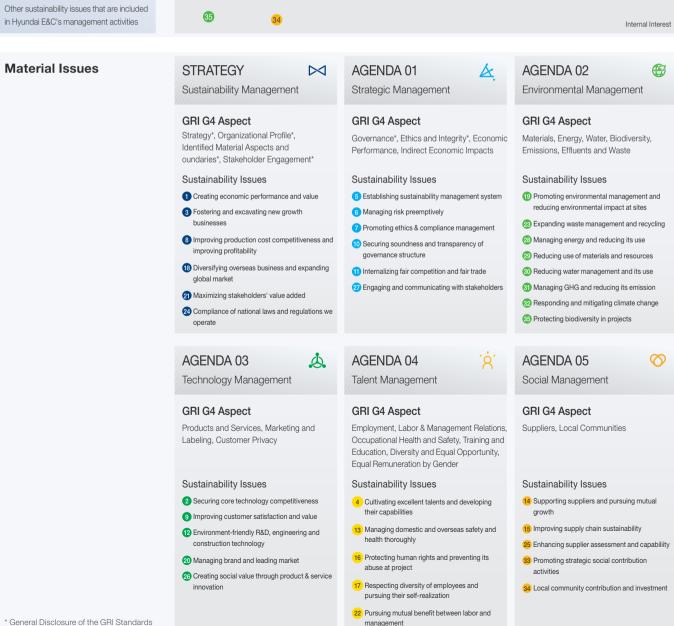
#### PRINCIPLE: Responsiveness

**Validation of Material Issues** 

Hyundai E&C thoroughly reviewed whether the issues identified have an important influence on the company. Comprehensively considering the validity of issues and their connection to management strategies, we subdivided issues into three categories: 20 core sustainability issues, 30 material issues, and general issues.

In planning this report, we focused mainly on the 20 core sustainability issues that have the highest importance. Also, we endeavored to guarantee our stakeholders' right to know by including material and general issues.

# Materiality Analysis Matrix Core Issues to Report: Issues that interest and influence of the entire stakeholder group are extremely high Material Issues to Report: Issues that interest of external stakeholders or influence of employees are high General Issues to Report: Other sustainability issues that are included in Hyundai E&C's management activities



#### Securing Sound Governance

Management Principle

Hyundai E&C applies the principles of checks and balances and international standards to ensure the soundness of corporate governance, which is the foundation for rational decision-making and a successful business environment. Furthermore, we are contributing to creating values and trust of shareholders and stakeholders by intensifying the expertise and transparency of the Board of Directors.

#### **Governance Principle**

#### Corporate Governance Reports

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#### **Board of Directors** (BoD)

Financial Supervisory Service's Data Analysis, Retrieval and Transfer System (DART)

HDFC Corporate Governance Charter



Hvundai E&C's corporate governance is managed under the supervision of an independent Board of Directors (BoD). It is based on a sound corporate governance structure that creates shareholder value through value creation management, global future management, and sustainability management and emphasizes the interests of internal and external stakeholders in a balanced manner.

In order to realize this, we have adopted the recommendation of corporate governance best criterion in line with international standards, and have established a transparent governance system centered on a professional manager system and independent BoD. Furthermore, we are making efforts to raise transparency by voluntarily disclosing corporate governance reports that contain the principles and status of Hyundai E&C's governance in 2016.

#### **Function of the Board of Directors**

The Board of Directors is the key body which makes decisions for the company and resolves issues articulated on regulations and the Articles of Incorporation as well as issues related to the business execution. It also monitors the execution of directors and the executive's duties while striving to maximize the corporate value and build trust of stakeholders.

Information such as Articles of Incorporation, key roles of the BoD, and resolutions are available on Hyundai E&C's website. In addition, we regularly disclose the BoD-related information that we have a legal duty to publicly report through the Data Analysis, Retrieval and Transfer System (DART) of the Financial Supervisory Service. In addition, in order to create a sound corporate governance structure that creates shareholder value and emphasizes balanced interests of internal and external stakeholders, we are continuously improving our corporate governance structure by establishing HDEC Corporate Governance Charter.

#### HDFC Corporate Governance Charter

Chapter 1	Chapter 2	Chapter 3	Chapter 4	Chapter 5
Shareholders	Board of Directors	Audit Organization	Stakeholders	Disclosure
3 articles, 8 clauses	9 articles, 42 clauses	2 articles, 9 clauses	1 articles, 3 clauses	1 articles, 3 clauses

#### **Current Status of** the Board of Directors

(As of 30 JLIN 2018)

\* As of JUN 2018, the average service duration of Hyundai E&C board directors is 3.2 years



Executive director Park Dong-Wook



Board Chairman / CEO Current President, Hyundai E&C Former Managing Director, Hvundai Motor Company

Bachelor of Business Administration, Sogang University, Korea



Won-Woo



Current Vice-president, Hyundai E&C Former Vice-president, Hyundai Engineering Master of Construction Project Management, University of Ulsan Graduate School, Korea



Yonsei University, Korea

Yun

Yeo-Suna

#### Attendance Rate of External Directors

As of 2017

#### **Board Composition and Guarantee of Independence**

Hyundai E&C operates the Board of Directors (BoD) that is composed of total seven members: three internal directors, four external directors. Moreover, it is chaired by the CEO because of the characteristic of the construction industry that requires a prompt decision making for sites located around the globe. In addition to this, the majority of the board consists of external directors while one independent lead director is appointed; as a consequence, the independence of the Board has been further secured.

External directors are independent from corporate subject to relevant laws including the commercial law. The independent lead director takes a responsibility for monitoring managerial activities of the CEO, mediating conflicts between executive and external directors, and proposing opinions of external directors. External directors fulfills their duties as faithful advisers and assistors in the management of the company by reinforcing the transparency and fairness of the corporate management, providing advices and expert knowledge to contribute to making important decisions of the company, and performing objective monitoring and supervision of management activities. Hyundai E&C has designated a complete charge department to support the efficient execution of external directors' duties and provide work-related information required.

#### Supporting External Directors

Providing information and explanation about the proposed agenda one week before the board

Providing information when required Paying for the consultation of external Supporting to visit domestic for tasks, enabling to interview with manager of sites independently without top management

experts if necessary, following the appropriate procedure

and overseas sites to enhance understanding of company business

#### **Criteria for Nominating Board Directors**

Directors are nominated at the general shareholders' meeting by the recommendation of the External Director Nominating Committee in accordance with Hyundai E&C's standards to nominate directors specified in the Articles of Incorporation. In recommending nominating external directors, Hyundai E&C observes gualifications articulated on related regulations such as the Commercial Act. Recommended by the External Director Nominating Committee, we nominate candidates who possess expertise and experience in fields such as the law, finance & accounting, and construction regarding the BoD diversity and the complementarity of skills. Detailed policies for Nominating the directors are specified in the '2.5 Nomination of Directors' of HDEC Corporate Governance Charter.

#### Policy for Director Nominating





Shin Hvun-Yoon



Chairman of the Audit Committee (independent lead director)

Current Professor of Law School at Yonsei Univ Former Vice-president, Education and Scholarship at Yonsei Univ.

Doctor of Law, University of Freiburg, Germany



Suh Chee-Ho



**Current** Professor of Architectural Engineering, Former Chairman, Architecture Institute of Korea Doctor of Architectural Engineering Hanyang University, Korea



Male

First Appointment MAR 2014

Current Lawyer, Lee International

Former Inspection Commissioner

Work Experience Law

Korea

NOV 1952

the Board of Audit and Inspection of

Bachelor of Law, Seoul National University, Korea

Doctor of Law, Wonkwang University, Korea

External director Park Sung-Duck



External director Kim Young-Kee



Current President, Tax&People Former Director, Research Bureau of National Tax Service

Master, Chung-Ang University Graduate School of Public Administration, Korea

#### Board of Directors Regulations

#### **Operation of the Board of Directors**

The Board of Directors (BoD) is operated as a regular board meeting once a quarter and a temporary board meeting as necessary. In order to ensure efficient operation of the BoD, we have established "Board of Directors Regulations" and have maintained minutes at each meeting. The resolution of the BoD is determined by the attendance of a majority of the directors and the affirmative vote of the majority of the directors present, except in cases where there is a difference in the laws and regulations. In 2017, the BoD has held nine times of meeting to resolve a total of 29 agendas including approval of transactions with affiliates.

#### Operation Status of the BoD

Round	Date	Contents
1	26 JAN 2017	7 agendas including approval of 67th Financial Statement
2	22 FEB 2017	3 agendas including convocation of the 67th regular general meeting of shareholders, approval of agenda discussion
3	17 MAR 2017	3 agendas including appointment of member of External Director Nominating Committee
4	27 APR 2017	3 agendas including revision of ethics regulations
5	17 JUN 2017	2 agendas including approval of moving Chile Santiago branch
6	27 JUL 2017	3 agendas including approval of transactions with the company of our largest shareholder
7	27 OCT 2017	4 agendas including approval of financial transaction by financial company of affiliates following provision
8	2 DEC 2017	Approval of Songdo B2 block residential complex new construction project, credit offering due to business expense loan agreement
9	28 DEC 2017	3 agendas including approval of transaction between affiliates

#### Committees **Under the BoD**

#### **Composition of Committees**

Hyundai E&C is currently operating Audit Committee, External Director Nominating Committee, and Transparent Management Committee under the BoD for the Board's efficient operation, execution of its duty, and promotion of sustainability management activity. Each committee is entrusted with part of the authority of the BoD, except as stipulated by the related laws or the Articles of Incorporation. Operation and authority of the committee are subject to the rules stipulated by the board. The Articles of Incorporation and regulations of the Board clarify that the key committees established by Articles of Incorporation shall consist mainly of external directors. Thus, we have guaranteed the independence of the committees.

#### Current Status of Committees under the BoD

Committee	Requirements of Composition	Functions	Authorities	Operation
Audit Committee Directors of three and over  Two-thirds of external		Auditing the legality of business activities carried out by the BoD and the management	Regular evaluating external auditors' audit activities, preliminary	Holding a meeting more than once a quarter, temporary audit committee as necessary
	directors and over	Reviewing the integrity and feasibility of the company's financial activities	approving management diagnosis activities	Being able to request employee attendance related to meeting
	One accounting or financial specialists and over	· Reviewing and controlling the internal audit, appoint external auditor	Confirming corrective actions for internal and external audits	Being able to request expert consultation at the company's expense
		· Reviewing the accuracy of financial reporting	Regarding amendment of the operating regulations	· Reviewing compliance with the company's compliance
		Reviewing the feasibility of the significant changes in accounting processing standards and estimation	of the Audit Committee	standards is from a compliance officer appointed by the board of directors.
		Reporting general shareholders' meeting on subjects related to appointment and dismissal of external auditors		· Being able to utilize the personnel of the Audit Office to be assisted in the duties
		$\cdot$ Mediating communication between external auditor and BoD		
External Director Nominating Committee	Directors of two and over     Half of external directors and over	· Recommending candidates for external directors	Reviewing compliance with legal requirements related to the appointment of external directors and their independence	· Being able to hold committee as necessary
Transparent Management Committee	Directors of three and over     Two-thirds of external directors and over	Ensuring the execution of Compliance Program     Deliberating and resolve major policies related to the ethical management and social contribution     Enacting and revise ethical regulations such as code of ethics and evaluate the compliance     Selecting the sustainability vision and strategic tasks	Supervising transactions between special relationship prescribed by the Monopoly Regulation and Fair Trade Act and Commercial Act     Matters concerning the protection of shareholders' rights	Holding a meeting more than once a quarter, temporary transparent management committee as necessary     Being able to appoint advisory with expert knowledge up to 2

#### **Audit Committee**

The Audit Committee is a committee within the BoD, which is responsible for auditing the legitimacy of directors and executives in order to enhance corporate value, and is independent from management and certain shareholders. It is mainly audits the accounting, tasks and financial status of the company. Currently, four external directors are appointed to ensure transparency and independence. In addition, it conducts audits efficiently while communicating with external auditor about the audit plan and results of financial statement.

#### **External Director Nominating Committee**

The External Director Nominating Committee is a committee within the BoD, which is established to recommend candidates for external directors in accordance with relevant laws and regulations. It is responsible for confirming the background of the appointment of directors, the interests of the company including transactions over the past three years, and legal qualifications. Currently, it is composed of one internal director and four external directors, which are more stringent than legal standards requiring majority of external directors.

#### **Transparent Management Committee**

The Transparent Management Committee is a committee within the BoD, which is established to review transparency and ethical management of the company's internal transactions and to protect the rights and interests of shareholders. Through the resolution of the BoD on 29 MAR 2018, we have enhanced the independence and transparency of the committee by switching the name from the existing 'Ethical Management Committee' to 'Transparent Management Committee, expanding the scope and functions of the deliberations, and changing the composition of the committee, which had included internal directors, to total four external directors.

#### **Evaluation and** Remuneration of **Directors**

Remuneration of directors includes the severance pay and is provided within the limit that is approved at the general shareholders' meeting on an annual basis; details are entrusted to BoD the remuneration status of all directors and the committee of inspection has been disclosed on quarterly, biannual and annual business reports. Remuneration of the CEO is paid in accordance with the provisions of executives human resources affairs and treatment considering the rank, position, ability, etc. within the limits determined by the general shareholders' meeting. In particular, the amount paid and methodology of personal remuneration are publicly reported in a clear and transparent manner when the total amount exceeds KRW 500 million. In addition, in order to improve the company's long-term growth and governance structure, a fair evaluation can be conducted based on the activities of the BoD.

#### **Protecting Shareholder Rights**

Disclosure of Shareholders' Status Lai

As the owners of Hyundai E&C, shareholders have a right to attend the general shareholders' meeting and vote, right to share in the profit, and right to receive management information as stated on legislations including the Commercial Act. We observe a principle to preserve shareholders' rights in any cases when a significant change to the existence of the company or shareholder rights, such as adjustment of the Articles of Incorporation, merger or split off, and changes in capital; decisions in these circumstances are made at the general shareholders' meeting. In addition, Hyundai E&C guarantees the shareholders' right to be informed by disclosing management information in an explicit and prompt manner through various channels: the corporate disclosure system, business report, website, and general shareholders' meeting.

(As of 31 DEC 2017) Major Shareholders



## Internalizing Ethics & Compliance Management

Management Principle

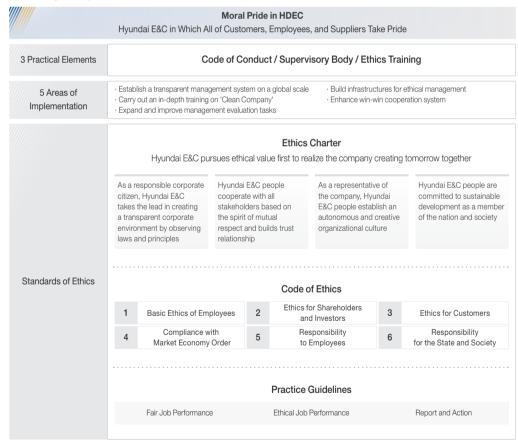
Ethics & compliance management is the basis for Hyundai E&C's value judgement and preventing regulatory risks and building trust with stakeholders. We regularly check the status of ethics & compliance management and reflect the necessary improvements in the ethics & compliance management system, so that we can internalize ethics & compliance, and our business activities lead to fair value creation.

## Strengthening Ethics & Compliance Management System

Hyundai E&C recognizes that the importance of ethics and compliance is increasing, and is continuing to strengthen its ethical and compliance management system. In 2017, we have established corporate-wide compliance organization and designated compliance officers by divisions and compliance leaders by departments following establishment of Compliance Support Team in 2016. In addition, Hyundai E&C has revised its the Code of Conduct to improve its systemicity, apply domestic and international compliance guidelines related to corruption prevention acts, and promote employees to understand and utilize The Improper Solicitation and Graft Act guidebook we developed.

In 2018, we will hold compliance consultative group meeting, which has been hold every three months before, on a monthly basis to reinforce ethical management promotion and inspection. In addition, we will continue to raise awareness of ethics & compliance and identifying improvement points through the development of individual and departmental checklists and regular self-examination.

#### Ethics Management System



#### Corporate-wide Compliance Organization System



## Expanding Ethics & Compliance Management

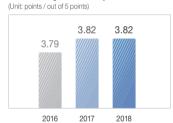
#### Improving Effectiveness of Ethics & Compliance Management Training

Hyundai E&C is constantly strengthening ethics & compliance management education and campaign activities to enhance the corporate-wide internalization of ethics & compliance management. Therefore, we have implemented the complementary ethics & compliance management training for all employees including the CEO and the top management. In addition, we operate an ethics management practice Q&A in the Online Ethics & Compliance Consulting Center on groupware to help employees make ethical decisions in work. In 2017, we have published a compliance monthly newsletter and developed an ethics and compliance counselling window to actively support the resolution of employees' concerns related to ethics and compliance. Furthermore, we have changed the format of the existing electronic signature practice pledge to deliver ethics management by directly inputting words to promote employee awareness. In 2018, we established a system of ethics and compliance education to ensure that all employees to take ethical management training obligatorily and improved the effectiveness of education by establishing customized compliance training for each job.

#### Performance of Ethics & Compliance Training in 2017

Туре	Course	Trainee	Participants
Corporate-wide	Online ethics management training	All employees	1,686 persons
Traning	Team seminar ethics training	All employees	1,427 persons
Training	Ethics management training	New and experienced employees hired	162 persons
by Group	Ethics management training	All executives, site managers, team leaders	350 persons
	Overseas sites ethics training	Employees at overseas sites	595 persons
	The Improper Solicitation and Graft Act training	Employees of sales department and other related departments	313 persons
	Specialized training by group	Promoted employees, PJT and etc.	1,387 persons
Training for Suppliers	Transparent ethics training	Sales organization team leaders or higher rank of suppliers	851 suppliers

#### Ethics Management Survey Results



http://engudit.hdec.kr

Cyber Audit Office

## Intensifying Autonomous Compliance Program for Fair Trade

#### **Ethics Management Survey**

Since 2015, Hyundai E&C has implemented an annual ethics management survey for all employees aiming to assess the corporate awareness of the ethical management and to establish appropriate directions. The survey is conducted for 4 sections: general ethics management, standards of ethics and practice guidelines, report of unethical behavior, and ethics training & campaign. Based on the survey results, we have been identifying specific implications such as systematization of ethics regulations and strengthening ethics management at overseas sites with high risk exposure. Our awareness of ethical management in 2018 was 3.82 points (out of 5 points).

#### **Operating Cyber Audit Office**

By operating the Cyber Audit Office, we receive reports about corruption, unfair transactions and requests to improve the system; reports and requests submitted to the Cyber Audit Office are being processed in a transparent manner. To ensure smooth reporting, we assure that the identity of the informant is confidential while operating the English Cyber Audit Office and the international hotline 24 hours a day. In addition, we have posted a Cyber Audit Office popup on our cooperation system to collect more available reports and have sent out guide e-mails to our domestic and overseas purchasing and outsourcing staffs of suppliers.

Hyundai E&C operates Autonomous Compliance Program for Fair Trade in order to create a transparent and fair trading culture and uses it as an internal control standard. We regularly hold an Autonomous Compliance Conference and share issues related to internal and external fair trade risks for the systematic operation of the Autonomous Compliance Program for Fair Trade. In addition, we are strengthening our minds to comply with fair trade laws and win-win partnerships with our suppliers through customized fair trade prevention training for each department, visiting subcontractors training at each domestic and overseas key sites, signing a pledge to practice fair trade for all employees, and holding a shared growth resolution conference.

#### Seven Key Components of Compliance Program for Fair Trade



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#### Managing Risks Proactively

Management Principle

Hyundai E&C is continuously enhancing preemptive risk management to improve the capability to identify potential risks and prevent crisis. In particular, we have been systematically enhancing our business stability and further strengthening our competitiveness by identifying new business opportunities based on long-term strategic risk analysis.

#### **Defining Risks**

#### **Enterprise Risks**

Enterprise risks are comprehensive risks that is not directly related to the project, and can affect corporate management goals and strategic direction. Enterprise risks are subdivided into country risks and company & market risks. Country risks include political, sociocultural, and environmental risks that can occur from domestic and overseas external changes and are managed at the corporate level. On the other hand, company & market risks include usual market, business, and financial risks.

Hyundai E&C is strengthening risk management based on the risk information we have acquired through the integrated risk management system established in 2016. In addition, considering the scope, nature, and management techniques of enterprise risk linked to the company's mid- to long-term direction are different from project risks, we plan to manage risks and strategies exclusively in a management planning office from 2018.

Multi-layered Risk Filtering System at Phases of Receiving Orders

#### Phase 3 Main Screening

Phase 2

#### Working Group Screening

Phase 1
Headquarters Screening

#### **Project Risks**

Project risks refers to material risks affecting the achievement of project targets during receiving or executing order. Hyundai E&C has established and operated a consistent and efficient project risk management system throughout the project lifecycle to prevent project risks preemptively.

From 2014, we have been cutting off risky project orders through our multi-layered risk filtering system at receiving phase. Through this process, projects selected and received are focused on identifying high-risks from the initial phase and we ensure appropriate risk responses by separating the risks that can be handled by sites and need support from the head office. In addition, we are responding to the risk of lower profitability due to compensation for damages caused by construction period delays and additional costs by supporting for the extension claim of the construction period. In addition, we established risk management regulations and implemented relevant training continuously to improve the project risk management capabilities of our employees. In 2018, we plan to build an construction period delay management system at the initial phase of the project to strengthen preemptive risk management capabilities.

#### **Long-term Strategic Risks**

Long-term strategic risks are material risks which may significantly influence the future sustainability of Hyundai E&C. We have identified urbanization, water scarcity & environmental pollution, energy & fuel scarcity, and resource depletion as the key megatrends of the construction industry in a long term perspective. Hyundai E&C has devoted its efforts to defining risk & opportunity factors through the future analysis against 2030 for each megatrend and to respond effectively.

Construction Industry Megatrends Analysis against 2030



## Intensifying Risk Management Infrastructure

Operating Direction of Department for Integrated Risk Management in 2018



Establishment of risk management plan

Establishment of articulated management
plan of risks and production costs

Risk assessment
Risk monitoring and control

#### **Reorganizing Department for Integrated Risk Management**

Hyundai E&C has operated the Project Risk Management (PRM) Strategy Office to stably respond to the domestic and overseas construction environment risk from 2016 to 2017. The PRM Strategy Office, as a control tower for enterprise risk, has inspected risks of the entire project life cycle from receiving orders to executing projects. In 2018, we plan to carry out more integrated and efficient risk management by transferring the overall risk management tasks to the Finance and Economy Division for organic identification and articulated management of risks and production costs.

#### **Advancing IT-based Integrated Risk Management System**

Through the operation of IT-based risk management system, we are efficiently dealing with key information created during the series of processes: risk identification, analysis, evaluation, and response. Following the development of the receiving of order management system in 2014, we have completed establishment of integrated risk management system that encompasses risk management functions at the implementation phase in 2016. In 2017, we have upgraded the system to realize a risk information portal function that enables integrated search of risk information for each business unit, and establish a real-time confirmation and support system for headquarters on each site's issues. In 2018, we plan to expand the existing overseas project screening database to domestic & investment project and overseas investment projects and develop a system to automate the screening process. In addition, we plan to strengthen the initial risk management by making a risk checklist for the person in charge of the execution phase and by developing a management function for managing delays of the headquarters' supporting activities.

#### **Improving Risk Analysis and Assessment System**

Hyundai E&C has distributed a checklist by project types for all projects since 2013 while conducting a risk assessment by experts for the systematic analysis and management of risk. Assessment results are utilized as basic materials to establish management strategies and make decisions for similar projects. In 2014, we have strengthened the risk analysis and evaluation activities of employees by introducing a working group screening system. In 2016, we have improved risk management methods in the phase of receiving order and execution in the form of risk registers for continuous risk management. In 2017, we have established Sensing, Assessing, Tracking, and Feed-back modules within the integrated risk management system to improve our risk analysis and assessment system. In 2018, we plan to hold sharing session of head office, on-site training and risk assessment results in order to activate the module utilization.

Risk Analysis and Assessment Module

Sensing	Assessing	Tracking	Feedback
Prompt identifying on-site risks based on information of on-site sales, collection of money, and process rate	Supporting on-site risk grading and task prioritization	Tracking site and headquarters risk management activity record	Supporting failure prevention by providing site management failure cases and similar experienced worker's

#### Risk Reporting System

#### Board of Directors High-level Risk

The CRO directly reports to the BoD and undertake the investigation of a given risk and the responsible personnel
 Establish a risk mitigation strategy, regular monitoring system, and countermeasures to a crisis situation

#### CEO Mid-level Risk

The CRO directly reports to the CEO
If a given risk is considered to be urgent and to have a significant effect on project(s), report to both the CEO and the BoD and make a prompt decision

#### CRO Low-level Risk

· Reported to the Chief Risk Offcer (CRO)

#### Improving Efficiency of Risk Monitoring and Reporting System

Hyundai E&C has defined 15 Key Risk Indicators and monitored through monthly risk analysis and regular scenario mapping. In addition, we have developed response manuals for each relevant organization to react to unusual signs immediately. Furthermore, we have a risk reporting system for effective response in advance by quantitatively analyzing the seriousness, possibility, and impacts as well as by proactively defining the reporting process and targets according to risk steps. In 2018, we will further strengthen our monitoring and reporting system by classifying key risks at the execution phase and enabling executives and employees in charge to search the status of each risk through the dashboard.

#### Hyundai E&C's 15 Key Risks

,									
01	Rise of Raw Materials Prices	02	Currency Volatility	03	Intensified Competition	04	Failure to Accomplish Management Targets	05	Failure of New Projects
06	Inability to Qualify with the Global QC Standards	07	Liquidity Crisis	80	Changes in the Global Economy	09	Stagnant Domestic Construction Industry	10	Political Uncertainties in Foreign Countries
11	Inadequate SCM	12	Vulnerability in HR Management	13	Non-compliance with Laws	14	Occupational Accidents	15	Information and Technology Leak

#### **Protecting Human Rights** in Value Chain

Management Principle

As a global construction company, Hyundai E&C has established the 'HDEC Human Rights Policy' to fulfill its social responsibilities and take the lead in protecting and promoting human rights through business. To this end, we have been minimizing negative impacts of human rights by analyzing the level of risk exposure to human rights at all domestic and overseas projects and implementing systematic human rights assessment and corrective action based on the 'On-site Human Rights Checklist' developed for the first time in domestic construction companies.

#### **Human Rights Policy**

#### **UNGC Communication On Progress**



#### **Protecting Human Rights** and Due Diligences

#### Hyundai E&C Human Rights Policy



in which we operate as a global construction company. To this end, We have established the 'HDEC Human Rights Policy' in MAY 2017. Based on the policy, we have operated domestically and internationally under the principle of respect for human rights as a global responsible company and have publicly expressed our will to actively protect and promote human rights through business. Hyundai E&C have established the highest level of human rights respect and protection responsibilities in all business activities. In addition, we firmly observe to the Constitution of the Republic of Korea and laws related to labor of the at all workplaces all over the world, and officially support international human rights and labor standards based on the Universal Declaration of Human Rights and the International Labor Organization (ILO) Declaration.

We have been making effort to carry out its social responsibility and role of global corporate citizen in all countries

Hyundai E&C has been promoting construction projects around the world, and has been deeply recognizing it is possible that unintentional human rights violations may occur in the process of business operations due to cultural, customary, religious, ethnic, and institutional differences in regions where Hyundai E&C operates. To minimize negative human rights impacts, we identify issues that could cause human rights violations in the process of business operation and the entire value chain as well as establish and implement process of organization, operation, monitoring, action and internal & external reporting in accordance with the due diligence process of human rights prescribed by the UN Guiding Principles on Business and Human Rights.

#### Human Rights Risk Assessment System

-				
Title	Scope	Potential Human Rights Issues	Vulnerable Group	Subject
Human Rights Risk Exposure Assessment	Risk identification	Corporate-wide human rights risk	Employees	100% of sales by country
On-site Human Rights Checklist Assessment	Business operation	Violation of human rights during company operation	Employees, children	100% of global sites where generated sales
Supply Chain Sustainability Management Assessment	Supply chain	Supply chain human rights, labor and safety	Suppliers, external contract workers	100% of tier 1 suppliers
Business Risk Assessment	Project	Violation of human rights in overseas projects	Local communities	100% of business

#### **Human Rights Risk Exposure Assessment**

Hyundai E&C analyzes the exposure of human rights risks to all domestic and overseas projects every year by using 'HDEC Human Rights Exposure Assessment Framework' since 2013. Based on it, we have been making effort to minimizing potential human rights issues by establishing a HDEC Human Rights Policy and implementing appropriate mitigation actions. In 2017, our sales were generated in 24 countries around the world, with 4.03% of the sales from countries with high human rights risks including Iraq, Saudi Arabia and Sri Lanka. Considering human rights violations can occur in various areas depending on the characteristics of each country, we have been monitoring potential human rights risks in these countries to identify and respond risks preemptively.

#### Status of High-risk Country Identification

(As of 31 DFC 2017)

Country	Basic Human Rights Risks	Labor Human Rights & Child Labor Risks	Violation of Freedom of Expression	Dispute Risk	Proportion of Sales (of Total Sales)
Iraq	High-risk	-	-	Medium-risk	1.74%
Saudi Arabia	Medium-risk	-	High-risk	-	1.22%
Sri Lanka	High-risk	High-risk	High-risk	Medium-risk	0.39%
Uganda	High-risk	High-risk	-	-	0.18%
Total					4.03%

#### **Protecting Human Rights** and Due Diligences

#### **On-site Human Rights Checklist Evaluation**

In order to prevent any human rights violations that may arise in the global construction sites, Hyundai E&C have developed the 'On-site Human Rights Checklist' for the first time as a construction company in Korea in May 2017, and have conducted detailed evaluations and inspections for each site. The 'On-site Human Rights Checklist' consists of 30 indicators in four areas: basic human rights respect, labor rights protection, workplace safety assurance, and welfare benefits. We utilize the checklist to identify and prioritize human rights risks at global construction sites where multinational workers work.

In 2017, all 14,473 foreign workers of 31 overseas sites in 9 countries were assessed. The evaluation process include site self-inspections, on-site verification by branches, and employee interviews. As a result of the evaluation in 2017, the implementation rate of the human rights checklist on the global site of Hyundai E&C was at 98%, and we have been identifying and supporting the improvement needs of each site based on the final inspection results. In 2018, we will increase the monitoring of human rights at overseas sites from one to two, and will conduct separate surveys on foreign employees.



#### Implementation Rates of the Human Rights Checklist in 2017

Human Rights Checklist Implementation Rate	98%
Basic Human Rights (9 indicators)	93%
Labour Rights (9 indicators)	100%
Site Safety (6 indicators)	100%
Welfare (6 indicators)	100%

#### **Supply Chain Sustainability Management**

For the first among domestic construction companies, Hyundai E&C has enacted the 'HDEC Sustainability Management Guideline for Suppliers' in OCT 2014 for the systematic and sustainable supply chain management. In MAY 2017, we revised the guideline to strengthen human rights management in the domestic and overseas supply chains in accordance with the 'Hyundai E&C Human Rights Policy.' Furthermore, in order to apply the 'HDEC Sustainability Management Guideline for Suppliers' to actual tasks effectively, we developed the 'Supplier Sustainability Assessment Framework' and have been evaluating the Environment, Society and Governance (ESG) risks of our suppliers since 2014. This assessment includes indicators of supply chain human rights, labor and safety assessment that may occur in the supply chain. Details including the results of the 2017 evaluation can be found in the Sustainable Supply Chain Management section of this report (p. 45).

#### **Business Risk Assessment**

When entering a new market or a foreign country, potential human rights risks may arise due to economic, social and cultural differences. It may result in negative impact on your business such as business delays or cancellations, complaints in local community, and difficulties in canceling or acquiring License to Operate (LTO), etc. Hyundai E&C has conducted 'Key Business Risk Monitoring' for successful business promotion and has established and operated procedures to identify risks before business operations. We assess the violation of laws and regulations related to human rights risks including safety, the political unrest in the entered country, labor management, and the status of suppliers at 'Business Core Risk Monitoring.' Thanks to these efforts, Hyundai E&C incurred neither restrictions nor accusations in regard to human rights in 2017.

## **APPENDIX**

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VALUE EMPOWERMENT

VALUE PRINCIPI

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APPENDIX

(Unit: KRW 100 million)

(Unit: KRW 100 million)

#### **Financial Performance**

#### [Condensed] Consolidated Statement of Income

Description	2015	2016	2017
Sales	192,332	188,250	168,871
Cost of Sales	175,081	168,953	151,081
Gross Profit	17,250	19,297	17,790
Operating Income	10,893	11,590	9,861
Income before Income Tax Expense	8,981	9,815	5,548
Net Income	6,638	7,317	3,716

#### [Condensed] Consolidated Statement of Financial Position

			(OTIIL KAVV 100 ITIIIIIOII)
Description	2015	2016	2017
Current Assets	142,284	149,379	132,498
Non-current Assets	51,217	49,355	51,821
Total Assets	193,501	198,734	184,319
Current Liabilities	85,753	87,496	72,190
Non-current Liabilities	33,842	29,992	27,399
Total Liabilities	119,595	117,488	99,590
Capital Stock	73,906	81,246	84,729
Other Contributed Capital	10,354	10,354	10,282
Components of Other Capital	404	1,145	690
Retained Earnings	40,872	46,218	48,132
Total Equity	73,906	81,246	84,729

#### Consolidated Financial Stability

Description	2015	2016	2017
Current Ratio	165.9	170.7	183.5
Debt Ratio	161.8	144.6	117.5
Net Worth Ratio	38.2	40.9	46.0

#### Compliance

Hyundai E&C strictly complies with tax laws and related regulations in all 59 countries where it operates business. In order to support the business operation and customer services more effectively, Hyundai E&C strives to pay tax efficiently within the legal limits by optimizing its domestic and overseas business structures. Hyundai E&C maintains an honest and positive relationship with the tax authorities of each country such as a National Tax Service, pays its tax faithfully in accordance with each country's tax laws every year, and focuses on transparently disclosing all tax-related data. Every year, we specify the information of the corporate tax, deferred corporate tax, and effective tax rate on the audit report and disclose the information through the Data Analysis, Retrieval and Transfer System (dart.fss.or.kr). In addition, Hyundai E&C paid penalties of KRW 21.7 billion in 2017 for case of the collusion act in the bidding process of Wonju-Gangneung railway roadbed facility construction. Hyundai E&C will endeavor to prevent the reoccurrence not to impede the order of the free market as well as communicate with stakeholders in a transparent manner.

#### **Key Sustainability Indicators**

#### Value Empowerment

		Responding Clim	ate Changes			
		Unit	FY2014	FY2015	FY2016	FY2017
	Diesel	TJ	68.18	209.54	69.07	79.96
	Gasoline	TJ	14.57	14.78	12.35	26.10
	Kerosene	TJ	32.78	20.29	45.73	80.02
	Subtotal	TJ	115.53	244.61	127.15	186.07
	LNG	TJ	62.85	44.18	51.99	44.12
	LPG	TJ	3.77	4.20	5.85	1.43
Energy Consumption by energy source)	Subtotal	TJ	66.62	48.38	57.84	45.55
	Lump Coal (brown coal)	TJ	26.40	10.53	16.80	44.62
	Ignition Coal (wood coal)	TJ	0.46	0.27	0.45	2.54
	Hot Water (district heating)	TJ	0.00	0.01	0.52	2.68
	Electric Power	TJ	1,072.97	1,095.48	1,247.92	1,077.77
	Subtotal	TJ	1,099.83	1,106.30	1,265.69	1,127.60
	Total	TJ	1,281.99	1,399.29	1,450.67	1,359.23
	Non-renewable Fuels	MWh	21,772.50	31,645.21	21,066.33	29,039.89
	Non-renewable Electricity Purchased	MWh	111,767.80	114,112.76	129,991.57	111,967.06
Energy Consumption	Steam / Heating / Cooling and Other Energy Purchased	MWh	-	1.25	53.81	278.92
by type)	Total Non-renewable Energy Consumption	MWh	133,540.30	145,759.22	151,111.71	141,285.86
	Renewable Energy Purchased or Generated	MWh	-	-	191.27	-
	Total Costs of Energy Consumption	KRW in millions	19,693.10	22,557.25	19,998.45	20,613.08
	Es	tablishing Safety & Envi	ronment Infrastructur	e		
		Unit	FY2014	FY2015	FY2016	FY2017
	Lost Time Injury Frequency Rate (LTIFR) - employees	1 million man hours	0.00	0.00	0.00	0.00
Safety Management Indicators*	Lost Time Injury Frequency Rate (LTIFR) - suppliers	1 million man hours	0.96	0.72	1.29	0.97
	Occupational Illness Frequency Rate (OIFR) - employees	1 million man hours	0.02	0.04	0.02	0.03
	Tap Water	1000m <sup>3</sup>	396.77	378.84	265.49	266.70
Vater Usage	Surface Water (including lake, river)	1000m³	281.76	166.37	105.33	386.21

* The safety management indicators are being measured base	d on the standard of Korea Occupational Safety & Health Agency
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<sup>\*\*</sup> Increase in wastewater generation due to increase of tunnel site (using wastewater treatment facility) in 2017

Underground Water

Others

(by water source)

1000m<sup>3</sup>

1000m<sup>3</sup>

121.11

3.60

1,093,787

390.28

4.76

990,315

260.37

85.84

2,742,827

		Establishing Safety & I	Environment Infrastru	ıcture		
		Unit	FY2014	FY2015	FY2016	FY201
	Steel	ton	811,000	670,000	661,000	631,00
	Ready-Cixed Concrete	m <sup>3</sup>	2,431,544	2,274,586	2,932,846	3,369,50
Material Usage	Cement	ton	81,706	137,332	128,696	70,61
iviateriai Osage	Sand	m³	8,894,000	1,129,893	5,650,396	672,75
	Aggregate	m³	7,660,000	7,566,771	999,519	2,343,50
	Asphalt Concrete	ton	354,972	423,703	366,528	604,61
		Cultivating Ir	nnovative Talents			(As of 31 DEC 2017
			Total	Male	Female	% of Femal
	Total Management		2,965	2,865	100	3.379
		Top management	107	107	0	0.009
Status of Management	By Rank***	Senior management	1,105	1,098	7	0.639
wanagement		Junior management	1,753	1,660	93	5.319
	Management in Sales & Marketing Departments		124	111	13	10.489
		Unit	FY2014	FY2015	FY2016	FY201
Employee Satisfaction	Employee Engagement Survey	points	83.0	83.3	83.5	83.
		Unit	Full-time Employees	Collective Bargaining A Applied Emp		Labor Unio
Status of Collective	Number of Employees	persons	4,424		3,888	78
Bargaining Agreement Application	Proportion	%	100.0%		87.9%	17.79
		Advancing Strateg	ic Social Contribution	ns		(As of 31 DEC 2017
		Unit	Cash Donation	Hours	Donation in Kind	Administrative Expenditure
Social Contribution	Expenditure of Social Contribution Activities	KRW in millions	9,292.0	1,129.3	290.0	461.
Activity Expenditure	Proportion of Social Contribution Activities	%	83.2%	10.1%	2.6%	4.19
		Unit	FY2014	FY2015	FY2016	FY201
Political Donation		KRW in millions	0	0	0	
	Total	KRW in millions	2,100.3	2,134.4	1,955.8	1,656.

#### The Largest Organizations donated in 2017 (Top 5)

Policy Support

- Industry Promotion

- Overseas Business Promotion

- Association Sponsorship

- Academia Sponsorship

1. Construction Association of Korea (KRW 539.4 million, 32.58%): The Korean representative construction association conducting activities related construction industry including laws, systems, policy research, statistical survey and management analysis. 2. International Contractors Association of Korea (KRW 396.7 million, 23.96%): A construction association operating for the purpose of supporting overseas business through collection, analysis and dissemination of overseas construction information 3. Korea Federation of Construction Contractors (KRW 104.0 million, 6.28%): A construction association operating for the purpose of studying policies & systems for development of construction business and improvement of international competitiveness for domestic construction companies. 4. Korea Chamber of Commerce and Industry (KRW 91.2 million, 5.51%): A private economic organizations for the purpose of promoting the Korean commerce and industry through mutual cooperation with domestic and overseas economic organizations. 5. Korea Atomic Industrial Forum (75.0%, 4.53%): A juridical foundation established to

572.9

300.0

50.0

606.0

300.0

39.0

560.2

388.6

42.5

641.7

396.7

34.8

KRW in millions

KRW in millions

KRW in millions

KRW in millions

68 2018 HYUNDAI E&C SUSTAINABILITY REPORT promote the peaceful use and industrialization of nuclear energy.

107.07

21.95

4,298,930\*\*

<sup>\*\*\*</sup> Top management: executives / senior management: general managers / junior management: deputy general managers & managers

<sup>\*\*\*\*</sup> Number of employees who can join labor union (full-time employees of promotable general manager and below)

#### **Key Sustainability Indicators**

#### Value Principle

	Securing Sound Governance (As of 31 DEC 20						
		Unit	Number of Directors (persons)	Total Remuneration (KRW in millions)	Average Remuneration (KRW in millions)		
	Board of Directors	Registered Directors*	3	828	276.00		
Remuneration		External Directors	4	210	52.50		
of Directors and Employees	Employees		6,797	508,379	74.79		
	Directors and Employees (excluding Registered Directors)		6,801	508,589	74.78		
	Туре	Total (KRW in millions)	Calc	ulation Standard and Method			
Remuneration	Base Salary	694.0	In accordance with the 'Management Personnel and Treatment Rules', which takes into consideration the rank, position and ability and payment limits set by the general sharehold meeting, KRW 57.8 million was paid every month from January to December.				
of Executives in 2017 (including compensation norms)	Incentive	134.0	In accordance with the 'Management Personnel and Treatment Rules', which takes into consideration the rank, position and ability and payment limits set by the general shareholder meeting, KRW 134 million was paid in installments during the disclosure period.				
	Total	828.0					

<sup>\*</sup> Breakdown from disclosure of 2017 business report (p. 363~365)

<sup>\*</sup> The average remuneration for registered directors in 2017 is 3.69 times the average remuneration for employees.

	Internalizing Ethics & Compliance Management (As of 31 DEC 2017					(As of 31 DEC 2017)
		Unit	FY2014	FY2015	FY2016	FY2017
	Disciplinary Dismissal	cases	8	3	1	1
Ethical Management Violation Cases and Measures	Suspension	cases	7	5	0	0
Measures	Total	cases	15	8	1	1

<sup>\*</sup> We excluded salary reduction, reprimands, and warnings from personal violations.

Sarisfying Customers					(As of 31 DEC 2017)
	Unit	FY2014	FY2015	FY2016	FY2017
Customer Satisfaction	points	96.3	85.0	84.8	85.3

<sup>\*</sup> Customer satisfaction survey scheme has been refurbished in 2015.

	Protecting Human Rights in Value Chain (As of 31 DEC							
	Assessment Title	Assessment		Identification		Mitigation		
	Assessment Title	Objects	Proportion	Identified	Proportion	Details	Proportion	
	Human Rights Exposure Assessment	KRW 10,001,679 million (100% of sales, seperated)	100%	KRW 409,845 million (sales from high-risk countries)	4.03%	Establishing and disclosing human rights policies, mitigating risk through business risk assessment	100%	
Results of Human Rights Risk	On-site Human Rights Checklist Assessment	31 (100% of global sites where generated sales)	100%	1 (sites lack of grievance settlement system for workers)	3.23%	Operating counseling office and meeting to improve worker grievance system	100%	
Assessment and Mitigation Results in 2017	Supplier Sustainability Assessment	3,118 (100% of Tier 1 suppliers)	100%	24 (high-risk suppliers)	0.77%	Encouraging improvement, cancelling registration in case of non-improvement	100%	
	Business Risk Assessment	100% of business	100%	100%	100%	Devising plans to reduce and avoid risk	100%	

#### **Greenhouse Gas Verification Statement**

Introduction Korean Foundation for Quality (hereinafter 'KFQ') has been engaged in Hyundai Engineering & Construction (hereinafter 'the Company') to independently verify its 2017 Report on the quantity of Greenhouse Gas Emissions from entire places of business nationwide (hereinafter 'Inventory Report').

Verification Scope

KFQ's verification was focused on all of the greenhouse gas emission sources domestic and foreign (direct emission and indirect emission) controlled by the Company.

Verification Criteria

The verification process was based on 'Greenhouse Gas and Energy Target Management Scheme (Notification No. 2016-255 of Ministry of Environment) (hereinafter 'the Scheme') and 'ISO14064-3' for every applicable part. The indirect emissions (electricity) factor of foreign sites by country was based on IEA composite electricity/heat factor.

Verification Procedure

The Verification has been planned and conducted by the "Greenhouse Gas and Energy Target Management Scheme", and to reach limited level of assurance. Furthermore, the entire verification process underwent internal review to ensure its methodology and effectiveness.

Verification Limitation

In order to confirm the data and information provided by the Company, sampling method was applied in the Verification Plan. For verification of foreign sites, the only document review was implemented. Therefore, KFQ acknowledged the data and information from Company as it is.

#### Conclusion & Opinion

Based on verification process according to the Scheme, KFQ obtained reasonable basis to derive following conclusion on the greenhouse gas emission data in the Inventory Report.

- 1) The Company's 2017 Report on Quantity of emitted Greenhouse Gas was documented in accordance with "Greenhouse Gas and Energy Target Management Scheme" run by the government.
- 2) According to materiality assessment on the quantity of greenhouse gas emitted from every Company's places of business nationwide in 2017, material discrepancy is less than the criteria of 5.0% for an organization that emits under  $500,000~\text{tCO}_2$ -e in accordance with "Greenhouse Gas and Energy Target Management Scheme"
- 3) Please note that the Scheme does not concern Scope 3 emissions. The verification accuracy of Scope 3 emissions may be limited as it was conducted with the data calculated by the Company Guidelines.

(Unit: tCO2-e)

Company	Site	Scope 1	Scope 2	Total	Scope 3
Hyundai Engineering &	Domestic	19,439	52,444	71,880	251,090
Construction	Overseas	411,001	148,256	559,258	171,063

<sup>\*</sup> The total amount of emissions was trimmed to the below of the decimal point in the sum of Scope 1 and 2.

<sup>4)</sup> Thus, KFQ conclude that the Greenhouse Gas Emissions and Energy Consumption of Hyundai Engineering & Construction in 2017 is correctly calculated and stated in accordance with "Greenhouse Gas and Energy Target Management Scheme".





Korean Foundation for Quality (KFQ)

APPENDIX

#### **Third Party Assurance Report**

#### To the Management of Hyundai E&C

The management of Hyundai E&C (hereinafter 'the Company') engaged us to conduct an independent third-party assurance on the 2018 Hyundai E&C Sustainability Report (hereinafter "the Report"). The objective of this assurance is to provide an external verification that statements and data presented in the Report are free from material errors or prejudice, based on accurate and appropriate data collection systems and data reported reflect actual performance. The Report was structured and prepared by the management of the Company, who retains responsibility for the contents and data presented in the Report.

#### Assurance Methodology

The Assurance Provider's assurance work has been planned and performed in accordance with international assurance quidelines of AA1000 Assurance Standard (2008) and GRI Standards. The Report and its contents have been evaluated against the following criteria:

- · Completeness: completeness of information in relation to the Company's operations
- · Materiality: materiality of Report contents in relation to internal and external impacts of the Company's business activities
- · Reliability: reliability and correctness of the information and data presented in the Report

#### **Assurance Scope**

#### The Auditor's assurance engagement covers the following:

- · Provision of assurance on whether information related to policies and management systems presented in the Report are reflected adequately
- · Provision of assurance on whether non-financial data in the Report is presented in full, and free from material errors or prejudice. The review covers the following data sets: environmental data, health & safety data, as well as social data. Verification of non-financial data was conducted based on samples at corporate and site level
- · Review of whether financial data has been derived adequately and correctly from the financial statements audited by an external third-party auditor

The scope of the work undertaken and verification of reported performance (qualitative and quantitative) represents "reasonable assurance" level according to international recognised assurance categorization.

#### **Assurance Process**

In order to provide reliable assurance to interested stakeholders on the information presented in the Report, the Auditor undertook the following procedures during the assurance engagement:

- · Reviewed the Company' processes for determining material issues and adequacy of results of this process
- · Reviewed the Company stakeholder engagement processes and results
- · Reviewed relevant policies, guidelines and management systems at corporate and site level
- · Conducted interviews with operational managers of relevant business units to determine the adequacy of the reported content
- Reviewed the Company approach to, and monitoring systems of, data collection and data management at corporate level
- · Review of underlying reference data on key economic, environmental and social performance
- Sample testing of materiality issues to ascertain the completeness and accuracy of information contained in the Report
- · Review of the Report's compliance against GRI Standards reporting guidelines

#### **Assurance Limitations**

The scope of this assurance engagement is limited to the Company headquarter visited in Korea. The Auditor did not conduct any visits to overseas facilities or projects in which the Company holds interests. Our review of data processes and data reliability included the following data sets: environmental data, health & safety data, as well as social data. Verification of non-financial data was conducted based on samples at corporate level, i.e. site-level data has not been verified individually. Our review of the data processes at operations level was limited to the Company-operated businesses visited. The level of work undertaken leads to reasonable assurance according to internationally recognized assurance categorizations.

#### **Findings**

The auditor reviewed and provided feedback on drafts of the Report and the data presented within. On the basis of the work undertaken, nothing came to our attention to would suggest that the Report does not adequately reflect the Company's non-financial performance.

#### Conclusions

On the basis of our review and in accordance with the terms of reference for our work we provide the following conclusions on the Report. Our conclusions should be read in conjunction with the above section on "Assurance Process" and "Assurance Limitations"

#### Completeness

Does the Report fully reflect the Company's operations and external impacts? How does the Report respond to stakeholder

- · We consider that the information contained in the Report sufficiently covers relevant aspects of the Company's business activities, sustainability management and performance according to the Company's specific business and operations
- · We are not aware of any additional issues of stakeholder interest that are not currently included in the Report's scope and content

Has the Company provided a balanced presentation of material issues concerning the Company's sustainability performance in its operations and business interests?

- The Company regularly conducts materiality test, by which the Company internally and externally measures the materiality of its sustainability related issues and challenges. We have reviewed internal materiality evaluation processes and external stakeholderrelated information and stakeholder engagement process, and consider that the information presented in the Report responds to most stakeholder information needs and requests
- · We are not aware of any material aspects concerning the Company's sustainability performance which have been excluded from the Report.
- · Nothing has come to our attention that causes us to believe that the Company's management has not applied its processes for determining material issues to be included in the Report, as described in "Assurance Methodology"

#### Reliability:

Are the contents and the data presented in the Report correct and free from material errors or misstatements?

- · We have reviewed internal policies, processes and management systems, and verified data samples both on site level and corporate level. Nothing has come to our attention that would cause us to believe that the Report contents and data presented in the Report has not been properly collected, consolidated and reported from information reported at operations level.
- · We have reviewed data collection systems and verified samples of the presented non-financial data. Nothing has come to our attention that causes us to believe that health, safety or environmental data are not free from material errors or misstatements

#### **Further Consideration**

The following issues do not affect our conclusions, but represent recommendation for further improvements to the Company's sustainability performance and reporting there of:

- · Develop group-level sustainability performance targets for the Company's sustainability management and describe yearly progress against these targets in the report
- · Developing measurement systems to quantify the monetary and nonfinancial value of sustainability management activities
- · Further develop systems to quantify and pro-active management of sustainability risks and opportunities throughout the value chain to extend win-win co-operations with suppliers

#### Our independence

With the exception of this work, we have provided no other services relating to collection, preparation and presentation of the Subject Matters and the Report. We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

Sungwon Koo CEO, Nstein Co., Ltd. Singum Coo



Nstein Co., Ltd

As the Auditor for this assurance. Notein Co., Ltd. has developed into a specialized institution with broad expertise in the areas of sustainability management, environmental management, business ethics and CSR since 2013.

APPENDIX

#### **GRI Standards Index**

GRI	GRI Standards	Contents	Page & Remarks	UN SDGs
		Universal Standards (GRI 100)		
	GRI 102-1	Name of the organization	4	
	GRI 102-2	Primary brands, products, and/or services	4-5, 08-15	
	GRI 102-3	Location of organization's headquarters	4, Cover	
-	GRI 102-4	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report	4, 21, 47, 65	
	GRI 102-5	Nature of ownership and legal form	4, 89	
	GRI 102-6	Markets served (including geographic breakdown, sectors served and types of customers/beneficiaries)	4, 21	
	GRI 102-7	Scale of the reporting organization	4-5, 39, 67	
GRI 102: Organizational Profile	GRI 102-8	a. Total number of employees by employment contract and gender b. Total number of permanent employees by employment type and gender c. Total workforce by employees and supervised workers and by gender d. Total workforce by region and gender e. Whether a substantial portion of the organization's work is performed by workers who are legally recognized as self-employed, or by individuals other than employees or supervised workers, including employees and supervised employees of contractors f. Any significant variations in employment numbers (such as seasonal variations in employment in the tourism or agricultural industries)	39, 69	
	GRI 102-9	Describe the organization's supply chain	45	
	GRI 102-10	Significant changes during the reporting period relating to size, structure, or ownership or its supply chain	About this report	
	GRI 102-11	Explanation of whether and how the precautionary approach or principle is addressed by the organization	45, 65	
	GRI 102-12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses	30-31, 49, 65	
-	GRI 102-13	Memberships in associations	79	
	GRI 102-14	Statement from the most senior decision-maker of the organization	2-3	
GRI 102: Strategy	GRI 102-15	Provide a description of key impacts, risks, and opportunities.	10-15, 62	
	GRI 102-16	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation	60	SDG 16
GRI 102: Ethics & Integrity		Report the internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity, such as helplines or advice lines.	61	SDG 16
	GRI 102-17	Report the internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity	61, 70	SDG 16
	GRI 102-18	Governance structure of the organization	56-57	
	GRI 102-19	Report the process for delegating authority for economic, environmental and social topics from the highest governance body to senior executives and other employees.	52, 57	
	GRI 102-20	Report whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental and social topics, and whether post holders report directly to the highest governance body.	58-59	
	GRI 102-21	Report processes for consultation between stakeholders and the highest governance body on economic, environmental and social topics. If consultation is delegated, describe to whom and any feedback processes to the highest governance body	56-57	SDG 16
	GRI 102-22	Report the composition of the highest governance body and its committees	56-59	SDG 5, 16
	GRI 102-23	Report whether the Chair of the highest governance body is also an executive officer (and, if so, his or her function within the organization's management and the reasons for this arrangement)	57	SDG 16
	GRI 102-24	Report the nomination and selection processes for the highest governance body and its committees, and the criteria used for nominating and selecting highest governance body members	57	SDG 5, 16
	GRI 102-25	Report processes for the highest governance body members  Report processes for the highest governance body to ensure conflicts of interest are avoided and managed. Report whether conflicts of interest are disclosed to stakeholders	56	SDG 16
	GRI 102-26	Report the highest governance body's and senior executives' roles in the development, approval, and updating of the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental and social impacts.	56-57	
	GRI 102-27	Report the measures taken to develop and enhance the highest overnance body's collective knowledge of economic, environmental and social tropics.	57	
	GRI 102-28	Report the processes for evaluation of the highest governance body's performance with respect to governance of economic, environmental and social topics	59	
GRI 102: Governance	GRI 102-29	and social topics  and social topics  for the highest governance body's role in the identification and management of economic, environmental and social impacts, risks, and opportunities. Include the highest governance body's role in the implementation of due diligence processes	58-59	SDG 16
	GRI 102-30	Report the highest governance body's role in reviewing the effectiveness of the organization's risk management processes for economic, environmental and social topics.	58-59	
	GRI 102-31	Report the frequency of the highest governance body's review of economic, environmental and social impacts, risks, and opportunities.	58-59	
- - -	GRI 102-32	Report the highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all	58-59	
	GRI 102-33	material Aspects are covered.  Report the process for communicating critical concerns to the highest governance body.	58-59	
	GRI 102-34	Report the nature and total number of critical concerns that were communicated to the highest governance body and the mechanism(s)	40, 58	
	GRI 102-35	used to address and resolve them.  Report the remuneration policies for the highest governance body and senior executives	59, 70	
	GRI 102-36	Report the process for determining remuneration. Report whether remuneration consultants are involved in determining remuneration and	59, 70	
	GRI 102-37	whether they are independent of management. Report any other relationships which the remuneration consultants have with the organization.  Report how stakeholders' views are sought and taken into account regarding remuneration	59	SDG 16
	GRI 102-38	Report the ratio of the annual total compensation for the organization's highest-paid individual in each country of significant operations to the	70	223.0
	GRI 102-39	median annual total compensation for all employees in the same country.  Report the ratio of percentage increase in annual total compensation for the organization's highest-paid individual in each country of significant operations to the median percentage increase in annual total compensation for all employees in the same country,	70	

GRI	GRI Standards	Contents	Page & Remarks	UN SDGs
		Universal Standards (GRI 100)		
	GRI 102-40	List of stakeholder groups engaged by the organization	53	
	GRI 102-41	Percentage of employees covered by collective bargaining agreements	41	SDG 8
GRI 102: Stakeholder	GRI 102-42	Basis for identification and selection of stakeholders with whom to engage	53-54	
Engagement	GRI 102-43	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	53-54	
	GRI 102-44	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	53-55	
	GRI 102-45	a. List all entities included in the organization's consolidated financial statements or equivalent documents b. Whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report	67	
-	GRI 102-46	a. Explain the process for defining the report content and the Aspect Boundaries b. Explain how the organization has implemented the Reporting Principles for Defining Report Content	54-55	
	GRI 102-47	List all the material Aspects identified in the process for defining report content	55	
	GRI 102-48	Explanation of the effect of any re-statements	About this report	
	GRI 102-49	Significant changes from previous reporting periods in the Scope and Aspect Boundaries	N/A	
	GRI 102-50	Reporting period	About this report	
ODI 400 I dendificat	GRI 102-51	Date of most recent previous report	2017 7	
GRI 102: Identified Material Aspects & Boundaries	GRI 102-52	Reporting cycle	1	
-	GRI 102-53	Contact point for questions regarding the report or its contents	Cover	
	GRI 102-54	'In accordance' option the organization has chosen	74-77	
	GRI 102-55	GRI Content Index for the chosen option	74-77	
		Reference to the External Assurance Report, if the report has been externally assured. GRI recommends the use of external assurance but it is not a requirement to be 'in accordance' with the Guidelines	72-73	
	GRI 102-56	a. Organization's policy and current practice with regard to seeking external assurance for the report b. If not included in the assurance report accompanying the sustainability report, report the scope and basis of any external assurance provided c. Relationship between the organization and the assurance providers d. Whether the highest governance body or senior executives are involved in seeking assurance for the organization's sustainability report	72-73	
GRI 103: Management Approach	GRI 103-1 GRI 103-2 GRI 103-3	2 b. How the organization manages the material Aspect or its impacts 54-55		
		Top-specific Standards (GRI 200, 300, 400)		
ECONOMIC PERFORMA	ANCE (GRI 200)			
	GRI 201-1	Direct economic value generated and distributed, including revenues, operating costs, employee wages and benefits, payments to providers of capital, payments to government	21, 53	SDG 2, 5, 7,
	GRI 201-2	Financial implications and other risks and opportunities for the organization's activities due to climate change	30-31	SDG 13
GRI 201: Economic Performance	GRI 201-3	Coverage of the organization's defined benefit plan obligations	Operating retirement pensior plans (defined-benefit & defined-contribution type)	n
	GRI 201-4	Financial assistance received from government	N/A	
GRI 202: Market	GRI 202-1	Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation	N/A	
Presence	GRI 202-2	Propertion fo senior management hired from the local community at significat locations of operation	N/A	
GRI 203: GRI 203-1 Development and impact of infrastructure investments and services supported		46-49	SDG 2, 5, 7	
Indirect Economic Impacts	GRI 203-2	Significant indirect economic impacts, including the extent of impacts	53	SDG 8, 10,
GRI 204: Procurement Practices	GRI 204-1	Proportion of spending on local suppliers at significant locations of operation	43-44	SDG 12
	GRI 205-1	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	45, 63, 65	SDG 16
GRI 205: Anti- corruption	GRI 205-2	Communication and training on anti-corruption policies and procedures	60-61	SDG 16
·	GRI 205-3	Confirmed incidents of corruption and actions taken	70	SDG 16

#### **GRI Standards Index**

GRI	GRI Standards	Contents	Page & Remarks	UN SDGs
ENVIRONMENTAL PERF	DRMANCE (GRI 300)			
	GRI 301-1 Materials used	by weight or volume	69	
GRI 301: Materials	GRI 301-2 Percentage of r	materials used that are recycled input materials	37	
	GRI 301-3 Percnetage of p	products sold and their packaging materials that are reclaimed by category	36	SDG 8, 12
	GRI 302-1 Energy consum	nption within the organization	68	SDG 7, 8, 12,
	GRI 302-2 Energy consum	nption outside of the organization	68	SDG 7, 8, 12,
GRI 302: Energy	GRI 302-3 Energy intensity	1	68	SDG 7, 8, 12,
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GRI 303: Water	GRI 303-2 Water sources	significantly affected by withdrawal of water	36, 68	SDG 6
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	GRI 304-1 Location and si areas	ize of land owned, leased, managed in or adjacent to protected areas and areas of high biodiversity value outside protected	37	
GRI 304: Biodiversity	GRI 304-2 Description of soutside protect	significant impacts of activities, products and services on biodiversity in protected areas and areas of high biodiversity value ed areas	37	
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	GRI 304-4 Total number of extinction risk	f IUCN RED list species and national conservation list species with habitats in areas affected by operations, by level of	37	
	GRI 305-1 Direct greenhou	use gas (GHG) emissions (Scope 1)	30	SDG 3, 12, 13 14, 15
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	GRI 305-5 Reduction of G	reenhouse gas (GHG) emissions	28, 31	SDG 13, 14, 1
	GRI 305-6 Emissions of oz	zone-depleting substances (ODS)	N/A	SDG 3, 12
	GRI 305-7 NOx, SOx and	other significant air emissions	N/A	SDG 3, 12, 14 15
	GRI 306-1 Total water disc	charge by quality and destination	68	
	GRI 306-2 Total weight of	waste by type and disposal method	37	SDG 3, 6, 12
GRI 306:	GRI 306-3 Total number a	nd volume of significant spills	N/A	SDG 3, 6, 12,
Effluents & Waste -	GRI 306-4 Weight of trnas AND VIII, and p	ported, imiported, exported, or treated waste deemed hazardous under the terms of the BASEL Convention Annex I, II, III, ercentage of transported wasted shipped internationally	N/A	
	GRI 306-5 Identity, size, pr discharges of w	rotected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's vater and runoff	37	
GRI 307: Environmental Compliance	GRI 307-1 Monetary value regulations	onetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and		SDG 8, 16
GRI 308: Supplier	GRI 308-1 Percentage of	new suppliers that were screened using enivronmental criteria	45, 70	
Environmental Assessment	GRI 308-2 Significant act	ual and potential negative environmental impacts in the supply chain and actions taken	45, 70	SDG 15

GRI	GRI Standards	Contents	Page & Remarks	UN SDO
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	GRI 401-1	Total workforce by employment type, employment contract and region	39	SDG 5,
GRI 401: Employment	GRI 401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	40-41	SDG 8
Linploymont	GRI 401-3	Return to work and retention rates after parental leave, by gender	41	SDG 5,
GRI 402: Labor/ Management Relations	GRI 402-1	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	41	SDG 8
		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	33	SDG
GRI 403: Occupational Health	GRI 403-2	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	33, 68	SDG 3
and Safety	GRI 403-3	Workers with high incidence or high risk of diseases related to their occupation	33-34	SDG 3
	GRI 403-4	Health and safety topics covered in formal agreements with trade unions	65	
	GRI 404-1	Average hours of training per year per employee by gender, and by employee category	40	SDG
GRI 404: Training & Education		Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	40	SDG
maining & Education		Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	41	SDG 5
GRI 405: Diversity	GRI 405-1	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership and other indicators of diversity	40	SDG 5
and Equal Opportunity		Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	41	SDG 8,
GRI 406: Non- discrimination		Total number of incidents of discrimination and actions taken	65, 70	0500
GRI 407: Freedom of Association and Collective Bargaing		Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights	45, 65, 70	SDG
GRI 408: Child Labor	GRI 408-1	Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	45, 65, 70	SDG 8
GRI 409: Forced or Compulsory Labor	GRI 409-1	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	45, 65, 70	SDG
GRI 410: Security Practices	GRI 410-1	Percentage of security personnel trained in the organization's human rights policies or procedures that are relevant to operations	64	SDG
GRI 411: Rights of Indigenous Peoples	GRI 411-1	Total number of incidents of violations involving rights of indigenous people and actions taken	64-65, 70	
	GRI 412-1	Total number and percentage of operations that have been subject to human rights reviews or impact assessments	45, 65, 70	
GRI 412: Human Rights	GRI 412-2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	64	
Assessments	GRI 412-3	Total number and percentage of significant invesetment agreements and contracts that include human rights clauses of that underwent human rights screening	64, 70	
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Communities	GRI 413-2	Operations with significant actual and potential negative impacts on local communities	47, 49	
GRI 414:	GRI 414-1	Percentage of new suppliers that were screened using labor practices criteria	45, 70	SDG 5,
Supplier and Social Assessment	GRI 414-2	Significant actual and potential negative impacts for labor practices in the supply chain and actions taken	45, 70	SDG 8
GRI 415: Public Policy	GRI 415-1	Total value of political contributions by country and recipient/beneficiary	48, 69	SDG
GRI 416:		Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures	33-34	
Customer Health and Safety	CDI /16 2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes	N/A	
	GRI 417-1	Type of product and service information required by the organization's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements	N/A	SDG
GRI 417: Marketing and Labeling	GRI 417-2	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	N/A	SDG
	GRI 417-3	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes	N/A	
GRI 418: Customer Privacy	GRI 418-1	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	N/A	
GRI 419: Socioeconomic	GRI 419-1	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	67	SDG

\* SDG https://sustainabledevelopment.un.org/index.php?menu=1300

#### **Global Sustainability Leadership**

#### Sustainable Valu

#### Industry leader of DJSI\* for Five Consecutive Years

\* Dow Jones Sustainability Index

Hyundai E&C has been assessing its internal and external sustainability management capabilities and promoting internal improvement activities by participating in the Dow Jones Sustainability Index (DJSI). By joining DJSI Korea in 2009 and joining DJSI World in 2010 for the first time, and continuing institutional improvement and sustainable management activities, Hyundai E&C was honored to be selected as the Industry Leader of the Construction & Engineering Industry in 2017, following 2016, 2015, 2014 and 2013. It is the first in the global construction industry for a company to become the Industry Leader for five consecutive years. This meaningful achievement is proving that Hyundai E&C has been highly recognized as the global leader of construction industry. The DJSI is the investment index developed by S&P Dow Jones Indices, the largest financial information company, and RobecoSAM, a Swiss assessment company. It annually evaluates the economic, environmental, and social sustainability of top 2,500 companies in market capitalization by industries and announces the evaluation result.

	ROBECOSAM Sustainability Award Gold Class 2017
2017	DJSI INDUSTRY LEADER Honored the Industry Leader for five consecutive years (2013~17)
2011	DJSI INDUSTRY LEADER Honored the Industry Leader for the first time
2010	DJSI WORLD Listed the Index for the first time
2009	DJSI KOREA Listed the Index for the first time



Rusiness Value



## Quality Excellence Award for Three Consecutive Years at Singapore BCA\* Awards

\* BCA: Building and Construction Authority

Platinum in Quality Excellence Award (QEA) for three consecutive years

Platinum in Quality Excellence Award (QEA) (QEA)

Platinum and Merit in Construction Excellence Award (CEA)

Awarded for the First Time as a Korean Company Construction Productivity Award (CPA)

Hyundai E&C enhanced its position as a global construction company by becoming the first Korean construction company to receive the Platinum in Quality Excellence Award for three consecutive years at 2018 Singapore BCA Awards held by the Singaporean government; Singapore BCA Awards is the most authoritative construction-related award that evaluates projects completed or being executed in the country in various areas including construction, environment-friendliness, engineering, safety, and quality. Since 1997, Hyundai E&C has won total 27 awards including BCA Green Mark Awards with its outstanding construction capability.

#### Environmental & Social Value

## CDP\* Carbon Management Honors Club for Four Consecutive years

\* Carbon Disclosure Project

In 2017, Hyundai E&C was selected as a member of 'Carbon Management Honors Club' which is an award given to outstanding companies for four consecutive years following 2016, 2015 and 2014 and 'Carbon Management Sector Winners' in the industrial material sector for six consecutive years, from Carbon Disclosure Project (CDP), the most authoritative environmental index of the world; the CDP Index is one of the most reliable sustainability management index in the world. It annually evaluates, analyzes, and reports the climate change action of key listed companies. In this evaluation, Hyundai E&C accomplished the 'Leadership A' for high score in climate change response strategy, GHG reduction efforts, and GHG management.



Selected as a Member of CDP Carbon Management Honors Club for Four consecutive Years (1st place overall), Carbon Management Sector Sector Winners for six consecutive Years (No. 1 in the industry)

2014 Selected as a Member of CDP Carbon Management Honors Club (1st place overall), Carbon Management Sector Sector Winners (No. 1 in the industry)

Selected as a Member of Carbon Disclosure Sector (Industrial material) Leaders

Received Special Award of Carbon Management for New Participation

#### **Major Awards and Accolades**

#### 2018 Major Awards

Award	Description	Host / Provider
BCA Awards 2018	Platinum (Quality Excellence Award) Merit (Construction Excellence Award)	BCA
2018 Money Today Overseas Construction Awards	Grand Prize (MOLIT* Minister's Prize)	Money Today
2018 Annual Asia Economy Apartment Brand Awards	Smart Home category	Asia Economy
2018 Money Today Korea Residential Service Awards	Engineering & Design category	Money Today
2018 Hall of Fame Housing Brand Grand Prize	Grand Prize (Quality category)	Newsway
2018 Well-being Apartment Awards	Grand Prize (Customer Satisfaction)	Hankyung Business

<sup>\*</sup> MOLIT: Ministry of Land, Infrastructure and Transport

#### 2017 Major Awards

Award	Description	Host / Provider
2017 Dow Jones Sustainability Index	Industry Leader, Construction & Engineering Industry	Dow Jones Indices, RobecoSAM
BCA Awards 2017	Platinum (Quality Excellence Award category)	BCA
2017 Money Today Overseas Construction Awards	Grand Prize (MOLIT Minister's Prize)	Money Today
2017 Annual Asia Economy Apartment Brand Awards	High-class category	Asia Economy
2017 Money Today Korea Residential Service Awards	Engineering & Design category	Money Today
2017 Hall of Fame Housing Brand Grand Prize	Grand Prize (Safety category)	Newsway
2017 Korea's Representative Apartment Awards	Grand Prize (Housing Value category)	Hankook Economy TV
2017 HanKyung Business Well-being Apartment Awards	Grand Prize (Space Innovation Caregory)	HanKyung Business
2017 First-half HanKyung Residential Culture Awards	Grand Prize (Flat Surface Innovation)	HanKyung
2017 Korea Joongang Daily JoinsLand Eco-friendly Construction Industry Awards	MOLIT Minister's Prize	Joongang Daily
2017 Korea High-efficiency, Eco-friendly Housing and Building Material Awards	MOE* Minister's Prize	Energy Economic News
2017 Money Today Korea Luxury Housing Awards	Best of Best	Money Today
12nd Asia Construction Awards	Overall Grand Prize (Win-win Cooperation & Management Support category)	Asia Economy
Favorite Brand for Sale	1st Place	Doctor Apartment
Brand Reputation	1st Place	Korea Corporate Research Institute
THE PROUD	2017 Korean Masterpiece (Environment-friendly Housing)	Korea Management Association
2017 Etoday Smart Building Grand Prize	Overall Grand Prize	Etoday
2017 Aju Economy Construction Awards	Grand Prize (Overseas Construction category)	Aju Economy
2017 Asia Today Green Construction Awards	MOLIT Minister's Prize (Grand Prize, Housing Business category)	Asia Today
6th eDaily Construction Industry Awards	Overall Grand Prize (Housing category)	eDaily
2017 Second-half HanKyung Residential Culture Awards	Grand Prize (Brand category)	HanKyung
2017 Herald Economy Green Residence Awards	Overall Grand Prize	Herald Economy
10th Green Housing Awards	Premium Housing Grand Prize	Hankook Daily
The 8th Green Construction Award	Civil Grand Prize	The Seoul Shinmun
13th Korea Civil Engineering & Construction Technology Awards	Overall Grand Prize (Civil category)	Maeil Business News Korea
2017 Korea Construction Award	Overall Grand Prize	The Dong-A Ilbo

<sup>\*</sup> MOE: Ministry of Environment

#### Memberships

Korean Society of Civil Engineers	The Society of Air-conditioning and Refrigerating Engineers of Korea	
Korean Institute of BIM	Korea Plant Industries Association	
The Korea Railway Association	Korea Society of Geothermal Energy Engineers	
Construction Association of Korea	Korea Federation of Construction Contractors	
Architectural Institute of Korea	buildingSMART Korea	
International Contractors Association of Korea	Korea Management Association	

<sup>\*</sup> Partial list: 75 business or academic memberships in total

#### Acknowledgemer

#### Sustainability Management Steering Group

Comprehensive	Kim Heung-Keun	Business Innovation Team
Comprehensive	Oh Jeong-Hun	
Economic	Kang Myung-Jun	Procurement Planning Team
Economic	Jung Hoe-Kyung	Compliance Management & Administration Team
Environmental	Kang Young-Min	Green Environment Team
Environmental	Park Joon-Yong	R&D Planning Team
	Kim Hyo-Jung	Human Resources Planning Team
Social	Kim Se-Won	General Affairs Team
	Hong Se-Hwa	Safety Planning Team

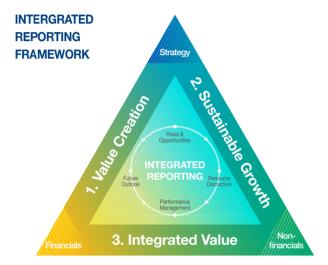
#### Relevant Teams

Kwon Sung-Jun	General Affairs Team	Lee Kyu-Heon	General Affairs Team
Kwon Young-Pil	RM Team	Lee Yo-Soo	Business Strategy Team
Kwon Jeong-Jin	CS Center	Lee Joong-Jae	Human Resources Supporting Team
Kim Dae-Wang	Business Policy Team	Jang Eun-Jong	Investor Relations Team
Kim Sung-Hoon	Raw Material Procurement Team	Jung Joon	Building Works Design 2 Team
Kim Su-Jung	Culture PR Team	Jung Hak-Pyung	Global Marketing Management & Administration Team
Kim Yoon-Tae	Quality Management Planning Team	Hwang Seon-Young	Culture PR Team
Moon Ji-Young	New Market Development Team		

#### **INTERGRATED REPORTING**

#### INTEGRATED REPORTING

Hyundai E&C has been publishing its annual sustainability report in an integrated format since 2011 to disclose the economic, environmental, and social values to the stakeholders in faithful and balanced manner; the integrated reporting refers to a method of sustainability reporting that covers both financial and non-financial performances. It is a way to improve the understanding of stakeholders about the interrelationship of economic, environmental and social aspects. Hyundai E&C has participated in the Integrated Reporting Pilot Program of the International Integrated Reporting Council (IIRC) and has lead the global sustainability management.



#### 01. Value Creation

- · Hyundai E&C's value creation process
- · Future outlook based on the analysis of megatrends
- · Strategies on a new growth business and new market entrance

#### 02. Sustainable Growth

- · Establishment of mid- to long-term strategies on sustainability management
- · Activities and accomplishments in economic, environmental, and social sectors
- · Catalogue of sustainability management targets and KPIs

#### 03. Integrated Value

- · Connection between financial information and non-financial information
- $\cdot$  Analysis on the efficiency of sustainability management activities
- · Report of the sales increase and cost reduction cases due to sustainability management

#### Contact Us

The Hyundai Engineering & Construction Sustainability Report is also available on our website (http://en.hdec.kr). Should you want more information or have any enquiries, please do not hesitate to contact us via the contact information below. We appreciate your feedback.

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