

CREATING SUSTAINABLE HABITAT FOR HUMAN



2022
HYUNDAI ENGINEERING &
CONSTRUCTION
SUSTAINABILITY REPORT

HDEC SUSTAINABILITY

The world is threatening existential sustainability due to global climate change, population growth, energy and water shortages and resource depletion.

Under the banner of ‘Creating Sustainable Habitat for Human’, Hyundai E&C is starting a new challenge of providing global construction and solutions to global problems by providing eco-friendly construction products and differentiated technology services.



CREATING SUSTAINABLE HABITAT FOR HUMAN

OVERVIEW	02	Message from the CEO
	04	Company Overview
	06	HDEC Future Strategy
	16	HDEC Sustainability Strategy

ABOUT THIS REPORT

Reporting Characteristics

This report is the thirteenth Sustainability Report published by Hyundai E&C, which introduces its 4P-based sustainable management strategy (Prosperity, Planet, People, Principle), and focuses on the long-term targets against 2030, eight propelling strategies, major activities and achievements in economic, environmental and social aspects to realize it. Furthermore, we aimed to enhance the understanding of stakeholders by reinforcing action strategies and performance indicators reporting for sustainable value improvement.

4 Propelling Divisions		8 Propelling Strategies		Key Sustainability Agenda			
<div>HDEC PROSPERITY</div> <div>Right Change Created by Hyundai E&C</div>	24		STRATEGY 1	Creating Corporate Value through Future Strategy	26	2030 Future Strategy	26
						Creating Sustainable Corporate Value	28
<div>HDEC PLANET</div> <div>Right Move for the Earth Led by Hyundai E&C</div>	34		STRATEGY 2	Creating Customer Value through Technological Innovation	30	Technological Innovation	30
						Advancing Future Technology	32
<div>HDEC PEOPLE</div> <div>Right Direction for Shared Growth Accompanied by Hyundai E&C</div>	44		STRATEGY 3	Maximizing Environmental Efficiency through Carbon Neutral	36	Carbon Neutral Efforts to Response to Climate Change	36
						Reinforcing Climate Change Response Organization	37
<div>HDEC PRINCIPLE</div> <div>Right Principle Implemented by Hyundai E&C</div>	62		STRATEGY 4	Minimizing Environmental Impact through Eco-friendly Management	40	Establishing and Implementing Climate Change Strategy	37
						Internalizing Climate Change Risk Management	38
			STRATEGY 5	Realizing Safe Workplaces and Cultivating Innovative Talents	46	Climate Change Indicators and Reduction Targets	39
						Strengthening the Eco-friendly Management System	40
			STRATEGY 6	Enhancing Value Chain Capability and Creating Values for Local Communities	40	Minimizing Environmental Impact	42
						Protecting Biodiversity	43
			STRATEGY 7	Establishing Sound Governance and Ethical & Compliance Management System	46	Strengthening the Safety Management System	46
						Spreading Smart Safety and OHS Culture	48
			STRATEGY 8	Implementing Integrated Risk Management and Protecting Human Rights in Value Chain	50	Cultivating Innovative Talents	50
						Pursuing Work-life Balance	52
						Fair Evaluation and Compensation	53
						Sustainable Shared Growth	54
						Strengthening Supply Chain Management	57
						Creating Community Value	58
						Hyundai E&C Social Contribution Story	60
						Governance Principles of Hyundai E&C	64
						Independence, Expertise and Diversity of the Board	66
						Operation, Evaluation and Compensation of the Board	67
						Ethics and Compliance	68
						Reinforcing Ethics and Compliance Management	69
						Integrated Risk Management	70
						Hyundai E&C Human Rights Management	72
						Major Human Rights Assessment and Measures	74
						Potential Human Rights Issue Management	75

Reporting Standards

This report complies with the Comprehensive option of the Global Reporting Initiative (GRI) Standards 2016 as well as newly revised GRI Standards 2021. It is reflecting the ten principles of the UN Global Compact and the main agenda of ISO 26000, SASB, TCFD and WEF Stakeholder Capitalism Metrics as well. For the financial performance, Hyundai E&C reports its financial data based on the Korean International Financial Reporting Standards (K-IFRS).

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 January 2021 to 31 December 2021. In addition, we partially included activities and performances until June 2022 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.

Third Party Assurance

In order to secure the credibility and fairness of the writing process and contents of the report, a third-party assurance (in Type 2 basis), was conducted by an external, independent specialized agency and the results are available on p. 84~85 of this report.

2022 COVER STORY

As a global sustainability management leader, Hyundai E&C has been leading the value creation of the construction industry. The cover visualized Hyundai E&C's sustainability management strategy which expands into four areas that pursue economic prosperity, environmental stewardship, social progress and sustainability principles.

INTERACTIVE

This report is designed as an interactive PDF that allows you to navigate to related pages within the report and link to related web pages.

MESSAGE FROM THE CEO

We Build a Sustainable Future with Pride As a Global Construction Leader.

Hyundai E&C Towards a Sustainable Company

Since its foundation in 1947, Hyundai E&C has created global value by successfully carrying out 873 overseas projects in 62 countries around the world based on a solid business model and proven corporate competitiveness. Now, Hyundai E&C is emerging as a genuine global construction leader doing its best to fulfill its social responsibilities.

Despite the global economic uncertainty caused by the prolonged global COVID-19 pandemic in 2021, Hyundai E&C has secured stable orders and continues to grow based on a solid financial structure. Hyundai E&C recorded about KRW 30 trillion in orders which are 11.5% increase from the previous year, thanks to orders from overseas projects in Peru, Saudi Arabia, and Singapore, as well as the record-breaking record for the city redevelopment project for three consecutive years.

Now, Hyundai E&C aims to realize new future possibilities through constant challenges beyond simple economic performance. Hyundai E&C will lead changes in the industry as a Total Solution Creator by advancing EPC competitiveness, which is our core field, and expanding the value chain from investment, planning, design, construction, and operation. In particular, we plan to strengthen our core competitiveness in the future by focusing on new growth businesses, including energy conversion projects such as offshore wind power, hydrogen, and new & renewable energy brokerage transactions, carbon capture, and SMR (Small Modular Reactor) to respond to climate change, UAM (Urban Air Mobility) and smart cities.

Global Sustainability Leadership

Hyundai E&C launched a company-wide consultative body in October 2020, is making efforts to internalize sustainability management, and is consolidating the ESG implementation system by reviewing/approving major issues at the Corporate Governance & Transparent Management Committee within the BoD. In terms of responding to the global climate change crisis, Hyundai E&C announced the “Coal-Exit Declaration” in 2021 and is preparing to declare the first SBTi-based “Carbon Neutral Declaration” in the domestic construction industry within the second half of 2022 (target for 2045). This sustainability report is also based on the World Economic Forum (WEF)’s 4P (Prosperity/Planet/People/Principle) implementation system, which is the direction of ESG information disclosure.

As a global corporate citizen, Hyundai E&C faithfully implements international standards and recommendations such as the Sustainable Development Goals (UN SDGs), the Universal Declaration of Human Rights, and the OECD Guidelines. Meanwhile, we will pave the way for the company and society to grow together through safety and quality management, win-win cooperation with the supply chain, and transparent and fair ethical and compliance management. Hyundai E&C also joined UNGC and TCFD membership, supports the principles of sustainability information disclosure (WEF, SASB, TCFD), and will expand the way of growth and communication with various stakeholders (shareholders, customers, suppliers, local communities, employees, etc.).

Hyundai E&C promises to faithfully fulfill its mission as a global construction leader and its roles and responsibilities as a member of the international community, and kindly ask for your loving support and encouragement on Hyundai E&C’s journey.



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CEO of Hyundai E&C Yoon Young-Joon

Young Joon yoon







COMPANY OVERVIEW

TOTAL SOLUTION CREATOR

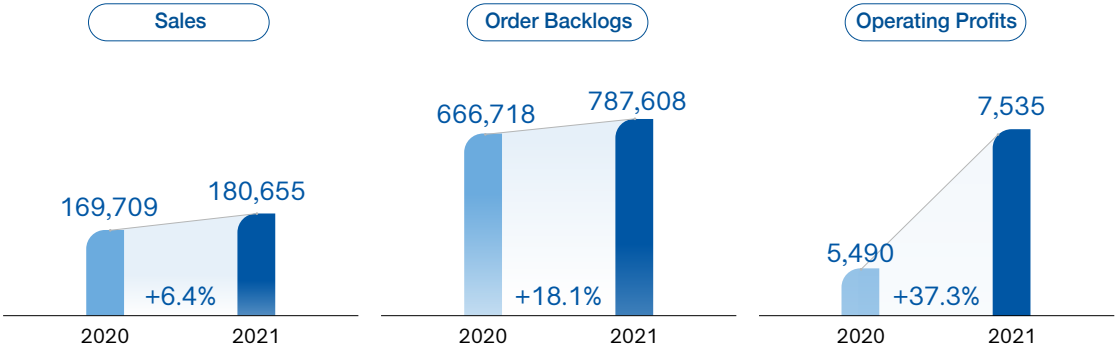
Hyundai E&C creates new value and builds a better world with creative ideas and passion, offering a greater future with constant innovations and bold initiatives

COMPANY PROFILE

Company Name	Hyundai Engineering & Construction	
Date of Foundation	May 1947	
Credit Rating	AA-	
Number Of Projects Performed (Cumulative)	873 Projects	

FINANCIAL PERFORMANCE

(Unit : KRW 100 million)



Since its foundation in 1947, Hyundai E&C has opened a new horizon in the global construction industry for the past 75 years. After the first overseas project in 1965 to construct Pattani-Narathiwat Highway in Thailand, Hyundai E&C has successfully carried out 873 projects in 62 countries and has leaped forward as a global construction leader based on its accumulated technology and proven business execution capabilities. As of April 2022, a total of 6,521 employees are working at 191 domestic and 64 overseas sites centered on 3 domestic branches as well as 31 overseas branches and offices.



Since 1947

75 Years



Countries Experienced

62 Countries



Global Project

873 Projects



World Index of DJSI

12 Consecutive Years

EUROPE & CIS

15

ASIA

333

NORTH AMERICA & PACIFIC

56

LATIN AMERICA

14

ANTARCTICA

2

AFRICA

40

MIDDLE EAST

413



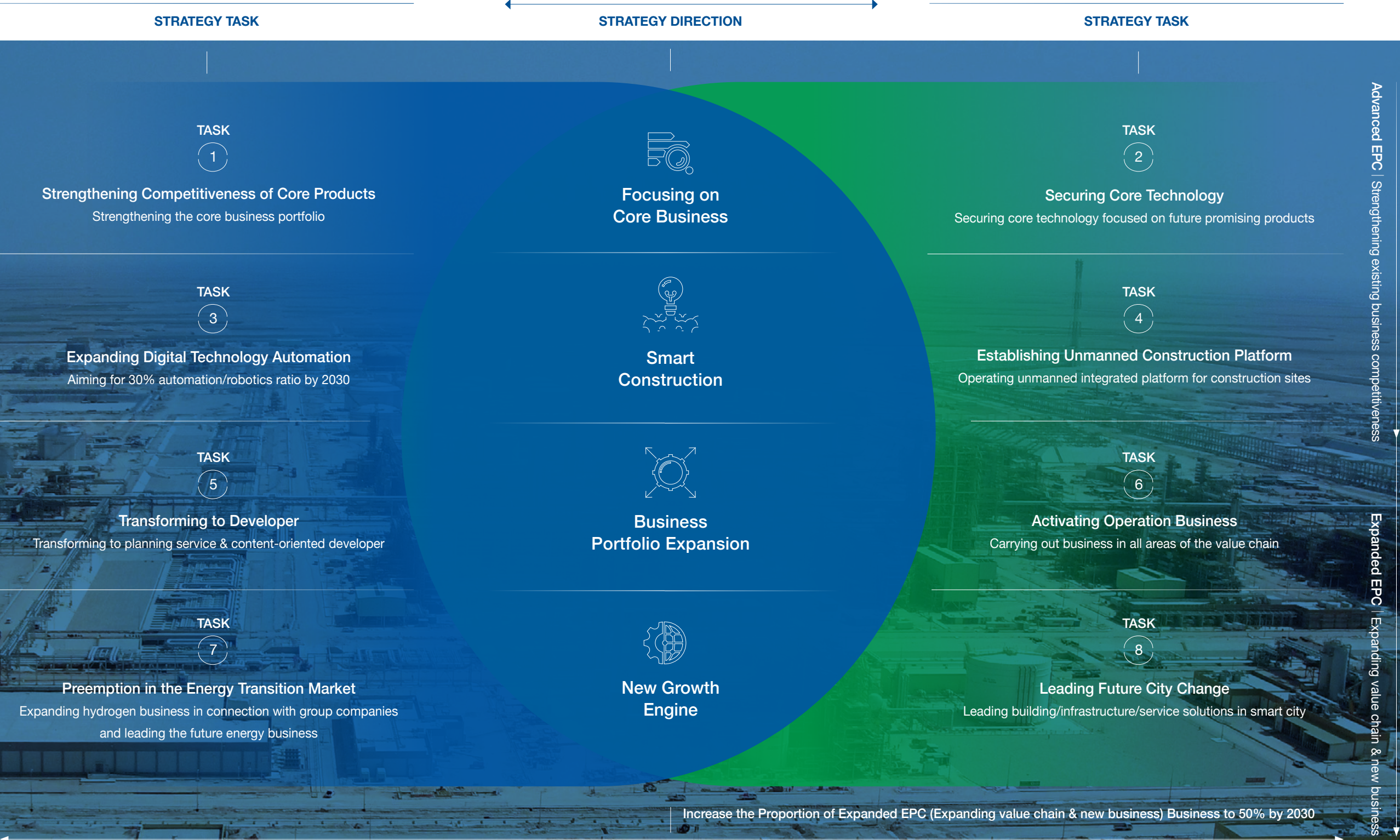
HDEC FUTURE STRATEGY

HDEC 2030 FUTURE STRATEGY

After the COVID-19 pandemic, the world is evolving into an era of rapid change centered on the two axes of energy conversion and digital transformation. The construction industry is facing new crises such as productivity policies, declining profitability, and challenges from heterogeneous industries. To respond to global changes, Hyundai E&C has established four strategic directions for each business model and is promoting the 2030 future strategy including eight strategic tasks.

TOTAL SOLUTION CREATOR

Hyundai E&C is transforming from a Constructor centered on orders and construction to a Total Solution Creator that creates added value in all stages of a project.





HDEC FUTURE STRATEGY

INFRASTRUCTURE WORKS

We Challenge Infinite Possibilities
on the Stage of the World.

Hyundai E&C is implementing the UN Sustainable Development Goals through the Infrastructure Works:



UN SDG 09
Industry, Innovation and Infrastructure



UN SDG 06
Clean Water and Sanitation



Al Zour LNG Terminal Project, Kuwait

Hyundai E&C Succeeded in Complete Purification of Large-scale Dioxin-Contaminated Soil for the First Time in Korea



Dioxin Contaminated Soil Cleaning Construction

In May 2022, Hyundai E&C successfully completed the contaminated soil purification project for 11,031m³ of the US return base ‘Camp Market’ located in Bupyeong, Incheon in 2 years and 11 months. As this project is being carried out in the middle of a dense city, there was concern among citizens about exposure to dioxin during the purification process. However, Hyundai E&C has achieved complete dioxin-contaminated soil purification by innovatively lowering it to 2.18 picograms, which is 1/50 of the original purification goal of 100 picograms*, by using a combination of “In-Pile Thermal Desorption (IPTD)” and “Thermal Oxidation”. Starting with ‘Unsanitary Landfill Contaminated Soil Cleaning Construction of Gwangju City’ in 2001, Hyundai E&C has concentrated its efforts on securing world-class soil purification technology. As a result, 30 related patent registrations have been completed and 3 environmental new technology certifications have been acquired.

* 1 Picogram: 1 trillionth of 1g

Advanced EPC Strengthening Existing Business Competitiveness



Key competitiveness | Ports, underground spaces, long span bridge

Based on the cutting-edge technology and abundant business experience accumulated over 75 years, Hyundai E&C’s Infrastructure Works Division has successfully carried out national land development projects, ports, railways, roads and bridges, water environment and water treatment business. The division is strengthening its business competitiveness by establishing underground spaces, marine ports, and floating and fixed offshore wind power foundation structures as core businesses, and is leading the global construction market as a global Infrastructure Top Tier by challenging new eco-friendly business fields such as offshore wind power and biogas and pioneering new markets in Latin America and Europe.

Expanded EPC Expanding Value Chain & New Business



New growth areas | Offshore wind, hydroelectric power generation, bio-energy, polluted soil purification

Based on the increasing importance of issues such as low-carbon and eco-friendliness due to the acceleration of climate change worldwide, the infrastructure sector is witnessing a rapid expansion of the new and renewable energy and eco-friendly construction markets. In particular, predictions that infrastructure markets of major countries/areas of the world (US, EU, South America) will expand as a means of post-pandemic revitalization and growth of economies are resulting in the opening of new paths to new markets and business areas. In response to the demands of the times for low-carbon, eco-friendly construction, we plan to lead new eco-friendly businesses such as offshore wind power and bio-energy.



HDEC FUTURE STRATEGY

BUILDING WORKS

We Build Future Building Facilities that Lead the 4th Industrial Revolution.

Hyundai E&C is implementing the UN Sustainable Development Goals through the Building Works:

11

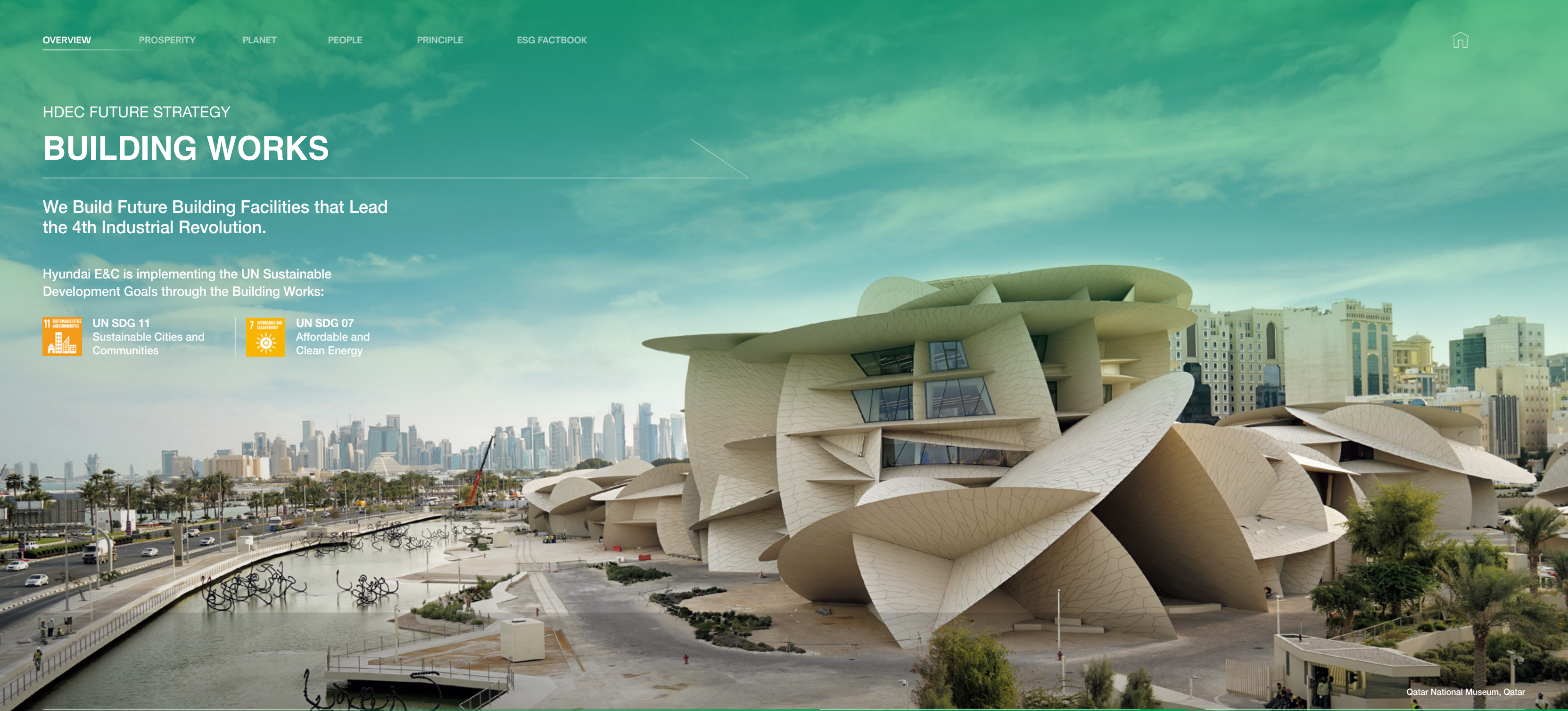
SUSTAINABLE CITIES AND COMMUNITIES

UN SDG 11
Sustainable Cities and Communities

7

AFFORDABLE AND CLEAN ENERGY

UN SDG 07
Affordable and Clean Energy



Qatar National Museum, Qatar

Hyundai E&C Advances the Era of Modular Construction Based on 'New Factory-made Construction Method'



Designation of New Construction Technology for PC Double Wall Method

In December 2021, Hyundai E&C developed the ‘End Reinforced PC Double Wall Complex Construction Method (hereinafter the PC Double Wall Method)’ and was designated as a new construction technology by the Ministry of Land, Infrastructure and Transport (No. 920). New construction technology is meaningful in that it can gain a monopoly position in the construction market. As the Ministry has recognized that the technology is the first in Korea, or that it has high inventive step and field applicability. As part of OSC (Off Site Construction) technology that converts on-site production method to factory production method, The PC double wall method is a method of forming one wall by connecting two PC (Pre Cast) wallboards connected to each other by transporting them to the site after manufacturing them in a factory. Hyundai E&C expects that the on-site application of this construction method will make work more efficient and shorten the construction period by about 30% compared to the existing construction method, as well as reduce safety accidents by simplifying the process.

Advanced EPC

Strengthening Existing Business Competitiveness



Key competitiveness | Project execution and design management competency

Hyundai E&C's Building Works Division prides itself on its ability to turn cutting-edge spaces, in which people, data, the environment, and technology exist in peaceful harmony, into reality through its infinite imagination. Hyundai E&C, which is leading eco-friendly construction paradigms (e.g. green building, high-rise building, smart building technology) in a broad range of facilities—from commercial, medical, office, educational, sports, and culture facilities to cutting-edge industrial facilities such as data center and distribution center—is well on its way to becoming a global constructor & developer by expanding its business areas to include Pre-Con service, Building Remodeling and Smart City.

Expanded EPC

Expanding Value Chain & New Business



New growth areas | Data center, healthcare/distribution facility, modular construction, smart construction

The demand for data centers is continuously increasing as data usage is explosively increasing due to the rapid technological development caused by the 4th industrial revolution. As interest in health and hygiene increases due to the COVID-19 pandemic, non-face-to-face daily life is expanding, including online purchases and food & beverage delivery. Accordingly, we have established medical facilities, data centers, and logistics centers, which are experiencing explosive growth in demand, as our core products and are continuously expanding orders. In addition, we will lead the next-generation construction technology paradigm, such as modular construction and smart construction technology, by securing the trust of the client through the Pre-Con service and securing high quality based on technology.

HDEC FUTURE STRATEGY

HOUSING WORKS

We Create Residential Spaces That Put People First.

Hyundai E&C is implementing the UN Sustainable Development Goals through the Housing Works:

7

7

AFFORDABLE AND CLEAN ENERGY

UN SDG 07

Affordable and Clean Energy

11

11

SUSTAINABLE CITIES AND COMMUNITIES

UN SDG 11

Sustainable Cities and Communities

Hyundai E&C Realizes the Best Residential Value with the Highest Level of Inter-floor Noise Reduction Patented Technology

In October 2021, Hyundai E&C succeeded in securing first-class performance technology, the highest level in inter-floor noise blocking, for the first time in Korea. This is an upgrade of the floor structure disclosed in 'H Silent Home System I' owned by Hyundai E&C, revealing further growth in technological capabilities. Hyundai E&C has secured the only first-class technological capability in Korea by additionally applying special materials to the existing floor structure system, focusing on the fact that the main cause of intergenerational conflict is the heavy impact sound generated by heavy and large impacts such as the sound of walking adults and running children. The 1st Grade for blocking heavy impact sound means that the excessive impact from the upper floor is almost imperceptible to the lower floor. Hyundai E&C will continue to strive to solve the social issue of inter-floor noise and realize the best residential value based on cutting-edge technology.



Achieved 1st Grade in Noise Reduction between Floors for the First Time in Korea

Advanced EPC

Strengthening Existing Business Competitiveness

Key competitiveness | Premium-grade housing brand, customized 'H SERIES' product

Hyundai E&C's Housing Works Division occupies the status of a luxury brand in the overall domestic housing business, including redevelopment, reconstruction and remodeling projects, as well as new construction projects for apartments, residential and commercial complexes and officetels. We present a new standard for Korean housing culture through trendy designs and high-quality, customer-oriented housing services. Through residential brands that are representative of Korea, such as Hillstate and The H (upscale apartment complexes), Hyundai E&C is a true "Lifestyle Leader" that is at the forefront of the residential paradigm of the future. We will continue to develop customized 'H SERIES' products that predict the market and customer changes and provide customers with a higher level of living experience.

Expanded EPC

Expanding Value Chain & New Business

New growth areas | Redevelopment/re-construction, zero energy housing, energy & environment improvement technology development

The Housing Works Division is significantly influenced by government policy by nature. With the recent inauguration of the new government, the increase in the supply of housing centered on the private sector, and the vitalization of redevelopment and reconstruction in Seoul, the positive factors in terms of expanding business opportunities are expected to increase. In addition, the importance of diversifying housing products and securing preemptive technologies is increasing due to socio-cultural issues such as the transition to the era of hyper-personalization, the expansion of inter-generational noise issues, and the mandatory zero-energy building. We will promote high-level technological research to secure the nation's highest level of inter-floor noise reduction technology and realize the realization of zero-energy buildings, while contributing to the qualitative improvement and stabilization of people's living standards in line with the expansion of the domestic housing supply.

The H La Class, South Korea

HDEC FUTURE STRATEGY

PLANT WORKS

We Lead the Global Plant Market with Technology, Experience and Strong Driving Force.

Hyundai E&C is implementing the UN Sustainable Development Goals through the Plant Works:



UN SDG 09
Industry, Innovation and Infrastructure



UN SDG 07
Affordable and Clean Energy

Hyundai E&C Pioneered the Hydrogen Era by Building Korea's First Water Electrolysis-based Hydrogen Production Base



Jeollabukdo Water Electrolysis-based Hydrogen Production Base

In June 2022, Hyundai E&C was finally selected for the 'water electrolysis-based hydrogen production base construction project' by the Ministry of Trade, Industry and Energy, the largest commercial clean hydrogen production base in Korea. Hyundai E&C will build an infrastructure capable of producing, storing and transporting more than 1 ton of hydrogen with a scale of 2.5 MW per day. Water electrolysis technology is a technology that produces oxygen and hydrogen on a large scale by decomposing water with electricity, and is attracting attention as the core of clean hydrogen production. Clean hydrogen refers to hydrogen that does not emit carbon dioxide or emits significantly less carbon dioxide during the hydrogen production process. The cumulative market size of the global water electrolysis hydrogen production plant in 2030 is expected to be KRW 1,800 trillion. In order to preoccupy the rapidly growing global market, Hyundai E&C is expanding cooperation with overseas specialized companies and securing capabilities in the hydrogen field such as the basic design of a GW-class large-scale water electrolysis hydrogen plant and clean hydrogen production using nuclear power.

Advanced EPC

Strengthening Existing Business Competitiveness



Key competitiveness | Oil & Gas business competitiveness

Hyundai E&C's Plant Division is recognized for its unrivaled technological prowess in the global super-large oil & gas, oil refining, and petrochemical plant construction fields based on abundant construction performance and advanced technical manpower and know-how accumulated in overseas markets.

As a leader in the global plant market, Hyundai E&C has secured competitiveness in design technology assets and core projects. Hyundai E&C is positioning itself as a Total Solution Provider by creating the environment necessary for project implementation and pioneering a new business development paradigm supervised by EPC.

Hyundai E&C Actively Embarks on Carbon-Neutral and Renewable Energy Market Expansion

In May 2022, Hyundai E&C established a new power brokerage business organization to lead the renewable energy conversion and carbon-neutral energy market, and is actively promoting the renewable energy brokerage transaction (PPA) business. In June, Hyundai E&C laid a solid foothold to provide more realistic carbon-neutral/RE100 solutions in the domestic market and major business sites in the Hyundai Motor Group's value chain, by signing a business agreement with Kia Motors, a Hyundai Motor Group company, for "Establishing and Realizing Strategies for Implementing Carbon Neutral and RE100". RE100 is a global initiative to convert 100% of the electricity used by businesses to renewable energy. Hyundai E&C plans to lead the carbon neutral of the Hyundai Motor Group and the entire value chain, accelerating the successful achievement of carbon neutral goals, energy conversion, and eco-friendly business conversion.



MOU with Kia Motors for a Renewable Energy Brokerage Business

Uthmaniyah Ethane Processing Plant Project, Saudi Arabia

Expanded EPC

Expanding Value Chain & New Business



New growth areas | Hydrogen plant, hybrid power generation, smart grid, SMR, renewable energy business, planning proposal type business

The growth of the coal-exit and oil-exit industries is bringing about a global consensus on the need for revitalization of the hydrogen economy, expanded demand for eco-friendly energy markets, actual supplying of dispersed, consumer-centric energy sources, and securing of next-generation power transmission/distribution network infrastructures. Accordingly, we are preparing for entry into the global hydrogen plant and carbon capture/utilization/storage (CCUS) market by performing basic design (FEED) for the domestic hydrogen business, while expanding our global partnership to preoccupy the Small Modular Reactor (SMR) market.

* FEED (Front End Engineering Design), CCUS (Carbon Capture, Utilization & Storage), SMR (Small Modular Reactor)

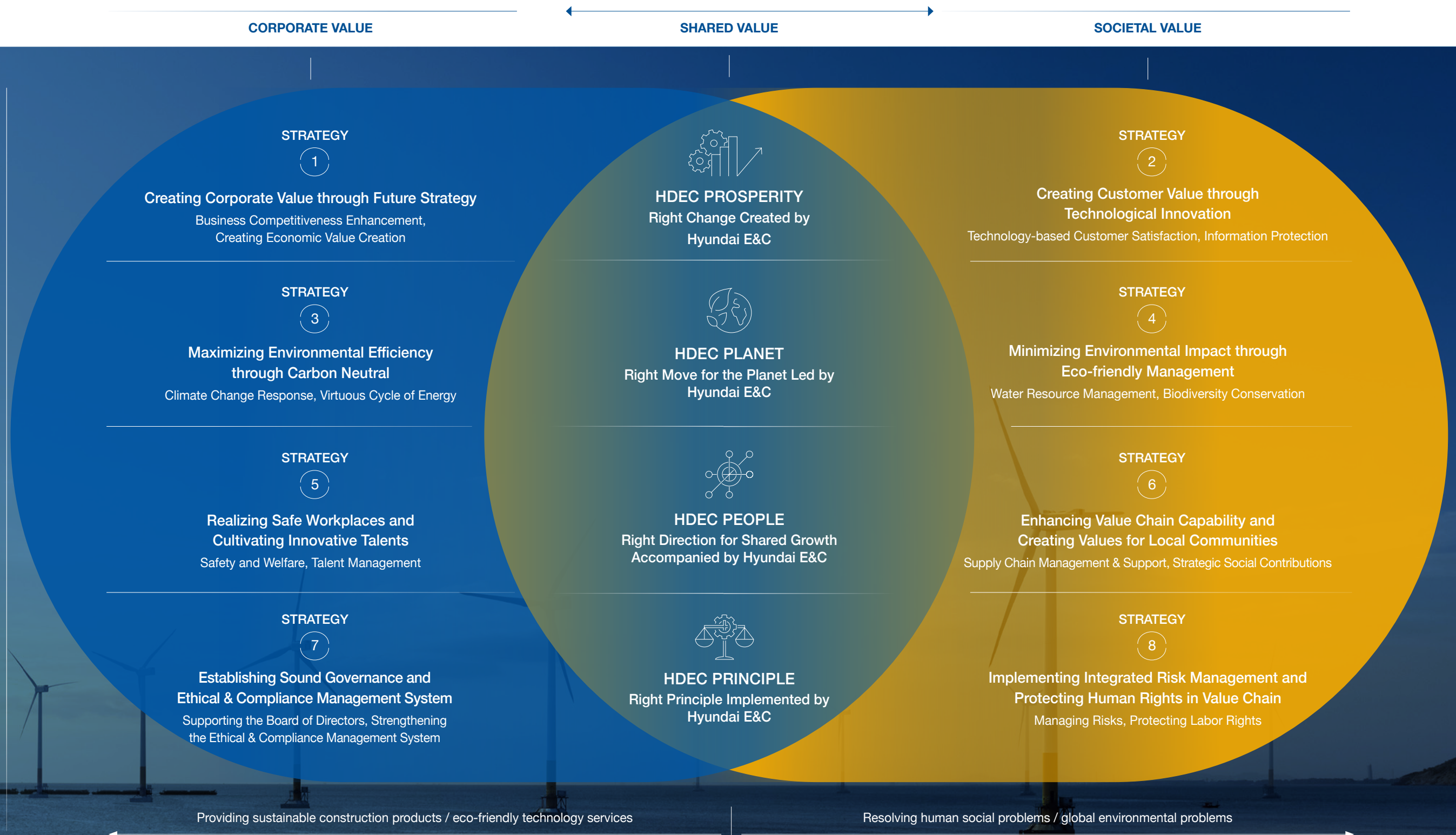
HDEC SUSTAINABILITY STRATEGY

HDEC SUSTAINABILITY STRATEGY

The world is threatening existential sustainability due to global climate change, population growth, energy and water shortages and resource depletion. Under the banner of 'Creating Sustainable Habitat for Human', Hyundai E&C is starting a new challenge of providing global construction and solutions to global problems by providing eco-friendly construction products and differentiated technology services.

CREATING SUSTAINABLE HABITAT FOR HUMAN

Hyundai E&C provides solutions to global problems by providing eco-friendly construction products and differentiated technical services with the goal of 'Creating Sustainable Habitat for Human'.





HDEC SUSTAINABILITY STRATEGY

LEADERSHIP

Sustainability Management

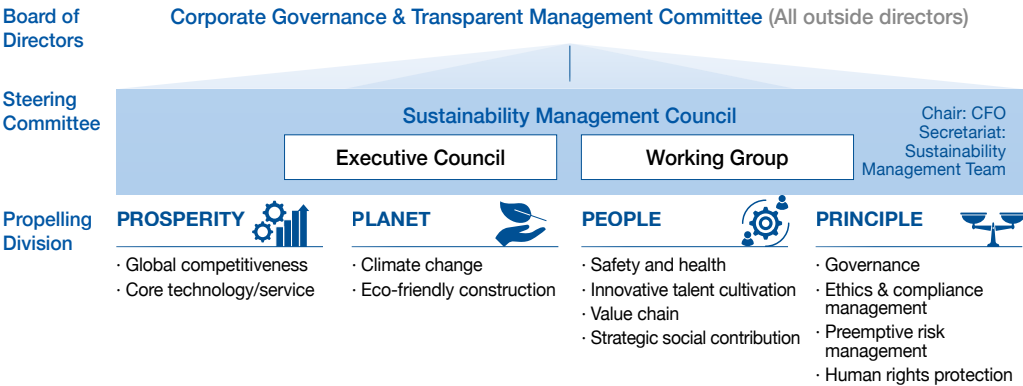
Hyundai E&C, which has led a new history of construction at every corner of Korea’s history, is now creating a sustainable base for mankind together with the world to leap into a sustainable world. Hyundai E&C is promoting company-wide sustainability management by establishing the 2030 Vision for Sustainable Management for the world and establishing long-term goals and key performance indicators.

Sustainability Management Organization



Quarterly Sustainability Management Council Held

As a global construction company, Hyundai E&C established the 2030 Vision for Sustainability Management to improve the sustainability of mankind and the world by concentrating on the construction technology and capabilities it has accumulated over the years. Hyundai E&C also launched a CFO-led Sustainability Management Council by the Corporate Governance & Transparent Management Committee under the Board of Directors in October 2020. In May 2021, we re-established the 4P-based sustainability management system (Prosperity, Planet, People, Principle), by reflecting the WEF Stakeholder Capitalism Metrics for the first time in a construction company. Hyundai E&C is promoting systematic company-wide sustainability management centered on 4 propelling divisions and 8 propelling strategies, based on the Creating Shared Value model that simultaneously creates economic and social values through the convergence of social needs and the resolution of problems.



Sustainability Management Culture

Hyundai E&C is conducting diversified sustainability management education and campaigns to enhance the understanding of sustainability management and internalize it as a culture throughout the value chain, including executives and employees, group companies, and supply chains. In 2020, we introduced “Basic ESG training” for all executives and employees, and in February 2022, “ESG Mindset Training”, a 6-week compulsory training, was newly established to raise ESG awareness. provided to all employees (94% of completion rate). The training covers major ESG agendas such as ESG overview, ethics, human rights, safety, and environment, and was simultaneously provided to 160,000 employees of 18 Hyundai Motor Group companies to spread ESG management throughout the group. Hyundai E&C is strengthening its sustainability management competitiveness by providing ESG training and consulting to its suppliers. In 2021, ESG management diagnosis and consulting were provided to 242 suppliers, and various practical training programs were provided, including practical training at construction safety sites and transparent ethics training to minimize ESG risks in the supply chain.



2022 ESG Mindset Training Video of Hyundai Motor Group



2022 Supplier ESG Training Video of Hyundai Motor Group

Sustainability Management Process



Selection and Implementation of Annual ESG Improvement Tasks

Through the quarterly Sustainability Management Council, Hyundai E&C identifies improvement tasks based on domestic and overseas ESG evaluation indicators/disclosure criteria, such as DJSI, MSCI, KCGS, 10 principles of UNGC, ISO 26000, SASB, TCFD, and the World Economic Forum’s Stakeholder Capitalism Metrics. Hyundai E&C is strengthening its sustainability management capabilities by systematically improving the tasks. In 2021, a total of 141 improvement tasks were identified and 31 quick-win improvement tasks with high importance among them were selected for intensive improvement activities. In addition, at the council in the fourth quarter of 2021, departments with excellent performance in implementing improvement tasks were rewarded and the results were shared to enhance understanding of sustainability management and induce active participation. At the council in the first quarter of 2022, 79 improvement tasks were identified and 50 quick-win tasks were selected among them. In April 2022, improvement activities were reflected in the ESG sector index of the Headquarters Performance Management (KPI). The implementation of the annual improvement tasks is monitored by conducting evaluations a total of three times each quarter, and the best departments are rewarded through a report to the Board of Directors (Corporate Governance & Transparent Management Committee) in December annually.

Annual Sustainability Management Process



* Year-round: Identification and analysis of sustainability management (ESG) issue risks → Board review/report

Global Sustainability Leadership

In 2021, Hyundai E&C was included in the DJSI World for 12 consecutive years and ranked No. 1 of the Construction & Engineering industry for 2 consecutive years in the Dow Jones Sustainability Index (DJSI), a credible global corporate sustainability evaluation. With this selection, Hyundai E&C was selected as the ‘Industry Leader’ a total of nine times as the global best company in the construction/engineering sector, which is the first in the history of the global construction industry. DJSI is an investment index provided by S&P Global, the world’s largest financial information company, and is published annually by evaluating the economic, environmental and social sustainability of the world’s top 2,500 companies by market capitalization. Hyundai E&C’s differentiated competitiveness, proven through DJSI evaluation, is expected to have a positive effect on securing liquidity of funds and pioneering new markets. Hyundai E&C was also inducted into the Hall of Fame for 4 consecutive years in the CDP (Carbon Disclosure Project) evaluation, which is an evaluation of response to the global climate change crisis. It has been recognized for its sound sustainability management level in major domestic and overseas sustainability management evaluations, such as acquiring an overall ‘A’ grade in the domestic KCGS evaluation for 4 consecutive years and achieving a ‘BBB’ grade in the overseas MSCI evaluation in 2022.



DJSI Global No. 1 / DJSI World for 12 Consecutive Years



CDP Hall of Fame Award for 4 Consecutive Years



Korea Corporate Governance Service (KCGS) ESG evaluation overall A grade for 4 consecutive years

HDEC SUSTAINABILITY STRATEGY

STRATEGY

Long-term Sustainability Goals & KPIs

2030 Sustainability Goals

PRODUCT

60%

Increasing the proportion of sales of sustainable products to more than 60% against total revenues by 2030

CLIMATE CHANGE

2.1%

Reducing GHG emissions by 2.1% per year compared to baseline year 2015 by 2030

TECH LEADERSHIP

20^{KRW billion}

Investing about KRW 20 billion annually in fortifying core technology competitiveness of value chain by 2030

From a long-term perspective, Hyundai E&C has established and managed mid- to long-term sustainability management goals until 2030. To effectively implement this, the WEF Stakeholder Capitalism Metrics has been established and managed by the implementation goals and key performance indicators (KPIs) for each of the 4 propelling divisions and 8 propelling strategies. In addition, in the second half of 2022, the first SBTi-based 2045 carbon-neutral roadmap including Scope 3 in the domestic construction industry was established and announced, and a new sustainable management goal was established to establish a new sustainable management goal for environmental management to respond to the climate crisis.

Focal Area	Long-term Sustainability Target	Key Sustainability Indicators	2019	2020	2021	2022 (Target)
<div>Creating Corporate Value through Future Strategy</div> <div></div>	Increasing the proportion of sales of sustainable products to more than 60% against total revenues by 2030	<div>· Revenues (KRW in 100 million, consolidated)</div> <div>· Revenues (KRW in 100 million, separate)</div> <div>· Proportion of total sustainable products (%)</div> <div>· Domestic & overseas branches and offices (units)</div>	172,788	169,709	180,655	197,000
<div>Creating Customer Value through Technological Innovation</div> <div></div>	Investing about KRW 20 billion annually in fortifying core technology Competitiveness of value chain by 2030	<div>· R&D investments (KRW 100 million)</div> <div>· R&D human resource (persons)</div> <div>· Patent registration (cases)</div> <div>· Site technical supports (cases)</div>	187	183	178	204
<div>Maximizing Environmental Efficiency through Carbon Neutral</div> <div></div>	Reducing GHG emissions by 2.1% per year compared to baseline year 2015 by 2030 (Plan to increase annual reduction of 4.2% by 2045 and declare carbon neutral based on SBTi)	<div>· Scope 1 GHG emissions (tCO₂e)</div> <div>· Scope 2 GHG emissions (tCO₂e)</div> <div>· Total GHG emissions reduction (tCO₂e)</div> <div>· Energy consumption (GJ)</div>	417,904	167,071	174,227	363,357
<div>Minimizing Environmental Impact through Eco-friendly Management</div> <div></div>	Minimizing environmental impacts by achieving ‘Environmental Penalty Zero’ by 2030	<div>· Water usage (thousand ton)</div> <div>· Waste water discharged (thousand ton)</div> <div>· Waste generated (ton)</div> <div>· Waste discharged (ton)</div>	802.0	1,278.0	1,478.0	1,531
<div>Realizing Safe Workplaces</div> <div></div>	Maintaining fatality rate remains zero by 2030	<div>· Safety management investment (KRW 100 million)</div> <div>· On-site safety inspection (times)</div> <div>· LTIFR - Employees (n/million hours worked)</div> <div>· LTIFR – Contractor (n/million hours worked)</div>	-	1,099	1,349	1,545
<div>Cultivating Innovative Talents</div> <div></div>	Securing and fostering talents in design/engineering expertise and key core technologies	<div>· Recruitment (persons)</div> <div>· Annual compensation for employees (KRW 100 million)</div> <div>· Average Course attendance (%)</div> <div>· Completion rate of skill training (%)</div>	1,067	1,153	1,217	1,699
<div>Enhancing Value Chain Capability</div> <div></div>	Expanding supplier management evaluation and action rate to 100% by 2030	<div>· Supplier's sales in overseas market by Hyundai E&C (KRW 100 million)</div> <div>· Total procurement cost (KRW 100 million)</div> <div>· Amount of Win-win Growth Fund (KRW 100 million)</div> <div>· Domestic & overseas branches and offices (units)</div>	1,137	1,540	800	1,000
<div>Creating Values for Local Communities</div> <div></div>	Improving social value as a global citizen through global social contribution in connection with the United Nations Sustainable Development Goals (SDGs)	<div>· Donations at headquarters (KRW 100 million)</div> <div>· Overseas social contribution investment (KRW 100 million)</div> <div>· Overseas social contribution countries (countries)</div> <div>· Annual target of social contribution mileage (mile)</div>	158.0	62.4	135.8	145.5

* SBTi-based 2045 carbon-neutral roadmap including Scope 3 and 2023 target will be established

HDEC SUSTAINABILITY STRATEGY

ENGAGEMENT







Stakeholder Engagement

When a company promotes sustainability management, the activities to collect opinions from various stakeholders who exchange influences with management activities and reflect them actively in management activities are very important. Hyundai E&C defines stakeholders who are directly or indirectly affected by business activities as the 7 major stakeholders and is actively collecting opinions by operating various communication channels. In addition, we are realizing the creation of shared value by fairly distributing the economic performance generated through business activities to stakeholders.

Stakeholder Communication Channels

<div>Government, Media and Association</div> <div></div>	<div><ul style="list-style-type: none">ComplianceTax obligationTransparent information disclosure</div>	<div><ul style="list-style-type: none">Public HearingsPress ReleaseAssociation Activities</div>	<div><ul style="list-style-type: none">Comply with the government's policy and regulationsTransparently disclose via mediaBuild a constructive relationship with relevant associations</div>
<div>Employee</div> <div></div>	<div><ul style="list-style-type: none">Safety and healthCompensationEmpowerment</div>	<div><ul style="list-style-type: none">Intranet, HDEC Newsletter, SNS, BlogNext Leader Board, Discussion with CEOEmployee Engagement Survey, H-DudrimSustainability Management Council</div>	<div><ul style="list-style-type: none">Provide fair appraisal and compensationSupport innovative capabilityPursue work and life balanceIdentify ESG improvement tasks and enacting/revisioning policies</div>
<div>Customer</div> <div></div>	<div><ul style="list-style-type: none">Provision of products/servicesRealization of customer satisfactionCustomer safety</div>	<div><ul style="list-style-type: none">Call Center, Customer Center (web), SNS, BlogCustomer Satisfaction SurveyHillstate StylerH-DudrimShare ESG policies in the supply chain with domestic/overseas clients</div>	<div><ul style="list-style-type: none">Maximize customer satisfaction through technologiesIncrease customers' trust and improve communicationConstruct a comfortable residential environmentShare policies and supply chains through mutual ESG agreements</div>
<div>Supplier</div> <div></div>	<div><ul style="list-style-type: none">Shared growthWin-win managementSafety and health</div>	<div><ul style="list-style-type: none">Hi-partner SystemJoint Cooperation Committee, Win-win Growth Support CenterSupplier satisfaction surveyH-Dudrim</div>	<div><ul style="list-style-type: none">Establish fair and transparent business relationsShare information and technologiesRealize the shared growth and win- win management</div>
<div>Society, NGOs and Social Groups</div> <div></div>	<div><ul style="list-style-type: none">Indirect economic effectContribution to the local communityEnvironmental improvement</div>	<div><ul style="list-style-type: none">Local social contribution activitiesCommunity meetingExternal social contribution committeeCivil society and environmental groupsGlobal ESG initiatives</div>	<div><ul style="list-style-type: none">Protect the environment around sitesEnhance six 'MOVE' social contribution activitiesCommunicate with local communities activelyEstablish the Coal-Exit Policy</div>
<div>Shareholder and Investor</div> <div></div>	<div><ul style="list-style-type: none">Transparent management activitiesCreation of financial performanceProvision of accurate information</div>	<div><ul style="list-style-type: none">General shareholders' meetingsInvestment presentationPublic disclosure</div>	<div><ul style="list-style-type: none">Establish a sound governanceEnhance the corporate competitiveness continuouslyMaximize the value of shareholders and investors</div>
<div>Sustainability Experts, Academia and Research Institute</div> <div></div>	<div><ul style="list-style-type: none">ESG information disclosureESG risk managementExpansion of ESG promotion</div>	<div><ul style="list-style-type: none">Sustainability ReportsParticipation in surveys and external evaluationsVoluntary disclosure</div>	<div><ul style="list-style-type: none">Reinforce ESG information disclosure (TCFD, SASB, WEF ESG Metrics, etc.)Joined UNGC and TCFDRespond to ESG evaluation, improve internal policies, and disclose resultsExpand sustainability management strategy</div>

Stakeholder Engagement Process







Planning	Target Selection	Opinion Gathering	Opinion Reflection	Monitoring	Disclosure
<div></div> <div>1</div> <div><ul style="list-style-type: none">Plan stakeholder communication (survey, interview, etc.)</div>	<div></div> <div>2</div> <div><ul style="list-style-type: none">Select stakeholders for communication</div>	<div></div> <div>3</div> <div><ul style="list-style-type: none">Conduct stakeholder communication and collect opinionsCollect stakeholder feedback</div>	<div></div> <div>4</div> <div><ul style="list-style-type: none">Reflect stakeholder opinionsApply work and implement improvement activities</div>	<div></div> <div>5</div> <div><ul style="list-style-type: none">Monitor improvement activitiesAnalyze stakeholder communication</div>	<div></div> <div>6</div> <div><ul style="list-style-type: none">Stakeholder engagement performance management and reporting</div>

Key Stakeholder Communication and ESG Initiative Participation (As of 2021~22)

E	S	G
Environmental	Social	Governance
<div><ul style="list-style-type: none">Join the Korea TCFD Alliance and disclose informationCDP responseParticipation in the local community climate action council (Jongno-gu Office)Energy welfare project for the vulnerable and social welfare facilities in Seoul (Climate Environment Division of Seoul, Seoul Social Welfare Council)Inquiries on ESG issues related to environmental impacts on the site of implementation (overseas environmental NGOs)Inquiries on the Coal-Exit management policy (domestic environmental NGOs)</div>	<div><ul style="list-style-type: none">Join the UN Global Compact and COPEducation/scholarship mentoring project for youth and college students in the metropolitan area (Dream Mentoring Volunteer Corps)CSR agreement for creative education related to smart city construction for middle school students in Jongno-gu (Jongno-gu Office, Seoul Central Office of Education)Inquiry on safety management issues related to domestic site worker fatality (Safety management supervision of the Ministry of Employment and Labor, National Pension Service, Korea Corporate Governance Service)One company, one district campaign in Jongno-gu (Gahoe-dong)</div>	<div><ul style="list-style-type: none">Ethical management monitoring (Norwegian Pension Fund)Responses to letters related to the coal-exit management policy (8 major environmental NGOs)Mutual expansion and sharing of ESG policies with domestic/overseas clientsESG communication to major domestic and foreign pension funds and investment institutions</div>

Distribution of Stakeholder Interests in 2021

(Unit: KRW 100 million)

<div>Government</div> <div></div> <div>Corporate tax payments</div> <div>2,997.2</div>	<div>Employees</div> <div></div> <div>Total annual compensations</div> <div>6,097.5</div>	<div>Suppliers</div> <div></div> <div>Procurement and subcontracting expenses</div> <div>86,844.0</div>
<div>Local Communities</div> <div></div> <div>Donations from HQ</div> <div>135.8</div>	<div>Shareholder and Investor</div> <div></div> <div>Dividends</div> <div>675.0</div>	<div>Visiting Meeting of Norwegian Pension Fund (Ethical Management Monitoring)</div> <div></div>



HDEC PROSPERITY

Right Change Created by Hyundai E&C



Since its foundation in 1947, Hyundai E&C has established a foundation for national economic development and has led the improvement of people's quality of life. Now, Hyundai E&C is creating a new era of prosperity by providing sustainable construction products and differentiated technology services around the world to create corporate value while pursuing the economic growth of mankind.



SHARED VALUE

STRATEGY | 1



Creating Corporate Value through Future Strategy
Business Competitiveness Enhancement,
Creating Economic Value Creation

HDEC PROSPERITY

STRATEGY | 2



Creating Customer Value through Technological Innovation
Technology-based Customer Satisfaction,
Information Protection

STRATEGY 1

Creating Corporate Value through Future Strategy

Since its founding in 1947, Hyundai E&C has been unceasingly renewing first and highest records for the past 75 years to rewrite the history of global construction. As a representative construction company that has grown along with the history of construction in Korea, Hyundai E&C has established the 2030 Future Strategy to preemptively respond to the acceleration of energy transition and digital transformation in the post-pandemic era. Hyundai E&C will pioneer a new history in the future construction industry, as a Total Solution Creator covering all areas of construction.

2021 Performance Highlights

Establishment of 2030 Future Strategy	Domestic & Overseas Orders in 2021	Operating Profit Growth Rate in 2021 (Compare to 2020)
2030	30,269 ^{KRW} billion	37.3%

Business https://www.hdec.kr/en/tech/infra_all.aspx



HDEC Value Creation



Agreement Signed for Nuclear Power Business

“Hyundai E&C Pioneers Energy Transition with Next-generation Nuclear Power Plant Business”

In November 2021, Hyundai E&C signed an agreement to jointly develop SMR and advance into the business through a strategic partnership with Holtech International, a leading U.S. nuclear power company. In May 2022, Hyundai E&C also signed a strategic cooperation agreement with Westinghouse, the best company in the nuclear industry, and laid the foundation for the global advancement of the US-type large-scale nuclear power plant (AP1000 model) business and a bridgehead for business diversification and competitiveness for the first time as a Korean company. This achievement is the worldwide recognition of Hyundai E&C’s know-how and technology accumulated through the construction of the largest number of nuclear power plants in Korea and the construction of the first exported UAE nuclear power plants. Furthermore, it is evaluated that the foundation for sustainable future business has been laid through exclusive cooperation in the next-generation nuclear power plant business, including the expansion of eco-friendly carbon-neutral business, the establishment of energy conversion business portfolio, etc.

2030 Future Strategy

Establishing 2030 Future Strategy

After the COVID-19 pandemic, the world is facing an era of great transformation with two axes: Energy Transformation and Digital Transformation. The construction industry, which operates in the areas of infrastructure and housing for humans, is being challenged by related heterogeneous industries such as energy, mobility, healthcare, infrastructure O&M, and life and safety IoT. The construction industry is also responding to future changes by innovating production methods, diversifying business areas, and promoting new businesses.

Accordingly, Hyundai E&C has established the ‘2030 Future Strategy’ and is implementing it to change the future business environment and secure sustainability in 2021. The goal of this strategy is to transform from ‘Order/Construction-centered Constructor’ to ‘Total Solution Creator’ at all stages of the project. To implement the strategy, Hyundai E&C is developing a business structure transformation strategy that expands into new businesses such as eco-friendly and low-carbon based on EPC capabilities accumulated through comprehensive construction projects such as infrastructure, building, housing, and plants.

‘2030 Future Strategy’ consists of 4 strategic directions and 8 strategic tasks for business structure transformation. First of all, in order to strengthen the competitiveness of existing businesses, we have established four strategic tasks: Strengthening Competitiveness of Core Products, Securing Core Technology, Expanding Digital Technology Automation, and Establishing Unmanned Construction Platform. Secondly, in order to expand the value chain & new business, we promote another four strategic tasks: Transforming to Developer, Activating Operation Business, Preemption in the Energy Transition Market, and Leading Future City Change.

Promoting Future New Business

While digital transformation is in progress due to the development of ICT technologies such as artificial intelligence, big data, drones, and BIM, the global construction trend is also rapidly evolving due to environmental factors such as the COVID-19 pandemic and climate change. Hyundai E&C is promoting new businesses such as renewable energy and eco-friendly businesses to lay a foothold for future growth. In particular, new businesses in the field of energy transition such as hydrogen plants, next-generation nuclear power plants, offshore wind power, and carbon capture/utilization/storage, and smart city fields such as urban mobility and future housing are intensively expanding. Hyundai E&C has experience in designing, constructing, and operating various designs, construction, and operation such as the Seonamhae offshore wind power 60 MW demonstration complex and the Seosan solar power plant.

The global construction trend is also rapidly changing due to the influence of rapid technological development and social change. To respond effectively to the changing environment of the construction industry and create new sources of profit, Hyundai E&C is actively searching for and implementing projects in new business areas.

Hyundai E&C meticulously analyzes markets through regular market trend monitoring and seeks business opportunities based on changing mega-trends in areas such as transportation, energy, residential services, and converged technology. Furthermore, Hyundai E&C engages in graded implementation of business strategies based on such analyses to ensure substantive outcomes per division. Hyundai E&C is also maximizing productivity through a company-wide digital transformation and regularly comes up with areas that can potentially be commercialized in the mid/long term to prepare itself for future industries.

Key New Growth Projects

Energy Transition

Hydrogen plant

- Water electrolysis/hydrogen liquefaction plant design/ construction
- Hydrogen fuel power generation business

Next-generation nuclear power plant

- Small Modular Reactor (SMR) design/construction
- Core technology development of nuclear power plant decommissioning

Offshore wind power

- Accumulation of track records using dedicated lines
- Securing of lower jacket standard model design capabilities

Carbon capture/utilization/storage (CCUS)

- Development of core carbon storage technology

Smart City

Urban mobility hub

- UAM vertiport design/construction

Future housing

- Developing products for responding future trends, such as robot services

Hyundai E&C 2030 Future Strategy System

Business Structure	4 Strategic Directions	8 Strategic Tasks	Strategic Target
<div>Strengthening Existing Business Competitiveness</div> <div>Transformation</div> <div>Expanding Value Chain & New Business</div>	<div>Focusing on Core Business</div> <div></div>	<div>Strengthening Competitiveness of Core Products</div> <div>Securing Core Technology</div>	<div>Transforming portfolio through product eliteization</div> <div>Securing core technology focused on future promising products</div>
	<div>Smart Construction</div> <div></div>	<div>Expanding Digital Technology Automation</div> <div>Establishing Unmanned Construction Platform</div>	<div>Expanding digital transformation and smart construction technology</div> <div>Promoting unmanned platform development</div>
	<div>Business Portfolio Expansion</div> <div></div>	<div>Transforming to Developer</div> <div>Activating Operation Business</div>	<div>Transforming to developer centered on business planning and content/service</div> <div>Carrying out business in all areas of the value chain from planning to operation</div>
	<div>New Growth Engine</div> <div></div>	<div>Preemption in the Energy Transition Market</div> <div>Leading Future City Change</div>	<div>Expanding hydrogen business in connection with group companies and leading the future energy business</div> <div>Leading building/infrastructure/service solutions in smart city</div>

Hyundai E&C Secures Core Growth Engine with New Smart City Business



In May 2022, Hyundai E&C successfully entered the smart city business that builds future high-tech city infrastructure, by being selected as the preferred bidder in the private business competition of the business corporation (SPC) that creates and operates the Busan Eco-Delta Smart City. The project jointly creates a smart city leading district in Busan Eco-Delta City and builds and operates smart services. Hyundai E&C expects not only to secure competitiveness for the construction of future high-tech urban infrastructure, but also to create new growth engines, by participating in the construction of a smart city in which major urban functions such as residential, commercial, transportation, R&D, ecological environment, and culture are integrated based on ICT. In the future, we plan to upgrade and expand our services in consideration of technological developments and domestic and overseas environments.

Creating Sustainable Corporate Value

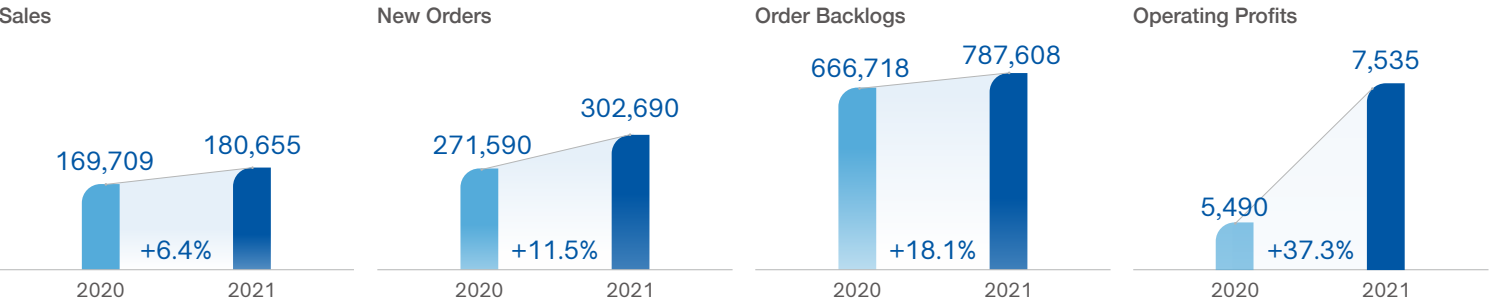
Creating Global Economic Value

Hyundai E&C has been demonstrating stable growth capabilities to the entire world far beyond the boundary of Korea through its stable business model and highly-recognized corporate competitiveness. Since its foundation in 1947, Hyundai E&C has been rewriting the history of global construction based on the experience and technological capabilities accumulated thus far while successfully carrying out 873 projects in 62 countries around the world, Hyundai E&C is expanding its global business through the profitability-oriented internal management and high-quality orders.

Despite the slowdown in the construction industry due to the spread of the global COVID-19 pandemic in 2021, Hyundai E&C recorded sales of KRW 18.65 trillion, operating profit of KRW 753.5 billion, and new orders of KRW 30.269 trillion, confirming solid global growth stability. In particular, orders increased by 11.5% compared to the previous year, exceeding the annual order target of KRW 25.6 trillion by 119.2%. – thanks to overseas orders (Cincheru New Airport Terminal Construction in Peru, Heil-Al-Jup 380kV Transmission Line Construction in Saudi Arabia, etc.) and domestic orders (Paju Unjeong Complex Facility Construction, Busan Beomcheon District 4 Redevelopment & Maintenance Construction, Jeju Hallim Offshore Wind Power Plant Development, etc.). Sales is also increased by 6.5% against the same period of the previous year as overseas plant construction began in earnest, including the Marjan Gas Treatment Plant in Saudi Arabia and the Refinery Upgrade Facility Construction in Basra, Iraq.

Under the goal of receiving orders of KRW 28.37 trillion and sales of KRW 19.7 trillion by 2022, Hyundai E&C plans to achieve profitability-oriented qualitative growth based on a solid financial structure and management stability. To strengthen our core competitiveness, Hyundai E&C will also focus on promoting new businesses such as SMR (Small Modular Reactor), UAM (Urban Air Mobility), and Smart City.

Key Financial Performance



Regional Business Strategy for Overseas Markets

CIS/Europe/Africa	Middle East	Asia	Central/South America
Uzbekistan, Libya, Egypt, Ethiopia, Uganda, Kenya, etc.	GCC* Countries, etc.	Singapore, Bangladesh, Vietnam, etc.	Peru, Chile, etc.
<div><div>Promote preemptive sales of Investment Development Corporation/Finance Partnership Corporation by strengthening network with European IOCs and leading developers</div><div>Resumption of Libyan power plant construction and establishment of market re-entry strategy</div><div>Nuclear power plants (Ethiopia, Uganda, Kenya, etc.) and EDCF and JICA financing target construction</div><div>Analyze cooperative partners and promote pre-partnering for entry into the European market</div><div>Actively participating in energy-related projects in the CIS region, and promoting business in the CIS region after Russia-Ukraine</div></div>	<div><div>Increase number of signed contracts through collaborations with companies that own/ specialize in petrochemical technologies</div><div>Advance into new tree types such as hydrogen/renewable business.</div><div>Increased opportunities for development/ infrastructure construction of large new cities based on GCC countries' policy stance on industrial diversification including Saudi Arabia and UAE.</div><div>Create market strategies and sales plans for Iranian/Iraqi markets based on monitoring of oil prices, international politics, and security issues.</div></div>	<div><div>Find projects to pursue in developing countries and enters countries (with no Hyundai E&C presence) in conjunction with Economic Development Cooperation Fund (EDCF), Japan International Cooperation Agency (JICA), and multilateral development banks.</div><div>Increase and maintain profitability of construction sites in Asia such as Singapore.</div><div>Actively searches for ways to participate in plant projects in Bangladesh, Myanmar, etc.</div></div>	<div><div>Follow-up construction for Cincheru International Airport (Peru), focused pursuit of PMO-style infrastructure construction</div><div>Strategic collaboration through advance partnering in key areas: ports, metro, bridge, etc.</div><div>Expand participation in privately-proposed PPP investment & development projects for hospitals and roads.</div><div>Accumulation of advanced nuclear power plant technology and expansion of participation in other construction types, through participation in US nuclear power plant decommissioning and Small Modular Reactor (SMR) business</div></div>

* GCC: Gulf Cooperation Council

Expanding Global Markets

Hyundai E&C is spurring the expansion of the global market by operating 31 overseas branches and offices around the world to flexibly respond to the rapidly changing global market environment after the COVID-19 pandemic. In order to expand overseas business experience accumulated in the Middle East and Asia for 75 years since its foundation to other parts of the world, Hyundai E&C designated Central/South America, Sub-Saharan Africa and the CIS as its new focus markets and is doing everything in its power to expand its presence in these markets.

Despite the downturn in the overseas construction market in 2021, Hyundai E&C recorded a record of about USD 3.29 billion by winning new orders for a total of 13 projects in 5 countries around the world. While achieving continuous profitability in the Middle East and Asia, which are major markets such as Saudi Arabia, Singapore, Vietnam and Indonesia, Hyundai E&C won USD 210 million worth of Cincheru New Airport Terminal Construction in Peru, a new market, as a base for pioneering new markets and targeting Latin America.

Hyundai E&C has also strengthened its expertise by establishing a nuclear SMR (Small Module Reactor) organization to respond to the accelerated energy transition and digital transformation in the post-corona era. Hyundai E&C plans to advance into the advanced nuclear power plant market in the US, such as SMR, nuclear decommissioning, and canister, through close cooperation with Holtec of the U.S. Hyundai E&C is accelerating its entry into new markets from the perspective of construction type, product, and region in preparation for possible market shrinkage due to the 2022 Russia-Ukraine war and the global economic downturn. Hyundai E&C maintains a balanced portfolio to flexibly respond to external environmental changes and uncertainties and strengthens its overall competitiveness across design/purchase/construction, while preemptively responding to increasing localization demands to discover influential local companies and expanding the supply chain to maximize local content.

Reinforcing Global Management Network

Hyundai E&C operates 31 overseas branches and offices around the world to promote successful global business. Based on its vast global network, Hyundai E&C operates systematic overseas business such as discovering new overseas projects, managing major customers, establishing subcontracting strategies, and conducting on-site management tasks. Overseas branches/offices are an important link between Hyundai E&C's management and overseas business sites: it conveys management's feedback to sites and acts as a go-between in communication between HQ and overseas offices. They not only select local partners and manage overseas supplier pools but also oversee on-site work, thereby contributing significantly to the gaining of overseas contracts and improving Hyundai E&C's ability to carry out projects. Hyundai E&C is actively reviewing and promoting the establishment of local branches and corporations in order to focus on winning overseas orders. Through the establishment and operation of local bases, Hyundai E&C is also striving to secure construction by minimizing competition in the short term, and to build a sound portfolio by laying the foundation for sustainable growth through localization in the long term. For instance, following the establishment of the Manila branch in the Philippines in 2020, the order for the 'Philippines South-North Railway Section 1' worth USD 490 million. Through continuous marketing activities closely with local clients, we are currently pursuing additional orders for three Philippine North-South Railways with a total construction cost of approximately USD 1.35 billion.

In 2022, we plan to establish an overseas office in Tokyo, Japan, to develop networking with related companies such as Japanese trading companies, and to actively participate in the US nuclear SMR business by establishing a US corporation. In addition, we plan to establish a differentiated and strategic global network for each country we enter through active expansion of our management network, such as establishing a new corporation in Vietnam, where our overseas branch is operating, to secure local veterinary contracts.

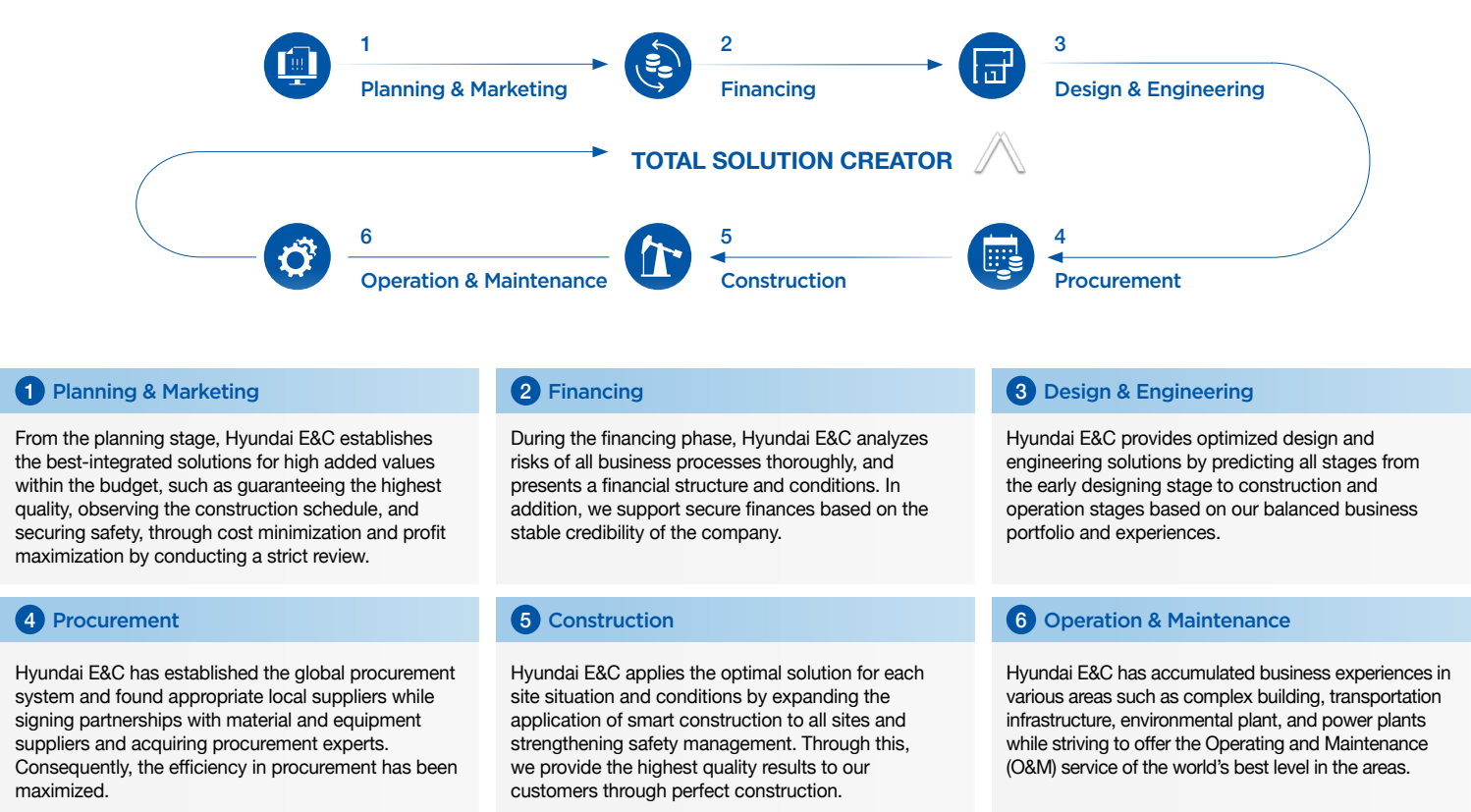
Creating Total Solutions

Total Solution Creator

The world is facing a new era of change as the gap between heterogeneous industries is narrowing due to digital transformation and changes in the market environment. Going beyond a construction-oriented traditional construction company, Hyundai E&C is opening up a better future through constant innovation and challenge as a Total Solution Creator, who provides integrated services covering all areas of the value chain of the construction industry, namely business planning/marketing, financing, design, purchasing, construction, operation and maintenance.

Hyundai E&C is building an industrial ecosystem through strategic alliances between various heterogeneous industries such as energy, mobility, healthcare, infrastructure O&M, and life/safety IoT that are closely related to the construction industry. Hyundai E&C is also striving to secure new business opportunities in all business stages by promoting new businesses together with Hyundai Motor Group to strengthen synergies, aiming to grow into a global company that can create added value at all stages of business by providing specialized solutions for each area. Hyundai E&C is leading the era of construction automation by strengthening product competitiveness based on core technology and utilizing unmanned construction sites. Hyundai E&C will provide the best brand value, by expanding the proportion of high value-added businesses and building a specialized residential service platform unique to Hyundai E&C.

Hyundai E&C Business Model



1 Planning & Marketing

From the planning stage, Hyundai E&C establishes the best-integrated solutions for high added values within the budget, such as guaranteeing the highest quality, observing the construction schedule, and securing safety, through cost minimization and profit maximization by conducting a strict review.

2 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 secure finances based on the stable credibility of the company.

3 Design & Engineering

Hyundai E&C provides 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.

4 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, the efficiency in procurement has been maximized.

5 Construction

Hyundai E&C applies the optimal solution for each site situation and conditions by expanding the application of smart construction to all sites and strengthening safety management. Through this, we provide the highest quality results to our customers through perfect construction.

6 Operation & Maintenance

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



Creating Corporate Value through Future Strategy

Creating Customer Value through Technological Innovation

STRATEGY 2

Creating Customer Value through Technological Innovation

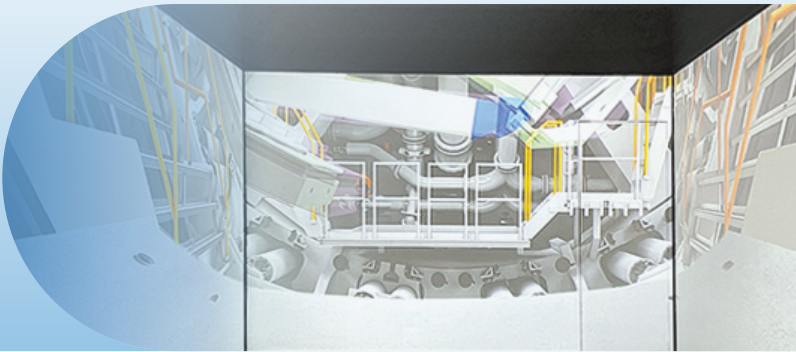


With cutting-edge technologies such as Artificial Intelligence (AI), Internet of Things (IoT), robotics, and drones, the global industry is facing a new era of transformation, and smart construction technology capabilities utilizing these technologies are emerging as a new competitive edge for construction companies. Hyundai E&C is striving to provide new value to customers and transform their spaces, by leading the construction industry in the era of the 4th industrial revolution through technological innovation.

2021 Performance Highlights

R&D investments in 2021	R&D Projects Implemented in 2021	Patents Registered in 2021
17.8KRW billion	32Cases	60Cases

R&D <https://www.hdec.kr/en/tech/rnd.aspx>



HDEC Value Creation



Hyundai E&C Tunnel/Smart Construction Technology Demonstration

“Hyundai E&C Opens the Digital Twin Era with Smart Construction Technology”

Hyundai E&C is accelerating the opening of the “Digital Twin” era, applying smart construction technology to tunnel construction sites for the first time in Korea. “Digital Twin” refers to smart construction technology that enables real-time construction sites and heavy equipment in the virtual world to collaborate between the headquarters and the site. Through the Tunnel/ Smart Construction Technology Demonstration held in April 2022, Hyundai E&C showcased its technological capabilities accumulated over the past 10 years by unveiling a total of 23 intelligent digital technologies and cutting-edge tunnel technologies, including the data-based, state-of-the-art TBM tunnel construction method applied to tunnel construction sites for the first time in Korea. Hyundai E&C plans to lead the global construction industry through continuous investment in R&D and expansion of smart construction technology, by establishing smartization of construction sites as a key factor that can enhance productivity and quality and strengthen safety.

Technological Innovation

Building a Sustainable Technology Platform

Hyundai E&C has established a ‘2030 Future Strategy’ to preemptively respond to the rapidly changing construction environment and is doing its best to lead technological competitiveness. In order to effectively realize this, we are trying to achieve a sustainable technology platform by systematically implementing our R&D strategy by dividing it into two areas: the Base Technology Competitiveness and the Future Technology Incubation.

First, to make base technologies more competitive, it develops peerless technologies to be applied to all stages of the project, from bidding to construction, to ensure a project’s successful completion. Accordingly, Hyundai E&C analyzes successful and unsuccessful examples of projects that are similar to the one it is working on to reduce the risk possibility of the latter. By applying supplemental technologies, it provides technical solutions that can improve the quality and productivity of key business sites. Furthermore, it is responding to changes in Fourth Industrial Revolution trends by accelerating its development of smart construction technologies to be merged with ICT (AI, big data, drone/ laser scan, BIM, etc.) for the incubation of future technologies. Based on an analysis of five mega-trends that are closely linked to the construction industry (urbanization, energy conversion, fuel/resource depletion, water shortage, environmental pollution), Hyundai E&C is leading the innovation of futuristic technologies by securing source technologies for new growth/future-oriented products.

Expanding Technology Innovation Investment

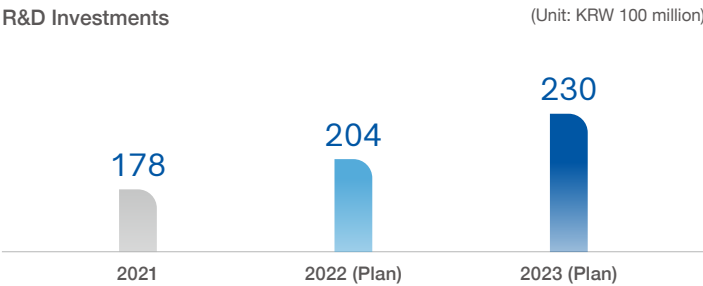
Hyundai E&C is striving to become a global construction company based on integrated engineering that will respond to future changes through technological innovation. Since the establishment of the R&D Center in October 1989, Hyundai E&C has contributed to the development of Korea’s construction and engineering industry as a child of Korean construction technology for the past 34 years. In order to quickly respond to rapidly changing R&D trends such as the 4th industrial revolution, Hyundai E&C is concentrating its capabilities to strengthen corporate competitiveness by changing the name of the technology organization to the R&D Center in April 2021 and developing and securing core technologies in line with the ‘2030 Future Strategy’. In May 2022, the R&D Center was separated and reorganized into three labs: the Base Technology Lab, the Future Business Lab, and the Smart Construction Lab, for the purpose of reinforcing expertise in strategy execution by upgrading EPC, securing new growth engines, and reorganizing the three axes of innovation in production methods. In addition, the Carbon Neutral Research Team was newly established and assigned to the Future Business Lab, and the Mobility Infrastructure Research Team was newly established and assigned to the Smart Construction Lab. As of July 2022, the R&D Center is operating a total of 12 teams in the a three-labs system.

Securing Core and Source Technologies

Hyundai E&C is promoting business creation by developing state-of-the-art construction technology on its own based on the secured R&D infrastructure and strengthening technological competitiveness through the demonstration of core technologies. In 2021, Hyundai E&C applied for 42 patents and registered 60 patents. In addition, the “Complex Construction Method Using End-reinforced Precast Double Wall” jointly developed with Sampyo PNC was designated as a new construction technology by the Ministry of Land, Infrastructure and Transport, and its technological capabilities were recognized. We are focusing on technological innovation with the goal of filing 67 patents by 2022.

Category	Unit	2019	2020	2021	2022 Target
Patent application	Cases	59	66	42	67
Patent registration	Cases	39	46	60	50
Valid New Excellent Technology (NET)	Cases	18	16	17	17
Valid Green Certification	Cases	1	2	1	1

Category	Unit	2019	2020	2021	2022 Target
R&D human resource	Persons	143	114	140	170
R&D investments	KRW 100 million	187	183	178	204
· R&D human resource operation	KRW 100 million	151	138	149	159
· R&D development expenses	KRW 100 million	29	44	29	45
· R&D asset acquisitions	KRW 100 million	7	1	0	0
R&D projects	Cases	46	37	32	43
· Governmental R&D projects	Cases	4	2	2	6
· Internal R&D projects	Cases	42	35	30	37



Base Technology Competitiveness	Infrastructure	Development of new strategies for reducing costs and construction time	Marine/port Bridge/structure	· Caisson method · Quick bridge construction	Underground space Foundation/ground/paving	· TBM · New type foundation, new construction material construction
	Building & Housing	Development of strategies for a differentiated market	Noise/vibration Construction/structure	· Reduced inter-floor noise · Off-site Construction, skyscraper	Construction materials Eco-friendly	· Improved quality of concrete · Zero energy building
	Plant	Develop quality-improving technologies, provide support for specialized designs	Welding/corrosion Process	· Digital quality management · Interpretation of oil & gas process	Machinery/piping	· Flow analysis/control · Soundness management system
Future Technology Incubation	Smart Construction	Development of automated construction technologies and digital project management systems	Big data	· AI predictions on safety, quality, process · IoT safety management system	Construction automation Smart city	· Construction robotics · UAM infrastructure
	New Growth Business	Secure core technologies through expansion of business areas	Eco-friendly	· Convert biogas into energy · Refine polluted soil · Carbon capture, utilization and storage (CCUS)	New & renewable energy	· Offshore wind power · Solar power · Small Modular Reactor · Hydrogen storage/shipping · New renewable brokerage transaction PPA business

On-site Technical Support Provided per Business Division in 2021 (Unit: cases)

Business Division	On-site Technical Support (cases)
Infrastructure	76
Building	42
Housing	87
Plant	40
Other	4

On-site Technical Support Provided per Project Stage in 2021 (Unit: cases)

Project Stage	On-site Technical Support (cases)
Implementation stage	136
Contract stage	110
Other	3

Total 249

Hyundai E&C Enhances Profitability and Competitiveness in Winning Orders through Technological Innovation

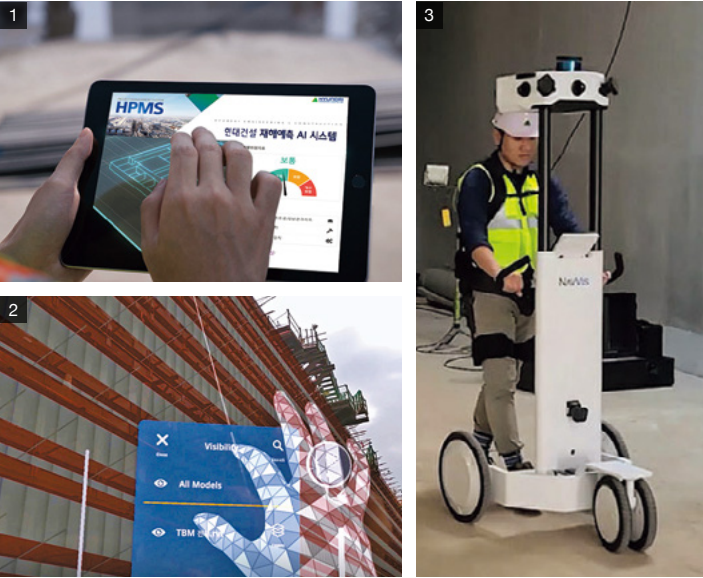
By developing cutting-edge construction technologies and processes and applying them to actual sites, Hyundai E&C is consistently improving its ability to gain contracts and implement projects. In 2021, the R&D Center provided a total of 249 cases of on-site technical support in Korea and overseas (on-site requests: 210, preemptive assistance: 39): this helped to improve profits by preventing increases in on-site construction fees and replacing outside service contractors with in-house resources. It contributed especially significantly to improving Hyundai E&C’s competitiveness in terms of implementing projects and creating the most optimum designs by providing 98 instances of technical support (of 210 on-site requests). In 2022, we plan to strengthen value creation through technological innovation by expanding technical support to 281 cases.

Advancing Future Technology

Leading Smart Construction Technology

Smart construction refers to a new construction paradigm that converges and applies cutting-edge technologies such as artificial intelligence (AI), the Internet of Things (IoT), robotics, drones, and BIM (Building Information Modeling) to construction sites. By accumulating smart construction technology for the past 10 years, Hyundai E&C is leading the era of smart construction that overcomes the limitations of manpower and improves productivity and safety through cutting-edge technology.

Strengthening smart construction: Starting with the self-development of HIoS (Hyundai IoT Safety System), the first IoT safety management system in Korea in 2019, Hyundai E&C is collaborating to conduct a 4D drawing review through BIM, the core technology of smart construction. Solution Securing various smart construction technologies such as Common Data Environment (CDE), VR (Virtual Reality) and AR (Augmented Reality) that can review on-site construction plans in a virtual environment, and UAV (Unmanned Aerial Vehicle) that enables unmanned site management It is being applied to construction sites. In April 2022, the ‘Tunnel/Smart Construction Technology Demonstration’ was held to reveal 23 smart construction technologies accumulated so far, leading to the era of the ‘Digital Twin’.



1. Hyundai E&C AI Disaster Prediction System
2. Smart Glass-based Augmented Reality Implementation
3. Wearable Robot for Strengthening Workers

Hyundai E&C Smart Construction Technology

	R&D Area	2021 Activities/Outcomes	2022 Plans/Goals
Construction Automation	Robotics	Development and pilot application of unmanned patrol and work robots	Site demonstration of robot control system
	3D printing	Production of apartment landscaping, atypical formwork	Concrete 3D printing equipment manufacturing and material development
Digital Business Management	AI/big data	Development of AI disaster prediction system	Accuracy advancement of Ai Disaster Prediction System Development of AI image-based temporary facility collapse monitoring technology
	Remote site management system	Unmanned drone, smart glass technology demonstration	Establishment of the remote site management system (1st stage)
Smart Safety	Safety Management System (HIoS)	System development and trial application	Function expansion (7→12 types) and site application expansion
	Prevention of equipment stenosis and collision	On-site distribution of sensor/camera based operator access warning devices	Development of UWB-based equipment stenosis prevention system
	Automatic measurement of earthen curtain	System prototype development and trial application	Development completion of automatic measurement of earthen curtain

MOU Signed with the Korea Institute of Science and Technology

Hyundai E&C Accelerates Development of Smart Construction Technology by Strengthening Technology Network

In December 2021, Hyundai E&C signed an MOU for R&D technical cooperation with the Korea Institute of Science and Technology (KIST) and opened a new chapter in research on smart construction technology and eco-friendly energy technology. Through joint research, Hyundai E&C plans to conduct research in construction management automation and digital twin environment construction, automation robot technology for construction and future residential service, hydrogen energy-based technology, and eco-friendly technology. Hyundai E&C plans to conduct joint research on ‘Nitrogen Reduction Water Treatment Technology Using a Complex Catalyst’, the KIST’s grand prize-winning technology in the ‘2021 Hyundai E&C Technology Contest’. Through this joint research, Hyundai E&C plans to secure cost/technical competitiveness by 2025 and apply it to the treatment of high-concentration nitrogen-containing wastewater generated when electricity is generated through biogas.

Enhancing Clean Technology and Networks

Expanding Clean Technology Development

Clean technology, which is growing in importance as an alternative to the rapid climate crisis and environmental pollution, refers to technology that saves resources and energy throughout the production process and prevents/minimizes environmental pollution. Hyundai E&C is focusing its construction technology capabilities on research in renewable energy, an area that is directly linked to humankind’s survival, and with a special concentration on water processing. In 2021, two research projects related to solar power generation and biogas were carried out in the field of new & renewable energy, and three research projects related to soil purification and decommissioning of nuclear power plants were performed in the eco-friendly field. In 2022, as the transition to low-carbon and eco-friendly energy is accelerating, related research tasks will be greatly expanded from 5 to 15, and research fields will be developed in a balanced way for offshore wind power, hydrogen plants, carbon capture, utilization and storage (CCUS), and water treatment.

Enlarging Technology Network

In order to secure the highest level of future core technologies, Hyundai E&C has established a research and development network with global leading research institutes and leading companies and conducts in-depth international joint research. As of December 2021, Hyundai E&C has signed technical cooperation agreements with 33 global companies/research institutes around the world, including “MOU for the revitalization of smart construction and eco-friendly energy technology research” signed with Korea Institute of Science and Technology in December 2021. As the energy transition is expected to accelerate after the COVID-19 pandemic in 2022, it is necessary to create a new business model for new energy businesses. Hyundai E&C plans to expand the new decarbonization business to promote cooperation and demonstration projects for CO₂ capture, utilization and storage (CCUS) technology, while developing eco-friendly hydrogen production technology.

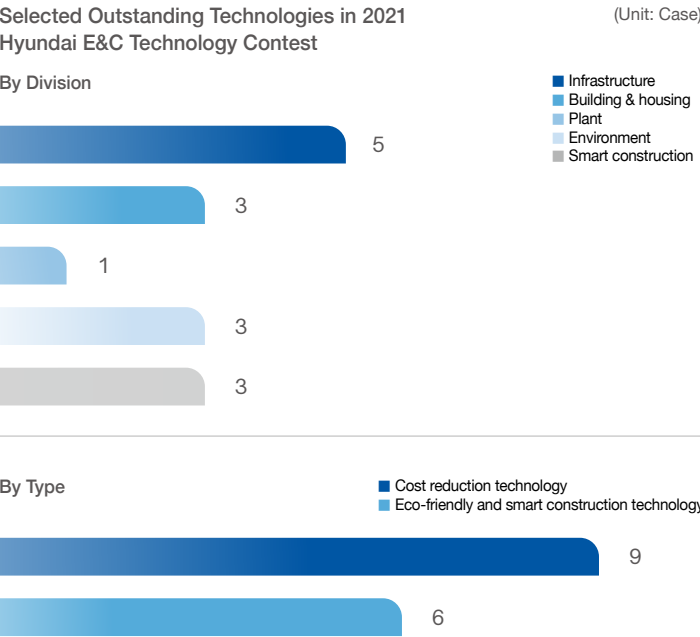


Status of Hyundai E&C’s Clean Technology Research (As of 2021)

Category	R&D Area	Research Task	Research Outcome	Invested Budget (KRW million)
Renewable Energy	Solar power generation	Research for the development of concrete roads for solar power generation (MAY 2021 ~ DEC 2021)	· Development of a new complex packaging method · Development of customized modules and panels for solar power generation	29
	Biogas energy conversion research	Design standardization and guideline establishment of organic waste resource biogas energy conversion technology (JAN 2021 ~ JUN 2022)	· Establishment of process design standards by target waste and capacity · Deduction of improvement plan for pre-treatment technology · Mechanical process standard design and cost calculation	53
Environment	Soil purification	Advancement of contaminated soil restoration technology to improve complex contaminated soil remediation efficiency (JAN 2021 ~ DEC 2022)	· Cause analysis of the decrease in cleaning efficiency by unit process based on site long-term operation data · Soil remediation site monitoring cost reduction plan · Analysis of increased cost of soil remediation and evaluation of applicability of alternative cleaners, in accordance with the Chemicals Control Act	124
	Nuclear power plant decommissioning	Decommissioning nuclear power plant site pollution and deregulation safety evaluation (MAY 2019 ~ DEC 2021)	· Demonstration of radioactively contaminated groundwater and soil restoration technology · Establishment of groundwater monitoring/contamination evaluation system for decommissioned nuclear power plants · Preliminary evaluation of the safety of deregulation of the site of decommissioned nuclear power plants	2,260
		Establishment of constructability evaluation technology and safety verification system for spent nuclear fuel disposal site (AUG 2021 ~ DEC 2029)	· Establishment of method/base for evaluation of high hydrological geological environment characteristics · Development of laboratory procedure for nuclide behavior · Analysis of construction methods for large underground structures and selection of similar structures for disposal facilities	1,250

Expanding Open Innovation

Hyundai E&C is sharing the latest R&D trends and strengthening partnerships with companies, research institutes, and suppliers with the highest level of R&D capabilities by holding the “Hyundai E&C Technology Contest”, an open innovation program every year. In 2021, a total of 157 technical ideas were received from 141 companies, universities, and research institutes, and a total of 15 award-winning works were selected after reviewing ideas appropriateness, development necessity, economic feasibility, and creativity. Universities and research institutes selected through the Technology Contest are supporting research funds and R&D cooperation through consultation with the Hyundai E&C R&D Center, and in the case of small and medium-sized enterprises, technology development is supported through the Shared Growth Cooperation Fund. In addition, we provide construction sites necessary for verification of technological ideas to verify their effectiveness, while also providing opportunities for commercialization if effectiveness is proven after verification.





HDEC PLANET

Right Movement for the Earth
Led by Hyundai E&C



Environmental issues facing the earth including climate change, energy and water shortages, and resource depletion are creating new challenges and opportunities for companies. Under the slogan of the “2050 Global Green One Pioneer”, Hyundai E&C seeks to lead a new era of innovation by establishing company-wide eco-friendly management strategies/goals and improving environmental efficiency and minimizing environmental impact through systematic management.

SHARED VALUE

STRATEGY | 3



Maximizing
Environmental
Efficiency through
Carbon Neutral

Climate Change Response,
Virtuous Cycle of Energy

HDEC PLANET

STRATEGY | 4



Minimizing
Environmental Impact
through Eco-friendly
Management

Water Resource Management,
Biodiversity Conservation



Maximizing Environmental Efficiency through Carbon Neutral

Minimizing Environmental Impact through Eco-friendly Management

STRATEGY 3

Maximizing Environmental Efficiency through Carbon Neutral



Due to global climate change, the ability to reduce carbon emissions and improve energy efficiency in most industries is becoming a competitive edge for companies. Hyundai E&C is promoting various environmental and energy management strategies and activities for preemptive responses. Hyundai E&C is also developing a company-wide response to climate change based on the climate change framework presented by the Task Force on Climate-related Financial Disclosures (TCFD) of the International Financial Stability Committee.

2021 Performance Highlights

CDP Platinum Club Achieved (Hall of Fame for 4 consecutive years)	GHG Emissions Reduction Rate in 2021 (Compare to 2020, Scope 1, 2, 3)	GHG Emissions Reduction in 2021
Platinum	17.24%	10,899 _{tCO₂e}

Environment <https://www.hdec.kr/en/invest/environment.aspx>



HDEC Value Creation



CDP Platinum Club Achieved

“Hyundai E&C Stands Tall as a Global Climate Change Leader”

In January 2022, Hyundai E&C was included in the CDP Korea Hall of Fame for four consecutive years by the Carbon Disclosure Project Korea Committee. Meanwhile, Hyundai E&C achieved the feat of entering the ‘Platinum Club’ for the first time in Korean construction industry. The CDP is an annual global project that assesses, analyzes, and writes reports on climate change response activities conducted by major listed companies worldwide. It is regarded as one of the world’s most trusted sustainability indices (alongside DJSI and Bloomberg ESG). The ‘Platinum Club’ is the highest honor given to companies that have achieved the ‘Hall of Fame’ for 4 consecutive years, and the ‘Hall of Fame’ refers to companies that have been awarded the ‘Carbon Management Honors Club’ for 5 consecutive years. We will continue to do our best to take the lead in achieving carbon neutral as a leading global eco-friendly company.

Carbon Neutral Efforts to Response to Climate Change

Climate Change and Carbon Neutral

Climate change refers to changes in the global climate, including global warming, and is a real threat to human survival due to sudden natural disasters such as heat waves, rainy seasons, and cold waves. In particular, the frequency and severity of heatwaves will gradually increase as the global temperature rises, and then rapidly increase from the moment it exceeds 1.5°C, which is expected to have a catastrophic impact. In response, the international community established a global climate change goal through the UN Paris Agreement on Climate Change (COP21) in 2015 to try to limit the increase in global average temperature to within 1.5°C of pre-industrial levels by 2100. In 2018, the Intergovernmental Panel on Climate Change (IPCC) presented a roadmap to reduce carbon emissions by at least 45% compared to 2010 levels by 2030 and to achieve carbon neutral (Net-Zero) by 2050.

TCFD-based Climate Change Response

Hyundai E&C has established and implemented a company-wide climate change response system based on the climate change framework presented by the Climate Change Financial Information Disclosure Task Force (TCFD) for climate change suppression and carbon neutral for present and future generations. Hyundai E&C officially supports TCFD and discloses actual and potential financial impacts from climate change based on TCFD recommendations, and promotes compliance with regulations and setting reduction targets to respond to climate change. In addition, in the second half of 2022, the first SBTi-based 2045 carbon-neutral roadmap including Scope 3 in the domestic construction industry was established and announced, and a new sustainable management goal was established to establish a new sustainable management goal for environmental management to respond to the climate crisis.

TCFD 1

Reinforcing Climate Change Response Organization

Climate Change Responsibility within the BoD

As the highest decision-making body, Board of Directors decides on major issues related to the company’s business execution, and issues related to climate change are also reviewed/resolved at the board level. Therefore, systematic climate change countermeasures are managed so that they can be pursued in connection with Hyundai E&C’s management strategy. In particular, the Corporate Governance & Transparent Management Committee within the BoD reviews, deliberates, and decides on company-wide sustainability management issues, including environmental management issues. Independently and objectively supervises and evaluates, while making decisions on material issues related to identified environmental risks/opportunities. As examples of the recent climate change-related decision-making by the Board of Directors, the Coal-Exit policy and environmental/energy management reinforcement agendas, which are core issues related to strengthening environmental management, were proposed and made decisions, through the 2nd Corporate Governance & Transparent Management Committee in 2021. In order to implement this policy, we have decided to reorganize the existing coal-fired power plant order sales organization into the new and renewable energy sector, and to promote organizational reorganization and business transformation in the new and renewable energy sector, such as the expansion of new and renewable energy, eco-friendly, and energy-efficient product businesses.

Expanding Climate Change Response Organization

Hyundai E&C operates a company-wide climate change response and risk management organization, and the environmental management team and RM team identify and evaluate climate change risks and opportunities every month, by conducting risk-based (RBS) evaluations related to new business promotion and project execution. Identified risk issues related to climate change are reported to the ‘Sustainability Management Council’ through the head of the relevant department and the head of the division, and high-priority issues are reported to the CEO depending on the severity of the issue, resulting in various business decisions such as establishing new business strategies and management plans. Reflected in the decision. Identified risk issues related to climate change are reported to the ‘Sustainability Management Council’ through the head of the relevant department and the head of the division, and material issues with high priority are reported to the CEO and reflected in various business decisions such as establishing new business strategies and management plans. Finally, the company’s major management policies are disclosed to stakeholders through deliberation and resolution by the Corporate Governance & Transparent Management Committee within the Board of Directors, the highest decision-making body. As the impact of climate change on the company gradually increases, we set and manage key business strategies and reduction targets according to climate change as the CEO’s KPI (includes quantitative reduction targets for GHG/energy). Through the ‘Sustainability Management Council’, the CEO is continuously being reported on integrated climate change risks, whether the performance of the target management system is met and risks related to the emission trading system. Hyundai E&C is actively responding to GHG regulations through a company-wide decision-making system to minimize climate change risks.

TCFD 2

Establishing and Implementing Climate Change Strategy

Climate Change Risks and Opportunities

Hyundai E&C assesses risks and opportunity factors related to climate change from financial as well as strategic perspectives. The extent of such impact is ascertained largely based on two aspects: 1) degree of impact on business and 2) need for responses. If something is deemed as not immediately being a risk but nevertheless requiring consistent supervision, it is classified and managed as a latent risk. Risk types that are given primary attention and consideration are climate change trends/regulations, requests by stakeholders, physical damage, and whether it is a government-funded project. In terms of influence on business, each category is assessed as “high, middle, or low” after taking into consideration the ripple effect of factors including financial impact, business opportunity/operation rights, and reputation. Instances in which 1) the cost of physical damages caused by climate change exceeds KRW 1 billion or 2) operating profit suffers a loss of at least KRW 10 billion are classified as “high” impact. In terms of the response necessity, assessment is based on consideration of factors such as whether the information is revealed that has financial influence (penalty, etc.) or the scale of government-funded projects (or whether such projects are made mandatory).

Climate Change Impact Analysis

Hyundai E&C continuously identifies, evaluates, and manages risk and opportunity factors to respond to climate change issues at the company-wide level. Each month, Hyundai E&C makes a climate change risk/opportunity analysis that targets not only business sites that it operates directly but also upstream and downstream companies. In the event that a climate change risk or opportunity is discovered, an impact assessment is conducted alongside the respective project or business strategy. The scope of the impact assessment takes into consideration short, middle and long-term factors. Furthermore, in-house assessments and unannounced inspections are regularly made to verify that measures are being adequately taken for major risks or opportunities. If anything is lacking, improvements are required to be made in a timely manner. Regarding climate change risk, in order to preemptively respond to the financial risks that may occur if Hyundai E&C is designated as a company that is subject to the Emission Trading Scheme (ETS) regulating, the company consistently educates itself on ETS trends and influences. In terms of market risk, due to the unavoidable increase in the price of energy-intensive construction materials (e.g. cement, steel), Hyundai E&C monitors raw material price changes in order to apply them to work processes. Regarding climate change opportunity impact, Hyundai E&C is doing its utmost to predict the financial impact of and prepare for the following: increase in sales due to increased demand for low-carbon products/services, decrease in operational cost due to use of highly efficient products and distribution systems, and the development of new products and services through innovation.

TCFD 1

Climate Change Governance



Establishing a promotion organization to respond to climate change

- Deliberation and resolution on climate change opportunity/crisis factors centered on the Corporate Governance & Transparent Management Committee within the BoD
- Implementation of the climate change agenda through the Sustainability Management Council, a company-wide ESG implementation organization
- Conducting risk-based (RBS) assessments related to new business promotion and project execution

TCFD 2

Climate Change Strategy



Promoting response strategies based on climate change risk/opportunity analysis

- Implementation of TCFD recommendations and analysis of physical climate change risk classification system
- Risk/opportunity impact analysis of identified factors, business strategy reflection, and climate change response roadmap implementation
- Participation in international initiatives such as SBTi and UN Global Compact

TCFD 3

Climate Change Risk Management



Strengthening company-wide risk management based on climate change risk assessment

- Conducting corporate-level and asset-level climate change risk assessments
- Strengthening company-wide risk management through materiality assessment and integrated risk management system
- Review impacts and countermeasures through regular management reports on climate change risks

TCFD 4

Climate Change Metrics and Targets



Establishing Net-Zero goal based on SBTi methodology

- 27.3% reduction by 2030, 52.4% reduction by 2050 (compared to 2015 emissions) through scientific analysis based on 1.5°C and 4.1°C scenarios
- Plan to establish SBTi-based 2045 carbon-neutral roadmap including Scope 3 for the first time in the domestic construction industry (second half of 2022)



Maximizing Environmental Efficiency through Carbon Neutral

Minimizing Environmental Impact through Eco-friendly Management

TCFD 3

Internalizing Climate Change Risk Management

Climate Change Risk Assessment

Hyundai E&C's climate change risk/opportunity assessment is comprised of two parts: company-wide assessment and asset-level assessment. Regarding company-wide climate change risk/opportunity assessment, it is usually conducted in conjunction with the company-wide severity assessment matrix. Assessment results are reported to the SMC through the head of divisions. The SMC collects the information sent by each division on risk/opportunity factors (e.g. climate change, environmental pollution, quality, safety) and applies it to the company-wide comprehensive severity assessment matrix, which predicts risks that may occur over the short-term, mid-term, or long-term (at least 10 years) in relation to urbanization, water depletion, environmental pollution, energy/fuel, and resource depletion. In terms of asset-level climate change risk/opportunity assessment, the RM team is responsible for pre-contract risk/opportunity ascertaining. During the contracting process, to prevent direct/indirect capital loss due to climate change, the Pre-contract Review Committee (PRC) minimizes financial loss by responding to latent threats (e.g. delays caused by regional factors, weather/climate, etc.) per project. The Environment Management Team is responsible for post-contract risk/opportunity ascertaining. The comprehensive risk management system records climate-related changes and energy technologies used at HQ and construction sites and reviews carbon-related activities and implementation outcomes as well as outcomes on emission decreases. Finally, data collected per project is later integrated into and managed by a company-wide risk/opportunity assessment system.

Climate Change Risk Management Process

Hyundai E&C is strengthening its company-wide risk management capabilities through its severity assessment and comprehensive risk management system. Climate change risks are assessed and managed in conjunction with corporate strategy. To discern and manage the factors that have a long-term effect on its sustainability, Hyundai E&C assesses each factor's degree of importance each year. The assessment process is carried out in the following order: environmental analysis, participation by stakeholders, and assessment/prioritizing of each factor.

At the project level, Hyundai E&C uses its risk management system (& PRC) to consider climate change risks from three perspectives: project implementation, financial impact, and sustainability. In particular, physical environmental dangers that can affect the duration and/or cost of construction (rainfall, solar radiation, wind, etc.) and climate change-related risks are included as assessment items, while key aspects to be monitored are derived through a comparison of each risk's relative size. Both company-wide risk management and project-level risk management are conducted in annual units at the working level. Important issues and the status of risk management are regularly reported to the SMC and CEO, with serious/grave issues reported to the Corporate Governance & Transparent Management Committee (BoD organization).

Establishing Climate Change Strategy

Hyundai E&C is establishing a company-wide carbon-neutral goal to actively participate in the low-carbon transition, which is required worldwide in order to limit the increase in global temperature to within 1.5 degrees Celsius. To ascertain the risks and opportunities to be brought about by climate change in the short-, middle-, and long-term, based on global climate change scenarios, Hyundai E&C conducted scenario analyses that took into consideration both physical and transformative aspects. For the physical scenario, Hyundai E&C analyzed the physical impact on the forecast and impact of abnormal weather such as typhoons and droughts in the area where the business site is located, based on the international climate change scenarios RCP 2.6 (Net-Zero level) and RCP 8.5 (non-climate change response scenario) in accordance with the analysis results provided by the Korea Meteorological Administration and the National Institute of Meteorology. In the case of the RCP 8.5 scenario, the frequency and intensity of abnormal climates such as typhoons, floods, and heat waves are expected to have a significant impact on Hyundai E&C's construction sites and operations. On the other hand, in the RCP 2.6 scenario, which suppresses the global average temperature rise by 0.3 to 1.7 degrees due to intensive environmental regulations and reduction activities, the frequency and intensity of abnormal climates decreased and the impact on business sites decreased. For the transitional scenario, in line with the timeline of the Science-Based Reduction Target Methodology (SBTi), the medium-term and reduction targets were set based on the IEA B2DS and the National GHG Reduction Target (NDCs) scenario as the low-carbon transition plan was promoted. The future emissions were estimated by performing a regression analysis using the amount of GHG emissions in the past year and basic units. The scope for reduction has been established by analyzing various potential reductions, such as mid- to long-term business plans, reduction technologies, and investment in new technologies using internal carbon prices. Hyundai E&C drew reduction targets applicable for 2030 and 2050, and checked whether the reduction targets were in line with international requirements using SBTi's SDA methodology and finally confirmed the reduction targets. Hyundai E&C has set a mid-term goal to reduce emissions by 27.3% by 2030 compared to 2015, and a long-term goal to reduce emissions by 52.5% by 2050. This is equivalent to a reduction of 2.1% per year on average including Scope 1 and 2 as well as Scope 3. Based on the SBTi methodology, we plan to expand the reduction target to an annual average of 4.2% as a result of reviewing the reduction goal that can be realized by considering the carbon-neutral scenario analysis and mid-to-long-term reduction potential.

Climate Change Risk/Opportunity Impact Analysis (Unit: KRW)

Category	Major potential financial impacts	Duration	Potential financial impact	Management costs
Risk Factors				
Increased Cost of Raw Materials	Increased direct costs	Mid-term	54,204,160,000	464,055,900
Opportunity Factors				
Development and Expansion of Low Emission Goods and Services	Increased sales due to growing demand for low-carbon products and services	Short-term	138,515,120,000	124,999,000,000

Climate Change Scenario Analysis

Category	Climate Change Scenario	Applied Temperature Change	Description
Physical Scenario Analysis	RCP 2.6, 4.5, 6.0, 8.5	1.5°C, 4.1°C or more	Based on RCP 2.6 and RCP 8.5 scenarios, physical impact on the forecast and impact of abnormal weather in project sites were analyzed, in accordance with the analysis results provided by the Korea Meteorological Administration and the National Institute of Meteorology.
Transitional Scenario Analysis	2DS, B2DS, NDCs, SBTi	1.5°C, 4.1°C or more	Based on IEA B2DS and NDCs scenarios, the future emissions were estimated by performing a regression analysis using the amount of GHG emissions in the past year and basic units.

TCFD 3

Climate Change Indicators and Reduction Targets

Expanding Climate Change Indicator Management

Since 2013, Hyundai E&C has been implementing efficient environmental and energy management and performance management by establishing and operating an eco-friendly integrated environmental system. In particular, we have developed and operated an integrated environmental performance management system in the 'H-PMS (Hyundai-Project Management System)' for IT-based environmental performance management. The system enables effective tracking and management of environmental performances (energy consumptions, GHG emissions, wastes, other emission limits (BOD, COD, SS, arsenic acid dust, etc.) are exceeded, etc.) at all sites. In addition, the efficiency of environmental performance management is maximized by linking and managing various systems such as ISO 14001 (environmental management system) operation, ISO 50001 (energy management system) operation, GHG generation management, and waste generation management.

Reinforcing GHG Emission Management

Hyundai E&C has been leading the carbon management sector in the construction industry by establishing a GHG inventory system in 2010 and selecting representative sites for each business division to analyze the potential amount of GHG reduction by site since 2013. As a company subject to the GHG energy target management system in the construction industry according to the 'Low Carbon Green Growth Framework Act', Hyundai E&C is also striving to reduce GHG emissions by voluntarily calculating domestic Scope 1 and 2 emissions, which are subject to mandatory reduction, as well as overseas and Scope 3 emissions (construction equipment). Hyundai E&C's GHG emission reduction activities are carried out in three aspects: optimizing GHG reduction items, conducting the green campaign, and training employees to respond to GHGs. Through these activities, we are continuously discovering and applying GHG reduction items at the site and at the headquarters, and effectively raising the awareness of our employees about GHG emissions and energy use. As a result of these diversified efforts to reduce GHG emissions, the total GHG emissions (Scope 1~3) in 2021 was 622,089 tCO₂e, a decrease of 17.24% compared to 751,658 tCO₂e in 2020.

GHG Emissions (Unit: tCO₂e)

Category		2018	2019	2020	2021
Direct GHG Emissions (Scope 1)	Domestic	19,890	15,536	10,986	13,102
	Overseas	403,312	402,368	156,085	161,125
	Total	423,202	417,904	167,071	174,227
Indirect GHG Emissions (Scope 2)	Domestic	53,390	58,090	64,663	65,075
	Overseas	117,222	120,146	76,006	57,539
	Total	170,612	178,236	140,669	122,614
Other Indirect GHG Emission (Scope 3)	Domestic	319,346	277,213	330,060	233,948
	Overseas	182,141	102,012	113,858	91,300
	Total	501,487	379,225	443,918	325,248
Total GHG Emission	Domestic	392,626	350,839	405,709	312,125
	Overseas	702,675	624,526	345,949	309,964
	Total	1,095,301	975,365	751,658	622,089

Climate Change Goals and Carbon Neutral

To realize its vision, "Global Green One Pioneer," and contribute to achieving Korea's GHG reduction goal, Hyundai E&C established the goal of reducing its Scope 1, 2, and 3 GHG emissions (including overseas) by 52.5 percent by 2050 compared to the same figures for 2015. The goal includes GHG emissions produced by suppliers' equipment in addition to the Scope 1 and 2 greenhouse gases produced by Hyundai E&C itself. To achieve its reduction goal, Hyundai E&C is taking a three-prong approach (optimizing of items to be reduced, Green Campaign, providing greenhouse gas response training to employees) through which it is consistently coming up with (HQ and construction sites) aspects in which greenhouse gases can be reduced and making employees more conscientious about greenhouse gas emissions and energy use.

Carbon Neutral Achievement Scenario of Hyundai E&C

In order to systematically and preemptively respond to the climate crisis, Hyundai E&C set the goal of Net-Zero by 2045, including Scopes 1, 2, and 3, and promotes changes in business operations as well as changes in internal operation methods. As carbon-neutral implementation means, improvement of internal operation method such as the phased transition to new and renewable energy, advancement of low-carbon construction method, and electric vehicle conversion, development of low-carbon building materials, and carbon capture and storage (CCS) technology We will reduce greenhouse gas emissions by promoting low-carbon business changes such as securing and developing zero-energy building technology. In accordance with the SBTi standard Hyundai E&C's carbon reduction goal for Scope 1& 2 is set to 46.2% reduction in 2030 and 100% reduction in 2045 (Net-Zero achievement), compared to the baseline year 2019. The carbon reduction goal for Scope 3 is set to 10% reduction in 2030 and 90% reduction in 2045 (Net-Zero achievement), compared to the baseline year 2020. Each reduction goal is scheduled to receive SBTi certification by 2023.

GHG Emission Reductions (Unit: tCO₂e)

Category	2018	2019	2020	2021
Total GHG reduction	66,580	65,182	24,130	10,899
GHG reduction by energy efficiency	65,860	64,477	22,951	10,716
GHG reduction by replacing energy equipment	571	559	1,169	151
GHG reduction by operating environment-friendly vehicles	149	146	10	32

Maximizing Environmental Efficiency
through Carbon Neutral

Minimizing Environmental Impact
through Eco-friendly Management

STRATEGY 4

Minimizing Environmental
Impact through Eco-friendly
Management



The construction industry provides a necessary basis for creating a new space while it consumes a significant amount of energy and imposes environmental impacts during the construction process. Hyundai E&C, therefore, has focused all its capabilities on minimizing the environmental impact of the construction industry by operating an eco-friendly management system based on international standards, and by establishing the eco-friendly process for all stages: engineering, procurement, transportation, construction, operation, and deconstruction.

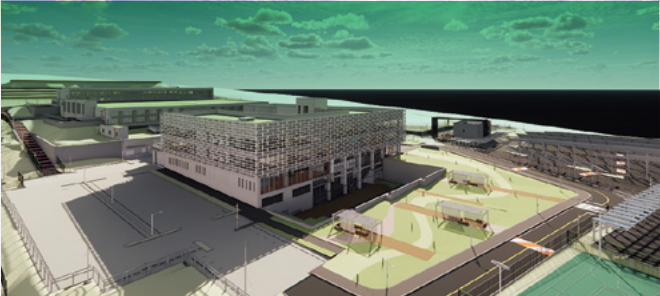
2021 Performance Highlights

Environmental Protection Investments in 2021	Sales Ratio from Water Stress Sensitive Sites in 2021	Waste Disposal Reduction Rate in 2021 (compared to 2020)
35.02 KRW billion	18.0%	19.9%

Environment www.hdec.kr/en/invest/environment.aspx



HDEC Value Creation



Rendering Bird's Eye View Using BIM

“Hyundai E&C Realizes Eco-friendly Construction with BIM-based Digital Platform”

In June 2022, Hyundai E&C established a cloud-based BIM collaboration system at all construction and housing division sites and is realizing eco-friendly construction through smart construction technology. BIM (Building Information Modeling) refers to a digital model including the shape and properties of a facility so that all information that occurs in the entire life cycle of a facility can be utilized based on a three-dimensional model. This technology is widely applied to all fields of the construction industry as a technology for realizing eco-friendly construction as well as improving quality and productivity. Hyundai E&C has been striving to secure BIM competitiveness by establishing a BIM activation TFT in 2019, establishing a customized BIM strategy, and establishing the optimal application level for each product. As a result, the company won the grand prize at the ‘BIM Awards 2021’, the largest BIM contest in Korea last year, and its capabilities were recognized.

Strengthening the Eco-friendly Management System

Advancing Environmental Management Strategy

Hyundai E&C has established ‘Global Green One Pioneer’ as its environmental management vision by reflecting eco-friendly management in its internal management strategy, and is leaping forward as a global eco-friendly management company that encompasses corporate social responsibility and entry into new eco-friendly businesses through integrated implementation. To realize this, we have established a long-term environmental management roadmap including an environmental management agenda by 2050, and are carrying out various environmental management activities to strengthen our status as a global eco-friendly company. To achieve this end, Hyundai E&C has prepared an environmental management system that covers all business practices, from technology development to purchasing, shipping, construction, demolishing and operation, and creates guidelines/goals on the environment/energy each year (company-wide and sites) and strictly adheres to these goals through detailed implementation plans. In 2021, we strived to maximize the performance of our environmental and energy management under the environmental energy goal of ‘ZERO Major Safety & Environmental Accidents’. Hyundai E&C supports the purpose of the 2015 UN Paris Agreement on Climate Change (COP21) in response to the climate change crisis that has emerged as a real threat to mankind after the COVID-19 pandemic. In line with carbon-neutral policies around the world, Hyundai E&C plans to establish a carbon-neutral management roadmap and release it within the year 2022. In addition, we plan to review the mid- to long-term roadmap for the establishment of a sustainable infrastructure for reducing GHG emissions and re-establish the goal by reflecting the interests and needs of stakeholders related to sustainability issues.

Global Environmental Management System

Hyundai E&C has been operating an eco-friendly integrated environmental system since 2013 to promote efficient environmental and energy management and performance management. Hyundai E&C is also managing the overall environmental impact of its operation by upgrading the IT system such as the waste generation management system and the GHG management system in 2018. Hyundai E&C has established and is operating an integrated environmental energy system by converting the ISO 50001:2011 standard, an existing energy management system standard, to the ISO 50001:2018 standard in 2020. Hyundai E&C operates an integrated environmental energy management manual, 16 management regulations/guidelines, and 8 technical regulations/guidelines for smooth operation of the environmental energy management system. Based on ‘H-PMS (Hyundai-Project Management System)’, an IT-based integrated environmental performance management system, Hyundai E&C efficiently tracks and manages the environmental performance (energy consumptions, GHG emissions, wastes, other emission limits such as BOD, COD, SS, etc.) of entire business sites. we are maximizing the efficiency of environmental performance management by linking and managing various systems such as ISO 14001/50001 management system operation, GHG management, and waste management. In 2019, ‘Environmental Permit Report Status’ and ‘Environmental Measurement and Result Analysis Results’ were newly added to the integrated environmental performance management system to increase the usability. In 2022, a new ‘Protection Species’ will be added to continue activities to protect endangered rare and endemic species. Hyundai E&C will practice more efficient eco-friendly management by continuously upgrading the integrated environmental performance management system.

Integrated Environmental Performance Management System

H-PMS	
• GHG management • Waste management • ISO 14001 operation • ISO 50001 operation • Environmental permit management	• Environmental measurement and result analysis results • Protected species management

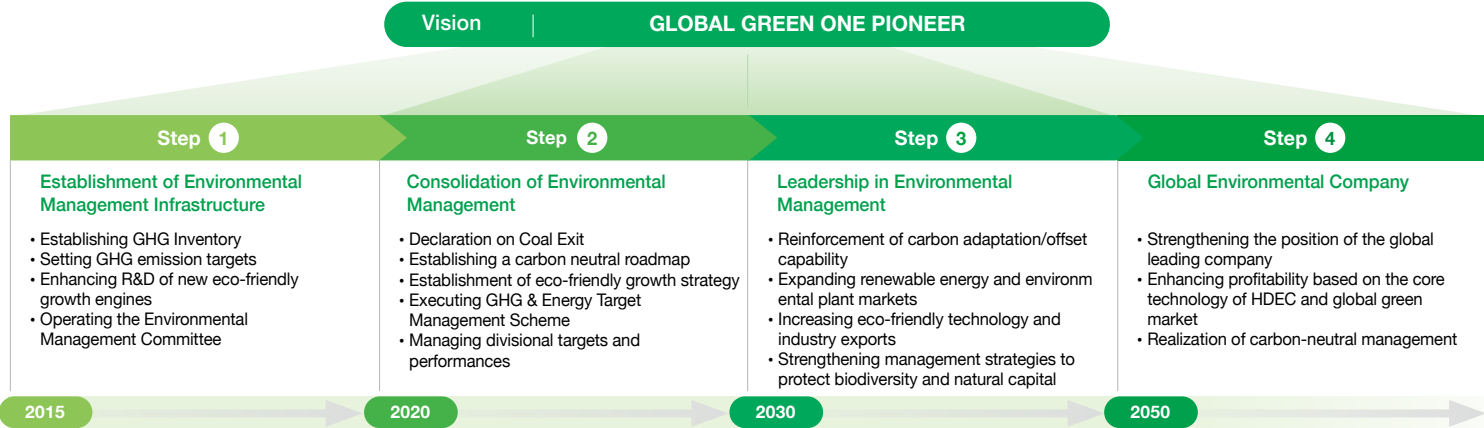
Expanding On-site Environmental Inspection

Each year, Hyundai E&C conducts regular on-site inspections and assessments at major domestic and overseas construction sites as a means of strengthening its environmental energy management capabilities. Inspections and/or assessments are conducted based on the size and characteristics of a particular site. The results of the environmental inspection are reflected in the performance evaluation of the site manager and team leader, and the management status of each site is also included in the completion evaluation score to select excellent sites and pay a separate incentive to strengthen the environmental management mindset. In the case of sites where vulnerabilities are identified, we are striving to raise interest in environmental management by increasing the weight of evaluation on vulnerable areas and establishing and improving work improvement plans. In addition, we are developing an environmental management system and providing environmental education through early stage and issue site support. In 2021, a total of 95 on-site environmental inspections were conducted, including environmental inspections for 44 domestic and foreign sites, 20 occasional inspections and 31 early-stage site support. In 2022, based on the results of implementation, we plan to conduct on-site environmental management activities with the goal of strengthening the evaluation of on-site environmental law violation issues, strengthening on-site support and promoting laws/issues, and reinforcing advance support for high-risk sites.

Environmental Education

Hyundai E&C systematically provides environmental education programs to improve employees’ understanding of environmental education and expedite participation in relevant activities. For construction sites, customized training was provided according to the site conditions, such as on-site excellent/failure cases, etc. In order to effectively respond to the COVID-19 pandemic, in 2021, non-face-to-face education was activated through environmental management videos for a total of 11 environmental issues, including 4 additional production videos such as ‘Site Noise Management Standard’ and ‘Environmental License and Permit Manual’. In addition, to strengthen the supply chain environmental management system, the diagnostic indicators for environmental risk in the ESG evaluation of suppliers have been renewed. In 2022, we plan to strengthen environmental education across the entire value chain by conducting on-site environmental education, including the heads of major suppliers.

Environmental Management Strategy



On-site Environmental Inspection and Support

2021 Key Activities

2021 Performance

2022 Goals

Environmental Inspection Practice-oriented evaluation of on-site environmental management
44 Times
Strengthening the evaluation of on-site environmental law violation issues • Segmentation of on-site environmental practice evaluation items and reinforcement of points • Improvement of the selection method for on-site environmental risk inspection

Occasional Inspection Preemptive on-site inspection/reinforcement of support system
20 Times
Strengthening on-site support and promoting laws/issues • Continuous operation of prompt on-site support system in case of an issue • Monthly environmental issues and laws dissemination • Conducting pre-inspection and support activities in case of external inspection scheduled

Early-stage On-site Support Enhancement of early-stage on-site support
31 Times
Reinforcing advance support for high-risk sites • Priority support for high-risk sites and requested sites • Mandatory environmental education for suppliers in the case of initial support • Activating online support for environmental systems



Maximizing Environmental Efficiency through Carbon Neutral

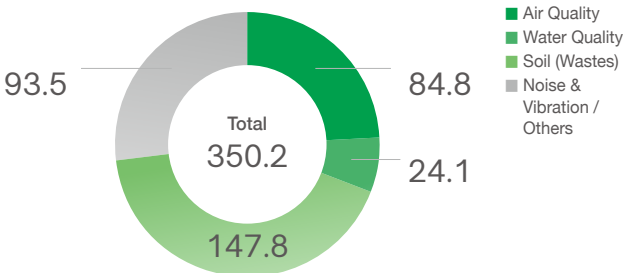
Minimizing Environmental Impact through Eco-friendly Management

Minimizing Environmental Impact

Strengthening Site Environmental Impact Management

Hyundai E&C conducts external and internal audits every year for all domestic and overseas sites, and systematically manages the site environment by identifying environmental risks and opportunity factors for each site. Hyundai E&C also identifies and manages internal and external stakeholders and other environmental impacts during construction to minimize the impact on the environment around the construction site. Hyundai E&C also identifies and manages internal and external stakeholders and other environmental impacts during construction to minimize the impact on the environment around the construction site. Based on the 8 environmental standards enacted in 2019, we are taking the lead in creating added value and realizing a sustainable company by establishing eco-friendly construction. Hyundai E&C strives to minimize the impact on the environment surrounding the construction site during construction by classifying the environmental impact of the site into four environmental factors: air, water quality, soil (waste), and noise and vibration. After the establishment of detailed environmental manuals in 2019 (fine dust management, waste management, noise control, etc.), in 2020, Hyundai E&C distributed a permit application write-up guideline, fine dust reduction guideline and collection of outstanding environmental management cases to sites as part of its efforts to minimize on-site environmental impact. Also, IoT-based environmental substance detection sensors were applied to sites to enable the preemptive taking of measures on on-site noise and fine dust emissions. In 2021, Hyundai E&C distributed ‘Quarterly Environmental Management Campaign’ and ‘Eight Environmental Standards Practice Guide’ and provided relevant assistance with a focus on sites with high environmental risk. In 2022, we plan to improve work convenience and efficiency by making it possible to register and manage on-site environmental work at all times through the establishment of an environment mobile system.

Environmental Protection Investments in 2021 (Unit: KRW 100 million)



Status of Water Usage by Countries in 2021 Based on WRI Water Stress Standards

Category	Overall Water Risk	Water Stress	Proportion of Sales	Proportion of Water Usage
South Korea	High (3-4)	2.55	Medium - High (20-40%)	73.27%
Myanmar	High (3-4)	0.65	Low (<10%)	0.20%
Vietnam	Medium-high (2-3)	0.94	Low (<10%)	1.39%
Saudi Arabia	Medium-high (2-3)	4.35	Extremely High (>80%)	6.62%
Sri Lanka	High (3-4)	1.66	Low - Medium (10-20%)	0.79%
Singapore	Low (0-1)	n/a	No data	2.56%
UAE	Extremely High (4-5)	4.26	Extremely High (>80%)	0.90%
Algeria	Extremely High (4-5)	3.69	High (40-80%)	0.51%
Iraq	Low-Medium (1-2)	3.13	High (40-80%)	2.72%
Indonesia	High (3-4)	2.07	Medium - High (20-40%)	1.00%
Chile	Medium-high (2-3)	3.98	High (40-80%)	0.02%
Qatar	High (3-4)	4.97	Extremely High (>80%)	6.92%
Kuwait	High (3-4)	4.43	Extremely High (>80%)	0.33%
Philippines	Extremely High (4-5)	1.55	Low - Medium (10-20%)	0.40%

Water and Water Resource Sensitivity Management

Hyundai E&C is making various efforts, such as recycling unnecessary runoff or minimizing water for sprinkling, by recycling it for sprinkling to reduce scattering dust or cleaning temporary toilets through a recycling report if the construction groundwater leaks. In addition, effluent water quality standards are strictly managed by installing and operating purification treatment facilities at sites where wastewater is generated and conducting continuous water quality inspections. Due to global climate change, temperatures are rising and desertification is accelerating, leading to an expansion of water-stressed areas. This is an important sustainability issue that can lead to increased construction costs and disputes in the project area due to the nature of the construction industry, where the use of water is essential. To make in-house diagnoses of water stress and the status of projects conducted in countries that experience water stress, Hyundai E&C used the World Resources Institute (WRI)’s Aqueduct 3.0 Country Rankings. Hyundai E&C analyzed the proportion of sales and water consumption by country of water stress for construction sites in 14 domestic and overseas countries that generated sales in 2021 (excluding construction, defect repair period, and initial design process sites). Hyundai E&C will be conducting water reduction activities and managing them more aggressively for projects in countries with a water stress level that is “high (40%)” or higher.

Water Usages (Unit: 1,000 tons)

Category	2018	2019	2020	2021
Total Fresh Water Consumption	746.58	802.05	1,278.00	1,478.01
- Municipal water supplies	504.93	403.82	472.06	400.58
- Fresh surface water (lakes, rivers, etc.)	105.19	292.02	505.34	809.96
- Fresh groundwater	121.61	65.09	196.31	93.61
- Rainwater and others	14.85	41.11	104.29	173.86
Wastewater*	5,499.84	5,333.86	8,311.23	4,234.53

* Includes large amounts of subterranean water that is processed when it occurs naturally during tunnel construction or underground excavation.

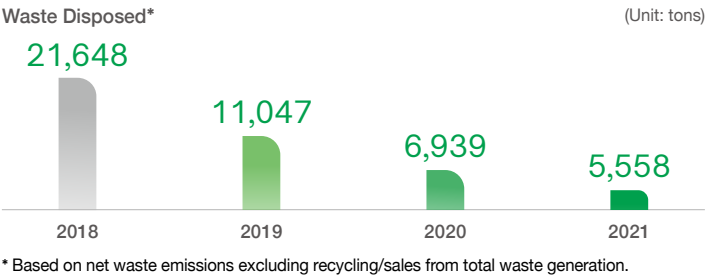
Waste and Eco-friendly Demolition Management

Since 2012, Hyundai E&C has delivered effective waste management through the Waste Management System that connects ‘Olbaro System’, a waste management system of the Ministry of Environment and Hyundai-Project Management System (H-PMS), and Integrated Environmental Performance Management System. Through this, we prevent environmental violations in advance and manage the total amount and cost of waste by business division, company, and type in real-time. In 2019, Hyundai E&C distributed the ‘Waste Separation Standard’ to maximize the reuse and recycling of waste to reduce landfill and incineration waste. In 2021, we upgraded the waste management system in accordance with the changes in the national waste management system standard. As a result of these diversified waste management efforts, the total waste disposed of in 2021 was 5,558 tons which is reduced by 19.9% from 6,939 tons by 2020. Hyundai E&C has established and thoroughly complied with the scattering dust reduction, asbestos waste, noise and vibration management manuals, etc. Furthermore, we are maximizing the utilization of waste resources by segregating waste by type for sites that discharge a lot of waste or sites with high importance in waste management so that they can be recycled rather than incinerated or landfilled. Hyundai E&C checks 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 the 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.

Protecting Biodiversity

Expanding Ecological Environment Protection

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. Hyundai E&C’s representative ecological environment protection activities include the preparation of alternative habitats, and various types of activities such as tree transplantation, creation of ecological wetlands using silt sand, installation of artificial plant islands, and development of natural rivers and green areas are being carried out. Second, we are carrying out activities to install protection devices and moving passages, and apply activities appropriate to the site situation, such as installing small animal escape routes and guide fences, setting anti-fouling nets and blocking routes, and installing moving passages using street trees and structures. Third, alternative designs are being considered, and these include changing the construction site, using a vibration reduction method, and reducing the bridge foundation. Hyundai E&C plans to upgrade internal standards to expand the disclosure of business information on biodiversity-sensitive areas.



(As of July 2022)

Status of Biodiversity Protection at Sites

Biodiversity Protection Activities	Construction Site	Status of Legally Protected Animals in Project Regions				
		Bird	Mammal	Fish	Amphibian & Reptile	Plants
Habitat protection (including construction method reduction measures, landscape design, and species protection)	Gyeongbu High-Speed Line (Safety Vulnerable Area C2)				Narrow-mouth frog	
	Gimpo~Paju (C2)	Red-crowned crane			Golden frog, Suwon tree frog	
	Daegok~Sosa Double Track Train (C1 & 2)	Kestrel, bean goose			Narrow-mouth frog	
	Roadbed for Eastern Railway Line (Pohang~Samcheok, C12)	Kestrel, red-bellied hawk, etc. (total 3 species)	Otter, lynx	Tuman river sculpin		
	Reconstruction of Duchon Jugong Apt	Red-bellied hawk, kestrel				
	Double track for Byeollae Line (Amsa~Byeollae) (C3)	kestrel				
	Stage 3 of Eco-Delta City (C3) (Busan)	Yellow-beak spoonbill, spoonbill, etc. (total 15 species)	Otter, lynx			
	Samsung~Dongtan Metropolitan Express Railway (C4)	kestrel	Otter			
	Straight Test-driving Road for Hyundai Motor (Seosan)	Stork, bean goose, etc. (total 11 species)	Otter, lynx			
	Main facility for Units 1 and 2 of Shin Hanul Nuclear Plant		Otter, lynx			
	Comprehensive development of Yeongdong-daero's underground space (C3)	Mandarin duck, bird horror, etc. (total 3 species)				
	Icheon~Mungyeong railway (C6, T/K)	Mandarin duck, red-bellied hawk, etc. (total 15 species)	Red bat, otter, etc. (total 6 species)			
	Dredged sediment dumping ground at Yeongjongdo (Incheon Port)	Kestrel, black-headed hound, etc. (total 15 species)			Narrow-mouth frog	
	Steam Generator Replacement for Units 2 and 4 of Hanbit Nuclear Power Plant		Otter, lynx			Prickly water lily
Food Chain Maintenance	Double-track railway for Central Line (Dodam~Yeongcheon) (C1)	Mandarin duck, kestrel, etc. (total 3 species)	Otter, lynx			
Minimum Environmental Damage Caused by Construction	Daegok~Sosa Double Track Train (C5)	Bean goose, kestrel, etc. (total 9 species)				
	HS Prugio Juan		Wildcat			

HDEC PEOPLE

Right Direction for Shared Growth
Accompanied by Hyundai E&C



Employees are the pioneers of innovation, Suppliers are partners to grow together, and the community is the foundation of corporate activities. Hyundai E&C is realizing the dream of 'Construction Korea' by fostering innovative talents who lead change and innovation around the world, and is opening a new era of win-win by searching for a path for shared growth with suppliers and local communities.

SHARED VALUE

STRATEGY | 5



**Realizing Safe Workplaces and
Cultivating Innovative Talents**

Safety and Welfare,
Talent Management

HDEC PEOPLE

STRATEGY | 6



**Enhancing Value Chain
Capability and Creating Values
for Local Communities**

Supply Chain Management &
Support, Strategic Social
Contributions



Realizing Safe Workplaces and Cultivating Innovative Talents

Enhancing Value Chain Capability and Creating Values for Local Communities

STRATEGY 5

Realizing Safe Workplaces and Cultivating Innovative Talents



The biggest challenge for Hyundai E&C is to nurture innovative talents who can lead change and innovation around the world and create new values, while realizing a safe workplace where they can freely express their will. Hyundai E&C seeks to establish itself as a leader in the global construction industry by securing innovative talents through employee global competency development and fair performance evaluation, while realizing 'Accident-free Construction' with 'Safety' as the top priority in corporate management.

2021 Performance Highlights

Safety Management Investment Growth Rate in 2021 (compared to 2020)	Secure 1,000 Safety Experts by 2025	Number of Recruits in 2021 (including contract workers)
23%	1,000 Experts	1,217 Recruits

Safety <https://www.hdec.kr/en/invest/safety.aspx>
Employees <https://www.hdec.kr/en/career/talent.aspx>



HDEC Value Creation



Hyundai E&C Smart Safety

“Hyundai E&C Takes the Lead in Strengthening Safety Management in the Construction Industry”

Hyundai E&C is leading the reinforcement of safety management in the construction industry by disclosing the blueprint for company-wide safety management to the public at the regular general shareholders' meeting on March 24, 2022. At the meeting, CEO Young-Jun Yoon disclosed specified safety management reinforcement measures to strengthen safety management: (i) appointing a Chief Safety Officer (CSO) within the board of directors and expanding safety organization; (ii) increasing safety management investments to KRW 154.5 billion (15% increase from the previous year), and (iii) strengthening smart safety and incentive systems. Following the introduction of a remote site platform using smart devices for the first time in Korea in 2021, Hyundai E&C has implemented various on-site safety including the implementation of the 'H-Safety Wallet System', which provides incentives for field workers to comply with safety rules in early 2022.

Strengthening the Safety Management System

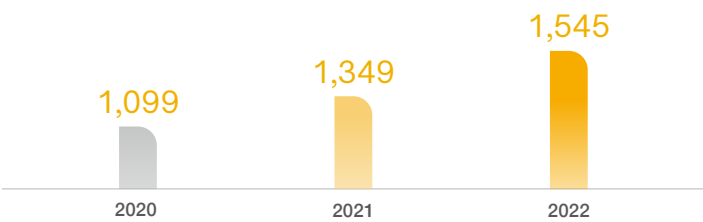
Safety First Management

'Safety' is the top priority of Hyundai E&C's management. Hyundai E&C has established the '12 Safety Standards' and established Hyundai E&C's unique safety culture by putting safety as the top priority for sustainable management. Under the 2030 safety management goal of "Creating a Happy Workplace through New Safety Management Technologies," Hyundai E&C is conducting company-wide safety management activities based on three major initiatives: Autonomous Site Safety, Smart Safety, and Eco-friendly Construction Implementation. In 2022, we have established and implemented three annual safety management targets: (i) achieving ZERO serious accidents through the establishment of corporate-wide accident preventing system, (ii) reinforcing the company-wide safety management efficiency and competency by strengthening the safety and health system, and (iii) spreading of safety and health culture centered on workers/suppliers. In 2021, Hyundai E&C completed 14 of the 16 safety and health promotion tasks within the year, selected through operation performance analysis by safety/health areas such as disaster statistics, safety inspection, safety education, IT safety management, health work, and overseas support work. In 2022, we are continuing to carry out two promotion tasks which has been put on hold due to the aftermath of COVID-19: one-point video production and Inspection of safety management tasks implementation by site managers. Through the disaster analysis in 2021, Hyundai E&C is striving to realize safety-first management by selecting the priority tasks for safety and health in 2022: establishment of a total system for accident prevention, spread of safety and health culture centered on workers/suppliers, and reinforcement of safety and health system. On top of the advanced safety and health management system based on the international standard ISO 45001 and KOSHA MS certification, Hyundai E&C built a safety culture experience center to provide construction safety experience education for employees and stakeholders while enhancing safety management competitiveness, including self-development of smart safety management platform based on new IoT technology.

Expanding Safety Management Investments and Organization

Since the establishment of the "Special Safety Management Reinforcement Plan" in March 2021, Hyundai E&C has made a large-scale investment in safety management worth KRW 134.9 billion (23% increase from KRW 109.9 billion in 2020) and is focusing on overall safety management in terms of policy, organization, process, and education system. In 2022, safety management investments have been further expanded to KRW 154.5 billion (increased by 15%), and various safety management activities are being carried out including investment in safety equipment, safety protection equipment, safety education and training, and on-site inspection and prevention. To realize company-wide safety-first management, Hyundai E&C promoted the safety management organization from the Safety Management Office to the Safety Management Division in October 2021 and expanded the number of safety managers to 831 as of January 2022 (16.4% increase from 714 in 2021). Hyundai E&C plans to secure 1,000 safety experts, 20% of the total workforce, by 2025 by making it mandatory for those in charge of the field to acquire safety certifications. By expanding the safety inspection organization and operating '365 Safety Patrol', a regular inspection organization for the safety inspection and education, Hyundai E&C is intensively inspecting high-intensity safety inspections and quality standards for industrial accidents such as falls, falls, collisions, collapses, electric shocks, fires, and suffocation accidents with high intensity and frequency. In particular, the board of directors' responsibility for safety management has been strengthened, by appointing a new chief safety officer (CSO) through the approval of the board of directors, and establishing a safety and health system evaluation function in the Corporate Governance & Transparent Management Committee within the BoD. As a result, an independent decision-making system for the safety management organization was established to respond immediately to the occurrence of major disasters, and the foundation was laid to efficiently perform the role of a control tower that supports safety-based business execution. Hyundai E&C is striving to induce the establishment of an autonomous safety and health system for suppliers by supporting the formation of safety management organizations for suppliers.

Safety Management Investments (Unit: KRW 100 million)



Safety Management Investment Performance and Plan (Unit: KRW 100 million)

Category	2020 Investment Performance	2021 Investment Performance	2022 Investment Plan
Safety Facilities (including reward and R&D)	362	508	621
Safety Gear	214	252	277
Safety Education and Training	11	18	19
On-site Inspection and Prevention	13	15	16
Legal Examination	16	19	21
Others	483	537	591
Total	1,099	1,349	1,545

Hyundai E&C Safety Management Investment Highlights

1,000 Experts

Organization
Appointment of Chief Safety Officer (CSO), goal of securing 1,000 safety managers

15%

Investment
15% increase in safety management investments

Safe Incentive

System
reinforcement of smart safety, introduction of safety incentives

2030 Safety Management Goal

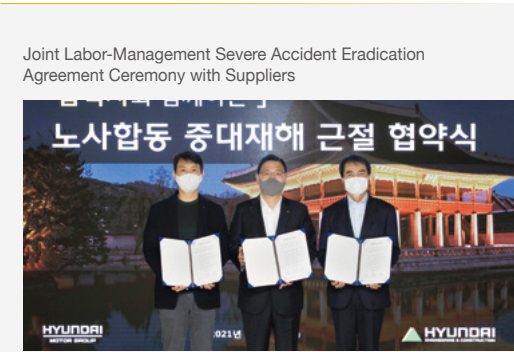
“Creating a Happy Workplace through New Safety Management Technologies”

3 Major Propelling Plans

2022 Safety Management Target

12 Safety Standards

Autonomous Site Safety	Smart Safety	Eco-friendly Construction Implementation
Achieving ZERO serious accidents through the establishment of corporate-wide accident preventing system	Reinforcing the company-wide safety management efficiency and competency by strengthening the safety and health system	Spreading of safety and health culture centered on workers/suppliers
<div>Proactive risk management<ul style="list-style-type: none">Compliance with the prior work permit system</div>	<div>Ensure safe working conditions<ul style="list-style-type: none">Install safety facilities and wear protective equipmentConcentration of gas in confined spacesConduct electrical safety inspection before workImplementation of measures to prevent arsenic acid during hot work</div>	<div>Block unsafe behavior<ul style="list-style-type: none">Pass through the designated movement pathProhibit entry to the lower part of the salvageProhibit dismantling of construction equipment safety devicesNo entry to the installation/disassembly work area</div> <div>Establishment of basic order<ul style="list-style-type: none">Prohibit drinkingProhibit smoking outside of designated areasProhibit speeding and mobilephones use while working on site</div>



Hyundai E&C Builds a Safety Management Ecosystem to Eradicate Major Accident

In November 2021, Hyundai E&C held the 'Joint Labor-Management Severe Accident Eradication Agreement Ceremony' for employees and suppliers, and disclosed measures to strengthen safety management and safety support programs for suppliers. Hyundai E&C expressed its will to eradicate major accidents through the signing ceremony with suppliers, by introducing multi-faceted supplier support programs: (i) incentives for suppliers with excellent safety/quality/process management worth KRW 500 billion per year, (ii) reinforcement of safety evaluation upon new registration and renewal of suppliers (5%→20%), (iii) introduction of H-Safe Wallet System. Since 2021, Hyundai E&C is making every effort to build a safety management ecosystem by implementing the '50% Advance Payment System for Safety Management Fees' to strengthen early safety management at construction sites.

Spreading Smart Safety and OHS Culture

Leading Smart Safety

Hyundai E&C is taking the lead in the development and application of smart safety technologies that can dramatically improve on-site safety management by utilizing cutting-edge technologies such as Artificial Intelligence (AI), Internet of Things (IoT), robotics, and drones. In October 2020, we developed “Accident Prediction AI,” an artificial intelligence platform that predicts and manages on-site accident risk, and applied it to construction sites. In August 2021, we developed an ‘AI Image Recognition Equipment Stenosis Prevention System’ that uses AI to eliminate blind spots on site and applied it to all sites. In November, Hyundai E&C is leading the smart safety field by developing the ‘Integrated Smart Automatic Measurement and Monitoring System’ for the first time in a construction company.

AI Image Recognition Equipment Stenosis Prevention System

The newly developed ‘AI Image Recognition Equipment Stenosis Prevention System’ can provide an alarm only when a person approaches heavy equipment by using AI to classify objects and people through the analysis of camera images installed in the side and rear, the main blind spot of heavy equipment. It is a state-of-the-art ICT system that is effective for worker safety management. The system has improved the disadvantages of the existing ultrasound method, which could not be used in the field because it did not distinguish between people and objects. In construction sites, depending on the construction characteristics, it may be difficult to detect workers even with the system. In particular, there are still blind spots that cannot be detected by the camera alone when working at a lower position than the equipment, such as by submerging a pipeline underground. Hyundai E&C plans to continuously expand R&D investment in wireless communication-based technology development to ensure safety by recognizing workers even in these special situations.

Integrated Smart Automatic Measurement Monitoring System

The ‘Integrated Smart Automatic Measurement Monitoring System’ developed for the first time in a construction company is a cloud-based system that can integrate and manage temporary structures and ground conditions on site in real-time to prevent collapse accidents that may occur during construction. Safety accidents in temporary structures were an urgent matter to take measure, due to its high frequency of accidents (about 40% of safety accidents that occur in construction work), and the nature of accidents that lead to damage to surrounding roads and buildings and human casualties. The system can thoroughly prevent safety accidents by monitoring the safety of temporary structures in real-time through an automatic measurement sensor installed on site and a cloud-based system. In particular, it has the advantage of being able to understand the safety of the site anytime, anywhere, as it transmits field data in real-time and automatically organizes and analyzes data. in conjunction with HloS (Hyundai IoT Safety System), the on-site safety management system in operation. Hyundai E&C will continuously strive to reduce all safety accidents on site as well as collapse accidents during construction through continuous discovery and application of smart safety technologies.

Hyundai E&C Smart Safety Technology



AI Disaster Prediction System
Preemptively providing disaster risk information on construction sites based on data



HloS Site Safety Management System
Smart management of site safety using IoT sensors for the first time in the construction industry



Construction Robotics
Site safety and quality management with construction automation technology using work robots and semi-autonomous construction equipment




Big Data/AI Analysis
Process/quality/safety management in the field through big data analysis




AI Image Recognition Equipment Stenosis Prevention System


Smart Automatic Measurement System




Ground inclinometer




Groundwater level gauge



Ground subsidence gauge



Stress meter



Integrated Smart Automatic Measurement Monitoring System

Strengthening and Diversifying Safety Inspections

Hyundai E&C is doing its best to preemptively prevent accidents in order to protect the safety of workers at all workplaces, by taking the initiative of the top management to conduct safety inspections, and by establishing a multifaceted safety inspection program and strengthening safety inspections. In 2021, we strengthened safety inspections led by top management and promoted the internalization of safety awareness, as the CEO directly conducts safety inspections at 24 major sites to spread safety awareness throughout the company, and the newly appointed Chief Safety Officer (CSO) in October 2021 conducts 17 intensive site safety inspections. In particular, safety and health inspections were significantly expanded from 110 in 2020 to 1,039 in total through a system dedicated to safety management by field (119 general, 32 technical, and 888 equipment). Preventive safety management has been reinforced to prevent disasters in advance by newly establishing long-term support inspections for sites identified as high-risk groups. In addition, the 'Safety Inspection Day' event in which the management participates is continuously held every month for all domestic and overseas sites to improve on-site safety diagnosis and safety accident prevention awareness of all employees. Through the 365 Safety Patrol inspection, we made an effort to improve the level of safety management on-site at all times through unscheduled inspections of all sites. Following the transition to the emergency safety management system, special safety inspections were carried out for all employees, and employees of the headquarters visited the site in groups of two to conduct safety inspections to instill a company-wide safety mindset.

Spreading Safety and Health Culture

Hyundai E&C is striving to secure competitiveness in safety and health and to become a global safety management company through sustainable and systematic employee safety training. In 2022, Hyundai E&C is making every effort to establish a customized safety training program for new employees to executives and to raise the safety mindset of its employees: (i) introduction of ‘Regular Safety and Health Education for All Employees’ (the first in the construction industry); (ii) establishment of ‘Executive Safety Leadership Training’ for head office executives and team leaders; (iii) ‘Education for New Site Officers’ has been newly established for those who are assigned to the first position in the site. In addition, Hyundai E&C secures the effectiveness of safety and health education by diversifying and operating safety education methods from group/lecture-centered to experiential/VR education, and has advanced worker safety education contents by producing 8 One Point safety management videos and 3 construction machine inspection videos. In March 2022, Hyundai E&C implemented the ‘H-Safety Wallet System’ to encourage autonomous safety management by providing workers with accident-free incentives for the first time in the domestic construction industry, raising safety awareness among on-site workers. The ‘H-Safety Wallet System’ is an incentive system that pays safety points for each achievement item to a worker who works at the site when he/she complies with safety rules, completes legal safety training, and makes a safety report or suggestion (applied to all sites). It is expected to be effective in internalizing workers' safety awareness and spreading a safety and health culture, as workers can receive financial compensation for their safety management activities and check the accumulated point status in real-time through the app.

Strengthening Safety Inspections

(Unit: times)

Category	Description	2020	2021
CEO Safety Inspections	Maximize the ripple effect of safety awareness among all employees by creating a safety culture led by top management	13	24
CSO Safety Inspections (new)		-	17
Safety and Health Inspection by Field	Designation of head office staff for each site and conducting close support inspection	110	1,039
Long-term Support for High-risk Sites (new)	Provide long-term safety supports for sites identified as high-risk groups	-	257
365 Safety Patrol Inspection (new)	Improve the level of on-site safety management through untimely inspection of all sites	-	364
Special Safety Inspections Led by HQ Employees	Conduct safety inspections led by employees at all sites and implement improvement activities for the identified agendas	1,565	875
Total		1,688	2,576

Safety and Health Education and Incentive System

Category	Item	Description
Safety and Health Education	Regular Safety and Health Education for All Employees (new, the first in the construction industry)	Regular safety and health education of at least 6 hours per quarter for all employees
	Executive Safety Leadership Training (new)	Regular safety leadership training at least once a year for head office executives and team leaders
	Education for New Site Officers (new)	Quarterly training for first-time officers in the site
	Reinforcement of experiential/VR-based safety education	Diversification of safety education methods from group/lecture-centered to experiential/VR education
Safety Incentive	Safety incentive system for workers (new)	Safety points are accumulated and paid for each worker's accident-free work period, participation in safety training, and safety activities.
	Safety incentive system for suppliers (new)	Additional points for company evaluation, selection of private contracts (if applicable), according to the safety management performance of each supplier

1. 'H-Safe Wallet System', the First Safety Incentive in the Construction Industry 2. 'H-Safe Wallet System' Pilot Application (Hillstate Lake Songdo 3rd site) 3. CEO Safety Inspections 4. Safety Inspection Day

2022 HYUNDAI E&C SUSTAINABILITY REPORT

48 | 49

Cultivating Innovative Talents

Innovating Smart Learning System

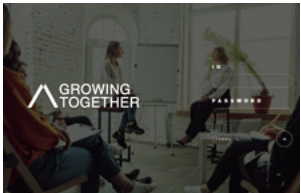
In order to successfully carry out the continuously expanding domestic and international business, it is essential to systematically nurture the discovered outstanding talents into innovative talents with differentiated competencies.

Hyundai E&C has established and is operating a company-wide human resource development system to simultaneously improve the organizational and individual capabilities of employees. Hyundai E&C introduced a smart learning system to recommend customized training contents for each job/position, and established an environment where employees around the world can learn at all times by supporting a mobile shared learning platform.

In 2021, the “Growing Together” system, a new smart learning system, is being introduced and operated with the goal of company-wide employee growth and competency enhancement. The “Growing Together” system quantifies various competency enhancement activities related to employee growth (external training, instructor activities, knowledge sharing, certification, degree acquisition, language improvement, etc.) in addition to in-house training, which was operated as a compulsory education completion system, and converts them into growth points. Hyundai E&C has improved the system so that leaders can actively promote employee growth coaching and support by reflecting measured growth points up to 3,000 points per year in the leader's personnel evaluation. With the introduction of this system, it is expected that an autonomous learning culture will be established for employees in more diverse capacity building areas such as education participation activities, qualification/degree acquisition activities, content sharing activities, and knowledge dissemination activities.

Hyundai E&C Smart Learning Website
“Growing Together” <https://hrd.hdec.co.kr>

Smart Learning Site
“Growing Together”



Reinforcing New Growth and Job Training

With the aim of nurturing the world's best construction experts, Hyundai E&C supports the development of customized job competency by establishing an advanced job training system and introducing essential job training programs for each position and job group. In order to minimize the training gap due to the COVID-19 pandemic in 2021, job training, which was previously conducted as a group training, will be operated as smart learning content that can be easily accessed anywhere, anytime in a mobile environment. In addition, the professional knowledge acquired in the field was effectively delivered by nurturing employees with expertise as in-house instructors.

The construction technology education is a design, construction and quality management education that construction engineers must take. By signing a cooperation agreement and training consignment agreement with the Construction Technology Education Center, a dedicated educational institution, Hyundai E&C has improved the convenience of employees so that they can easily apply for and take legal education, a construction technology that was applied for by each educational institution, on the dedicated website.

Following the 2020 company-wide sustainability management (ESG) basic education as part of corporate culture education, the new growth/fourth industry education course held in 2021 enhanced understanding of global trends and promotes consensus among all executives and employees on new growth businesses. In 2022, we plan to upgrade the recently introduced smart learning system, “Growing Together,” so that it can be improved so that it can be integrated into strengthening competencies by linking the history of external education such as group education and the Construction Technology Education Center.

FTE Training Performance in 2021



Innovating Work Efficiency

Hyundai E&C is carrying out various activities to improve the work efficiency of its employees and to create an innovative work environment. In order to improve work efficiency and work methods, Hyundai E&C conducted improvement activities by receiving opinions from employees to improve work efficiency, such as work standards, procedures, and corporate culture at the headquarters and site in 2021. A total of 2,703 cases were received, including employee opinions for business improvement and new suggestions through bulletin boards/TFTs, and various improvement activities were carried out in 4 rounds. In addition, efforts were made to improve work efficiency through various trainings and workshops, such as enhancing intergenerational understanding through training for domestic field managers and enhancing the sense of belonging of employees through training for contract workers on projects.

Hyundai E&C is developing a variety of programs and activities to improve the work culture. The top 3 postures among the 'listening' postures necessary to improve work efficiency selected by the employees' votes for each organization are produced and distributed as posters to encourage the participation of employees. A campaign to improve the organizational culture was also launched in a cut-toon format, such as creating and posting 'Work Etiquette' that employees must follow and 'Unfamiliar Safety System'. To raise awareness in 2022, we plan to create and post customized posters for each organization in which employees directly present their opinions regarding the corporate culture slogan 'Challenge', and to produce various video toons under the theme of improvements in overall corporate culture, such as reporting/payment culture and working methods. In 2022, in order to improve the work efficiency of employees and create an innovative working environment, we are continuously striving to improve the working environment of our employees by piloting a smart office in the head office and opening a base office in the metropolitan area.

Status of Innovation in “The Way We Work” in 2021

1 Safety	<ul style="list-style-type: none">Improvement of safety management organizationImprovement of safety reward and punishment systemExpansion of safety management expensesEnhancement of the organization dedicated to construction equipmentImprovement of the disciplinary process for serious accidentsIntroduction of workers' accident-free incentive system, etc.
2 Business Standards/Procedures	<ul style="list-style-type: none">Improvement of domestic base organization operationImprovement of working time management systemImprovement of the company-wide reward systemImprovement of working environmentSimplified access to the Technical Information Center
3 Organizational Culture	<ul style="list-style-type: none">Activation of Family Day implementationImproved accessibility to IT work channelsManagement of domestic site holiday workUnification of vacation standards for congratulations and condolencesImprovement of notification of application results for resorts, etc.

Major Work Culture Innovation Activities in 2021

Innovation Program	Innovation program “The Way We Work”	Receive and improve employee opinions to improve work efficiency, including head office/site work standards, procedures, corporate culture, etc.
Education/workshop	Domestic site head training Project contract training	Foster intergenerational understanding Increase employee sense of belonging
Campaign	Customized posters for each organization Posting gentle culture cut-toons Posting safety system cut-toons	Posting poster on 'listening' postures necessary to improve work efficiency selected by the employees' votes Posting cut-toons on 'Work Etiquette' that must be followed by each other Posting cut-toons on 'Unfamiliar Safety System' to efficiently perform safety tasks

Reinforcing Communication

Based on a human-centered corporate culture that values communication and trust, Hyundai E&C is expanding the field of communication with its employees and strengthening emotional capabilities. To realize this, we operate various communication channels for employees to solve difficulties experienced by employees while working and to reflect suggestions as much as possible. Hyundai E&C has been operating an on/off line employee psychological counseling center since 2015 to improve work immersion and organizational productivity by resolving employee grievances. Since 2018, ‘H · Dudrim’ has been operated, as a window for resolving internal and external complaints. A total of 9,683 cases were received through ‘H · Dudrim’ in 2021, and 100% of responses were completed to improve employee grievances/welfare and customer satisfaction.

In May 2021, the CEO letter was distributed to commemorate the anniversary of the foundation, and in August, the CEO column was published under the theme of ‘One Team’ to strengthen communication between management and employees. In addition, we conducted the ‘2021 Happiness Grand Prize Campaign’ to provide a place for communication by recording the stories that received a lot of sympathy among the happy stories written by the executives and employees themselves and transmitting them through the in-house broadcast. In 2022, we plan to expand the campaign to receive employee stories and strengthen communication and bond among field employees through the ‘Domestic Site Challenge Class’.

H · Dudrim <https://dudrim.hdec.co.kr:4443/Partner/Intro.aspx>

Improving Employee Satisfaction

In order to the level and factors of the corporate culture affecting the work and performance of employees, Hyundai E&C has conducted an annual employee satisfaction survey. The survey measures specific levels of satisfaction by positions, gender, age, and organizations. Therefore, through annual trend analysis, Hyundai E&C proactively identify employees' grievance and strives to increase employee satisfaction through internal improvement activities. In this survey, we have defined work engagement areas as i) organizational culture, ii) leadership and iii) organizational effectiveness. Based on the results of the Index, we have made an effort to improve work engagement by identifying systematic corporate culture improvement tasks. In addition, we have shared the Index results with all employees through mail and groupware. The index is comprised of 3 areas and 82 indicators. As a result of the Employee Satisfaction Survey in 2021, the ‘Praise and Recognition’ area increased significantly (▲14 points) compared to 2020, which is a meaningful result indicating that Hyundai E&C is moving towards a happy workplace. organizations with less than 50 points of employee satisfaction were classified as sub-organizations, and detailed diagnosis was carried out through field trips. We conducted 1:1 in-depth interview with all employees of the target organizations (9 in the first half, 8 in the second half) and reflected their opinions to improve the problems of sub-organizations. In 2022, we plan to conduct one-on-one interviews with all employees at key sites about corporate culture and HR system improvement, to improve employee satisfaction.

Pursuing Work-life Balance

Employee Support Programs

Hyundai E&C operates various flexible work programs such as flexible working hours, staggered work systems, and part-time work systems to support employees in pursuing an efficient work and life balance at the same time. The flexible working hours system is flexibly adjusted for every two weeks at the head office, branch/ corporate and domestic sites, and every three months at overseas sites to operate an appropriate commuting system according to the location of work. Depending on the current status of the construction site, if long-term site operation is required, three working hours are operated at 7 am, 8 am, and 10 am according to the group organization, enabling efficient work. In the case of the part-time work system, there are four-hour and five-hour work types.

To ensure that our employees can raise their children happily, we support child-rearing for each life cycle, including pregnancy, childbirth, child-rearing, and child-rearing. “Hyundai Dasom Daycare Center,” a workplace daycare center, is being operated to support childcare so that employees can balance work and childcare, and high-quality childcare is provided through the consignment operation of the Hansol Childcare Foundation, an educational institution. In addition, congratulatory money and scholarship supports are provided for children of employees such as birth celebrations, entrance celebrations, and Children’s Day.

Hyundai E&C operates an in-house infirmary with resident nurses so that employees can check their health status immediately, and conducts regular health check-ups for employees and their spouses every year. In 2021, a total of KRW 1.96 billion and 6,074 people benefited. In addition, group accident insurance was expanded to cover employees, spouses and children, and a total of 14,762 people were supported. In 2022, we plan to expand the health and health support of employees’ families by making it possible to transfer the spouse support for the comprehensive health check-up between family members, and to improve the medical welfare of employees by diversifying the options for group accident insurance.

Building Trust in Labor Relations

Hyundai E&C has created a corporate culture that values trust and harmony between labor and management. Hyundai E&C’s employees can join in or withdraw from associations at their free will, except those who fall under the category of workers prescribed in Article 3 and 5 of the Labor Union Act, a collective agreement. It is also specified that the company should neither obstruct employee participation nor force employee withdrawal from associations. As of April 2022, 100% of total 6,192 employees are protected by the collective bargaining agreement and 927 employees are registered to the labor union. Hyundai E&C holds regular meetings with the Labor Union to discuss labor-related issues, and, in principle, notifies the labor union as soon as possible of changes in important business operations, such as reorganization and reorganization of the company. In 2021, the Quarterly Working Environment Improvement Committee was held to improve the working environment due to COVID-19, expand the scope of support for health checkups, and raise the long-term service celebration subsidy.

Health Check-up Supports for Employee and Spouse in 2021



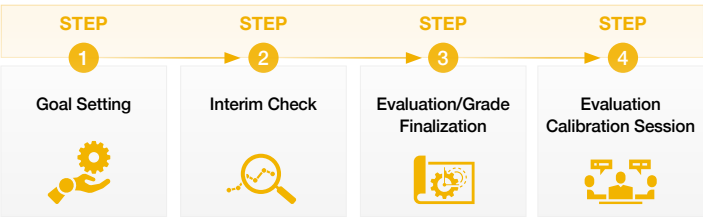
Fair Evaluation and Compensation

Fair Evaluation System

Hyundai E&C develops its employees’ capabilities based on performance achievement, strengths, and improvement areas through the MBO (Management by Objective) -based HR system and educate major officers on performance management for a fair evaluation. Hyundai E&C an environment where more accurate evaluation and fair compensation can be made by upgrading the performance management system into goal-setting – interim check - evaluation/ grade finalization - evaluation calibration session.

In 2021, employees can voluntarily revise their goals at any time through performance management, with the introduction of frequent goal management. By setting goals for each execution period, we have improved so that appropriate feedback and coaching are possible in line with the expected date of goal achievement. In addition, Hyundai E&C has strengthened the effectiveness of the existing descriptive competency evaluation index by converting it to an intuitive index and introducing a new semantic index to enable more effective competency evaluation. In 2021, the scope of peer reviews was expanded from 5 to 7, and efforts were made to improve the reliability of evaluation so that an accurate diagnosis of collaborative competency is possible.

Performance Management Process



Smart Compensation System

Hyundai E&C is operating a performance-oriented compensation/system based on performance evaluation results. In 2020, the promotion point system was abolished 2020 to establish a foundation for the early selection of excellent talents. In 2021, by introducing a new selection promotion system, excellent employees with outstanding work competencies can be selected and promoted through promotion screening regardless of their age or experience, thereby promoting employee motivation to work. All Hyundai E&C employees are compensated fairly, in accordance with their position, years of service, and relevant regulations. Hyundai E&C rewards male and female employees according to identical standards. However, Korean men are performing compulsory military service for 18-22 months in order to fulfill their national defense obligations (18 months in the Army, 20 months in the Navy, 22 months in the Air Force). Like other Korean companies, Hyundai E&C recognizes military service experience as an official social experience and reflects it when paying salaries. Therefore, it is revealed that the difference in the salaries of male and female employees is due to experience, not gender. The ratio of wages between males and females at the highest positions available is given as there is no female director currently.

Employee Compensation by Gender in 2021 (Unit: KRW)

Category		Average Women Salary Per Month	Average Men Salary Per Month
Executive Level	Base salary	15,000,000	20,202,490
	Total compensation	15,000,000	20,202,490
Management Level	Base salary	4,820,069	4,917,269
	Total compensation	6,618,562	6,751,868
Non-management Level	Total compensation	4,760,874	5,004,102

* Due to the new appointment of female executives in 2021, there is a difference in salary based on years of service.

Employee Support Programs

Category		Description	
Smart Working System		Flexible working hours	Flexibly adjusted for every two weeks at the head office, branch/corporate and domestic sites, and every three months at overseas sites
		Staggered work systems	The head office operates three working hours at 7 am, 8 am, and 10 am, and the site operates shifts according to the on-site situation.
		Part-time working options	Four-hour and five-hour work types operated
Childcare Support System		In-house nursery/daycare	Providing high-quality childcare through in-house nursery
		Congratulatory money support	Financial support for employees’ children, such as birthday celebrations, entrance celebrations, Children’s Day, etc.
		Scholarship support	Scholarship support for employees’ children up to high school/university students
		Reduced working hours during pregnancy	Within 12 weeks of pregnancy or after 36 weeks, up to 2 hours of reduced work is possible
		Reduced work hours during childcare period	15 to 35 hours per week for one year
Maternity & Parental Leave System		Maternity leave	90 days of paid maternity leave for female workers
			10 days of paid work leave for male workers
		Parental leave	12 months of paid parental leave for female workers
			12 months of paid parental leave for male workers
		Fertility treatment leave	Provided with a leave of up to 3 days per year and paid leave for the first day
		Family care leave	Unpaid leave can be used up to 10 days per year
		Family care vacation	Family care leave can be used up to 90 days per year
		Refresh leave	Up to 13 weeks of paid leave for self-development or recharging
		Onboarding support leave	One paid leave in the first half of every year and one paid leave in the second half of every year until the second year of joining the company
Health Support System		Regular health check-ups	Regular health check-ups for employees and their spouses
		Group accident insurance	Expanding group accident insurance for employees, spouses and children
		Employee healing program	Provide professional psychological counseling and coaching service for employee mental health within 6 times a year

Status of Maternity and Parental Leave Use

Category		Unit	2019	2020	2021
Number of Employees who took Maternity Leave	Female	Employees	17	11	29
	Male	Employees	205	161	198
	Total	Employees	222	172	227
Return Rate After Maternity Leave		%	100	100	100
Number of Employees Who Took Parental Leave	Female	Employees	20	12	17
	Male	Employees	14	9	17
	Total	Employees	34	21	34
Number of Employees Who Returned After Parental Leave	Female	Employees	19	10	15
	Male	Employees	13	7	15
	Total	Employees	32	17	30
Number of Employees Who Worked for 12 Months After Parental Leave	Female	Employees	13	7	10
	Male	Employees	13	3	5
	Total	Employees	26	10	15

Realizing Safe Workplaces and
Cultivating Innovative Talents

Enhancing Value Chain Capability and
Creating Values for Local Communities

STRATEGY 6

Enhancing Value Chain
Capability and Creating
Values for Local
Communities



Suppliers are partners to grow together with, and local communities are the base for corporate activities. In order to grow into a sustainable construction company, Hyundai E&C is striving to strengthen the competitiveness of the entire value chain and to grow together with suppliers through communication and cooperation. Hyundai E&C is also striving to fulfill its role and responsibility as a global corporate citizen by actively participating in local communities and expanding domestic and overseas social contribution activities by reflecting the characteristics of the construction industry.

2021 Performance Highlights

Amount of Shared Growth Fund in 2021	Scale of Supplier Safety Incentives in 2021	Social Contribution Investments in 2021
160 <small>KRW billion</small>	500 <small>KRW billion</small>	13.58 <small>KRW billion</small>

Supply Chain <https://www.hdec.kr/en/invest/partnership.aspx>

Social Contribution <https://www.hdec.kr/en/invest/contribute.aspx>



HDEC Value Creation



H-Together Declaration

“Hyundai E&C Opens the Right Path for Coexistence with Suppliers”

On September 10, 2021, Hyundai E&C announced the ‘H-Together’, a win-win growth program to realize sustainable growth with suppliers, and the ‘H-Together Declaration’ containing the will for win-win growth. The ‘H-Together’ program promotes diverse supplier support activities in five areas: win-win, safety, quality, transparency, and new technology, and includes practical support measures including (i) establishment of a win-win growth fund worth KRW 160 billion, (ii) supplier incentives worth KRW 500 billion, (iii) 50% advance payment of safety management fees to enhance suppliers’ safety management capabilities. As a result of operating the highest level of effective win-win growth program, Hyundai E&C received the highest grade in the Win-Win Growth Index Evaluation in September 2021, with the selection as the ‘Best Honorary Company’.

Sustainable Shared Growth

Shared Growth Strategy and H-Together Program

The construction industry has industrial characteristics that require collaboration with a number of suppliers with various expertise and capabilities from the supply of building materials to on-site construction. Therefore, the improvement of competitiveness and management stability of these suppliers are indispensable for Hyundai E&C to realize sustainable growth. Accordingly, Hyundai E&C is pursuing a balanced win-win growth strategy centered on the two pillars of ‘Supporting Shared Growth’ and ‘Complying with Fair Trade’ under the goal of “Realizing Shared Growth Through Cooperation”. Hyundai E&C promotes the H-Together program, a sustainable shared growth system through win-win cooperation with suppliers, to strengthen the value chain capabilities in five areas: win-win, safety, quality, transparency, and new technology. Hyundai E&C is also contributing to the development of partnerships through the introduction of incentives for suppliers, support for hiring suppliers, and a close and systematic support system to strengthen mutual ties. As these efforts are recognized externally, Hyundai E&C received the highest grade in the Win-Win Growth Index Evaluation in September 2021, with the selection as the ‘Best Honorary Company’. As a representative win-win growth index, the evaluation is announced by the Win-Win Growth Committee by evaluating the level of win-win growth of 200 domestic conglomerates to promote win-win growth between large companies and SMEs. Hyundai E&C will continue to take the lead in shared growth in the construction industry by providing practically needed support through active communication and cooperation.

Share Together

For win-win cooperation with suppliers, Hyundai E&C is carrying out a wide range of shared growth activities in four areas: financial support, education support, recruitment support, and welfare support. First of all, various financial support programs are being provided to stabilize the management of suppliers with weak financial foundations. The cash payment ratio for subcontract payments to suppliers has continuously increased every year, from 80% in 2020 to 100% in 2021. Hyundai E&C has made payments to subcontracts within 10 days and monitors whether the payments made to the primary supplier are paid to the secondary supplier within a reasonable time thereby strengthening the sustainability of the entire supply chain. Hyundai E&C operates a network loan to support suppliers so that they can receive loans at a lower interest rate than the standard interest rate from financial institutions. Hyundai E&C is striving to provide practical help to suppliers in resolving their financial difficulties by establishing and operating the Shared Growth Fund with commercial financial institutions. In 2021, the scale of financial support for suppliers was further expanded to overcome the COVID-19 crisis. In terms of education support, we are striving to strengthen the practical competencies of our suppliers by providing various practical training programs such as management, safety, quality, and ethics education. For recruitment support, the only technical training center specialized in construction technology is operated in the construction industry, for supply to the overall construction industry including suppliers by nurturing global construction technology talents that are close to the site. In 2021, 25 suppliers entered overseas projects with Hyundai E&C and signed new contracts worth KRW 80 billion.

We strived for win-win management by building automated production facilities and supporting job creation to improve the productivity of our suppliers.

Safer Together

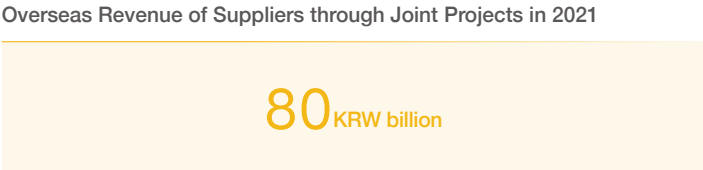
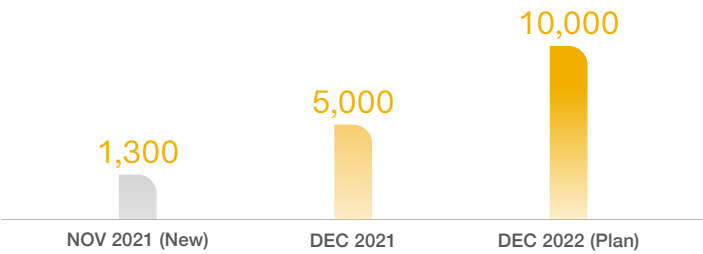
Hyundai E&C is carrying out various safety support activities to strengthen supply chain safety. As of December 2021, we made efforts to raise our own voluntary safety awareness. By allocating an annual incentive amount of KRW 500 billion to suppliers selected as excellent suppliers in safety/quality/performance evaluation by construction type (plant to expand to KRW 1 trillion by the end of 2022 significantly). In addition, we are operating a policy to ensure a safer working environment for construction site workers by raising the weight of safety evaluation to 30% of the total in the evaluation of suppliers. In the case of construction work of less than KRW 10 billion, there is a possibility of being vulnerable to safety because there is no legal obligation to appoint a safety manager. Accordingly, Hyundai E&C has provided wage support so that its suppliers can hire workers in charge of safety, and wage support of KRW 10 billion was provided to 40 suppliers as of December 2021. In addition, the ‘50% Advance Payment System for Safety Management Fees’ policy has been newly implemented in June 2021 to improve the competitiveness of suppliers in safety management at construction sites. This system supports the meticulous management of on-site safety from the early stage of construction without any financial burden by paying 50% of the safety management fee to suppliers in advance. Hyundai E&C is strengthening safety management in the early stages of construction through proactive safety management input from suppliers.

Hyundai E&C Shared Growth Strategy and Programs



Category	Description	2021 Performance
Financial Support	Improvement of payment conditions	100% cash payment
	Direct financial support	KRW 2.7 billion
	Operation of the Shared Growth Fund	KRW 160 billion
	Contribution to the Win-Win Cooperation Fund	KRW 29.6 billion
	50% reduction of contract performance deposit with excellent suppliers	KRW 90 billion
Education Support	Support for implementation guarantee fee	KRW 1.3 billion
	Support for business consulting (ESG)	174 suppliers
	Practical training on site construction safety (Hyundai E&C Institute of Technology)	22 suppliers
	Support for quality education	22 suppliers
	Support for transparent ethics education	679 suppliers
Recruitment Support	Support for guidance training	1,284 cases
	Support for recruitment of human resources linked to suppliers (Hyundai E&C Institute of Technology)	148 workers
	Recruitment and wage support for safety personnel in charge of suppliers	49 workers
Welfare Support	Operation of an online recruitment center exclusively for Hyundai E&C suppliers	35 workers
	Improvement of the working environment for supplier workers	KRW 3.2 billion
	Operation of welfare programs for employees of suppliers	Constantly

Expansion of Supplier Incentives (Unit: KRW 100 million)





Realizing Safe Workplaces and
Cultivating Innovative Talents

Enhancing Value Chain Capability and
Creating Values for Local Communities

In order to prevent disasters in advance, it is essential to improve the level of fundamental safety management of suppliers themselves. Hyundai E&C operates customized safety consulting for suppliers’ headquarters and sites, by conducting safety management consulting through an external consulting professional organization and establishing a health and safety management system.

Quality Together

By converting the entire quality control process from an analog method to a digital method for the first time in the construction industry, Hyundai E&C aims to proactively manage quality defects and take preemptive measures for quality problems. Hyundai E&C has presented a new paradigm for quality management, by performing real-time on-site detection using the mobile-based smart integrated detection system “Q-Pocket” distributed in 2021, and by building an “Untact” and “Paperless” digital data system utilizing functions such as automatic notification of scheduled tasks.

As suppliers’ Q-Pocket utilization enables systematic inspection, defects such as omissions and installation errors are prevented, and positive effects such as reduction of failure costs and improvement of work efficiency are expected. Hyundai E&C is also striving to improve the quality competitiveness of its suppliers by providing training and quality support at all times through Q-Consulting, while continuously providing quality improvement training materials. The quality improvement of suppliers leads to the strengthening of export competitiveness and efficiency improvement.

Clean Together

To establish a transparent and fair-trade culture with suppliers, Hyundai E&C conducts transparent ethics education for suppliers every year and practices the pledge of ethical practice. In 2021, Hyundai E&C is doing its best to achieve transparent ethical management, including transparent ethics education for a total of 885 partners and the operation of Supplier H Dudrim, an integrated complaint window that can report anti-ethical/law violations in real-time. In addition, ESG education and diagnosis/consulting are provided through a third-party specialized institution so that suppliers can promote sustainable management in ESG management based on environmental preservation, social responsibility, and sound governance. In 2021, ESG management diagnosis, diagnosis system establishment, and consulting were conducted for a total of 174 suppliers, to strengthen supply chain sustainability management. Hyundai E&C conducts regular dialogue through the ‘Supplier Council’ and reflects it in improving the supplier system, and strengthens the bond by sending a quarterly newsletter composed of major news from Hyundai E&C and interesting domestic and overseas issues. Hyundai E&C also operates the ‘Hi-Partner’ portal, which is a cooperative information system for partners, to efficiently process suppliers and promote mutual cooperation. operating the ‘Supplier H- Dudrim’ bulletin board to provide a more transparent channel for receiving grievances and complaints from suppliers, Hyundai E&C has established a communication channel for suppliers at all times and collects complaints and suggestions from suppliers and reflects them in their work.

Smart Integrated
Detection System Q-Pocket



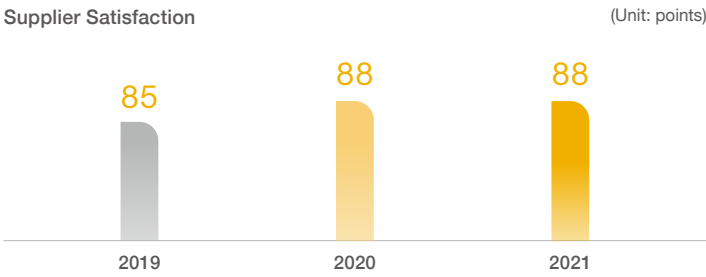
Smarter Together

Through the technology development support program, Hyundai E&C not only transmits and shares technology with its partners but also actively supports its own technology development. In particular, the ‘Hyundai E&C Technology Contest, a technology development support platform in the ‘Open Innovation’ method, is a technology competition for win-win cooperation unique to Hyundai E&C. Every year, Hyundai E&C pays all R&D expenses to the suppliers selected in this competition and provides incentives when registering new suppliers. In 2021, 13 suppliers were selected through the contest and R&D expenses of KRW 1.12 billion were paid. In addition, Hyundai E&C is striving to strengthen the competitiveness of the value chain by granting its own patented technology free of charge to suppliers and transferring technology every year. In 2021, a total of 83 patents were granted free of charge to suppliers, and 6 patents were transferred.

Category	Content	2021 Performance
Technical Support	Hyundai E&C Technology Contest	KRW 1,120 million
	Patent grant for free	83 Cases
	Technology transfer	6 Cases

Improving Supplier Satisfaction

Hyundai E&C has been pursuing the shared growth management by regularly conducting supplier satisfaction surveys since 2009 to actively collect suppliers’ requirements and apply them to the management thereby promoting shared growth management. The supplier satisfaction survey system of Hyundai E&C was developed in-house using VOC and IPA methods and is optimized to reflect and understand suppliers’ needs and solve dissatisfied matters. The supplier satisfaction survey is carried out every half-year in a system where each supplier evaluates and gives opinions about satisfaction with Hyundai E&C according to indicators prepared by item ranging from the selection stage to the payment stage. Hyundai E&C analyzes satisfaction survey results to classify suppliers into subjects of first improvement, subjects of progressive improvements, and subjects of continuous improvement in an effort to actively accept suppliers’ voices and establish a basis for shared growth management.



Supplier H-Dudrim
<https://dudrim.hdec.co.kr:4443/Partner/Main.aspx>

Strengthening Supply Chain Management

Sustainable Supply Chain Policy

In October 2014, Hyundai E&C established the ‘Supplier Sustainability Management Guidelines’ for the first time in a domestic construction company to prevent risks that may occur within the supply chain and expand responsible and sustainable management throughout the supply chain. In July 2020, the ‘Supplier Code of Conduct’ was newly enacted and implemented to strengthen the competitiveness of the entire group value chain. This Code of Conduct was established based on global standards and guidelines such as the UN Global Compact, the ILO Convention Standards, and the United Nations Universal Declaration of Human Rights, and presents the sustainability management standards required of suppliers across a total of 36 items in 6 chapters. In May 2021, the ‘Supplier Code of Conduct Practice Guidelines’ was additionally enacted to suggest specific action plans. This guideline provides detailed guidelines for 1) policies and procedures, 2) organization, 3) operation, and 4) action in each of the four areas of the code of conduct. In order to fulfill the actual compliance with and practice of the sustainable supply chain policy, Hyundai E&C signed sustainability management agreements with its suppliers in May 2019 to make effort to enhance competitiveness throughout the supply chain and minimize the risk. Under the goal of pursuing shared growth for mutual benefit between Hyundai E&C and its suppliers, Hyundai E&C has established and is striving to achieve the 2030 supply chain sustainability goal.

HDEC Supplier Code of Conduct
[https://www.hdec.kr/downloadfile/HDEC_Supplier_Code_of_Conduct_\(Rev.2\)_E.pdf](https://www.hdec.kr/downloadfile/HDEC_Supplier_Code_of_Conduct_(Rev.2)_E.pdf)

Supply Chain Management Strategy, Long-term Target & KPI

Supply Chain Sustainability Strategy		KPI	Long-term Target
Improve Supply Chain Sustainability	In order for Hyundai E&C to lead successful business, it is essential to improve the sustainability of the entire value chain. We introduced ‘Supply Chain Sustainability Assessment’ in 2014 and is regularly measuring and monitoring the level of sustainability of its supply chain.	Supply Chain Sustainability Assessment score	Achieve 100 points of Supply Chain Sustainability Assessment score by 2030
Enhance Energy Efficiency and Cost Competitiveness of Supply Chain	Suppliers use large amounts of energy in product manufacturing and construction stages. This is not only a major issue for the cost competitiveness of suppliers, but also a critical issue directly connected to Hyundai E&C’s purchasing costs. Therefore, we make efforts to improve energy efficiency in the supply chain.	Supply chain GHG emissions	Reduce supply chain GHG emissions by 2.1% per year compared to baseline year 2015 by 2030

Results of Supplier Risk Assessment and Corrective Actions

(As of December 31, 2021, Unit: suppliers)

Risk Category			Risk Assessment		Risk Identification		Risk Mitigation	
Risk Type		Risk Level	Scope	Ratio	High-risk Suppliers	Ratio	Corrective Actions / Termination	Ratio
Economic Risks	Violation of the principle of ethics and anti-corruption	High	3,855	100%	0	0.00%	0	0.00%
	Deterioration of the financial structure including credit rating	Medium-high	3,855	100%	0	0.00%	0	0.00%
	Low supplier evaluation score	High	3,855	100%	12	0.31%	12	0.31%
	Poor supplier performance	Medium-high	3,855	100%	9	0.23%	9	0.23%
Environmental Risks	Violation of environmental regulations	High	3,855	100%	0	0.00%	0	0.00%
	Occurrence of an environmental accident during construction	High	3,855	100%	0	0.00%	0	0.00%
	Failure to meet environmental evaluation standards	Medium-high	3,855	100%	0	0.00%	0	0.00%
	Other environmental risks	Medium-high	3,855	100%	0	0.00%	0	0.00%
Social Risks	Violation of labor or safety regulation	High	3,855	100%	0	0.00%	0	0.00%
	Occurrence of safety accident during construction	High	3,855	100%	0	0.00%	0	0.00%
	Failure to meet safety evaluation standards	Medium-high	3,855	100%	18	0.47%	18	0.47%
	Other social risks	Medium-high	3,855	100%	0	0.00%	0	0.00%
Total			3,855	100%	39	1.01%	39	1.01%

Realizing Safe Workplaces and
Cultivating Innovative Talents

Enhancing Value Chain Capability and
Creating Values for Local Communities

Creating Community Value

Social Contribution Vision and Strategy

The local community is the driving force for corporate growth, providing a base for business activities and supplying new customers and consumption. As trusted members of society, global companies are faithfully fulfilling their social responsibilities for mutual coexistence with the local community, while further identifying social needs and making various efforts to address them. Under the social responsibility message of “The Right Move for the Right Future”, Hyundai E&C is conducting systematic social contribution activities based on the 6 major moves that reflect the vision and philosophy of Hyundai Motor Group. To realize professional social contribution operation management, transparent donation execution, and communication with various stakeholders, social contribution activities are being carried out centering on the Sustainability Management Council under the Corporate Governance & Transparent Management Committee within the Board of Directors. In addition, an external social contribution professional consultative body is being operated to promote systematic socially responsible management. Since 2010, Hyundai E&C has been reflecting the performance of social contribution activities in KPIs for each division in order to promote social contribution activities in which employees participate together, by operating the social contribution mileage system, which is a volunteer activity incentive system that specifically recommends the amount of time for social service activities to be achieved by employees. In 2021, one year-end evaluation was conducted to ensure that social contribution activities are carried out evenly throughout the year, and performance evaluations for major social contribution activities were conducted to strengthen effectiveness. The social contribution mileage per employee in 2021 is 3.9 miles.

Social Contribution Specialized in Construction Industry

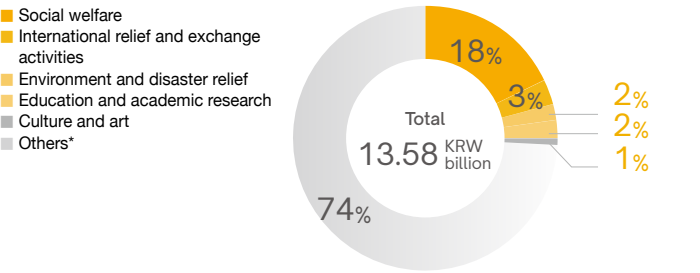
By resolving social and environmental problems facing local communities through strategic social contribution activities that reflect the characteristics of the construction industry, Hyundai E&C is pioneering shared value social contribution for coexistence. By providing the necessary economic and social infrastructure to local communities, mainly in domestic as well as overseas countries, while improving business competitiveness, Hyundai E&C is presenting a sustainable local community value creation model for the construction industry. In 2021, we focused on the ‘H-Green Saving’ project and the ‘disaster safety light helmet supply/education’ project by selecting environment and safety as the core theme. The ‘H-Green Saving’ project in the environment sector is a program that replaces existing lamps with high-efficiency LED lamps to reduce GHG emissions and reduce electricity bills for the vulnerable and social welfare facilities. In the safety sector, the ‘disaster safety light safety helmet supply/education’ project is part of the ‘disaster safety social contribution’ pioneered by Hyundai E&C to provide solutions to social problems based on the capabilities of the construction industry. It is a project to supply light safety helmets for children and children. In line with the vision of “The Right Move for the Right Future,” the social responsibility message of Hyundai Motor Group, Hyundai E&C plans to expand its socially responsible management in 2022, including (i) improvement of social and environmental issues, (ii) contesting ideas from employees for implementing carbon reduction practices based on a carbon-neutral roadmap, and (iii) participation in the eco-mileage system. In addition, Hyundai E&C plans to further develop the ‘H-Green Saving’ business to reduce actual electricity consumption, and 45 tCO₂eq of carbon credit proceeds will be used for energy education for youth in the environmental career field, through the application for an external project to reduce greenhouse gas.

Expansion of Social Contribution to Overseas Markets

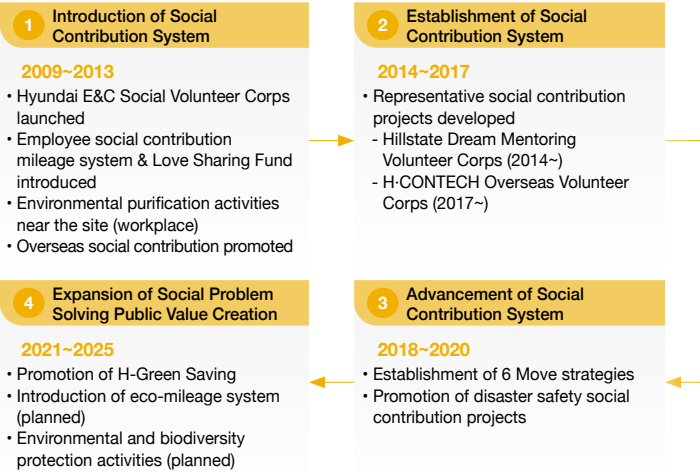
Hyundai E&C is continuously promoting overseas social contribution activities by reflecting the characteristics of the construction industry with a number of overseas projects. Starting from building a community center in the Philippines in 2011, Hyundai E&C established the Hyundai KOICA Dream Center in Vietnam in 2016, the first CSV project of a construction company, and has been pursuing the development of the local community and training of construction manpower as well as providing training equipment and specialized construction training. This project has had the effect of creating group synergies by simultaneously nurturing construction safety and automobile maintenance experts in the university through collaboration with Hyundai Motor Company. In addition, Hyundai E&C launched 'H CONTECH', a technology exchange-type overseas volunteer corps for the first time in the domestic construction industry, and held technical seminars in connection with major engineering universities and national institutions in developing countries. H-CONTECH is being evaluated for raising the level of contribution to the local community by discovering appropriate technology items and establishing public facilities. By 2021, Hyundai E&C has been implementing a total of 50 social contribution projects in 20 countries around the world, including health and hygiene, educational scholarship, cultural exchange, and relief for the poor. In 2021, Hyundai E&C provided sanitary kits (masks, hand sanitizer) and foodstuffs (rice, canned food, sugar, etc.) to overcome COVID-19, to the residents of 7,800 households in poor economic and medical conditions, mainly in Apalit and Calumpit, the Philippines, where construction is underway. In addition, computers, teaching materials, and school supplies were delivered to 15 local schools in urgent need of non-face-to-face educational facilities. In 2022, we plan to expand our social contribution activities not only in the Philippines, but also in Quang Binh Province in central Vietnam and Chinchero, Peru.

* CSV : Creating Shared Value

Donation Expenditure in 2021



Social Contribution Roadmap



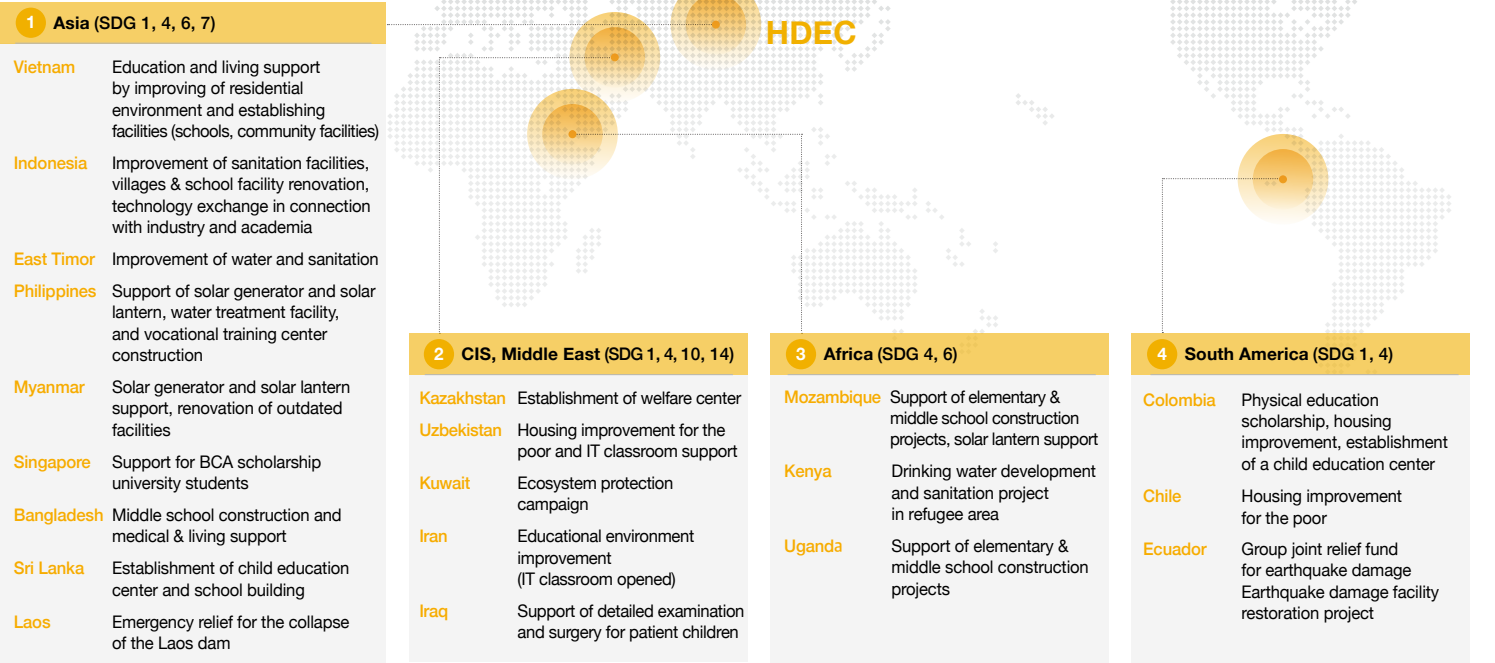
Hyundai E&C Social Contribution System



Number of Overseas Social Contribution Projects (cumulative)



Overseas Social Contribution Projects (2011~21)



Hyundai E&C's Social Contribution Story

GREEN MOVE

Based on the capabilities of the construction industry, Hyundai E&C is contributing to environmental management by establishing a CSR virtuous cycle system that contributes and utilizes carbon credit earnings while making efforts to reduce greenhouse gas emissions to realize a carbon-neutral society.

Social contribution in the environmental sector for the underprivileged

- Social contribution for climate change response
- High-efficiency LED lighting equipment replacement project for the underprivileged

Implementation of UN SDGs

SDG 07.
Affordable and clean energy

SDG 13.
Climate action

Major Program | H-Green Saving LED

Since 2021, Hyundai E&C has been carrying out the 'H-Green Saving' project for the underprivileged and social welfare facilities suffering from energy poverty, in collaboration with Seoul Climate Environment Headquarters, Korea Energy Agency, and Seoul Social Welfare Council. 'H-Green Saving' is a program that replaces general lighting equipment with more than 1,000 high-efficiency LED lighting equipment in 8 social welfare facilities and 6 households suffering from energy poverty. It is expected that the cost burden will be lowered, as the building sector accounts for the largest share (68.8%) of Seoul's GHG emissions. In the future, the GHG emission reductions would be recognized as carbon credits, through the Korea Energy Agency's external project registration support/ project. The carbon credits acquired will be re-donated and used for energy education projects for youth in the environmental careers.

H-Green Savings Agreement Ceremony

SAFE MOVE

Based on the capabilities of the construction industry, Hyundai E&C is carrying out social contribution activities in the field of disaster safety, developing and operating disaster safety contents and distributing safety products.

Disaster safety education and safety equipment distribution

- Development and operation of disaster safety education projects
- Distribution of safety equipment for disaster safety prevention

Implementation of UN SDGs

SDG 09.
Pursuit of sustainable industrialization

SDG 03.
Health and wellbeing

Major Program | Disaster Safety Education and Safety Equipment Distribution

In 2018, Hyundai E&C pioneered a social contribution project in the disaster safety field for the first time as a domestic company. For post-disaster relief activities, Hyundai E&C is promoting social contribution as an innovative company that provides active solutions to social problems. In particular, 'disaster safety light helmets' that can protect children's heads in the event of a disaster such as an earthquake have been developed and distributed to give practical help to children's safety. In 2021, about 4,000 safety helmets were distributed to 6 elementary schools in Busan, and training on how to use the helmet, disaster safety education and hands-on training were conducted. It is expected that the beneficiaries will be able to receive practical help in case of an emergency. In 2022, we plan to distribute disaster safety helmets and promote educational activities in Pohang or Busan, Gyeongsangbuk-do, in consideration of the earthquake-prone regions in the past three years.

Disaster Safety Light Helmet Delivery Ceremony

DREAM MOVE

To pursue the development of the construction industry and the local community together, Hyundai E&C is conducting a mentoring project to support the construction and science and engineering education scholarship support for domestic and foreign children and adolescents who need scholarship support and academic help for science and engineering students.

Educational scholarship support for youth

- Community mentoring talent donation activities - Hillstate Dream Mentoring Volunteer Corps

Implementation of UN SDGs

SDG 04.
Quality assurance of education

Major Program | Hillstate Dream Mentoring Volunteer Corps

For future generations who do not have the opportunity to realize their dreams due to high barriers to entry and environmental reasons, Hyundai E&C is operating the 'Hillstate Dream Mentoring Volunteer Corps', a talent donation volunteer group that was launched in 2014 for the first time among domestic construction companies. It provides academic guidance and career counselling to low-income youth mentees, and give social experience, know-how regarding major/practice, and counselling for getting a job to college student mentors. In 2021, youth mentees (3rd - high school students), college student mentors, and employee mentors formed a group, and a total of 60 people worked for about 10 months, not only studying but also building friendly relationships through activities for practical changes. In 2021, the social value of the 8th Corps is converted into monetary value of about KRW 140 million, and through 1,560 hours of learning mentoring/90 career mentoring sessions, it greatly contributed to the reduction of youth private education expenses and career exploration for college students.

Hillstate Dream Mentoring Volunteer Corps

NEXT MOVE

Based on the characteristics of the construction industry, Hyundai E&C is supporting the construction of public infrastructures for local communities in Korea and overseas developing countries, and is actively contributing to strengthening the self-sustenance of local communities through fostering of local construction by manpower and technology exchanges.

Social contribution based on the characteristics of the construction industry

- Social contribution to overseas developing countries
- Overseas volunteer corps for improvement of facilities and education in developing countries and technical exchanges

Implementation of UN SDGs

SDG 11.
Realization of sustainable cities

Major Program | H-CONTECH Overseas Volunteer Corps, Smart City (Creative Education CSR)

Hyundai E&C is actively promoting overseas social contribution activities after launching 'H-CONTECH', a technology-driven overseas volunteer corps, for the first time in Korean construction companies in 2017. In 2019, H-CONTECH was dispatched to the Cilegon and Cilebon regions in Indonesia to improve the village and school environment while holding a technology seminar in cooperation with the National University of Science and Technology and Applied Science and Technology (BPPT). In 2020-21, as it is impossible to dispatch H-CONTECH overseas technical volunteers due to the global COVID-19 pandemic, we plan to focus on new countries in the future. In addition, Hyundai E&C conducted smart city creative education for middle school students in Jongno-gu (245 students from 2 schools) based on the characteristics of the construction industry. Through theoretical education on the construction industry, smart city, and smart technology, and practical training for creating a future city, it has greatly contributed to enhancing the image of the construction industry and interest in smart city.

Smart City Creative Education

HAPPY MOVE

With a view to solving problems in the community and activate the participation based on its capabilities in the construction business, Hyundai E&C is expanding the participation of employees, their families, and stakeholders, for implementing community support activities.

Community improvement and employee activities

- Blood and product donation campaign
- DIY kit production
- Healthy food sharing project

Implementation of UN SDGs

SDG 16.
Peaceful society and systems

SDG 3.
Health and wellbeing

Major Program | Employee Volunteering and the Love Sharing Fundraising

Hyundai E&C is conducting diverse employee volunteer activities centering on the local community. In 2021, we launched a product donation campaign in collaboration with the 'Beautiful Store', and a total of 116 employees participated in reselling about 2,100 items at the Beautiful Store. As a social effect, it is calculated that about 9 tons of carbon emissions were reduced and about 3,200 pine trees were planted. In addition, a blood donation campaign was held to alleviate the difficult situation in blood supply due to the impact of COVID-19, and 500 blood donations were donated. Through the DIY kit production, about 1,000 beads mask lines were delivered to the underprivileged in the Jongno area, and food materials were provided to about 1,200 households through the healthy food sharing project. In 2022, we plan to further expand the product donation campaign to promote resource recycling, while also carrying out activities to support the underprivileged by providing DIY packages made by our employees.

Love Sharing Fund by the Participation of Employees

2022 HYUNDAI E&C SUSTAINABILITY REPORT

60 | 61

HDEC PRINCIPLE

Right Principle Implemented
by Hyundai E&C



The strength of Hyundai E&C, which has been the leading the sustainability management of the global construction industry, starts with 'Right Principle' that considers economic, environmental, social changes and stakeholders when establishing management strategies. Hyundai E&C established sustainability principles that are the core criteria for value judgment and builds a sustainable tomorrow based on them.

SHARED VALUE

STRATEGY | 7



Establishing Sound Governance and Ethical & Compliance Management System

Supporting the Board of Directors, Strengthening the Ethical & Compliance Management System

**HDEC
PRINCIPLE**

STRATEGY | 8



Implementing Integrated Risk Management and Protecting Human Rights in Value Chain

Managing Risks, Protecting Labor Rights



STRATEGY 7

Establishing Sound Governance and Ethical & Compliance Management System

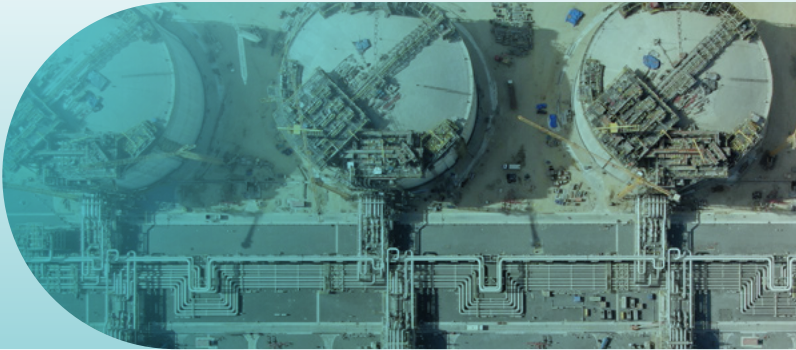


In order to create an environment for rational decision-making and successful business execution, Hyundai E&C is building a sound governance structure that meets international standards based on checks and balances. Hyundai E&C is also strengthening the company-wide ethical management system by establishing and improving the ethical compliance management system.

2021 Performance Highlights

Board Meetings Held in 2021	Board Agendas Deliberated in 2021	2021 Board Efficiency Assessment Result (of total 5 points)
13Times	36Cases	4.79Points

Governance <https://www.hdec.kr/en/invest/overview.aspx>
Ethics <https://www.hdec.kr/en/invest/ethic.aspx>



HDEC Value Creation



1. Hyundai E&C Investor Meeting (Yulchon Offshore Wind Power Material Manufacturing Plant)
2. Hyundai E&C Investor Tour (Yulchon Offshore Wind Power Material Manufacturing Plant)

“Hyundai E&C Carries out Diversified Efforts to Create Shareholder Value”

Hyundai E&C is actively improving policies and continuously expanding various support activities to enhance shareholder value and maximize shareholder profits. The introduction of the electronic voting system at the 70th general shareholders’ meeting in 2020 enabled online voting 10 days before the general shareholders’ meeting, making it easier to exercise voting rights. In 2021, the agenda was disclosed through the electronic disclosure system four weeks before the general meeting of shareholders so that shareholders can have sufficient review time. Hyundai E&C has held a total of 328 institutional investor meetings for smooth communication. In December 2021, as investors and shareholders’ interest in the renewable energy sector increased, major domestic and foreign analysts visited the Yulchon Plant of Hyundai Steel Industries, which manufactures major materials for the offshore wind industry.

[HDEC Corporate Governance Charter](https://www.hdec.kr/en/invest/overview.aspx)
<https://www.hdec.kr/en/invest/overview.aspx>

[HDEC Corporate Governance Report \(May 31, 2022\)](https://dart.fss.or.kr/dsaf001/main.do?rcpNo=20220531800385)
<https://dart.fss.or.kr/dsaf001/main.do?rcpNo=20220531800385>

Governance Principles of Hyundai E&C

As a global leading construction company with the philosophy of Human Respect and Enterprise Patriotism, Hyundai E&C aims to maximize corporate value and build stakeholders’ trust with reasonable and transparent management. The corporate governance of Hyundai E&C aims to set a sound Governance Structure that creates shareholder’s value and appreciates interest of internal and external customers through professional management under the supervision of independent Board of Directors.

In order to realize this, Hyundai E&C has adopted the recommendation of corporate governance best practices in line with international standards and to establish a transparent corporate governance system centering on a professional management system and independent board of directors. The basis of Hyundai E&C’s governance model is to establish a sound and transparent governance structure based on the three principles of independence of the board, management expertise, and enhancement of stakeholder value. In order to secure the independence of the Board of Directors, which is the basic principle of the operation of the Board of Directors of Hyundai E&C, the independence of the Board of Directors is defined in the ‘HDEC Corporate Governance Charter’ and the conditions for securing independence are specified. In addition, the ‘HDEC Corporate Governance Report’ is annually disclosed by submitting to the Korea Exchange to ensure shareholders’ right to know.

The Board of Directors

The Function and Composition of the Board

As the company’s highest decision-making body, the Board of Directors has comprehensive authority over company management and strives to maximize corporate value and build trust with stakeholders, by representing the company and shareholders, determining core management goals and basic management policies for the benefit of all stakeholders, and performing the function of supervising management activities.

Due to the nature of the construction industry, in which fast decision-making is needed at business places located throughout the world, the CEO is also the chairman of the Board of Directors. Therefore, in order to allow the Board of Directors to function independently of the plural office system, more than half of the total number of directors is composed of outside directors, and an Independent Lead Director is appointed. To strengthen the independence, all chairmen of each committee are appointed as outside directors, and the ratio of outside directors within the Board is 57.14%, exceeding the 50% requirement under Article 542-8 Paragraph 1 of the Commercial Act.

Definition and Principles of the Board Independence

Definition of the Board Independence

“Under the monitoring of independent Board of Directors, the corporate governance of Hyundai E&C aims to generate shareholder values through value-creating management, global future management, and sustainability management by a professional manager and to consolidate sound corporate governance that concerns interests of internal and external stakeholders in a balanced manner.”
- The Preface of HDEC Corporate Governance Charter

Governance Philosophy

Independence of the Board



Management Expertise



Enhancement of Stakeholder Value



Governance Features

Organization of the Board of Directors centered on outside directors



Committees Operates within the Board of Directors



Reinforcement of the Expertise of Committees within the Board of Directors



Principles of the Board Independence

1
Independence of the Board of Directors guaranteed by independent lead director

2
Nomination of independent directors

3
Target share of independent directors on the Board

4
Transparency in the nomination process of outside directors

5
Committees solely composed of outside directors

Status of the Board of Directors

(As of July 2022)

Name	Position	Gender	Birth	Appointment	Work Experience	Education	GICS Classification	Treasury Stocks
Yoon Young-Joon	President & CEO [Board Chairman]	Male	DEC 1957	25 MAR 2021	(Current) President of Hyundai E&C, CEO (Former) Executive Vice President of Hyundai E&C (Housing Works Division)	M.A. in Environment, Graduate School of Yonsei University	Construction & Engineering	3,339
Kim Kwang-Pyung	Inside Director	Male	MAY 1969	25 MAR 2021	(Current) Senior Vice President of Hyundai E&C, CFO (Former) Vice President of Hyundai E&C (Finance & Accounting Division)	B.A. in Economics, Korea University	Finance & Accounting	
Hwang Jun-Ha	Inside Director	Male	OCT 1966	24 MAR 2022	(Current) Senior Vice President of Hyundai E&C, CSO (Former) Vice President of Hyundai E&C (Procurement Division)	B. A. in Trade, Hankuk University of Foreign Studies	Safety Management	
Kim Jae-Jun	Outside Director [Lead Independent Director]	Male	OCT 1960	19 MAR 2020	(Current) Professor of Architectural Engineering at Hanyang University (Former) President of Korean Institute of BIM	Ph. D. in Construction Management, Graduate School, University of Illinois at Urbana-Champaign, U.S.A.	Construction & Engineering	
Hong Dae-Sik	Outside Director	Male	SEP 1965	19 MAR 2020	(Current) Professor of Law School at Sogang University (Former) Lawyer at Yulchon L.L.C	Ph. D. in Law, Graduate School of Seoul National University	Law	100
Cho Hye-Kyung	Outside Director	Female	JUL 1964	25 MAR 2021	(Current) Professor of IT Convergence Engineering School at Hansung University (Former) Director of Korea Institute for Robot Industry Advancement	Ph. D. in Advanced Control and Instrumentation, Graduate School of Seoul National University	Construction & Engineering (Construction Robot)	
Jung Moon-Ki	Outside Director	Male	MAR 1959	24 MAR 2022	(Current) Professor of Department of Business Administration, Sungkyunkwan University (Former) Outside Director of POSCO	Ph. D. in Business Administration, Sungkyunkwan University	Finance & Accounting	

* As of July 2022, the average service duration of Hyundai E&C board directors is 1.42 years

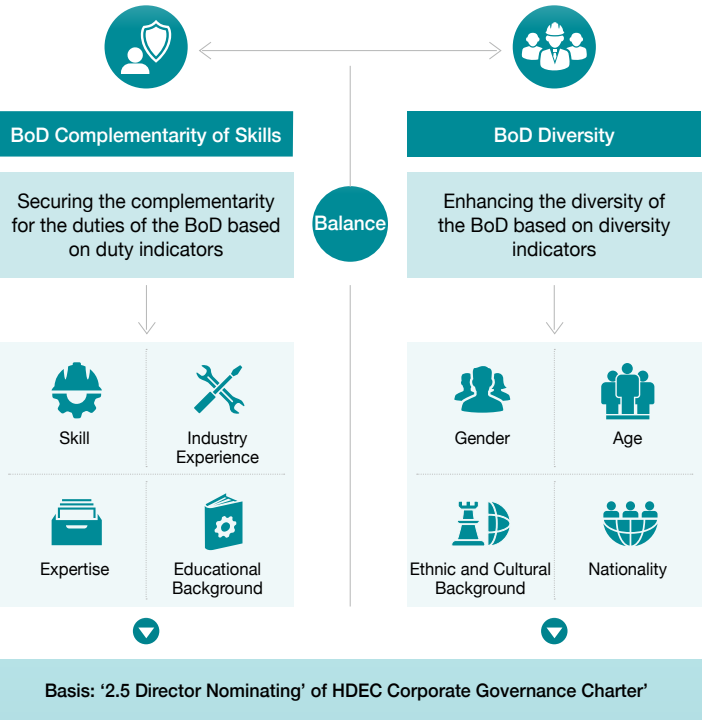


Independence, Expertise and Diversity of the Board

Expertise and Diversity of the Board

The Board of Directors has a structure that enables efficient and strategic decision-making, by composing executive directors who have abundant experience and expertise related to the company’ s business and outside directors with rich expertise and experience in each field of industry, academia, legal, and finance. Through the Corporate Governance Charter, the company stipulated that the candidate’ s board of directors’ diversity standards such as gender, age, race, and nationality and skill complementarity such as skill, industry experience, expertise, and educational background should be promoted in a balanced way. Candidates with expertise and experience in related fields such as accounting, construction, and smart technology are appointed as 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. Detailed policies for Nominating the directors are specified in the ‘2.5 Nomination of Directors’ of HDEC Corporate Governance Charter.

Nomination Standards for Directors



Independence of the Board

To ensure the independence of outside directors, Hyundai E&C specifies independence criteria through the Corporate Governance Charter and appoints independent outside directors who have no significant interests with the Company for the past five years in accordance with relevant laws such as the Commercial Law. Outside directors enhance the fairness and transparency of corporate management, provide advice and related expertise for important decisions of the company, and perform objective monitoring and supervision of management activities, thereby fulfilling their duties as faithful advisers and assistants in corporate management. Hyundai E&C has designated a dedicated department (IR Team, Financial Planning Team, Accounting Team, Audit Team, Compliance Support Team) to faithfully provide the information necessary for business and support the smooth execution of duties by outside directors.

Independence Standards for Outside Directors

“ Outside directors shall have expert knowledge and experiences in the industrial, financial, academic, legal, accounting, and public sector, and must have no interests with the company in the last five years as follows: ”

- 1 The director must not have been employed by the company in an executive capacity within the last five years.
- 2 The director must not be a “Family Member of an individual who is, or during the past three years was employed by the company or by any parent or subsidiary of the company as an executive officer.”
- 3 The director must not accept or have a “Family Member who accepts any payments from the company or any parent or subsidiary of the company in excess of \$60,000 during the current fiscal year or any of the past three fiscal years”, other than those permitted by SEC Rule 4200 Definitions, including i) payments arising solely from investments in the company’s securities; or ii) payments under non-discretionary charitable contribution matching programs. Payments that do not meet these two criteria are disallowed.
- 4 The director must not be a partner or employee of the company’s outside auditor.
- 5 The director must not be a partner or employee of a company that has signed a major advisory agreement or a technology partnership agreement with the company.
- 6 The director must not be an adviser or consultant to the company or a member of the company’s senior management.
- 7 The director must not be a partner or employee of a company that has concluded in the past three fiscal years a total contract > with the company for an amount that exceed 10% of the company’s total assets or consolidated gross profits.
- 8 The director must not be a partner or employee of a company that has concluded in the current fiscal year a single contract with the company for an amount that exceed 10% of the company’s consolidated gross revenues for that year.
- 9 The director must not have any other conflict of interest on the agenda determined by the board.

⬇

Basis: ‘2.4 Qualifications and Independence of Directors’ of HDEC Corporate Governance Charter

Operation, Evaluation and Compensation of the Board

Operation Status of the Board

The Board of Directors operates as regular Board of Directors meetings held once a quarter and as temporary board meetings held when necessary. The Board of Directors prepared the “Board of Directors Regulations” for the efficient operation of the Board of Directors and minutes are written and kept at every meeting. The resolution of the Board of Directors shall be determined by the attendance of a majority of the directors and the affirmative votes of the majority of the attending directors unless stipulated otherwise under the law. The Board of Directors convened 4 regular and 9 temporary meetings to resolve a total of 36 agendas, including approval of transactions withaffiliates. The average attendance rate of the board in 2021 is 92%.

Committees in the Board

Hyundai E&C is currently operating the Audit Committee, the Outside Director Nominating Committee, and the Corporate Governance & Communication 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. The 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 the Articles of Incorporation shall consist mainly of external directors. Thus, we have guaranteed the independence of the committees.

Status of ESG Agenda Deliberation on the Board

Date	ESG Agenda Deliberated
26 JAN 2022	Approval in the appointment of Compliance Officer
	Approval in the OHS management system operation and plan
	Deliberation in ISO 37001 (Corruption Management System) Certification Acquisition
27 JAN 2022	Appointment of the Chief Safety Management Officer
22 FEB 2022	Deliberation of the Fair-Trade Compliance Program (CP) operation plan
22 JAN 2021	Deliberation/resolution of major ESG policies (Coal-Exit, Reinforcement of environmental management)
23 JUL 2021	Revision and enactment of the Code of Ethics
22 OCT 2021	Deliberation in the main contents of the Sustainability Report
	Deliberation in the change of Fair-Trade Compliance Manager
	Deliberation in the OHS management system improvement plan

Status of the Board Committees (As of July 2022)

Committee	Formation	Chairman (Position)	Purpose and Authority
Audit Committee	4 outside directors	Jung Moon-Ki (Outside Director)	Accounting audit and business audit
Outside Director Nominating Committee	4 outside directors and 1 inside director	Cho Hye-Kyung (Outside Director)	Investigation, examination, and general meeting recommendation of candidates for outside director
Corporate Governance & Transparent Management Committee	4 outside directors	Hong Dae-Sik (Outside Director)	Sustainability agendas including internal transaction transparency and ethical management, protection of shareholder rights and interests, environment, society, and governance (ESG)
Compensation Committee	2 outside directors and 1 inside director	Kim Jae-Jun (Lead Independent Director)	Remuneration for registered directors and other directors

Board Efficiency Assessment

Hyundai E&C stipulates the introduction of the Board of Directors operation evaluation system in Article 18 of the Board of Directors’ regulations for the long-term growth of the company and the improvement of corporate governance. Since 2021, the evaluation area was expanded to 31 areas in 7 aspects: BoD role and responsibilities, BoD efficiency, appropriateness of committee activity, and individual director activity evaluation. In 2021, the Board’s Efficiency Assessment Score was counted as 4.79 points out of the full score of 5 points, and Hyundai E&C is making effort to strengthen the soundness and efficiency of its governance based on the results of the diagnosis.

Board Compensation

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. 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 the Board the remuneration status of all directors and the committee of inspection has been disclosed on a quarterly, biannual and annual business reports.

2021 Board Efficiency Assessment Result

Category	Assessment Areas	Assessment Indexes	Score (of 5 Points)
The Board of Committee	BoD role and responsibilities	5	4.85
	BoD efficiency	5	4.75
Committees	Appropriateness of committee activity		
	- Corporate Governance & Transparent Management Committee	4	4.81
	- Audit Committee	4	4.88
	- Compensation Committee	4	4.88
	- Outside Director Nominating Committee	4	4.58
Individuals Directors	Individual director activity evaluation	5	4.80
Total		31	4.79

Status of Top Management Compensation in 2021

Category		Number of Persons (n)	Total Amount of Remuneration (KRW million)	Average Remuneration (KRW million)
Top Managements	Inside directors	3	2,139	713.0
Employees and Outside Directors	Outside directors	4	360	90.0
	Employees	6,324	609,745	96.4
	Total	6,328	610,105	96.4
Ratio of Top management compensation against the average of employee compensations (times)				7.4

* Excluding severance pay of executive director.

Status of Top Management Stock Holdings in 2021

Category		Total amount of shares (Shares)	Price of Shares (KRW)*	Ratio of Share Value against Base Salary (%)
CEO	Yoon Young-Jun	3,339	149,555,400	16.99
Inside director	Lee Won-Woo	1,000	44,450,000	8.93

* Based on the closing share price as of December 30, 2021 (KRW 44,450 per voting share, KRW 73,600 per share without voting rights)

Outside Directors Visit Overseas Sites

Hyundai E&C Strengthens the Expertise and Efficiency of the Board of Directors

Hyundai E&C is striving to improve the expertise and efficiency of the Board of Directors, the company’s highest decision-making body, in order to fulfill its social responsibilities through company-wide sustainability management. In particular, under the growing importance of sustainability management issues both internally and externally, the BoD ESG seminar was held in October 2020, and ESG management expertise was strengthened through online BoD training in December 2021. As part of a multi-faceted effort to enhance the board’s understanding of the project and site, in January 2022, outside directors directly visited the Dubai Eye site in UAE, the Albastan Expressway, the Lusail Tower and the National Museum in Qatar.



Ethics and Compliance

Strengthening Ethics Charter and Compliance Policy

Hyundai E&C is constantly working to share its vision of ethical management and corporate culture with all its stakeholders, including our employees and suppliers. In July 2020, Hyundai E&C completely revised the Ethics Charter and Code of Conduct, which is the standards for correct decision-making and ethical judgment in corporate management, and promotes ethical management based on the five codes of practice: (i) employee ethics, (ii) fair competition and trade, (iii) realization of customer value, (iv) respect for executives and employees; and (v) commitment to sustainability. In 2021, the contents of the five codes were subdivided and five compliance policies were newly established that were directly related to the major components of each value. The Ethics Charter and Code of Conduct applies not only to the entire workforce, subsidiaries and affiliate companies of the Hyundai Motor Group, but also to all stakeholders, including business partners and subcontractors. Hyundai E&C shall continue to monitor and improve its Ethics & Compliance Management System in response to rapidly changing industry trends and developments, ensuring the needs of the stakeholders are met. In 2022, we are strengthening company-wide compliance training to internalize the code of ethics, while providing various internal and external training to enhance the understanding of employees of departments in charge of each specific compliance policy. Hyundai E&C conducts regular reviews of the Code of Ethics and Compliance Policy to reflect the rapidly changing industry trends and the needs of stakeholders. Since December 2020, an external specialized agency has been appointed and the 'Compliance Monitor activity' has been continuously carried out to diagnose compliance policies and proactively implement improvement activities to derive system improvement plans. An in-house Compliance Monitor TF is organized to support the activities of external experts, and when system improvement plans are drawn up, they are reflected in the work process through internal consultation. In July 2021, the compliance regulations for the Anti-Corruption Act were amended, and internal regulations were established in five areas, and internal and external education on these new compliance policies is being reinforced: competition law, money laundering/terrorism financing, whistleblower protection, human rights (slavery/trafficking prohibition), and international sanctions.

 **HDEC Ethics Charter & Code of Conduct**
https://www.hdec.kr/downloadfile/HDEC_Ethics_Charter_&_Code_of_Conduct_E.pdf

HDEC Ethics Charter & Code of Conduct

Concept

Ethics Charter

Code of Conduct


Moral Pride in HDEC

Hyundai E&C in Which All of Customers, Employees, and Suppliers Take Pride

1

Ethics for Executives and Employees

We shall perform our duties based on clear and transparent standards, and do our utmost to fulfill our responsibilities with integrity.




8 issues

2

Fair Competition and Trade

We shall compete fairly in the market and conduct business ethically with parties that engage in contractual relationships with us.



7 issues

3

Realization of Customer Value

We shall provide safe products, exceptional services and accurate information, and we rigorously protect personal information to increase customer value.



7 issues

4

Respect for Executives and Employees

We shall respect our members as independent individuals, and to this end, we provide fair working conditions and safe working environments.




7 issues

5

Commitment to Sustainability

We shall contribute to sustainable development by fulfilling our social & environmental responsibilities as a member of society so that diverse stakeholders can prosper together in harmony.



8 issues

Advancing Anti-corruption Management Policies and Systems

Since the enactment of the Anti-Corruption Compliance Policy & Procedures in April 2017, Hyundai E&C has been continuously striving to internalize anti-corruption management. In July 2021, through the revision of the Policy (Article 16 – Obstructive practice), interfering with employees who have been the subject of internal investigations or investigations is prohibited, including (i) obstructing investigations by destroying, forging, falsifying, or concealing evidence; (ii) intimidating or intimidating others to prevent testimony; and (iii) interfering with any other investigation/investigation. This was a precautionary measure as it was discovered that employees of other companies in Korea committed illegal acts such as destroying evidence and persuading witnesses after they became the target of investigations into corruption crimes. Under domestic law, separate criminal responsibility such as destruction of evidence is established, and in foreign countries, it can be punished as a felony for obstruction of justice. In November 2021, Hyundai E&C was acquired ISO 37001:2016, an international anti-corruption management system standard, by Lloyd's Register, a third-party certification body, and the scope of certification is applicable to prevention, detection and response to bribery when undertaking work relating to services across the entire value chain of the construction industry. In 2022, we plan to raise employee awareness and establish an anti-corruption and ethical management culture within the company, by introducing the company's business process and company rules revised in accordance with the anti-corruption management system certification to all executives and employees, and educating other companies on cases of violation of anti-corruption laws. In addition, Hyundai E&C strives to share its experience and values of ethical and compliance management with partners in cooperative relationships, such as joint ventures and overseas investment corporations. Hyundai E&C also ensures that the counterparty is clearly aware of Hyundai E&C's Code of Ethics, recommends that an anti-corruption clause be included in the contract, and makes it mandatory to submit a pledge of compliance.

ISO 37001 Certificate

Reinforcing Ethics and Compliance Management

Expanding Ethics and Compliance Organization

In order to implement its ethical management effectively, Hyundai E&C established a corporate-wide compliance organization called the Corporate Governance & Transparent Management Committee within the Board of Directors. This committee reviews and approves compliance policies and business decisions related to anti-trust and anti-corruption matters. The Board of Directors of Hyundai E&C appointed a Chief Compliance Manager (officially disclosed as “Compliance Officer” in accordance with the Commercial Act of Korea) who is a Registered Attorney in the Republic of Korea. The Compliance Support Team sits within the Legal Affairs Group, under the supervision of the Chief Compliance Manager. It is responsible for (i) assessment and development of compliance policies, (ii), compliance training to the entire workforce, (iii) compliance monitoring; and (iv) consultation compliance issues to employees. Hyundai E&C appoints Compliance Ambassadors to each division/team/project site/branch office who are responsible for disseminating compliance policies and instructions to the rest of the employees promptly. In 2022, the number of senior compliance ambassadors increased from 26 to 25 and the number of junior compliance ambassadors from 361 to 384 to expand the compliance organization. In accordance with the ISO 37001 Anti-Corruption Management System certification, we are strengthening our internal ethics and compliance monitoring capabilities by nurturing employees from working-level departments as internal auditors in addition to the compliance support team. In 2022, we plan to continuously conduct various internal and external education programs such as in-house training on the anti-corruption management system and training for internal auditors to strengthen the competencies of the compliance support team and members of the compliance support organization.

Advancing Ethics and Compliance Awareness

Hyundai E&C develops and provides various systems and training programs to raise the ethical and compliance awareness of its employees. Every year, all employees sign the 'Ethical Management Pledge', and mandatory ethics and compliance training is provided to all employees, including new recruits. In addition, we help ethical judgments experienced in actual work. by operating an ethical management practice Q&A in the groupware online ethics and compliance counseling center. In the first quarter of 2021, sustainability management education was conducted for all employees to enhance their understanding of ESG risks, and in the second quarter of 2021, international compliance education was provided for the US Foreign Corrupt Practices Act (FCPA), UK Bribery Act (UKBA), and the Company. We have provided training on major anti-corruption laws, including regulations on compliance with anti-corruption laws. In 2022, we plan to encourage compliance officers and compliance leaders to complete in-house ethical compliance training and pledge to practice ethical management. In addition, we plan to set goals for the completion of in-house ethics and compliance education and the rate of pledge to practice ethical management in the anti-corruption management goals for each business division, in order to raise the awareness of ethics and compliance among employees.

Establishing Fair Trade Compliance

To settle the transparent and fair-trading culture, Hyundai E&C has introduced the Compliance Program (CP) designed to comply with the Monopoly Regulation and Fair Trade Act as an internal control standard. We monthly 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 reinforcing the mindset of fair trade-related laws and win-win cooperation with suppliers through customized fair trade prevention education for each department, subcontract visit education for each domestic and overseas site base, and signing of a pledge to practice fair trade for all employees. Hyundai E&C received no administrative measure for violating fair trade law in 2021, as a result of strengthening voluntary compliance with fair trade by conducting fair trade education for 1,969 employees (830 relevant departments and sites, 1,139 new/experienced recruits) and reviewing any risk of violation of the law. In 2022, we plan to enhance the effectiveness of training by raising the awareness of compliance among employees and expanding specialized training for each sector/target, by announcing the CEO's will to comply every half year and distributing fair trade compliance guidelines for each field, such as prevention of collusion, insider trading, and subcontracting.

Status of Anti-competitive Penalty

Category	Unit	2018	2019	2020	2021
Total Fines	KRW 100 million	0	0	0	0
Ratio to Sales	%	0	0	0	0

Violation of Ethical Management and Consequences

Hyundai E&C provides online training on the Code of Ethics and related regulations through the operation of the Cyber Audit Office, receives reports on irregularities, reports on unfair business practices, and system improvement requirements in real-time, and transparently deals with the reports. For smooth reporting from overseas business sites, Hyundai E&C operates the English Cyber Audit Office and hotlines by overseas country 24 hours a day, while encouraging anonymous reporting and ensuring the secrecy of the identity of reporters and confidentiality of the reported information by not disclosing all reported contents. In particular, as the Whistleblowing Policy and Procedure was introduced in July 2021 to strengthen the whistleblower protection program, the identity of the whistleblower and the contents of the report are strictly confidential. In 2021, a total of 87 reports were received, of which 58 cases were found to be true as a result of fact-finding by the Audit Office, and disciplinary measures were taken for 24 employees of ethical management violations. In the future, Hyundai E&C will continue to declare the CEO's Zero-tolerance Message on matters related to transparency violations such as corruption, and practice law-abiding management based on principles. Hyundai E&C will continue to declare a zero-tolerance message in the CEO's name on matters related to transparency violations, such as corruption, to practice law-abiding management based on principles.

Ethics & Compliance Education in 2021

Category	Education Target	Education Content
Ethics Education	All employees	Ethical management trend, ethical management system, and ethical regulation education
International Compliance Training	All employees	U.S./UK Anti-Corruption Act, Hyundai E&C Anti-Corruption Act Compliance Regulations
Sustainability Management Education (new)	All employees	Understanding of sustainability and ESG, ESG internalization method
Compliance Education	Employees performing subcontract related work	Construction-related law compliance
Fair Trade Education	Employees from relevant departments and site, New/experienced recruits	Fair trade, subcontracting and compliance

2022 HYUNDAI E&C SUSTAINABILITY REPORT

68 | 69



STRATEGY 8

Implementing Integrated Risk Management and Protecting Human Rights in Value Chain



Hyundai E&C is striving to efficiently secure business stability by identifying potential risk factors in advance and preventing crises through integrated financial and non-financial risk management. Hyundai E&C is also strengthening its competitiveness by conducting systematic long-term strategic risk analysis to discover new opportunities and integrate them into business. In addition, we are making efforts to preemptively analyze human rights risks that may occur throughout the value chain and minimize negative human rights impacts.


2021 Performance Highlights

Implementation Rates of 2021 On-site Human Rights Assessment	Identified Risk Rates of 2021 Supplier ESG Risk Assessment	Identified Risk Rates of 2021 Business Risk Assessment
99.7%	1.01%	1.15%

 Risk Management <https://www.hdec.kr/en/invest/safety.aspx>
Human Rights Protection <https://www.hdec.kr/en/invest/ethic.aspx>



HDEC Value Creation



HDEC Remote Site Management Platform

“Hyundai E&C Leads On-site Risk Management with ICT Technology”

In October 2021, Hyundai E&C pioneered a new paradigm for on-site risk management by developing a ‘remote site management platform’ that can manage construction sites in real-time by linking unmanned drones and smart glasses. The platform developed by Hyundai E&C is capable of three-dimensional on-site risk management based on video and 3D data. It is linked with various smart devices such as 360° cameras and CCTV images to check the safety of field workers in real-time in hazardous work areas and prevent accidents. In the event of an emergency, immediate safety measures can be taken to minimize damage. Hyundai E&C plans to expand the application of the remote site management platform to construction sites in the future, while leading the future smart construction technology by linking with various smart technologies such as artificial intelligence and robotics, and strengthening on-site risk management.

Integrated Risk Management

Risk Management System





Hyundai E&C is preventing risk factors that threaten continuous management in advance by extending the scope of risk management from the traditional financial area to the non-financial area. Risk management is largely divided into finance and operation, environment, safety and health, ethics, supply chain, and information security. Based on risk management regulations, while systematic risk responses are developed for each area based on risk management regulations. Hyundai E&C is continuously improving risk management to appropriately respond to sudden risks such as COVID-19, and is responding to identified risks with company-wide management strategies. In order to effectively respond to risks that threaten continuous business operation, Hyundai E&C sets a strategic direction by comprehensively considering business areas, changes in customer needs, demand forecasts, and changes in the economic/technical/industrial environment, and uses them as a basis for decision-making. are using it. Hyundai E&C analyzes the risks it faces and sets appropriate control measures to establish and operate effective financial management policies, by identifying financial risks such as exchange risk, credit risk, liquidity risk, and interest rate risk. To manage environmental risks, we are striving to identify environmental risks in advance through on-site monitoring, such as Site Environmental Evaluation Inspection. For social aspects, Safety & Health Evaluation Checks and 365 Safety Patrol inspections are continued for safety and health risk management. To identify supply chain risks, we conduct an annual Supplier ESG Risk Assessment to implement improvement measures for high-risk suppliers. On-site Human Rights Assessment is also being conducted to prevent human rights risks that may occur at global business sites. In addition, we manage ethical and compliance risks through continuous compliance activities and regular internal audits, while striving to manage information security risks in various ways, such as Information Security Inspection, security vulnerability inspection, and mock hacking.

Risk Classification System




For effective responses to risks, Hyundai E&C classifies risks largely into corporate-wide risk, project risk, and long-term strategic risk, taking into account business areas, activity markets, macroeconomic environment, and stakeholder characteristics for management of the risks. Corporate-wide risks refer to those significant risks that can affect Hyundai E&C’s business objectives among various risks to which the whole company is exposed-largely classified into country risks and corporate & market risks. Country risks are political, social, cultural, and environmental risks caused by changes in the external environment, and are managed at the company-wide level. Corporate & market risks generally include market, business, and financial risks managed by a company. Project risks refer to important risks that can affect project winning and the achievement of project goals when projects implemented. Hyundai E&C is proactively blocking project risks by establishing and operating a consistent and efficient project risk management system throughout the project lifecycle.

Since 2014, Hyundai E&C is fundamentally blocking the winning of projects with apparent risks through the order winning stage multilayered filtering system. When projects have been selected and won through the foregoing process, high risks are intensively identified, and risks are divided into those that can be handled at the site and those that require head office’s support so that appropriate responses can be carried out. Long-term strategic risks are material risks that 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. Through long-term strategic risk analysis according to internal and external environmental changes, Hyundai E&C is striving to identify risk/opportunity factors and integrate them into the business.

Risk Management Organization and Assessment

Finance and Operation 	Financial Risk	Financial management office, IR	Financial risk assessment (exchange rate, credit, liquidity, interest rate)
	Business Risk	Budget management office	Order review, business risk assessment
Environment 	Environmental Risk	Environmental management team	Site Environmental Evaluation Inspection
Society 	Safety and Health Risk	Safety diagnosis team	Safety & Health Evaluation Checks, 365 Safety Patrol
	Supply Chain Risk	Procurement support team	Supplier ESG Risk Assessment
	Human Rights Risk	Human resources operation team	On-site Human Rights Assessment
Governance 	Ethics and Compliance Risk	Compliance support team, Auditing Team 1	Compliance activities, internal audit
	Information Security Risk	Information operation team	Information Security Inspection, security vulnerability inspection, mock hacking

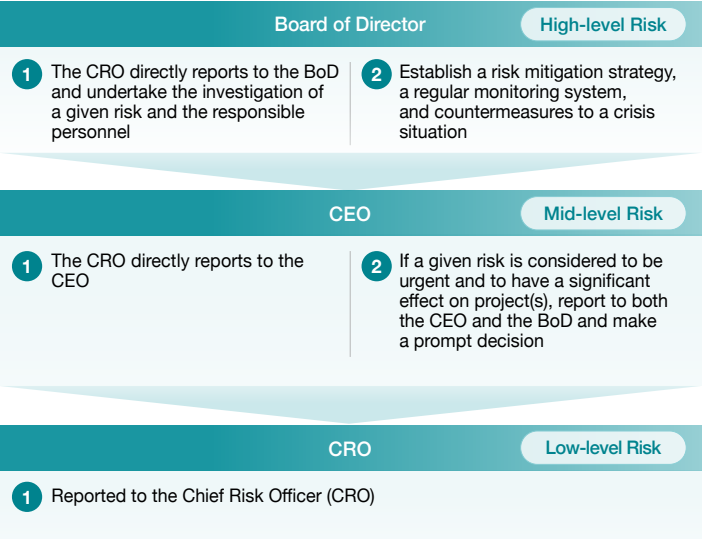
Long-term Strategic Risk

	Market Restructuring Due to Energy Transition	Changes in Industry Structure and Customer Needs Due to Digital Transformation
Description 	<ul style="list-style-type: none">After the COVID-19 pandemic, the world is accelerating industrial restructuring on two axes: Energy Transformation and Digital Transformation.As the demand for renewable energy continues to increase following the implementation of carbon neutral and energy transition policies in major countries around the world, global competition is intensifying for eco-friendly energy, hydrogen energy, consumer-oriented easy-to-use energy supply, and next-generation transmission and distribution network infrastructure markets.	<ul style="list-style-type: none">While digital transformation is accelerating with the development of ICT technologies such as artificial intelligence, big data, drones, and BIM, the data-based 4th industrial revolution has brought major changes to business areas and processes across all industries.As the construction industry evolves into smart construction that converges cutting-edge technologies amid the challenges of related heterogeneous industries such as energy, mobility, healthcare, infrastructure O&M, and life/safety IoT, global competition is fierce for the application of technologies that improve customer convenience.
Business Impact 	<ul style="list-style-type: none">Starting with Germany increasing the share of renewable energy from 43% in 2019 to 85% in 2050, major countries around the world have been announcing carbon neutral/hydrogen strategies in large numbers since 2019. Accordingly, the share of new and renewable energy in each country is continuously increasing and the hydrogen ecosystem is expanding, which is rapidly changing the energy market.The restructuring of the market structure due to energy conversion is a significant risk factor affecting the project orders and management performance of Hyundai E&C’s civil engineering/plant division, and Hyundai E&C must invest large-scale investment to strengthen its competitiveness in the new and renewable energy market.	<ul style="list-style-type: none">The industrial structure is being reorganized as a national growth strategy centered on digital transformation is emerging, including the announcement of China’s digital China transformation strategy in 2019, the release of the EU digital strategy in Europe in 2020, and the promotion of Japan’s digital new deal.Changes in the industrial structure and customer needs due to digital transformation are significant risk factors that affect the project orders and business performance of Hyundai E&C’s building/housing division. If Hyundai E&C fails to provide differentiated products and services by identifying customer needs, it will lose its market competitiveness. In the long run, the brand power value will also decrease, which may lead to large business losses.
Mitigating Strategy 	<ul style="list-style-type: none">Declaration of Coal-Free and Organizational Reorganization: In order to preemptively respond to the energy transition, Hyundai E&C ended the coal power plant construction project through the 2021 coal-free policy, and reorganized the existing coal-fired power plant order sales organization into the new and renewable energy sector. In addition, we are promoting organizational reorganization and business transformation in the new and renewable energy sector, such as expansion of new and renewable energy, eco-friendly, and energy-efficient product businesses.Reinforcement of new and renewable energy business: Hyundai E&C is taking the lead in the new and renewable energy market by expanding existing businesses based on its accumulated experience. <p>[Core Business]</p> <ul style="list-style-type: none">- Hydrogen plant- Offshore wind power- Next-generation nuclear power plant- Carbon capture/utilization/storage (CCUS)	<ul style="list-style-type: none">Strengthening smart construction: Starting with the self-development of HloS (Hyundai IoT Safety System), the first IoT safety management system in Korea in 2019, Hyundai E&C is collaborating to conduct 4D drawing review through BIM, the core technology of smart construction. Solution Securing various smart construction technologies such as Common Data Environment (CDE), VR (Virtual Reality) and AR (Augmented Reality) that can review on-site construction plans in a virtual environment, and UAV (Unmanned Aerial Vehicle) that enables unmanned site management It is being applied to construction sites.Promotion of New Smart City Businesses: Hyundai E&C is intensively expanding new businesses in the smart city field, such as urban mobility and future housing. <p>[Core Business]</p> <ul style="list-style-type: none">- Urban mobility hub: UAM Vertiport design/construction- Future housing: Developing products that respond to future trends, such as robot services

Risk Monitoring and Reporting System

Hyundai E&C has defined 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.

Risk Reporting System



Enhancing On-site Risk Management

Hyundai E&C operates a corporate-wide risk management system to identify and manage risks that can occur in various types of projects, including infrastructure, building, housing, plant, and energy. Risks at all sites are managed by dividing them into order-taking and execution stages. In December 2021, the on-site risk management function was integrated into the Budget Management Office so that the process and budget could be managed in connection with the process and budget.

In the pre-participation stage, we are participating in bidding stably by identifying and minimizing project risks preemptively through risk assessment procedures. Subsequently, in the project execution stage, Key milestones-centered management system by project type has been established to effectively identify and respond to risks. Risk analysis results are shared with each business division and a system is operated to respond to risks in a timely manner through organic collaboration. In addition, various analysis methods such as milestone management and productivity measurement have been introduced and operated to quantitatively determine the progress and risks of the project being carried out.

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. The identified risks in the site are classified into four stages: Issue, Watch, Monitoring, and Normal through the process management system, and the Issue and Watch stages are designated as a focus management site and continuously tracking the risk to reduce the risk by continuously tracking and managing the risk. In addition, V/O claim management, construction cost analysis, and productivity analysis systems have been developed to systematically monitor and respond to on-site risks and are utilized in risk management.

Establishing Sound Governance and Ethical & Compliance Management System

Implementing Integrated Risk Management and Protecting Human Rights in Value Chain

Hyundai E&C Human Rights Management

Human Rights Policy

As the transition to the new normal era is accelerating due to the COVID-19 pandemic, corporate human rights issues are spreading from traditional business operations and supply chain issues to the entire value chain related to companies, such as personal information protection, emotional worker protection, and environmental rights. While promoting the construction project on the world, Hyundai E&C is deeply aware that unintended human rights violations may occur in the process of business operations due to the cultural, customary, religious, racial, and institutional differences of the region. As a responsible global construction company, Hyundai E&C enacted the HDEC Human Rights Policy' in May 2017, established a human rights management process under the principle of strict respect for human rights, and has conducted monitoring activities at all domestic and overseas business sites. Hyundai E&C has also been actively protecting and promoting human rights by managing major human rights issues and vulnerable groups throughout the business process. In July 2020, the 'Hyundai E&C Human Rights Charter' was completely revised to include the basic rights of stakeholders and a philosophy of respecting human rights to practice respect for human rights at the group level. Hyundai E&C expressed its will to practice throughout the value chain by reflecting the purpose of human rights management in the 'HDEC Supplier Code of Conduct'. The charter consists of five chapters: Overview, Principles, System, Risk Management, Appendix and presents the human rights standards expected across the value chain.

Basic Principle of HDEC Human Rights Charter

Article 1	Prohibition of Discrimination		Article 6	Prohibition of Human Trafficking and Exploitation	
Article 2	Working Condition Compliance and Equal Remuneration		Article 7	Compliance with Living Wage	
Article 3	Humane Treatment and Prohibition of Harassment		Article 8	Guarantee of Industrial Safety	
Article 4	Guarantee of the Freedom of Association and Collective Bargaining		Article 9	Protection of the Human Rights of Local Residents	
Article 5	Prohibition of Forced Labor and Child Labor		Article 10	Protection of the Human Rights for Customers	

Human Rights Risk Management Process



UN Global Compact COP
<https://www.unglobalcompact.org/what-is-gc/participants/11559>

Compliance with Global Human Rights Standards

As a responsible global construction company, Hyundai E&C officially supports global human rights and labor standards such as the 'UN Universal Declaration of Human Rights', the 'ILO Conventions', the 'OECD Guidelines for Multinational Enterprises', and the 'UN Guiding Principles on Business and Human Rights', and reflect them in the charter. The 'UN Guiding Principles on Business and Human Rights' provides companies and stakeholders with a clear framework for promoting human rights in the business process. Based on the principle, Hyundai E&C established a human rights management process by itself. In April 2010, Hyundai E&C joined the UN Global Compact, a voluntary council on the fulfillment of social responsibility, and has practiced the 10 principles of the four areas of human rights, labor, environment, and anti-corruption throughout the management. As of July 2022, we are trying to faithfully implement relevant obligations as a UN Global Compact member.

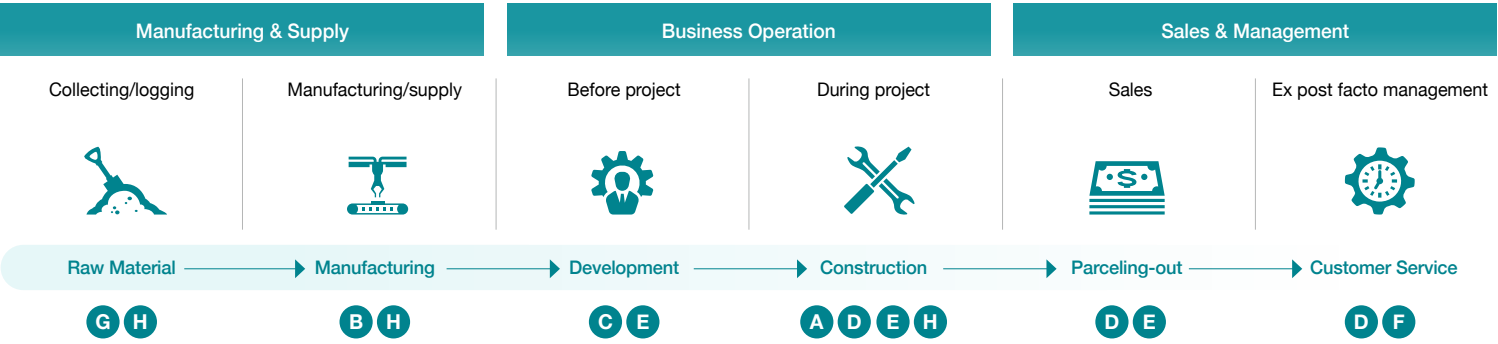
Human Rights Risk Management System

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 the 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.

Through diagnostic analysis of the entire value chain of manufacturing/supply, business operation, and sales/management, major human rights issues were defined and priorities established according to the degree of risk exposure, based on the three aspects of policy declaration, policy implementation, and human rights remedies in the "UN Guiding Principles on Business and Human Rights". Hyundai E&C's human rights risk identification procedures implemented after comprehensively reviewing the following depending on the targets of review; 1) On-site Human Rights Assessment, 2) Supplier ESG Risk Assessment, 3) Business Risk Assessment results, and 4) Information Security Inspection.

HDEC Human Rights Charter
<https://www.hdec.kr/en/invest/ethic.aspx>

Hyundai E&C Human Rights Map and Major Human Right Issues



	Major Human Rights Issues	Vulnerable Group	Review Targets	Issue Definition	Risk Level	Evaluation System	Scope	Identi-fication	Action
A	Business Operation	Employees, local communities	Hyundai E&C	Potential human rights violations that may be caused by goods / services	Subjects of due diligence	On-site Human Rights Assessment	100%	8.3%	100%
B	Supply Chain Human Right	Supplier employees, migrant workers, external contract workers	Supplier, local community	Issue of the violation of supplier employees' basic human rights, labor rights, and safety rights	Subjects of due diligence	Supplier ESG Risk Assessment	100%	1.01%	100%
C	Indigenous People's Rights	Indigenous people, local communities	Hyundai E&C	Direct infringement on the rights of indigenous persons, such as land and property due to the promotion of construction projects	Subjects of due diligence	Business Risk Assessment	100%	1.15%	100%
D	Privacy Protection	Employees, customers	Hyundai E&C	Personal information and privacy protection issues of employees and customers	Subjects of due diligence	Information Security Inspection	100%	15.8%	100%
E	Employee Human Rights	Employees, women	Hyundai E&C	Issue of the violation of basic human rights, labor rights, safety violation issues in the working environment of employees	Preliminary caution	-	-	-	-
F	Emotional Worker Protection	Customer center counselor	Subsidiary company	Protect counselors who are exposed to unjust acts (such as profanity, ranting, intimidation, insults, sexual harassment) or unreasonable demands of customers	Preliminary caution	-	-	-	-
G	Illegal Logging	Indigenous people, children	Supplier of wood	Issues of child labor exploitation in illegal logging process	Preliminary caution	-	-	-	-
H	Guarantee of Environmental Rights	Employees, customers, suppliers, local communities	Hyundai E&C, supplier	Deforestation, biodiversity loss and climate crisis issues that may occur in business operations and supply chains	Preliminary caution	-	-	-	-



Major Human Rights Assessment and Measures

On-site Human Rights Assessment

Hyundai E&C developed the ‘On-site Human Rights Assessmen’ in May 2017 for the first time among construction companies in South Korea to conduct close evaluation and inspections of every site every year. The ‘On-site Human Rights Checklist’ consists of a total of 41 indicators in four areas: respect for basic human rights, worker human rights protection, workplace safety assurance, and welfare benefits under the purpose operation of identifying human rights risks in global construction sites where multinational workers work in advance and actually improving the conditions.

In 2021, a total of 12,178 domestic and overseas workers at 36 overseas sites in 13 countries were completely evaluated through evaluation processes including self-check by sites, branch site visiting verification, and worker interviews. According to the results of the evaluation in 2021, Hyundai E&C’s global on-site human rights checklist implementation rate was 99.7%, which is a good level, and none of the major human rights risks such as discrimination/abuse, child / forced labor, and non-compliance with labor laws was identified. Hyundai E&C implemented immediate follow-up measures for a total of three sites where potential human rights risks were identified. Based on the final inspection results, improvement activities are carried out by identifying improvement needs for each site.

Newly Established Workers’ Council (Punggol Sports Center Construction Site, Singapore)



Implementation Rates of 2021 On-site Human Rights Assessment

Respect for Basic Human Right	10 indicators	Prohibition of discrimination/ physical abuse 100% Religious/political freedom 100% Grievance 97.2%
Welfare Benefits	12 indicators	Accommodations 100% Mess hall 100% Facilities 100%

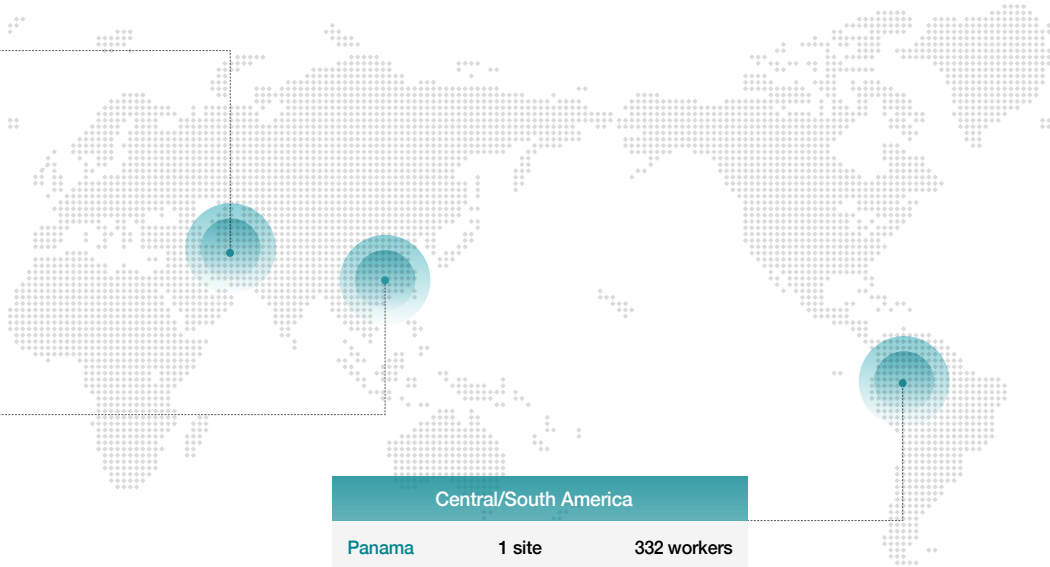
Protection of Labor Right	12 indicators	Prohibition of enforced/child labor 99.1% Payment of salary 100% Working hours 100% Freedom of association/collective bargaining 100%
Provision of Safety	7 indicators	Safety compliance 100% Health care enhancemen 100%
		<div><div></div><div>Total</div></div> 41 99.7%

2021 On-site Human Rights Assessment Site

Middle East		
Saudi Arabia	7 sites	1,880 workers
Kuwait	4 sites	1,085 workers
Qatar	6 sites	4,148 workers
UAE	3 sites	604 workers
Iraq	1 site	278 workers

Asia		
Singapore	7 sites	1,609 workers
Indonesia	2 sites	475 workers
Vietnam	1 site	66 workers
Sri Lanka	1 site	263 workers
Bangladesh	1 site	506 workers
Philippines	1 site	749 workers

Central/South America		
Panama	1 site	332 workers
Chile	1 site	101 workers



Supplier ESG Risk Assessment

In October 2014, Hyundai E&C established the ‘Supplier Sustainability Guidelines’ for the first time among domestic construction companies and developed the ‘Supplier ESG Risk Assessment Index’ to evaluate the level of negative economic, environmental, and social risks that may occur in the supply chain. This assessment includes evaluation indicators directly related to human rights risks such as supply chain human rights, labor and safety. Corrective action plans are established for suppliers in need of improvement according to the results of the supply chain risk assessment, and sustainability management performance improvement is required. Please refer to “Strengthening Supply Chain Management (p. 57)” for detailed information.

Results of Supplier 2021 ESG Risk Assessment

Category	Number of Suppliers (n)	Ratio	Description
Risk Evaluation	3,855	100%	100% of tier 1 suppliers
Risk Identification	39	1.01%	High-risk suppliers
Corrective Actions	39	100%	Induce the implementation of corrective measures and improvement; if no improvement, cancel the registration

Business Risk Assessment

Hyundai E&C is aware that potential human rights risks may arise due to multiple factors, including economic, social and cultural differences and long-term construction project progress, when entering a business site, new market, or overseas country requiring advancement of new construction methods (technology) and on-site management according to business portfolio expansion. For the successful promotion of projects, Hyundai E&C conducts ‘Business Risk Assessment’ and establishes and operates procedures so that risks should be identified without fail before projects.

2021 Results of Business Risk Assessment

Category	Number of Suppliers (n)	Ratio	Description
Risk Evaluation	87	100%	100% of projects being promoted
Risk Identification	1	1.15%	Projects promoted in high human right risk countries
Corrective Actions	1	100%	Devise measures to mitigate or avoid risks

Information Security Inspection

Hyundai E&C recognizes the importance of personal information we collect, handle and store during our business and identifies it as a major human rights risk that leads to human rights violations of stakeholders such as customers and employees when information is leaked. Based on group security guide criteria, Hyundai E&C is implementing preventive measures by conducting simulation hacking of business systems and inspection of infrastructure systems annually through Hyundai AutoEver, a third-party IT system specialist, and deriving countermeasures by simulation analysis of discovered vulnerabilities.

Results of 2021 Information Security Inspection

Category	Vulnerabilities (n)	Ratio	Description
Risk Evaluation	317 (Checked system)	100%	Infrastructure security check based on group security guide
Risk Identification	50	15.8%	Vulnerabilities identified in account and password management, solution security management area
Corrective Actions	50	100%	OS improvement, DB supplementa-tion, WEB solution security manage-ment reinforcement

Potential Human Rights Issue Management

Employee Human Rights and Emotional Worker Protection

Hyundai E&C has mandated company-wide human rights education for all employees to guarantee basic human rights/labor rights/safety rights. Hyundai E&C conducts compulsory “Workplace Harassment Prevention Education” and “Sexual Harassment Prevention Education” for all employees annually. Hyundai E&C is conducting continuing education and management to prevent unfair practices such as workplace harassment and sexual harassment, which are social issues, forced labor, child labor, and violations of rights in the working environment. Due to the nature of their work, customer center counselors may be exposed to personal insults or unreasonable demands such as verbal abuse and sexual harassment by customers during counseling, which may lead to human rights violations. Hyundai E&C runs regular inspection and healing programs to protect the rights and interests of counselors in consultation with customers through regular cooperation with customer center subsidiaries. In addition, in order to maintain and manage the health status of our employees, we operate an in-house medical office where a professional nurse reside and implement health promotion programs.

Employee Human Rights Education

Category	Workplace Harassment Prevention Education	Sexual Harassment Prevention Education	Awareness Education for the Challenged
Purpose	Understanding and preventing workplace harassment	Clear understanding and prevention of sexual harassment in the workplace	Creating stable working conditions for challenged workers
Content	Definitions and related regulations Status and type of occurrence Essential factors for prevention	Definitions and judgment criteria by types Secondary damage, gender sensitivity Sexual harassment procedures	Definition and types of disability Laws/systems related to employment of persons with disabilities Working with challenged colleagues
Trainees	Compulsory education for all employees	Compulsory education for all employees	Compulsory education for all employees

Illegal Logging and Environmental Rights Protection

With the expansion of industrialization and regional development centering on developing countries, large-scale deforestation for cultivation, livestock raising, and timber production is taking place all over the world. Forests are a major carbon sink and are known as the last bastion for global warming. Continuous deforestation has a negative impact on the earth’s climate change, causing frequent droughts and floods, and rapid soil erosion leads to a decrease in biodiversity. Hyundai E&C supports the prohibition of deforestation in order to guarantee the environmental rights of mankind and is taking the lead in securing the environmental rights of the growing generation. In this regard, illegal logging without permission in the process of deforestation for the manufacture of wood finishing materials used in construction projects is becoming an international issue. When purchasing finished wood products for the interior, Hyundai E&C is receiving FSC (Forest Stewardship Council) certification and HB (Healthy Building Material) certification from suppliers that have acquired it. Also, when purchasing paper, we purchase 100% FSC certified paper.



ESG FACTBOOK



Financial Performance	77
Key Sustainability Indicators	78
Materiality Analysis Process	82
Independent Assurance Statement	84
Greenhouse Gas Verification Statement	86
GRI Standards Index	87
WEF Stakeholder Capitalism Metrics	91
SASB Index	93
TCFD Index	94
Major Awards & Memberships	94

Financial Performance

[Condensed] Consolidated Statement of Income
(Unit: KRW 100 million)

Category	2017	2018	2019	2020	2021
Sales	168,871	167,309	172,788	169,709	180,655
Cost of Sales	151,081	150,697	155,529	155,740	162,683
Gross Profit	17,790	16,611	17,259	13,969	17,972
Operating Income	9,861	8,400	8,597	5,490	7,535
Income Before Income Tax Expense	5,548	8,979	7,989	3,956	8,541
Net Income	3,716	5,353	5,733	2,277	5,544
Other Comprehensive Income	726	-2,071	-332	-907	1,566
Total Comprehensive Income	4,441	3,282	5,402	1,370	7,110

[Condensed] Consolidated Statement of Financial Position
(Unit: KRW 100 million)

Category	2017	2018	2019	2020	2021
Current Assets	132,498	133,368	131,720	133,989	145,264
Non-current Assets	51,821	47,178	50,550	45,403	51,109
Total Assets	184,319	180,546	182,270	179,393	196,373
Current Liabilities	72,190	68,609	67,709	64,677	76,132
Non-current Liabilities	27,399	29,019	27,411	27,052	25,948
Total Liabilities	99,590	97,628	95,120	91,729	102,080
Capital Stock	5,573	5,573	5,573	5,573	5,621
Other Contributed Capital	10,282	9,979	10,138	10,135	10,924
Components of Other Capita	690	-2,675	-2,337	-2,398	-777
Retained Earnings	48,132	49,864	53,252	53,008	56,400
Non-controlling Interests	20,053	20,178	20,524	21,346	22,126
Total Equity	84,730	82,919	87,150	87,664	94,293

Consolidated Financial Stability
(Unit: %)

Category	2017	2018	2019	2020	2021
Current Ratio	183.5	194.4	194.5	207.2	190.8
Debt Ratio	117.5	117.7	109.1	104.6	108.3
Net Worth Ratio	46.0	45.9	47.8	48.9	48.0

Compliance

Hyundai E&C strictly complies with tax laws and related regulations in all 62 countries (as of May 2022) 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 is transparently disclosing the status of its sanctions through its annual report, and no penalties or correction orders have been issued in the economic, environmental, and social fields in 2021. Hyundai E&C will endeavor to communicate with its stakeholders in a transparent manner.



Key Sustainability Indicators

Energy Consumption

(Unit: TJ)

Category	2018	2019	2020	2021
Non-renewable energy consumption (A)	7,690.16	7,776.51	4,071.17	4,838.95
Renewable energy purchased or generated (B)	2.82	9.25	1.56	7.95
Total non-renewable energy consumption (A-B)	7,687.34	7,767.26	4,069.61	4,831.00
Total costs of energy consumption (KRW million)	192,959	205,297	119,108	116,189

Material Usage and Recycling

(As of 2021)

Category	Unit	Total Used	Total Site Used (Sites)	Total Recycled	Recycling Rate (%)
Wood	m'	27,890	13	-	-
Steel	ton	501,000	130	-	-
Concrete	m'	3,871,549	149	-	-
Aggregate	m'	644,346	27	9,072	1.41
Asphalt concrete	ton	334,410	17	-	-
Cement	ton	225,830	52	-	-
Sand	m'	34,386	3	-	-
LO2	ℓ	614,392	3	-	-
Munition	kg	126,540	6	-	-

Waste Generation

Category	Unit	2018	2019	2020	2021
Total waste generated	ton	831,482	764,565	883,383	869,806
Total waste used/recycled	ton	809,834	753,518	876,444	864,247
Total waste disposed	ton	21,648	11,047	6,939	5,558
- Waste landfilled	ton	19,243	9,290	4,159	3,230
- Waste incinerated (without energy recovery)	ton	2,405	1,757	2,780	2,328
Waste recycle rate	%	97.41	98.56	99.22	99.36

Hazardous Waste Generation

Category	Unit	2018	2019	2020	2021
Total hazardous waste generated	ton	67.18	17.32	2.97	19.29
Total hazardous waste used/recycled	ton	21.31	3.60	0.12	3.80
Total hazardous waste disposed	ton	45.87	13.72	2.85	15.49
- Hazardous waste landfilled	ton	2.37	10.43	1.50	0
- Hazardous waste incinerated (without energy recovery)	ton	43.50	3.29	1.35	15.49

Safety Management Indicator

Category		Unit	2018	2019	2020	2021
LTIFR	Employees	n/million hours worked	0.166	0.192	0.105	0.140
	Contractors	n/million hours worked	0.877	0.917	1.024	1.644
OIFR		n/million hours worked	0.085	0.172	0.265	0.571
Number of Fatality	Employees	person	0	2	0	0
	Contractors	person	3	4	4	5
Number of Injured	Employees	person	21	15	9	14
	Contractors	person	121	130	150	267

* Based on domestic and overseas sites

* Based on domestic and overseas sites

Status of Employees in 2021

(Unit: employees)

Category			Total	Male	Female	Female Ratio	FY2030 Goal
Total employees (including contract workers)			6,241	5,548	693	11.10%	14.18%
Type	Sales & marketing division		4,678	4,203	475	10.15%	13.55%
	Non-sales & marketing division	General	768	625	143	18.62%	20.46%
		STEM-related	795	720	75	9.43%	12.73%
Management Level (FTEs)	Management	Senior	1,993	1,943	50	2.51%	3.68%
		Junior	1,244	1,160	84	6.75%	8.75%
		Sub-total	3,237	3,103	134	4.14%	5.59%
	Non-management		781	683	98	12.55%	16.46%

Category		Total	Male	Female	Female Ratio	Ratio to Total
Age Groups	Under 30	568	386	182	32.04%	9.10%
	30~50	4,602	4,118	483	10.52%	73.74%
	Over 51	1,071	1,044	27	2.52%	17.16%
Minority Groups	The handicapped (including severe grade)	191	140	51	26.70%	3.06%
	The national merit	71	68	3	4.23%	1.14%
	Foreign employees	17	16	1	5.88%	0.27%

Category		Total	Male	Female	Ratio to Management	Ratio to Total
Nationality	Asia	6,241	5,528	687	100%	99.599%
	Europe/CIS	12	10	2	0%	0.192%
	America/Pacific	11	9	2	0%	0.176%
	Africa	2	1	1	0%	0.032%

Status of FTE Training in 2021

(Unit: employees)

Category			Trainees (n)	Training Hours (hour)	Training Costs (KRW million)	Attendance Rate
Total FTE training			4,219	186,793	1,688,33	100%
Type	FTE compulsory training		22,102	51,503	78.01	100%
	FTE non-compulsory training		41,092	135,290	1,610.32	100%
Gender	Male		3,986	176,477	1,595.09	100%
	Female		233	10,316	93.24	100%
Age Groups	Under 30		238	10,537	95.24	100%
	31~50		3,191	141,279	1,276.95	100%
	Over 51		790	34,977	316.14	100%
Nationality	Asia		3,525	156,067	1,410.61	100%
	Middle East		574	25,413	229.70	100%
	Europe /CIS		3	133	1.20	100%
	America/Pacific		76	3,365	30.41	100%
	Africa		41	1,815	16.41	100%
Management Level	Management	Senior	2,135	94,525	854,37	100%
		Junior	1,290	57,114	516.22	100%
	Non-management		712	31,523	284.92	100%



Status of Recruitment

(Unit: employees)

Category			2018	2019	2020	2021
Total recruitments			1,106	1,067	1,153	1,217
Experience	New hires		51	18	10	48
	Experienced hires		1,055	1,049	1,143	1,169
Gender	Male		919	857	938	970
	Female		187	210	215	247
Age Groups	Under 30		190	205	298	377
	30~50		774	724	722	681
	Over 51		142	138	133	159
Nationality	Asia		1,104	1,063	1,152	1,213
	Europe/CIS		1	1	1	0
	America/Pacific		1	3	0	4
	Africa		0	0	0	0
Management Level	Management	Senior	9	48	31	44
		Junior	12	63	37	30
		Sub-total	21	111	68	74
	Non-management		65	32	28	81
Other Indicators	Average hiring costs (KRW)		536,000	426,890	137,834	186,364
	Percentage filled with existing employees (%)		83.0	83.2	81.5	80.8

Turnover Rate

(Unit: %)

Category			2018	2019	2020	2021
Type	Total employee turnover rate		5.53	3.78	5.85	4.33
	Voluntary employee turnover rate		2.08	1.49	1.19	1.77
Gender	Male employee		5.16	3.71	5.60	4.38
	Female employee		11.37	4.98	9.96	3.45
Age Group	Under 30		1.01	2.16	1.89	5.15
	30~50		3.47	2.72	3.19	3.52
	Over 51		22.44	11.05	21.67	8.04
Nationality	Asia		5.48	3.75	5.85	4.33
	America/Pacific		0.04	0.02	0	0
Management Level	Management level	Senior	6.43	3.90	8.52	4.47
		Junior	4.40	2.96	2.66	3.54
		Sub-total	5.75	3.56	6.31	4.11
	Non-management level		5.53	3.78	5.85	5.25

* Based on full-time employees

Starting Salary Rate

(As of annual salary)

Category	Unit	2018	2019	2020	2021
Starting salary for new recruit (male)	KRW	45,310,080	45,990,000	46,174,080	47,237,000
Starting salary for new recruit (female)	KRW	45,310,080	45,990,000	46,174,080	47,237,000
Ratio of starting salary for new recruit against the minimum wage	%	175	160	156	157
Minimum wage	KRW	7,530	8,350	8,590	8,720

Employee Satisfaction

* Satisfaction survey system changed to Culture Index in 2021.

Category	Unit	2018	2019	2020	2021
Employee engagement index	Points	83.5	83.5	86.8	
Culture Index (new)	Points	-	-	-	68.1

Living Wages

(As of December 31, 2021)

Category		Employee Ratio (%)	Hourly Wage (USD)	Hourly Living Wage (USD)	GAP (Times)
Employees	South Korea	81.62	35.9	8.9	4.1
	Iraq	4.31	43.8	1.6	26.6
	UAE	1.38	46.9	4.2	11.3

Social Contribution Activity Expenditures

(As of December 2021, Unit: KRW)

Category	Cash Contribution	Time	In-kind Giving	Overhead	Total
Charitable donation	3,758,171,000	-	-	-	3,758,171,000
Community investment	9,817,484,467	525,107,257	135,770,000	-	10,478,361,724
Commercial programs	211,000,000	-	-	5,595,664,320	5,806,664,320
Total	13,786,655,467	525,107,257	135,770,000	5,595,664,320	20,043,197,044

Status of Top Management Compensation in 2021

(As of December 31, 2021)

Name	Types of Remunerations	Total Amount (KRW million)	Calculation Criteria and Method
CEO Yoon Young-Jun	Salary	880	In accordance with the [Management Personnel and Treatment Regulations] considering the position, assignment and ability, KRW 880 million was paid in instalments within the limits of payment determined by the resolution of the general meeting of shareholders.
	Incentive	200	In accordance with the [Management Personnel and Treatment Regulations] considering the position, assignment, and ability, KRW 38 million (in May) and KRW 162 million (in December) were paid within the limits of payment determined by the resolution of the general meeting of shareholders.
Other Earned Incomes		0	Not applicable

Responsibilities on Data Security

Type	Name	Position	Work Experience	Role and Activities
Board of directors-level responsibility	Hong Dae-Sik	Chair of the Corporate Governance & Transparent Management Committee (outside director)	Law (legal advice on Personal Information Protection Act, etc.)	Review in-house audits, regulate data protection-related activities
Management-level responsibility	Yoo Myeong-Geun	Managing Director (Head of Management Support Division), Chief Security Officer (CSO)	Vice-chair of Security Council	Give orders to security officers on planning and implementing Hyundai E&C's security and management related tasks, oversee implementation, give final approval for data security policies/guidelines

Customer Satisfaction Scores

Category	Unit	2018	2019	2020	2021
Customer satisfaction survey	Points	88.9	85.8	85.7	84.4

Ethical Management Violation Cases and Measurements

(Unit: cases)

Category	Description	2018	2019	2020	2021
Actions on Reported Cases through Cyber Audit Office	Number of reported cases	62	49	52	87
	- Number of cases found to be true	36	33	40	58
	- Number of cases found to be innocent	26	16	12	29
Occurrence of Ethics Violation Cases	Acceptance of hospitality/entertainment	0	0	2	4
	Abuse of work position	0	1	2	4
	Price fixing	0	0	0	0
	Violation of law	0	1	0	0
	Harassment/Sexual harassment	2	4	5	2
	Total	2	6	9	10
Measurement of Ethics Violation Cases	Disciplinary dismissal	1	1	5	14
	Recommended resignation	0	0	2	1
	Suspension	0	0	1	2
	Pay-cut	2	4	0	3
	Reprimand	0	0	1	4
Total		3	5	9	24

* In 2021, the number of whistleblowers increased due to the strengthening of employee ethics and revision of the whistleblower protection regulations. Disciplinary action may not be possible in case of resignation.

Policy Support Expenditures

(Unit: KRW million)

Category		2018	2019	2020	2021
Political Donation		0	0	0	0
Policy Support Expenditures	Total	1,840.5	1,844.4	1,636.4	1,746.3
	Industry promotion	739.1	676.2	577.0	653.7
	Overseas business promotion	372.6	368.3	382.5	363.0
	Association dues & sponsorship	567.4	643.9	587.3	614.7
	Academy dues & sponsorship	161.3	156.1	89.6	115.0

- The Largest Organizations donated in 2021 (Top 5)
1. Construction Association of Kore (KRW 540.5 million, 30.95%): 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 363.0 million, 20.79%): A construction association operating for the purpose of supporting overseas business through collection, analysis and dissemination of overseas construction information.
 3. Seoul Chamber of Commerce and Industry (KRW 102.6 million, 5.88%): A private economic organizations for the purpose of promoting the Korean commerce and industry through mutual cooperation with domestic and overseas economic organizations.
 4. Korea Federation of Construction Contractors (KRW 100.0 million, 5.73%): 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.
 5. Korea Enterprises Federation (KRW 85.0 million, 4.87%): An organization of users established as a national organization to exclusively deal with labor-management issues.

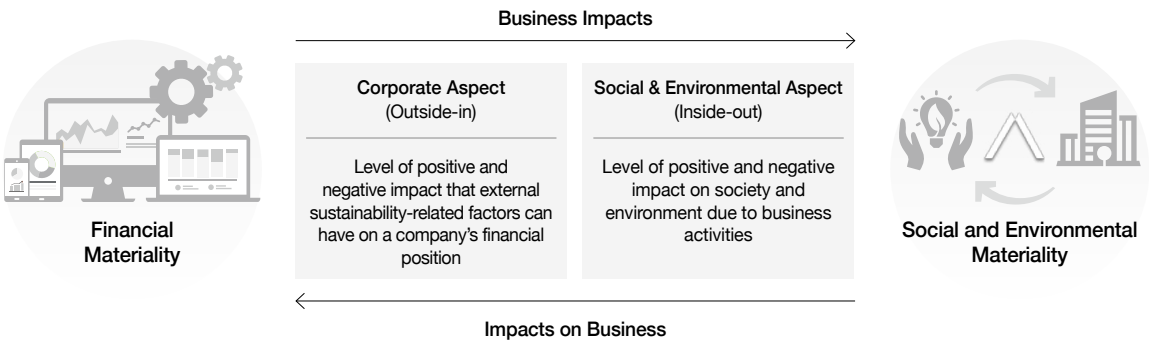


Materiality Analysis Process

Introduction of Double Materiality

Hyundai E&C selects and reports key sustainability issues affecting the corporate sustainability management in accordance with the international standards for sustainability reporting, GRI (Global Reporting Initiative) Standards and referring to the IR Framework Methodology of IIRC. Additionally, we reflected four principles of the inclusivity, materiality, responsiveness, and impact which AA 1000 standard requires for the accountability of the issue selection process and evaluation result.

In May 2022, Hyundai E&C conducted a materiality assessment by applying the concept of double materiality, ①Financial Materiality and ②Social and Environmental Materiality (Impact Materiality). are considered in a balanced way. Materiality is the concept that both internal and external perspectives, that is, external environmental and social factors that affect the financial position of a company, and the external influence of a company’s business activities should be considered. By clearly understanding the concerns and expectations of stakeholders and reflecting them in our management strategies, Hyundai E&C is striving to improve business performance and reflect social and environmental values more closely throughout corporate activities.



Materiality Issue Analysis

Based on the analysis of international standards, global trends, and issues of similar companies, Hyundai E&C created an issue-pool consisting of 380 construction industry sustainability issues, and selected a total of 35 sustainability issues by reflecting their internal and external importance. Financial impact and social/environmental impact were analyzed, by conducting an online and offline survey on Hyundai E&C’s sustainability issues for a total of 2,896 employees and external stakeholders from April 20 to 29, 2022. To analyze the impact of sustainability issues on the business perspective, the strategic linkages between individual issues and Hyundai E&C businesses and financial impacts of individual issues were comprehensively evaluated.

Material Issue Analysis

2022 Material Issues		Financial / Social and Environmental Impacts				
Rank	Issue	Sales	Costs	Risks	Social	Environmental
1	Safety first and prevention of major accidents	M	M	H	H	L
2	Securing customer satisfaction management through quality control	H	M	H	H	L
3	Creating sustainable management performance	H	H	M	L	L
4	Propelling ethical & compliance management and fair trade	L	M	H	H	L
5	Nurturing new growth businesses and expanding portfolio	M	H	H	L	M
6	Securing sound and transparent corporate governance	L	L	H	M	L
7	Cultivating excellent talent and developing competency	H	M	M	H	L
8	Enhancing smart construction, design and constructing competitiveness	H	H	M	M	M
9	Leading eco-friendly/renewable-based energy conversion	H	H	H	L	H
10	Realizing integrated risk management	M	M	H	H	H
11	Fair performance evaluation and compensation for employees	M	M	M	H	L
12	Pursuing sustainable supply chain management for reinforcing value chain	L	H	H	H	M

H High Impact **M** Medium Impact **L** Low Impact

Financial Materiality Analysis

International Standard Review analysis of global guidelines such as SASB, WEF ESG Metrics, IIRC IR Framework, etc.	Step 1	Business Impact Analysis	Step 2	Internal Stakeholder Analysis	Step 3
Analysis of international standards related to sustainability management and construction industry · Analysis of global guidelines such as SASB, WEF ESG Metrics, IIRC IR Framework, etc · Analysis of global evaluation indicators such as DJSI and MSCI		Analysis of business impact related to Hyundai E&C's business operation · Analysis of business impacts related to financial performance such as revenue generation, cost reduction, risk and opportunity cost · Analysis of related regulations such as the Serious Disaster Act and the Personal Information Protection Act		Analysis of internal issues through review of internal documents related to Hyundai E&C's business environment, department interviews, and surveys · Conducted employee survey (2,496 employees) · Review documents such as business reports and audit reports	

Social and Environmental Materiality Analysis

International Standard Review	Step 1	Peer Analysis	Step 2	External Stakeholder Analysis	Step 3
Analysis of international standards related to sustainability management and construction industry · Analysis of global guidelines such as GRI Standards, ISO 26000, UN Global Compact, TCFD.		Analysis of major construction industry issues through benchmarking of domestic and foreign construction companies · Benchmarking of the peer companies including 4 overseas and 4 domestic construction companies		Analysis of concerns/expectations of external stakeholders regarding the social and environmental impact of Hyundai E&C's business operation · Conducted external stakeholder survey (400 stakeholders) · Media review such as paper/online/broadcast media	

Major Sustainability Issues Identified

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 selected 12 material sustainability issues. In planning this report, we focused mainly on the 12 material sustainability issues that have the highest importance. Also, we endeavored to guarantee our stakeholders’ right to know by including material and general issues. In addition, since the existing materiality evaluation matrix consists of two axes of external interest and employee influence, it has limitations in expression, so it has been converted into a table format so that financial/social/environmental influence and stakeholder influence can be compared with each other.

Stakeholder Impacts								Related Pages
Employee	Government, Media & Association	Customer	Supplier	Local Community	Shareholder and Investor	Sustainability Experts, Academia & Research Institute	Average of External Stakeholders	
H	H	H	H	H	H	H	H	46-49
H	H	H	H	H	M	H	H	46-49
H	M	H	H	H	H	H	H	5, 26-29
M	H	M	H	M	H	H	H	68-69
H	M	L	M	L	H	M	M	6-15, 26-27
M	M	H	L	H	H	H	H	64-67
H	L	H	L	L	M	L	L	50-53
M	L	L	M	L	M	L	M	32, 40, 46-49
L	H	L	L	M	M	L	H	6-15, 26-27
M	L	M	H	L	H	M	M	70-71
H	L	L	L	L	M	L	L	53, 79
L	M	L	H	L	L	M	L	54-57



Independent Assurance Statement

Introduction

Korea Management Registrar (KMR) was commissioned by Hyundai Engineering and Construction to conduct an independent assurance of its Sustainability Report 2022 (the “Report”). The data and its presentation in the Report is the sole responsibility of the management of Hyundai Engineering and Construction. KMR’s responsibility is to perform an assurance engagement as agreed upon in our agreement with Hyundai Engineering and Construction and issue an assurance statement.

Scope and Standards

Hyundai Engineering and Construction described its sustainability performance and activities in the Report. Our Assurance Team carried out an assurance engagement in accordance with the AA1000AS v3 and KMR’s assurance standard SRV1000. We are providing a Type 2, moderate level assurance. We evaluated the adherence to the AA1000AP (2018) principles of inclusivity, materiality, responsiveness and impact, and the reliability of the information and data provided using the Global Reporting Initiative (GRI) Index provided below. The opinion expressed in the Assurance Statement has been formed at the materiality of the professional judgment of our Assurance Team.

Confirmation that the Report was prepared in accordance with the Core Options of the GRI standards was included in the scope of the assurance. We have reviewed the topic-specific disclosures of standards which were identified in the materiality assessment process.

- GRI Sustainability Reporting Standards
- Universal standards
- Topic specific standards
 - Management approach of Topic Specific Standards
 - GRI 201: Economic Performance
 - GRI 204: Procurement Practices
 - GRI 205: Anti-Corruption
 - GRI 206: Anti-Competitive Behavior
 - GRI 302: Energy
 - GRI 303: Water and Effluents
 - GRI 305: Emissions
 - GRI 306: Effluents and Waste
 - GRI 307: Environmental Compliance
 - GRI 308: Supplier Environmental Assessment
 - GRI 403: Occupational Health and Safety
 - GRI 404: Training and Education
 - GRI 405: Diversity and Equal Opportunity
 - GRI 414: Supplier Social Assessment
 - GRI 416: Customer Health and Safety

As for the reporting boundary, the engagement excludes the data and information of Hyundai Engineering and Construction’s partners, suppliers and any third parties.

KMR’s Approach

To perform an assurance engagement within an agreed scope of assessment using the standards outlined above, our Assurance Team undertook the following activities as part of the engagement:

- reviewed the overall Report;
- reviewed materiality assessment methodology and the assessment report;
- evaluated sustainability strategies, performance data management system, and processes;
- interviewed people in charge of preparing the Report;
- reviewed the reliability of the Report’s performance data and conducted data sampling;
- assessed the reliability of information using independent external sources such as Financial Supervisory Service’s DART and public databases.

Limitations and Recommendations

Conclusion and Opinion

KMR’s assurance engagement is based on the assumption that the data and information provided by Hyundai Engineering and Construction to us as part of our review are provided in good faith. Limited depth of evidence gathering including inquiry and analytical procedures and limited sampling at lower levels in the organization were applied. To address this, we referred to independent external sources such as DART and National Greenhouse Gas Management System (NGMS) and public databases to challenge the quality and reliability of the information provided.

Based on the document reviews and interviews, we had several discussions with Hyundai Engineering and Construction on the revision of the Report. We reviewed the Report’s final version in order to make sure that our recommendations for improvement and revision have been reflected. Based on the work performed, it is our opinion that the Report applied the Core Option of the GRI Standards and GRI Standards 2021. Nothing comes to our attention to suggest that the Report was not prepared in accordance with the AA1000AP (2018) principles.

Inclusivity

Hyundai Engineering and Construction has developed and maintained different stakeholder communication channels at all levels to announce and fulfill its responsibilities to the stakeholders. Nothing comes to our attention to suggest that there is a key stakeholder group left out in the process. The organization makes efforts to properly reflect opinions and expectations into its strategies.

Materiality

Hyundai Engineering and Construction has a unique materiality assessment process to decide the impact of issues identified on its sustainability performance. We have not found any material topics left out in the process.

Responsiveness

Hyundai Engineering and Construction prioritized material issues to provide a comprehensive, balanced report of performance, responses, and future plans regarding them. We did not find anything to suggest that data and information disclosed in the Report do not give a fair representation of Hyundai Engineering and Construction’s actions.

Impact

Hyundai Engineering and Construction identifies and monitors the direct and indirect impacts of material topics found through the materiality assessment, and quantifies such impacts as much as possible.

In addition to the adherence to AA1000AP (2018) principles, we have assessed the reliability of economic, environmental, and social performance data related to sustainability performance. We interviewed the in-charge persons and reviewed information on a sampling basis and supporting documents as well as external sources and public databases to confirm that the disclosed data is reliable. Any intentional error or misstatement is not noted from the data and information disclosed in the Report.

KMR maintains a comprehensive system of quality control including documented policies and procedures in accordance with ISO/IEC 17021:2015 - Requirements for bodies providing audit and certification of management systems. This engagement was carried out by an independent team of sustainability assurance professionals. KMR has no other contract with Hyundai Engineering and Construction and did not provide any services to Hyundai Engineering and Construction that could compromise the independence of our work.

July 2022
Seoul, Korea

CEO *E. J. Hwang*





Greenhouse Gas Verification Statement

Terms of Engagement	LRQA was commissioned by Hyundai Engineering & Construction Co., Ltd. (Hyundai E&C) to provide independent assurance on its greenhouse gas (GHG) emissions in Korea and overseas for the calendar year of 2021 (“the report”) against “GHG Target Management Scheme for quantification and reporting of GHG emissions in Korea” using “Verification guideline for GHG Target Management System in Korea”. The report relates to direct GHG emissions and energy indirect GHG emissions.
Management Responsibility	LRQA’s responsibility is only to Hyundai E&C. LRQA disclaims any liability or responsibility to others as explained in the end footnote. The management of Hyundai E&C is responsible for preparing the report and for maintaining effective internal controls over all the data and information within the report. Ultimately, the report has been approved by, and remains the responsibility of Hyundai E&C.
LRQA’s Approach	<p>LRQA’s assurance engagement has been carried out in accordance with our verification procedure using “Verification guideline for GHG Target Management System” to a limited level of assurance.</p> <p>The following tasks were undertaken as part of the evidence gathering process for this assurance engagement:</p> <ul style="list-style-type: none">• Visiting Hyundai E&C’s headquarters located in Seoul and auditing management system to control the data and records regarding GHG emissions• Interviewing the relevant persons responsible for managing and maintaining data and associated records• Reviewing the historical data and information through sampling at an aggregated level. <p>The opinion expressed in this Assurance Statement has been formed on the basis of a limited level of assurance and at the materiality of the professional judgement of the verifier.</p> <p>Based on LRQA’s approach, nothing has come to our attention that would cause us to believe that the direct GHG emissions and energy indirect GHG emissions summarized in Table 1 below are not materially correct.</p> <p>Dated: 26 May 2022</p> <div><div>IL-HYOUNG LEE</div><div></div></div> <p>LRQA Korea Limited 17th Floor, Singsong Building, 67 Yeouinaru-ro, Yeongdeungpo-gu, Seoul, 07327, Korea LRQA Reference: SEO6051437</p>
Level of Assurance & Materiality	
LRQA’s Opinion	

Table 1. Summary of GHG Emissions from E&C’s Site in 2021Unit: tCO₂eq

Category	Direct emissions (Scope 1)	Indirect emissions (Scope 2)	Other indirect emissions**(Scope 3)
Domestic	13,102	65,075	233,948
Overseas	161,125	57,539	91,300

* These were transposed from the National Greenhouse Gas Management System (NGMS, 2022.4.21).

** This covers only GHG emissions from energy consumption of contractors' equipment.

GRI Standards Index

GRI Standards 2016	Contents		Page & Remarks	GRI 2021
UNIVERSAL STANDARDS (GRI 100)				
Organizational Profile	GRI 102-1	Name of the organization	4	GRI 2-1
	GRI 102-2	Primary brands, products, and/or services	4-15	GRI 2-6
	GRI 102-3	Location of organization's headquarters	4-5, Cover	GRI 2-1
	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	4-15, 57, 59, 74	GRI 2-1
	GRI 102-5	Nature of ownership and legal form	4	GRI 2-1
	GRI 102-6	Markets served (including geographic breakdown, sectors served and types of customers/beneficiaries)	4-5	GRI 2-6
	GRI 102-7	Scale of the reporting organization	4-5, 79	GRI 2-6, 2-7
	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)	79-80	GRI 2-7, 2-8
	GRI 102-9	Describe the organization's supply chain	54-57	GRI 2-6
	GRI 102-10	Significant changes during the reporting period relating to size, structure, or ownership or its supply chain	About this report	GRI 2-6
	GRI 102-11	Explanation of whether and how the precautionary approach or principle is addressed by the organization	36-39, 46-49, 57, 72-75	GRI 2-23, 3-3
	GRI 102-12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses	36-39, 72-75	N/A
	GRI 102-13	Memberships in associations	94	GRI 2-28
Strategy	GRI 102-14	Statement from the most senior decision-maker of the organization	2-3	GRI 2-22
	GRI 102-15	Provide a description of key impacts, risks, and opportunities.	70-71	N/A
Ethics & Integrity	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	68-69	GRI 2-23
	GRI 102-17	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.	68-69	GRI 2-26
		Report the internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity	68-69, 81	GRI 2-9
Governance	GRI 102-18	Governance structure of the organization	64-67	GRI 2-13
	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.	18	GRI 2-13
	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.	18, 67	GRI 2-12
	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	18, 67	GRI 2-9
	GRI 102-22	Report the composition of the highest governance body and its committees	64-67	GRI 2-11
	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)	64	GRI 2-10
	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	66	GRI 2-15
	GRI 102-25	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	18, 64	GRI 2-12
	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.	18, 64	GRI 2-17
	GRI 102-27	Report the measures taken to develop and enhance the highest overnance body's collective knowledge of economic, environmental and social topics.	66	GRI 2-18
	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	67	GRI 2-12
	GRI 102-29	Report 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	18, 64-67	GRI 2-12
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.	18, 64-67	N/A	



GRI Standards Index

GRI Standards 2016		Contents	Page & Remarks	GRI 2021
UNIVERSAL STANDARDS (GRI 100)				
Governance	GRI 102-31	Report the frequency of the highest governance body's review of economic, environmental and social impacts, risks, and opportunities.	18, 64-67	GRI 2-14
	GRI 102-32	Report the highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material Aspects are covered.	18, 64-67	GRI 2-16
	GRI 102-33	Report the process for communicating critical concerns to the highest governance body.	18, 72	GRI 2-16
	GRI 102-34	Report the nature and total number of critical concerns that were communicated to the highest governance body and the mechanism(s) used to address and resolve them.	18, 64	GRI 2-19
	GRI 102-35	Report the remuneration policies for the highest governance body and senior executives	67, 81	GRI 2-20
	GRI 102-36	Report the process for determining remuneration. Report whether remuneration consultants are involved in determining remuneration and whether they are independent of management. Report any other relationships which the remuneration consultants have with the organization.	67	GRI 2-20
	GRI 102-37	Report how stakeholders' views are sought and taken into account regarding remuneration	67	GRI 2-21
	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 median annual total compensation for all employees in the same country.	67	GRI 2-21
	GRI 102-39	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.	67	GRI 2-29
Stakeholder Engagement	GRI 102-40	List of stakeholder groups engaged by the organization	22	GRI 2-30
	GRI 102-41	Percentage of employees covered by collective bargaining agreements	52	GRI 2-29
	GRI 102-42	Basis for identification and selection of stakeholders with whom to engage	22-23	GRI 2-29
	GRI 102-43	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	22-23	N/A
	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	82-83	GRI 2-2
Reporting Practice	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	77	GRI 3-1
	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	82-83	GRI 3-2
	GRI 102-47	List all the material Aspects identified in the process for defining report content	82-83	GRI 2-4
	GRI 102-48	Explanation of the effect of any re-statements	About this report	GRI 3-2
	GRI 102-49	Significant changes from previous reporting periods in the Scope and Aspect Boundaries	N/A	GRI 2-3
	GRI 102-50	Reporting period	About this report	N/A
	GRI 102-51	Date of most recent previous report	JUL 2021	GRI 2-3
	GRI 102-52	Reporting cycle	Annual	GRI 2-3
	GRI 102-53	Contact point for questions regarding the report or its contents	Cover	N/A
	GRI 102-54	'In accordance' option the organization has chosen	84-85	N/A
	GRI 102-55	GRI Content Index for the chosen option	87-90	N/A
	GRI 102-56	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 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	84-85	GRI 2-5
Management Approach	GRI 103-1 GRI 103-2 GRI 103-3	a. Why the Aspect is material. Report the impacts that make this Aspect material b. How the organization manages the material Aspect or its impacts c. Evaluation of the management approach	82-83	GRI 2-25, 3-3
	TOP-SPECIFIC STANDARDS (GRI 200, 300, 400)			
	ECONOMIC PERFORMANCE (GRI 200)			
Economic Performance	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	5, 23	GRI 201-1
	GRI 201-2	Financial implications and other risks and opportunities for the organization's activities due to climate change	36-39	GRI 201-2
	GRI 201-3	Coverage of the organization's defined benefit plan obligations	Operating retirement pension plans (DB & DC type)	GRI 201-3
	GRI 201-4	Financial assistance received from government	N/A	GRI 201-4

GRI Standards 2016		Contents	Page & Remarks	GRI 2021
TOP-SPECIFIC STANDARDS (GRI 200, 300, 400)				
ECONOMIC PERFORMANCE (GRI 200)				
Market Presence	GRI 202-1	Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation	80	GRI 202-1
	GRI 202-2	Proportion fo senior management hired from the local community at significat locations of operation	N/A	GRI 202-2
Indirect Economic Impacts	GRI 203-1	Development and impact of infrastructure investments and services supported	58-61, 81	GRI 203-1
	GRI 203-2	Significant indirect economic impacts, including the extent of impacts	23	GRI 203-2
Procurement Practices	GRI 204-1	Proportion of spending on local suppliers at significant locations of operation	54-56	GRI 204-1
Anti-corruption	GRI 205-1	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	57, 74	GRI 205-1
	GRI 205-2	Communication and training on anti-corruption policies and procedures	69	GRI 205-2
	GRI 205-3	Confirmed incidents of corruption and actions taken	69	GRI 205-3
Anti-competitive Behavior	GRI 206-1	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	69	GRI 206-1
ENVIRONMENTAL PERFORMANCE (GRI 300)				
Materials	GRI 301-1	Materials used by weight or volume	78	GRI 301-1
	GRI 301-2	Percentage of materials used that are recycled input materials	78	GRI 301-2
	GRI 301-3	Percnetage of products sold and their packaging materials that are reclaimed by category	78	GRI 301-3
Energy	GRI 302-1	Energy consumption within the organization	39	GRI 302-1
	GRI 302-2	Energy consumption outside of the organization	39	GRI 302-2
	GRI 302-3	Energy intensity	39	GRI 302-3
	GRI 302-4	Reduction of energy consumption	39	GRI 302-4
	GRI 302-5	Reductions in energy requirements of products and services	39	GRI 302-5
Water	GRI 303-1	Total water withdrawal by source	42	GRI 303-1
	GRI 303-2	Water sources significantly affected by withdrawal of water	42	GRI 303-2
	GRI 303-3	Percentage and total volume of water recycled and reused	42	GRI 303-3
Biodiversity	GRI 304-1	Location and size of land owned, leased, managed in or adjacent to protected areas and areas of high biodiversity value outside protected areas	43	GRI 304-1
	GRI 304-2	Description of significant impacts of activities, products and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	43	GRI 304-2
	GRI 304-3	Habitats protected or restored	43	GRI 304-3
	GRI 304-4	Total number of IUCN RED list species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	43	GRI 304-4
Emissions	GRI 305-1	Direct greenhouse gas (GHG) emissions (Scope 1)	39	GRI 305-1
	GRI 305-2	Indirect greenhouse gas (GHG) emissions (Scope 2)	39	GRI 305-2
	GRI 305-3	Other indirect greenhouse gas(GHG) emissions (Scope3)	39	GRI 305-3
	GRI 305-4	Greenhouse gas(GHG) emissions intensity	39	GRI 305-4
	GRI 305-5	Reduction of Greenhouse gas(GHG) emissions	39	GRI 305-5
	GRI 305-6	Emissions of ozone-depleting substances(ODS)	N/A	GRI 305-6
	GRI 305-7	NOx, SOx and other significant air emissions	N/A	GRI 305-7
Effluents & Waste	GRI 306-1	Total water discharge by quality and destination	42	GRI 306-1
	GRI 306-2	Total weight of waste by type and disposal method	78	GRI 306-2
	GRI 306-3	Total number and volume of significant spills	N/A	GRI 306-3
	GRI 306-4	Weight of trnasported, imiported, exported, or treated waste deemed hazardous under the terms of the BASEL Convention Annex I, II, III, AND VIII, and percentage of transported wasted shipped internationally	N/A	GRI 306-4
	GRI 306-5	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff	42	GRI 306-5
Environmental Compliance	GRI 307-1	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	93	GRI 307-1
Supplier Environmental Assessment	GRI 308-1	Percentage of new suppliers that were screened using enivronmental criteria	57	GRI 308-1
	GRI 308-2	Significant actual and potential negative environmental impacts in the supply chain and actions taken	57	GRI 308-2

GRI Standards Index

GRI Standards 2016		Contents	Page & Remarks	GRI 2021
SOCIAL PERFORMANCE (GRI 400)				
Employment	GRI 401-1	Total workforce by employment type, employment contract and region	80	GRI 401-1
	GRI 401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	52	GRI 401-2
	GRI 401-3	Return to work and retention rates after parental leave, by gender	53	GRI 401-3
Labor/ Management Relations	GRI 402-1	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	52	GRI 402-1
Occupational Health and Safety	GRI 403-1	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	46–49	GRI 403-1
	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	78	GRI 403-2
	GRI 403-3	Workers with high incidence or high risk of diseases related to their occupation	78	GRI 403-3
	GRI 403-4	Health and safety topics covered in formal agreements with trade unions	46–49	GRI 403-4
Training & Education	GRI 404-1	Average hours of training per year per employee by gender, and by employee category	50, 79	GRI 404-1
	GRI 404-2	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	50, 79	GRI 404-2
	GRI 404-3	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	53	GRI 404-3
Diversity and Equal Opportunity	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	79	GRI 405-1
	GRI 405-2	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	79	GRI 405-2
Non-discrimination	GRI 406-1	Total number of incidents of discrimination and actions taken	81	GRI 406-1
Freedom of Association and Collective Bargaing	GRI 407-1	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	57, 73-75	GRI 407-1
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	57, 73-75	GRI 408-1
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	57, 73-75	GRI 409-1
Security Practices	GRI 410-1	Percentage of security personnel trained in the organization's human rights policies or procedures that are relevant to operations	75	GRI 410-1
Rights of Indigenous Peoples	GRI 411-1	Total number of incidents of violations involving rights of indigenous people and actions taken	73-75	GRI 411-1
Human Rights Assessments	GRI 412-1	Total number and percentage of operations that have been subject to human rights reviews or impact assessments	57, 73-75	GRI 412-1
	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	75	GRI 412-2
	GRI 412-3	Total number and percentage of significant invesetment agreements and contracts that include human rights clauses of that underwent human rights screening	73-75	GRI 412-3
Local Communities	GRI 413-1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	58-61	GRI 413-1
	GRI 413-2	Operations with significant actual and potential negative impacts on local communities	58-61	GRI 413-2
Supplier and Social Assessment	GRI 414-1	Percentage of new suppliers that were screened using labor practices criteria	57	GRI 414-1
	GRI 414-2	Significant actual and potential negative impacts for labor practices in the supply chain and actions taken	57	GRI 414-2
Public Policy	GRI 415-1	Total value of political contributions by country and recipient/beneficiary	59, 81	GRI 415-1
Customer Health and Safety	GRI 416-1	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	46-49	GRI 416-1
	GRI 416-2	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 416-2
Marketing and Labeling	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	GRI 417-1
	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	GRI 417-2
	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 417-3
Customer Privacy	GRI 418-1	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	N/A	GRI 418-1
Socioeconomic Compliance	GRI 419-1	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	77	GRI 419-1

WEF Stakeholder Capitalism Metrics

Theme	Metrics	Disclosures		Page
Governing Purpose	Setting purpose	The company's stated purpose, as the expression of the means by which a business proposes solutions to economic, environmental and social issues. Corporate purpose should create value for all stakeholders, including shareholders.		2-3
Quality of Governing Body	Governance body composition	Composition of the highest governance body and its committees by:	Competencies relating to economic, environmental and social topics	18
			Executive or Non-Executive	64-65
			Independence	66
			Tenure on the governance body	65
			Number of each individual's other significant positions and commitments, and the nature of the commitments	65
			Gender	65
			Membership of under-represented social groups	65
			Stakeholder representation	65
Stakeholder Engagement	Material issues impacting stakeholders	A list of the topics that are material to key stakeholders and the company,		82-83
		how the topics were identified and how the stakeholders were engaged.		82-83
Ethical Behaviour	Anti-corruption	Total percentage of governance body members, employees and business partners who have received training on the organization's anti-corruption policies and procedures, broken down by region	Total number and nature of incidents of corruption confirmed during the current year, but related to previous years	81
			Total number and nature of incidents of corruption confirmed during the current year, related to this year	81
			Discussion of initiatives and stakeholder engagement to improve the broader operating environment and culture, in order to combat corruption	68-69
	Protected ethics advice and reporting mechanisms	A description of internal and external mechanisms for:	Seeking advice about ethical and lawful behaviour and organizational integrity;	68-69
			Reporting concerns about unethical or unlawful behaviour and lack of organizational integrity	68-69, 72
Risk and Opportunity Oversight	Integrating risk and opportunity into business process	Company risk factor and opportunity disclosures that clearly identify the principal material risks and opportunities facing the company specifically (as opposed to generic sector risks)	The company appetite in respect of these risks	70-72
			How these risks and opportunities have moved over time and the response to those changes	70-72
Climate Change	Greenhouse gas (GHG) emissions	For all relevant greenhouse gases (e.g. carbon dioxide, methane, nitrous oxide, F-gases etc.), report in metric tonnes of carbon dioxide equivalent (tCO ₂ e) GHG Protocol Scope 1 and Scope 2 emissions		39
		Estimate and report material upstream and downstream (GHG Protocol Scope 3) emissions where appropriate		39
	TCFD implementation	Fully implement the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)		36-39
		If necessary, disclose a timeline of at most three years for full implementation		36-39
		Disclose whether you have set, or have committed to set, GHG emissions targets that are in line with the goals of the Paris Agreement - to limit global warming to well below 2°C above pre-industrial levels and pursue efforts to limit warming to 1.5°C - and to achieve net-zero emissions before 2050		36-39
Nature Loss	Land use and ecological sensitivity	Report the number of sites owned, leased or managed in or adjacent to protected areas and/or key biodiversity areas		43
Freshwater Availability	Water consumption and withdrawal in water-stressed areas	Report for operations where material: with high or extremely high baseline water stress, according to WRI Aqueduct water risk atlas tool	Megalitres of water withdrawn	42
			Megalitres of water consumed	42
			The percentage of each in regions	42
			Estimate and report the same information for the full value chain (upstream and downstream) where appropriate	42
Dignity and Equality	Diversity and Inclusion	Percentage of employees per employee category,	By age group	79
			By gender	79
			By other indicators of diversity	79
	Pay equality	Ratio of the basic salary and remuneration for each employee category by significant locations of operation for priority areas of equality:	Women to men	53
			Minor to major ethnic groups	n/a
			Other relevant equality areas	n/a

WEF Stakeholder Capitalism Metrics

Theme	Metrics	Disclosures		Page
Dignity and Equality	Wage level	Ratios of standard entry level wage by gender compared to local minimum wage		80
		Ratio of the annual total compensation of the CEO to the median of the annual total compensation of all its employees, except the CEO		67
	Risk for incidents of child, forced or compulsory labour	An explanation of the operations and suppliers considered to have significant risk for incidents of child labour, forced or compulsory labour. Such risks could emerge in relation to:	Type of operation (such as manufacturing plant) and type of supplier; and	57, 72-75
			Countries or geographic areas with operations and suppliers considered at risk	57, 72-75
Health and Well-being	Health and safety	The number and rate of fatalities as a result of work-related injury		78
		The number and rate of high-consequence work-related injuries (excluding fatalities)		78
		The number and rate of recordable work-related injuries		78
		The number and rate of main types of work-related injury		78
		the number of hours worked		78
		An explanation of how the organization facilitates workers' access to non-occupational medical and healthcare services		52
		The scope of access provided for employees and workers		52
Skills for the Future	Training Provided	Average hours of training per person that the organization's employees have undertaken during the reporting period, (total number of hours of training provided to employees divided by the number of employees)	By gender	79
			By employee category	79
		Average training and development expenditure per full time employee (total cost of training provided to employees divided by the number of employees)		50
Employment and Wealth Generation	Absolute number and rate of employment	Total number and rate of new employee hires during the reporting period,	By age group	80
			By gender	80
			By other indicators of diversity	80
			By region	80
		Total number and rate of employee turnover during the reporting period,	By age group	80
			By gender	80
			By other indicators of diversity	80
			By region	80
	Economic contribution	Direct economic value generated and distributed (EVG&D), on an accruals basis, covering the basic components for the organization's global operations, ideally split out by:	Revenues	5, 77
			Operating Cost	5, 77
			Employee wages and benefits	23
			Payments to providers of capital	23
			Payments to government	23
			Community investment	23
		Financial assistance received from the government: total monetary value of financial assistance received by the organization from any government during the reporting period		n/a
	Financial investment contribution	Total capital expenditures (CapEx) minus depreciation, supported by narrative to describe the company's investment strategy		n/a
		Share buybacks plus dividend payments, supported by narrative to describe the company's strategy for returns of capital to shareholders		n/a
Innovation of Better Products and Services	Total R&D expenses	Total costs related to research and development.		31
Community and Social Vitality	Total tax paid	The total global tax borne by the company	Corporate income taxes	23, 77
			Property taxes	n/a
			Non-creditable VAT and other sales taxes	n/a
			Employer-paid payroll taxes	n/a
			Other taxes that constitute costs to the company, by category of taxes	n/a

SASB Index

Topic	Code	Accounting Metric	Category	Remarks
Environmental Impacts of Project Development	IF-EN-160a.1	Number of incidents of non-compliance with environmental permits, standards, and regulations	Quantitative	No violations of environmental laws (disposal matters) for which the disposal of the corporate has been confirmed (as of December 31, 2021). Hyundai E&C is fully aware that the construction industry is an order-made production industry and it is hard to receive an order if an environmental accident or violation of environmental regulation occurs. Therefore, Hyundai E&C has thoroughly managed the on-site environment management by complying with domestic and overseas regulations in business and conducting an external independent evaluation and internal evaluation by experts.
	IF-EN-160a.2	Discussion of processes to assess and manage environmental risks associated with project design, siting, and construction	Discussion and Analysis	Hyundai E&C identifies the impact on the surrounding environment prior to the construction, establishes an on-site environmental management plan, and prevents damage to the surrounding environment through regular environmental management status and performance monitoring during the construction. In addition, we are maximizing the efficiency of on-site environmental management through various activities including environmental management training, emergency drills, and communication. In 2021, environmental evaluation and inspections were conducted for 44 domestic and overseas sites, 20 occasional inspections and 31 initial site supports.
Structural Integrity & Safety	IF-EN-250a.1	Amount of defect- and safety-related rework costs	Quantitative	As of 2021, the total cost of rework is KRW 91.7 billion (in consolidated basis), and it is transparently disclosed through the business report FY2021.
	IF-EN-250a.2	Total amount of monetary losses as a result of legal proceedings associated with defect- and safety-related incidents	Quantitative	As of 2021, the amount of litigation related to defects or safety (accumulate): KRW 30.2 billion. The number of new defendant defect litigation: 3 cases (the amount of litigation: KRW 9 billion)
Workforce Health & Safety	IF-EN-320a.1	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	Quantitative	Safety management indicators are disclosed through 'Safety Management Index (p. 78) and 'Key Sustainability Indicators (p. 20-21)' included in this report.
Lifecycle Impacts of Buildings & Infrastructure	IF-EN-410a.1	Number of (1) commissioned projects certified to a third-party multi-attribute sustainability standard and (2) active projects seeking such certification	Quantitative	Hyundai E&C has established an eco-friendly integrated environmental system (ISO 14001/ 50001) since 2013 to promote efficient environmental energy management and manage the performance. Since 2020, Hyundai E&C analyzes and manages the environmental and energy impacts of the overall construction business operation by applying the ISO 50001:2018 standard. In November 2021, Hyundai E&C was also acquired ISO 37001:2016, an international anti-corruption management system standard, by Lloyd's Register, a third-party certification body, and the scope of certification is applicable to prevention, detection and response to bribery when undertaking work relating to services across the entire value chain of the construction industry.
	IF-EN-410a.2	Discussion of process to incorporate operational-phase energy and water efficiency considerations into project planning and design	Discussion and Analysis	Hyundai E&C has established energy saving, water saving, ecological environment consideration and comfortable living environment as four eco-friendly engineering factors are making efforts to realize eco-friendly construction from the design stage.
Climate Impacts of Business Mix	IF-EN-410b.1	Amount of backlog for (1) hydrocarbon related projects and (2) renewable energy projects	Quantitative	As of the end of 2021, the amount of backlog related as follows: - hydrocarbon related projects: 35 projects (4 domestic and 31 overseas), KRW 6,964.0 billion. - renewable energy projects: 4 projects, KRW 277.3 billion - Jeju Hallim Offshore Wind Power Project, Daesan Biomass Power Plant Construction, etc.
	IF-EN-410b.2	Amount of backlog cancellations associated with hydrocarbon-related projects	Quantitative	As of the end of 2021, no related projects have been canceled.
	IF-EN-410b.3	Amount of backlog for non-energy projects associated with climate change mitigation	Quantitative	As of the end of 2021, no related projects have been ordered.
Business Ethics	IF-EN-510a.1	(1) Number of active projects and (2) backlog in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	Quantitative	As of the end of 2021, there are a total of five projects in the 20 lowest rankings in Transparency International's Corruption Perception Index (2 in Libya, 1 in Venezuela, 1 in Yemen and 1 in Turk). The order backlog of these projects totaled KRW 936 billion.
	IF-EN-510a.2	Total amount of monetary losses as a result of legal proceedings associated with charges of (1) bribery or corruption and (2) anticompetitive practices	Quantitative	As of 2021, there were no fines, penalties, and settlements due to bribery, corruption, and anti-competitive behavior.
	IF-EN-510a.3	Description of policies and practices for prevention of (1) bribery and corruption, and (2) anti-competitive behavior in the project bidding processes	Discussion and Analysis	Hyundai E&C enacted the Anti-Corruption Compliance Policy & Procedures in April 2017 and strives to comply with ethical management principles in all countries and regions where it operates business. In March 2020, provisions were added to require that anti-corruption risks be taken into account when hiring executives and employees and signing third-party contracts, and to obtain prior approval from the Compliance Team if suspicious payment requests are received during the execution of the contract. In addition, Hyundai E&C requires the counterparty to clearly understand the company's Ethics Charter & Code of Conduct, accept the anti-corruption clause in the contract, and demands a pledge of compliance.
Activity Metrics	IF-EN-000.A	Number of active projects	Quantitative	As of the end of April 2022, 191 domestic and 64 overseas sites are in progress.
	IF-EN-000.B	Number of commissioned projects	Quantitative	In 2021, 46 domestic and 7 overseas sites were completed (in Taking-Over Certificate basis).
	IF-EN-000.C	Total backlog	Quantitative	As of the end of 2021, the total order backlog is KRW 78,760.8 billion (in consolidated basis) – KRW 51,403.0 billion in domestic and 27,357.8 billion in overseas.



TCFD Index

Topic	TCFD Recommendation	CDP Remarks	Page
Governance	1a) Describe the board’s oversight of climate-related risks and opportunities	CDP, CC1.1a	37
	1b) Describe management’s role in assessing and managing climate-related risks and opportunities	CDP, CC1.2a	37
Strategy	2a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term	CDP, CC2.1	38
	2b) Describe the impact of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning	CDP, CC2.2, CC2.3	38
	2c) Describe the resilience of the organization’s strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	CDP, CC3.2	39
Risk Management	3a) Describe the organization’s processes for identifying and assessing climate-related risks	CDP, CC2.2	40
	3b) Describe the organization’s processes for managing climate-related risks	CDP, CC2.2	40
	3c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization’s overall risk management	CDP, CC2.2	70-72
Metrics and Targets	4a) Disclose the metrics used by the organization to assess climate related risks and opportunities in line with its strategy and risk management process	CDP, CC2.1b, CC7.3	41
	4b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks	CDP, CC6	41
	4c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets	CDP, C4.1	41

Major Awards · Memberships

Major Awards	Award	Description	Host / Provider
2021~22 Major Awards	2021 Green Construction Awards	Grand Prize (Housing)	Asia Today
	2021 Aju Economic Construction Awards	Best of Best (Officetel)	Ajou Economy
	2021 Smart Construction Awards	Best of Best (Design Innovation)	eToday
	The 9th Construction Industry Awards	Grand Prize (Brand)	eDaily
	Green Housing Awards	Best of Best (Brand)	Hankook Ilbo
	2021 Green Construction Awards	Best of Best (Design)	Seoul Newspaper
	House To Live in Awards	Best of Best (Residential Complex)	Herald Economy
	2021 Hankyung Residential Culture Awards	Best of Best (Customer Satisfaction)	Korea Economy
	Civil Engineering & Construction Technology Awards	Grand Prize (Building)	Maeil Economyi
	Construction Real Estate Awards	Best of Best (Apartment)	e-Korea Economy
	2021 CDP Climate Change	Hall of Fame	CDP Korea Committee
	2022 JoongAng ESG Management Awards	Best (Industry & Capital Goods)	JoongAng Ilbo
	2022 Overseas Construction Awards	Grand Prize (Social Infrastructure)	Money Today
	2022 Housing Brand Awards	Grand Prize (Housing-Quality)	Newsway
	2022 Residential Service Awards	Grand Prize (Green Home)	Money Today
	2022 Apartment Brand Awards	Grand Prize (Complex Housing)	Asian economy
Memberships	Korean Society of Civil Engineers	Korea Atomic Industrial Forum	Korea Railway Association
	Construction Association of Korea	Korea Electrical Contractors Association	International Contractors Association of Korea
	The Society of Air-conditioning and Refrigerating Engineers of Korea	Korea Plant Industries Association	Korea Information & Communication Constructors Association
	Korea Federation of Construction Contractors	Korea Nuclear Association for International Cooperation	Korea Housing Association
	UN Global Compact	TCFD Supporters	* 86 business or academic memberships in total

Sustainability Management Council

(As of 2022)

Category	Executive Council		Working Group		
Overall	IR Group	Moon Je-Cheol	Sustainability Management Team	Kim Se-Won	Ahn Cheol-Ho
Prosperity	Business Planning Group	Seong Wan-Sang	Business Strategy Team	Park Dae-Gyun	Koh Tae-Ik
	Infra Business Planning Group	Kim Kee-Young	Infrastructure Management & Administration Team	Hong Jae-Hyuk	Hyun Ji-Yul
	Building & Housing Business Planning Group	Park Se-Jin	Housing Works Management & Administration Team	Choi Jae-Won	Park Sung-Won
	Plant Business Planning Group	Ryu Seong-An	Plant Management & Administration Team	Chong Mu-Sig	Cho Jun-Ki
	Technology Research Center	-	Research Administration Team	Lee Se-Jin	Park Jun-Yong
	Safety Management Group	Chu Young-Ki	Environmental Management Team	Kim Je-Young	Hong Hyun-Jong
Planet	Business Supporting Group	Kim Ki-Hong	Business Support Team	Yeo Chul-Kee	Kim Beom-Yoon
	Plant Business & Marketing Group	Shim Bo-Hyeon	New & Renewable Energy Marketing Team	Lee Se-IlK	Song Gi-Sup
	Business Planning Group	Seong Wan-Sang	Business Planning Team	Park Byoung-Gyu	Min Yoon-Gun
	Development & Investment Business Division	-	Development & Investment Business Management Team	Lee Woong-Ro	Park Jin-Seop
People	Safety Management Group	Im Byung-Chun	Safety Planning Team	Chae Dae-Byeoung	Yoon Joong-Hoon
	Human Resources Management Group	Ku Young-Cheol	Corporate Culture Team	Kim Yoon	Moon Ji-Young
	Public Relations Group	Lee Young-Ho	PR Planning Team	Lee Sun-Young	Kim Su-Jung
	Procurement Innovation Group	Seo Tae-Kyu	Procurement Support Team	Kim In-Dong	Lee Young-Je
Principle	IR Group	-	IR Team	-	An Sang-Hoon
	Legal Affairs Group	Suh Hee-Suk	Compliance Management & Administration Team	Jun Jin-Woo	Yoon Hye-Jung
	Audit Group	Yoon Young-Keun	Auditing Team 1	Lee Je-Ju	Kim Yang-Su
	Communication Group	Yang Sang-Woo	Policy Support Team 1	Cho Joong-Hyun	Kook Jung-Hoon
	Safety Management Group	Chu Young-Ki	Project Management Team	You Yong-Bae	Hong Dae-Ho

Contact Us

The Hyundai Engineering & Construction Sustainability Report is also available on our website (<http://en.hdec.kr>).
For more information or any inquiries, please contact us via the contact information below.
We appreciate your feedback.

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