

**HYUNDAI**  
HEAVY INDUSTRIES  
GROUP

**H H I G R O U P**  
INTEGRATED REPORT



The 2018 HHI Group Integrated Report introduces activities and achievements of Hyundai Heavy Industries Group in sustainable management. To provide relevant information to stakeholders, the core issues derived from materiality assessment were reported on the basis of five management philosophies.

#### Reporting Principle

- GRI (Global Reporting Initiative) Standards
- International Integrated Reporting Council (IIRC)'s integrated reporting framework

#### Reporting Boundary

Listed companies of HHI Group  
(HHI Holdings, HHI, Hyundai Electric, HCE, HMD)

#### Reporting Scope

Overall economic (based on K-IFRS), social and environmental aspects of the company's sustainability management

#### Reporting Period

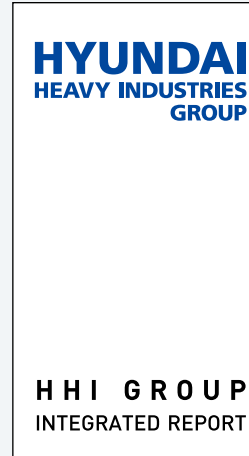
January 1 to December 31, 2017, and 2015 ~ March 2018 for some data

#### Reporting Frequency

Annual (Previous report was published in June 2017)

#### Reporting Assurance

Independence assurance by a third party  
(Covering overall aspects of sustainability management. A separate assurance for GHG emissions and energy consumption)



The 2018 HHI Group Integrated Report is available on our website([www.hyundai-holdings.com](http://www.hyundai-holdings.com)) as an interactive PDF for a more convenient user experience.

# 2018 HHI GROUP INTEGRATED REPORT

---

## 2018 HHI Group Integrated Report Outline

### Part 1.

Company and business profile, governance, global network and shared values

### Part 2.

Financial performance and stock information

### Part 3.

Sustainable management activities and achievements based on the five management philosophies

### Part 4.

Financial statements, third-party assurance report, GRI G4 Guidelines index and other supplementary information

## PROGRAM

---

### 2017 The Highlights of the Year

### PART 1. OVERVIEW

010	CEO Message
012	HHI Group Introduction
014	Governance of HHI Holdings
016	Global Network
018	Enhancing Competitiveness through Business Spin-offs
020	Value Chain

### PART 2. BUSINESS REVIEW

024	Financial Highlight
026	Hyundai Heavy Industries Holdings (HHI Holdings)
030	Hyundai Heavy Industries (HHI)
034	Hyundai Electric & Energy Systems (Hyundai Electric)
038	Hyundai Construction Equipment (HCE)
042	Hyundai Mipo Dockyard (HMD)

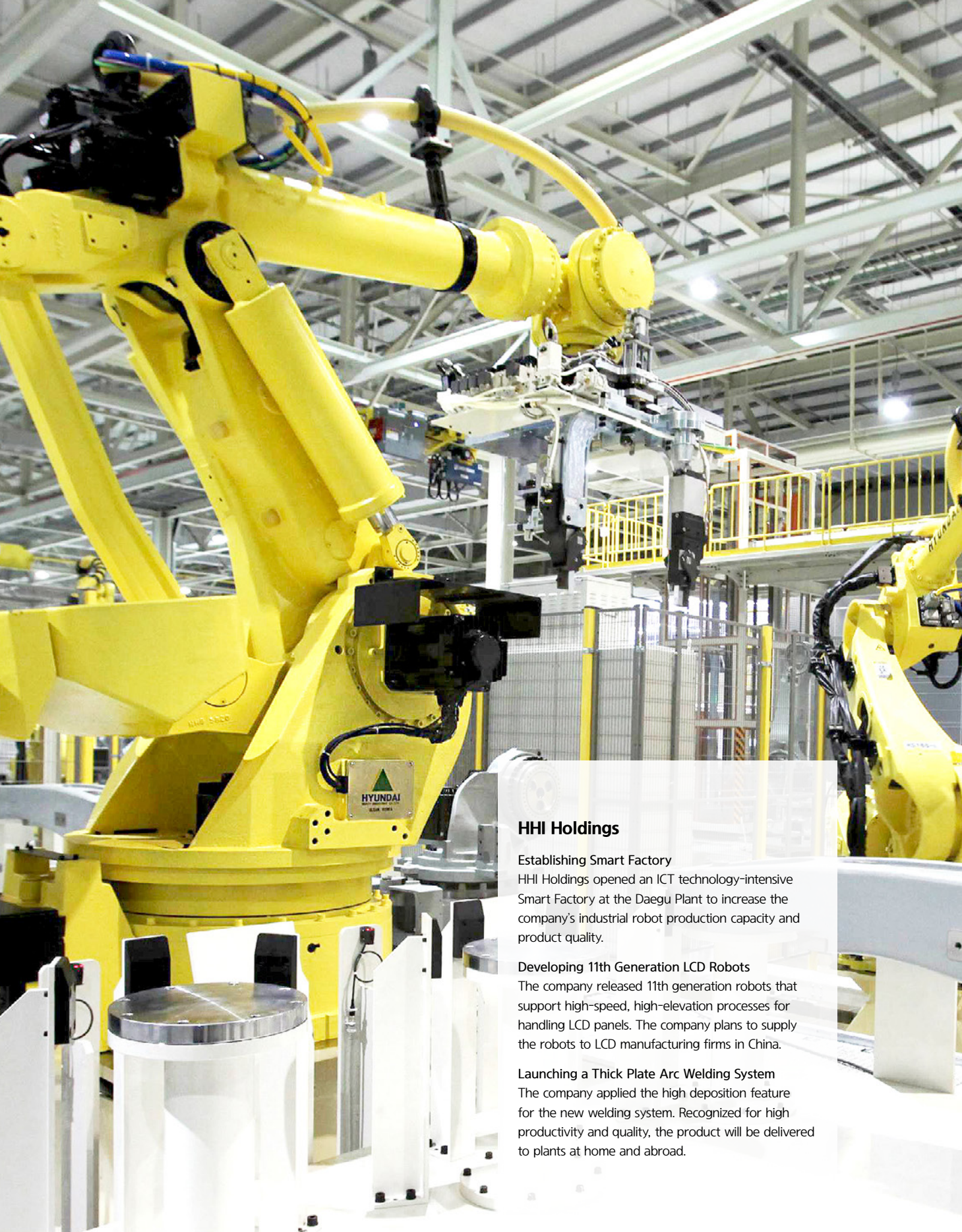
### PART 3. SUSTAINABILITY PERFORMANCE

048	Sustainable Management System
050	Strategic Direction and Performance Indicators of Sustainability Management
052	Materiality Assessment
054	Enhancing Corporate Value Through Continual Growth
068	Upholding Fair and Transparent Business Practices
078	Pursuing Safe and Environmentally Friendly Business Practices
096	Upholding a Corporate Culture of Mutual Respect and Trust
108	Contributing to the Development of a Society as a Global Corporate Citizen

### PART 4. APPENDIX

117	Consolidated Financial Statement Summary
120	Independent Auditor's Report
121	Information Disclosure
122	Third-Party Assurance Report
124	GRI Standards
127	Membership Status





### HHI Holdings

#### Establishing Smart Factory

HHI Holdings opened an ICT technology-intensive Smart Factory at the Daegu Plant to increase the company's industrial robot production capacity and product quality.

#### Developing 11th Generation LCD Robots

The company released 11th generation robots that support high-speed, high-elevation processes for handling LCD panels. The company plans to supply the robots to LCD manufacturing firms in China.

#### Launching a Thick Plate Arc Welding System

The company applied the high deposition feature for the new welding system. Recognized for high productivity and quality, the product will be delivered to plants at home and abroad.

### HHI

#### Building Industry-First Integrated LNG Demonstration Facility

HHI enhanced customer reliability through its LNG re-liquefaction and re-gasification demonstration facility that evaluates actual performance against design performance.

#### Developing Smart Engine System

HHI developed a system that enables real-time analysis and evaluation of critical engine data for navigation by means of digital twin technology.

#### Developing High-Efficiency Re-liquefaction System

HHI released 'Eco-SMRT' system that requires about 40 percent less space for installation and delivers 20~40% more efficiency.



2017

HHI HIGHLIGHTS OF THE YEAR





### Hyundai Electric

#### Implementing Global Business Management Platform

The company aligned its capability with overseas market development efforts by securing production basis in major markets and launching targeted products for different regions.

#### Expanding ICT Energy Solutions

Hyundai Electric expanded its market dominance by launching a brand fitted with ICT energy solutions and posting landmark performances across various segments.

#### Strengthening R&D Competitiveness

The company focused on further improving its R&D competitiveness through establishing and acquiring new research centers and refurbishing existing ones in Korea and other major countries.

### HCE

#### Securing Competitiveness in Emerging Markets

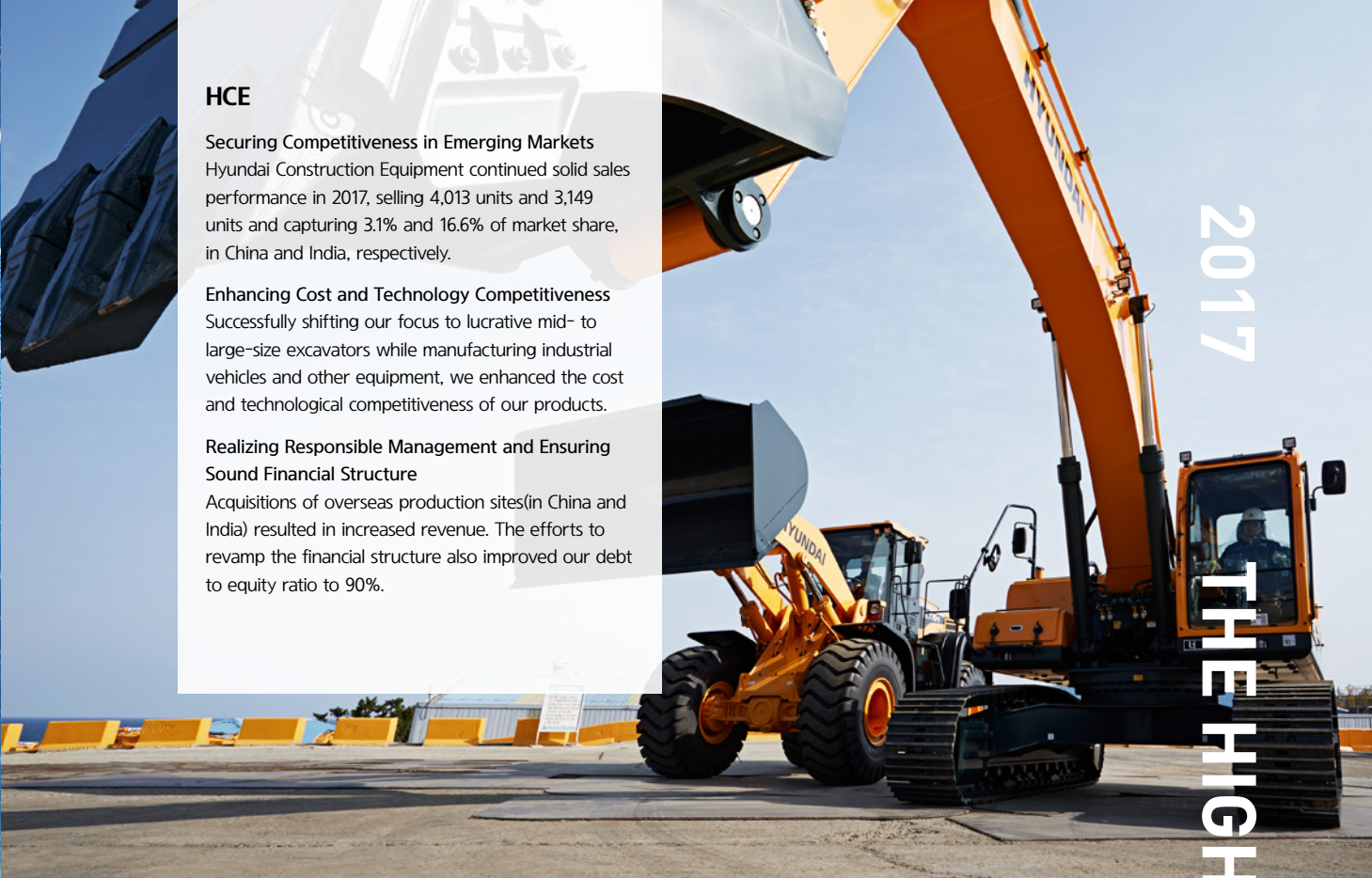
Hyundai Construction Equipment continued solid sales performance in 2017, selling 4,013 units and 3,149 units and capturing 3.1% and 16.6% of market share, in China and India, respectively.

#### Enhancing Cost and Technology Competitiveness

Successfully shifting our focus to lucrative mid- to large-size excavators while manufacturing industrial vehicles and other equipment, we enhanced the cost and technological competitiveness of our products.

#### Realizing Responsible Management and Ensuring Sound Financial Structure

Acquisitions of overseas production sites(in China and India) resulted in increased revenue. The efforts to revamp the financial structure also improved our debt to equity ratio to 90%.



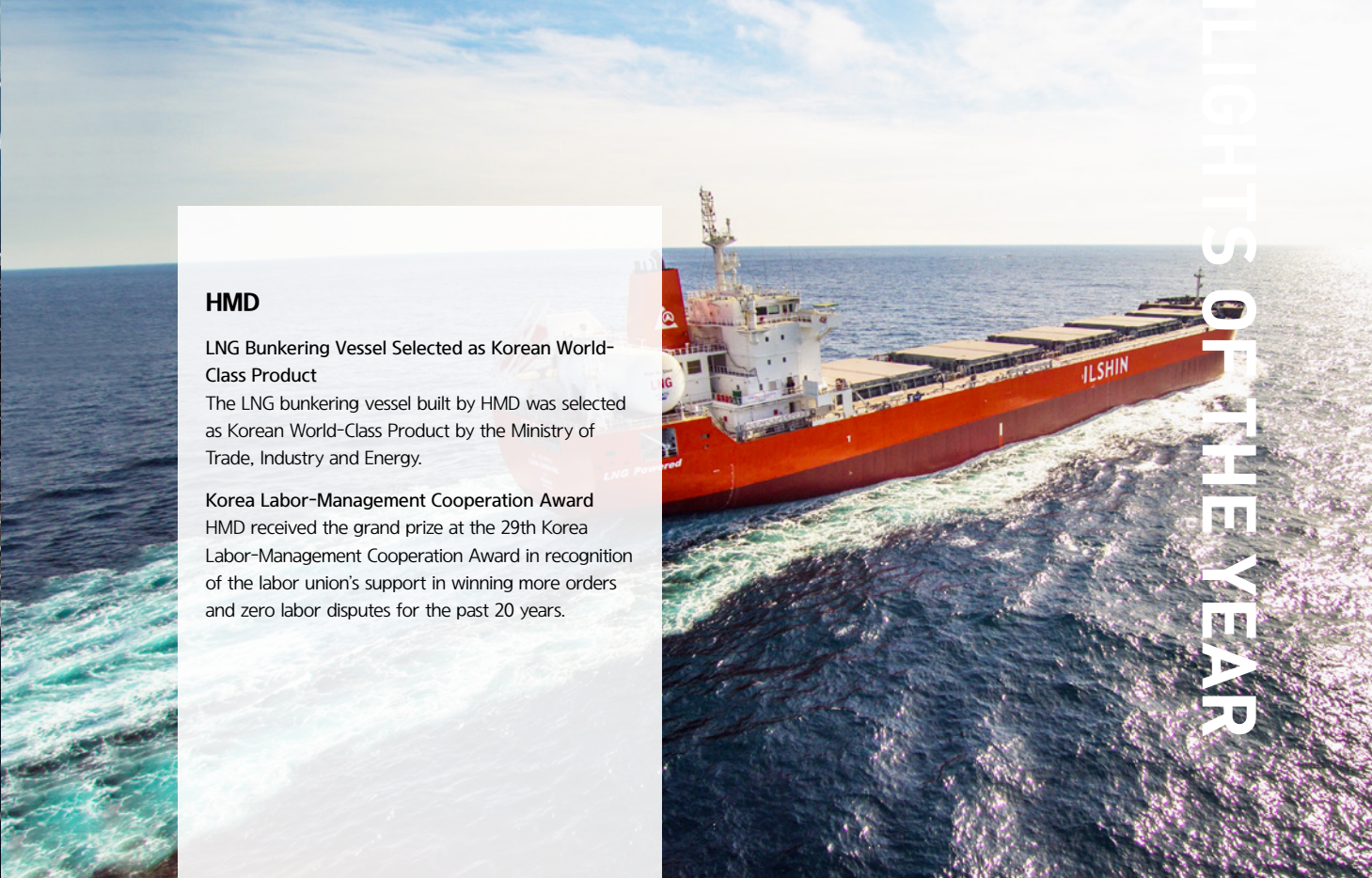
### HMD

#### LNG Bunkering Vessel Selected as Korean World-Class Product

The LNG bunkering vessel built by HMD was selected as Korean World-Class Product by the Ministry of Trade, Industry and Energy.

#### Korea Labor-Management Cooperation Award

HMD received the grand prize at the 29th Korea Labor-Management Cooperation Award in recognition of the labor union's support in winning more orders and zero labor disputes for the past 20 years.



2017 THE HIGHLIGHTS OF THE YEAR



PART 1

OVERVIEW

1

CEO Message

HHI Group Introduction

Governance of HHI Holdings

Global Network

Enhancing Competitiveness Through Business Spin-Offs

Value Chain

PART 1

OVERVIEW





# CEO Message



Vice Chairman & CEO of HHI Holdings

*Kwon Oh-gap*

## Dear stakeholders,

We would like to express our sincere appreciation to you for your kind support and interest for HHI Group. Throughout last year, HHI group has pushed forward with the corporate spin-off to respond to the rapidly evolving business environment and expand the size of each division. As a result, we were able to break up the cross shareholding to create a holding company structure, which will enable us to better pursue sustainable management based on transparent corporate governance.

The year 2017 saw a continuation of difficult market conditions including a global economic recession, low oil prices and spread of trade protectionism, which have led to severe shortage of orders in the shipbuilding industry and other major business areas. Despite the challenging environment, each independent entity of HHI Group has concerted efforts to maximize business capabilities and corporate values, laying a foundation for the next leap forward. These efforts have allowed five independent entities including HHI to achieve a profit position. Based on such performance, HHI Group is committed to creating new value and enhancing competitiveness for sustainable growth across economic, environmental and social aspects. As the first step,

we are making multifaceted efforts such as disposing non-core assets and investing in future growth engines in order to improve corporate value and shareholders' values in the longer term. We expect these efforts will bolster the business competitiveness of the Group as a whole and each of the independent entities.

We are also actively fulfilling our social and environmental responsibilities to build a sustainable community. Activities implemented to contribute to the society as a global corporate citizen include the 'Making Kimchi with Love' project launched in 1991, and sharing programs such as the 24th 'Charity Bazaar with Love'. We will continue to conduct various CSR activities to create a society where everyone can lead happy lives.

Furthermore, we are making a consistent investment to minimize adverse impact to the environment. This includes the assessment and improvement of environmental risks in main operation sites to promote integrated environmental management and reduction of greenhouse gas emissions. In particular, we are driving efforts to manufacture products that comply with international environmental regulations which are being strengthened and to emerge as a market leader in eco-friendly products.

HHI Group is concentrating efforts to foster a safe workplace, designating safety as a priority value that should not be compromised under any conditions. This includes the development and operation of the Health, Safety and Environment System(HISEs), a comprehensive system for promoting a safe work environment by preventing accidents in a systematic manner. Also, an Immediate Reward System was introduced to help establish a safety culture across the entire Group.

Lastly, we are bolstering ethics and compliance management to nurture a transparent and sound corporate culture. We have revised the Fair Trade Compliance Program according to the trend of reinforced regulations related to fair trade and expanded on-site inspections to enhance preemptive response. We plan to promote sustainable ethics and compliance management across the distribution channel by providing the necessary support to partner companies.

Dear stakeholders, the business environment surrounding HHI Group remains uncertain and foggy. Determined to transform challenges to opportunities, HHI Group is pushing forth with innovative initiatives such as spinning off business sectors. We were able to post good performances during the transitional phase and stabilize the new system thanks to the support and trust of all the stakeholders. We request for your continued support on our journey forward. Each and every employee of HHI Group will step up as pioneers of change and make the best of their efforts to shape a better future with you.

Thank you.



# HHI Group Introduction

HHI Group has grown to be a global heavy industry leader with creative pioneering and unwavering challenge. Backed by the solid leadership in the shipbuilding industry, we are leading the future growth in the offshore and industrial plants, engine and machinery, electric systems and construction equipment. The key to our success lies in the 'Hyundai Spirit' created by our founder Chung Ju-young

## Hyundai Spirit

HHI Group firmly believed that we can accomplish anything that is thought to be theoretically impossible by exploiting our unlimited potential and unwavering drive.



### Creative Wisdom

Wisdom to seek novelty and innovation to meet the needs of customers and our society



### Positive Thinking

Attitude to face challenges with a strong sense of ownership



### Unwavering Drive

Power to achieve goals with a strong spirit and indomitable will

## Management Vision



A Respected Corporation with Advanced Technologies and High-Quality Products



A Trusted Corporation with Fair and Transparent Management



An Admired Corporation with Social Contributions

## Management Philosophy

We have established five management philosophies that must be shared and practiced by all employees to fulfill our corporate social responsibility.

1

Enhancing Corporate Value Through Continual Growth

2

Upholding Fair and Transparent Business Practices

3

Pursuing Safe and Environmentally Friendly Business Practices

4

Upholding a Company Culture of Mutual Respect and Trust

5

Contributing to the Development of a society as a Global Corporate Citizen

## Profile of HHI Group's Listed Affiliates



Foundation Date: April 3, 2017  
 CEO: Kwon Oh-gap  
 No. of Employees: 259  
 Capital: KRW 81.4 billion  
 Major Business: Investment, Industrial Robot & Automation System  
 Address: 50, Technosunhwan3-gil, Yuga-myeon, Dalseong-gun, Daegu



Foundation Date: December 28, 1973  
 CEO: Kang Hwan-gu  
 No. of Employees: 16,504  
 Capital: KRW 283.3 billion  
 Major Business: Shipbuilding, Offshore EPC, Marine Engine  
 Address: 1000, Bangeoginsunhwan-doro, Dong-gu, Ulsan, Korea



Foundation Date: April 3, 2017  
 CEO: Jung Myung-rim  
 No. of Employees: 2,811  
 Capital: KRW 51.0 billion  
 Major Business: Electrical Machinery for Power Generation, Distribution and Transmission, Energy Management Solutions  
 Address: 75, Yulgok-ro, Jongno-gu, Seoul



Foundation Date: April 3, 2017  
 CEO: Kong Ki-young  
 No. of Employees: 1,392  
 Capital: KRW 49.4 billion  
 Major Business: Construction Equipment, Industrial Vehicles  
 Address: 75, Yulgok-ro, Jongno-gu, Seoul



Foundation Date: April 28, 1975  
 CEO: Han Young-seuk  
 No. of Employees: 3,212  
 Capital: KRW 100.0 billion  
 Major Business: Medium-size ships  
 Address: 100, Bangeoginsunhwan-doro, Dong-gu, Ulsan, Korea

Financial information and no. of employees: as of March 31, 2017

# Governance of HHI Holdings

## Board of Directors

As of April 2, 2018, HHI Holdings' Board of Directors(BoD) consists of two internal and three outside directors, with three subcommittees. To ensure transparent corporate governance, HHI Holdings abides by the regulations that require more than half of BoD members to be outside directors. The BoD has authority to vote for matters mandated from the shareholders' meeting and basic principles of corporate operation. The directors also have rights to appoint CEO and Chairman of the Board as well as responsibility to oversee the duties of executives.

Type	Name	Position	Gender	Current Occupation	Committee	Appointed Date
Internal Director	Kwon Oh-gap	Chairman	M	Vice Chairman & CEO of HHI Holdings	Outside Director Recommendation Committee	Appointed on March 30, 2018
	Youn Joong-geun	Director	M	Senior Executive Vice President of HHI Holdings	Internal Trade Committee	Reappointed on March 30, 2018
Outside Director	Kim Hwa-jin	Director	M	Professor of Seoul National University School of Law	Internal Trade Committee, Outside Director Recommendation Committee, Audit Committee	Reappointed on March 30, 2018
	Shin Jae-yong	Director	M	Professor of Seoul National University Business School	Internal Trade Committee, Outside Director Recommendation Committee, Audit Committee	Reappointed on March 30, 2018
	Hwang Yun-sung	Director	M	Attorney of Law Group MinJu	Internal Trade Committee, Outside Director Recommendation Committee, Audit Committee	Appointed on March 30, 2018

As of April 2, 2018

## Board of Directors(BoD) Subcommittees

Name of Committee	Objective and Authority
Audit Committee	Audit duties of directors, access authority to material and information required for audit
Outside Director Recommendation Committee	Recommendation of suitable candidates for outside directors
Internal Trade Committee	Establishment of basic policies on internal transactions, inspection of counterparty selection

## Shareholders

HHI Holdings are authorized to issue 160 million shares according to the article of incorporation, and as of December 31, 2017, the number of issued shares was 16,286,617 after paid-in capital increase in the form of public recruitment on December 31, 2017. Outstanding shares are 14,621,686, excluding 1,664,931 shares of treasury stock, and par value is KRW 5,000.

Type	Name	No. of Shares	Ration
Shareholders with over 5%	Chung Mong-joon	4,202,266	25.80%
	NPS	1,306,312	8.02%
	KCC	844,033	5.18%
General shareholders		8,016,387	49.22%

As of December 31, 2017

## Main Changes of 2017 Management Performance

HHI resolved to spin off its business divisions on November 15, 2016 and approved the spin-off plan at the extraordinary general meeting on February 27, 2017. Starting the spin-off date of April 1, 2017, HHI is continuing its business and spin-off its electro electric division to Hyundai Electric & Energy Systems, the construction equipment division to Hyundai Construction Equipment, and robots and investment to Hyundai Robotics (now HHI Holdings). On May 10, continuing HHI was change-listed and HHI Holdings, Hyundai Electric and HCE were relisted on the stock market.



# Global Network

## Status of Domestic Corporations

HHI Holdings was established following the equity spin-off of HHI in April 2017, in the form of an operating holding company engaged in the robotics business. HHI Holdings is a holding company belonging to the HHI Group companies pursuant to the Monopoly Regulation and Fair Trade Act, and the HHI Group companies consist of 28 domestic affiliates. There are a total of five listed companies including HHI, and 23 non-listed companies.

	Type of Business	Company
Listed Companies	Shipbuilding, etc.	HHI
	Shipbuilding	HMD
	Non-financial holding business	HHI Holdings
	Manufacturing of motors, generators, switchgears	Hyundai Electric
	Manufacturing of construction machinery	HCE
Non-Listed Companies	Shipbuilding	HSHI
	Engineering services	Hyundai E&T
	Manufacturing of ship components & equipment	Hyundai HYMS
	Ocean-going cargo shipping	KOMAS
	Manufacturing & sales of marine engines	Wärtsilä-Hyundai Engine
	Manufacturing of electrical equipment	Hyundai Avancis
	Crude oil refinery	Hyundai Oilbank
	Manufacturing of chemical material & products	Hyundai Cosmo
	Warehousing & transportation service	Hyundai Oil Terminal
	Manufacturing of petroleum refining products	Hyundai-Shell Base Oil
	Refining & processing of oil products	Hyundai Chemicals
	Stockbroking	Hi Investment & Securities
	Financial asset management	Hi Asset Management
	Futures trading trust & brokerage	Hyundai Futures
	Power generation	Taebaek Wind Power
	Power generation	Taebaek Guynemi Wind Power
	Power generation	Changjuk Wind Power
	Operating service of sports club	HHI Sports
	Manufacturing of basic inorganic chemical products	Hyundai OCI
	Manufacturing of fluid pumps	HHI Turbomachinery
	Facilities maintenance & management service	HHI MOS
	Engineering service	Hyundai Global Service
	Manufacturing & sales of solar power cells	Hyundai Green Energy

As of December 31, 2017



## Overseas Branches and Corporations

Europe	Americas	China	Asia	Middle East, Africa
<b>Branches</b>				
London	New York	Beijing	Tokyo(2)	Dubai
Moscow	New Jersey	Shanghai	Bangkok	Luanda
Munich	Mexico City	Yan Cheng	Singapore	Riyadh
Athens	Atlanta	Chongqing	Osaka	Jebel Ali
Oslo	Houston		Hanoi	Fujairah
Frankfurt				
<b>Corporations</b>				
·HCE Europe N.V	·HGS Americas Co., Ltd	·Hyundai (Jiangsu) Construction Machinery Co., Ltd.	·HGS Singapore Pte. Ltd.	·HHI Co., NIGERIA Ltd.
·HHI Co. Bulgaria	·Hyundai Technologies Center Hungary Ltd.	·Changzhou Hyundai Hydraulic Machinery Co., Ltd.	·Hyundai Oil Singapore Pte. Ltd.	·Hyundai Arabia Co., Ltd.
·Hyundai Electric Switzerland Ltd.	·HCE Americas, Inc.	·Hyundai Oilbank (Shanghai) Co., Ltd.	·HCE India Pvt. Ltd.	
·HGS Europe B.V.	·Hyundai Power	·HHI (China) Electric Co., Ltd.	·HDENE POWER SOLUTION INDIA Pvt. Ltd.	
·HHI France SAS	·Hyundai Transformers USA, Inc.	·Yantai HHI Co., Ltd.	·PT. Hyundai Machinery Indonesia	
·Hyundai Technologies Center Hungary Ltd.		·Hyundai Financial Leasing Co., Ltd.	·Hyundai-Vinashin Shipyard	
		·HHI (Shanghai) R&D Co., Ltd.		
		·HHI China Investment Co., Ltd.		

As of March 31, 2017



# Enhancing Competitiveness Through Business Spin-Offs

## Background for the Spin-Offs

HHI Holdings plans to pursue business risk diversification by strengthening expertise and competitiveness for each business division based on a system that allows swift and professional decision-making tailored to business characteristics. Furthermore, HHI Holdings will make efforts to boost shareholders' values by receiving appropriate evaluation on its corporate value from the market by establishing responsible management based on independence and transparency.



## Expected Benefit of Spin-Offs

- |   |   |
|---|---|
| 1. Increase in R&D Investment                         | <ul style="list-style-type: none"> <li>·Maximize the benefits by reinvesting profits back into respective businesses</li> <li>·Shift to technology-driven business structure</li> </ul>   |
| 2. Entering new markets through building capabilities | <ul style="list-style-type: none"> <li>·Strengthen the market leading position in the shipbuilding industry and secure the competitive edge for future growth engines through smart ships and eco-friendly marine engines</li> <li>·Secure future competitiveness by making serious inroads into new business areas based on the independent management system</li> </ul> |
| 3. Financial structure improvement                    | <ul style="list-style-type: none"> <li>·Improve the financial stability by selling non-core assets and reconstructing existing businesses into core businesses</li> <li>·Maintain financial stability of each company at the industry's top-level</li> </ul>  |
| 4. Improving governance transparency                  | <ul style="list-style-type: none"> <li>·Comply with, and become more responsive to, more stringent governance-related regulations at home and abroad</li> <li>·Enhance transparency around governance by breaking up the cross shareholding</li> </ul>  |
| 5. Promoting corporate and shareholder values         | <ul style="list-style-type: none"> <li>·Increase corporate value by improving management efficiency with the independent management system</li> <li>·Reevaluate the corporate value of newly created companies</li> </ul>   |



# Value Chain

HHI Group generates values with high expertise and resources. The six resources utilized in the operation of HHI Group are the core factors that drive economic, environmental and social outputs. HHI distributes the generated value to the stakeholders based on the business model of each sector along with the management philosophy and vision.

## Input

### Financial Capital

- 28 domestic affiliates (5 listed, 23 non-listed)
- Financing from shareholders and investors for business operation
- Management disclosure by shareholders' meeting and IR news

### Manufacture Capital

- HHI Group's shipbuilding capacity: 16,678 thousand GT
- See Business Report for production capacity in remaining areas

### Intellectual Capital

- Acquisition of technology to build competency in the market, reinforcing R&D capacity
- 2017 R&D investments: KRW 174 billion
- R&D organizations: Corporate Research Center, Business Division Research Institutes, etc.
- R&D resources: 945 persons

### Human Capital

- Executives and employees (male/female): 22,874/1,241 persons
- Labor union subscription: 94.2%
- The average length of service: 16.1 years (HHI)

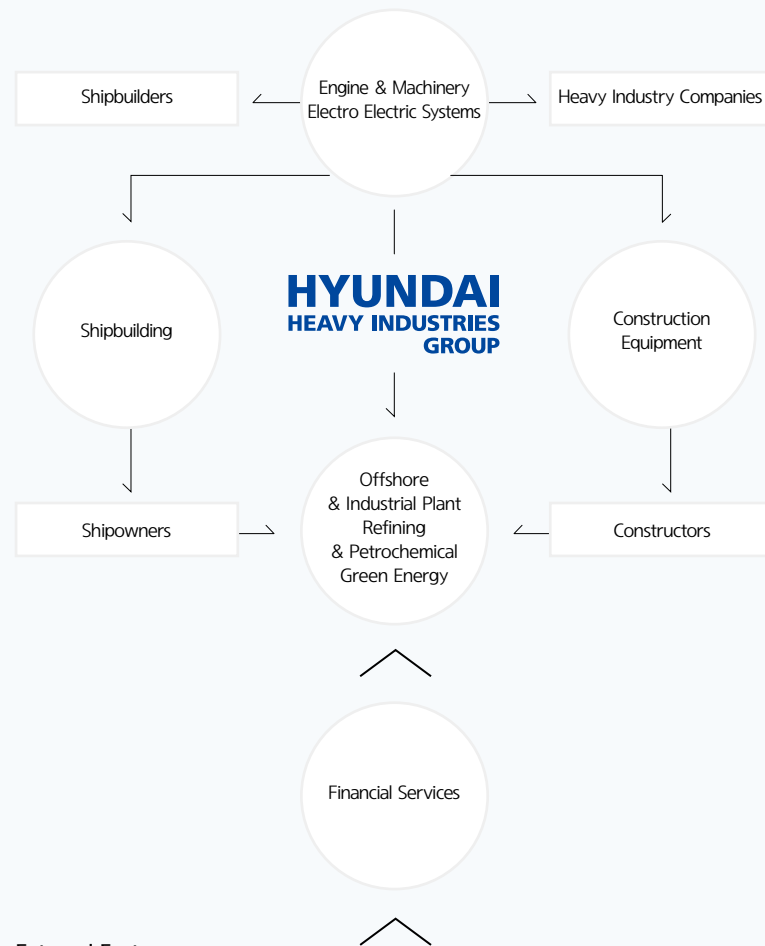
### Social Relations Capital

- Various activities and organization to promote shareholders value and meet their needs including general shareholders' meeting, after-sales service and Group Shared Development Committee and social contribution for local communities

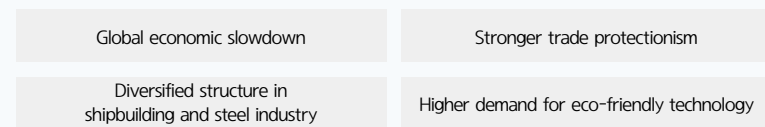
### Environmental Capital

- Certified to ISO 14001
- Certified to ISO 50001(HHI)
- Environmentally friendly policies on GHG reduction and green purchasing
- Energy usage: 14,516 TJ
- Environmental Investments: KRW 16.9 billion

## Business



### External Factors



## Output

### Financial Capital (Consolidated)

- HHI Holdings (consolidated) sales: KRW 14,2894 trillion
- HHI Holdings earnings per share: KRW 74,312
- HHI (consolidated) sales: KRW 15,4688 trillion
- HHI earnings per share: KRW 44,807

### Manufacture Capital

- Production performance
- 138 ships(including affiliates)
- 170 two-stroke engines, 408 four-stroke engines
- Actual production of robots(for industrial and LCD): 2,730 units
- 20,398 units of construction equipment

### Intellectual Capital

- No. of intellectual property rights applications made in 2017: 657 (HHI)
- Greatest number of World-Class Product of Korea: 49 (including subsidiaries)\*
- No. of skills managed by the Core Skill Transfer Program in 2017: 63 (including subsidiaries)

\*Based on the 2018 data released by MOTIE

### Human Capital

- Female workforce: 5.2% · Per capita training hours: 28.1 hours
- No. of staff receiving job training: 5,701
- Cumulative no. of employees qualified with master craftsmanship: 1,215
- Cumulative no. of employees awarded in the World Skills Competition: 96
- No. of employees who used parental leave: 179

### Social Relations Capital

- No.1 market share in shipbuilding industry (2017 Clarksons Report)
- No.1 market share in the two-stroke engine industry
- Ranked 313th in the 2017 Fortune Global 500

### Environmental Capital

- GHG emission: 852,493 tCO2e (decreased 5% year-on-year)
- Waste generating (general/designated): 85,533/9,330 ton
- Wastewater discharge: 11,131 ton

### Main Products & Services

**Shipbuilding**  
Oil tankers, containerships, bulk carriers, LNG-LPG carriers, petrochemical carriers, semi-submersible drilling rig, special purpose ships

**Offshore & Industrial Plant**  
Oil and gas production facilities, subsea pipelines and offshore installations, power plants, process plants, utility and industrial boilers, process equipment, specialized equipment

**Engine & Machinery**  
Two-stroke & four-stroke marine engines and components, propellers, engine power plants

**Robotics**  
Car assembly robots, LCD handling robots

**Electro Electric Systems**  
Electrical equipment (transformers, GIS), Rotating machinery (motors, generators), Power distribution equipment (switchboards, low and medium voltage circuit breakers, power controls)

**Construction Equipment**  
Excavators, wheel loaders, forklifts, tow and transport vehicles, order pickers, skid steer loaders

**Green Energy**  
Solar modules and systems

**Refining & Petrochemical**  
Gasoline, diesel, kerosene, fuel oil, BTX, LPG, jet fuel, lubricants

## Outcome

### Customers

Delivering products and services that satisfy customer needs

### Shareholders & Investors

Promoting shareholders' value and protecting their rights

### Partners

Supporting partners in improving financial health and competitiveness

### Local Communities

Contributing to the development of local communities through social contribution

### Industries

Creating an industrial ecosystem for fair competition

### Employees

Achieving higher employee satisfaction by supporting talent development and improving benefits and work environment



PART 2

BUSINESS REVIEW

2

Financial Highlight  
Hyundai Heavy Industries Holdings (HHI Holdings)  
Hyundai Heavy Industries (HHI)  
Hyundai Electric & Energy Systems (Hyundai Electric)  
Hyundai Construction Equipment (HCE)  
Hyundai Mipo Dockyard (HMD)

PART 2

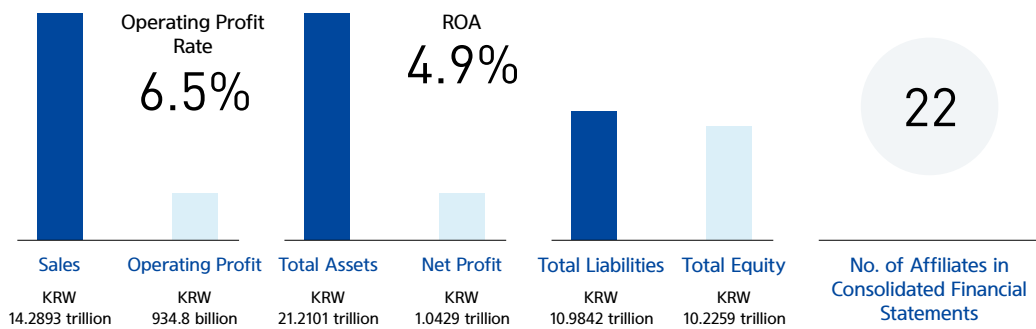
BUSINESS REVIEW





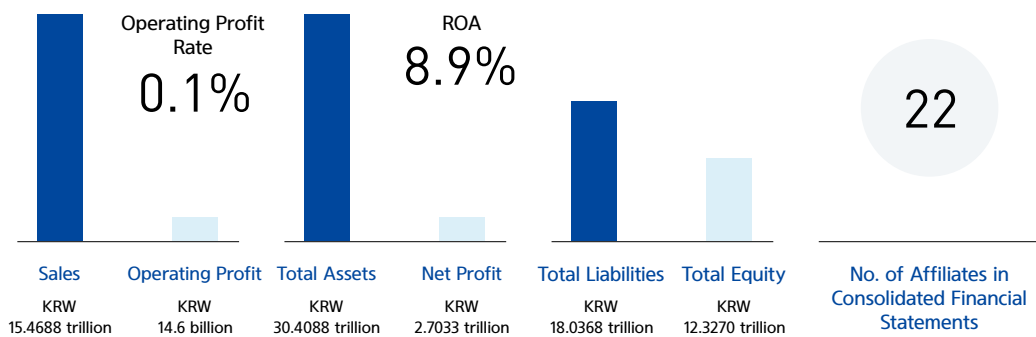
# Financial Highlight

## HHI Holdings

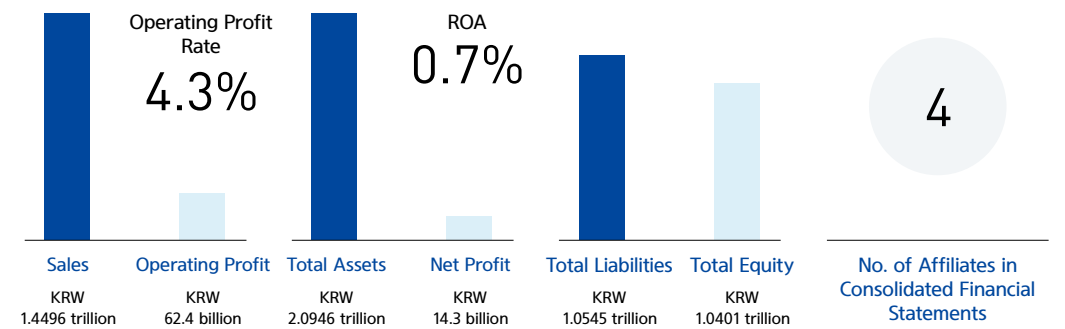


Consolidated Financial Statement Period: April 1 ~ December 31, 2017

## HHI

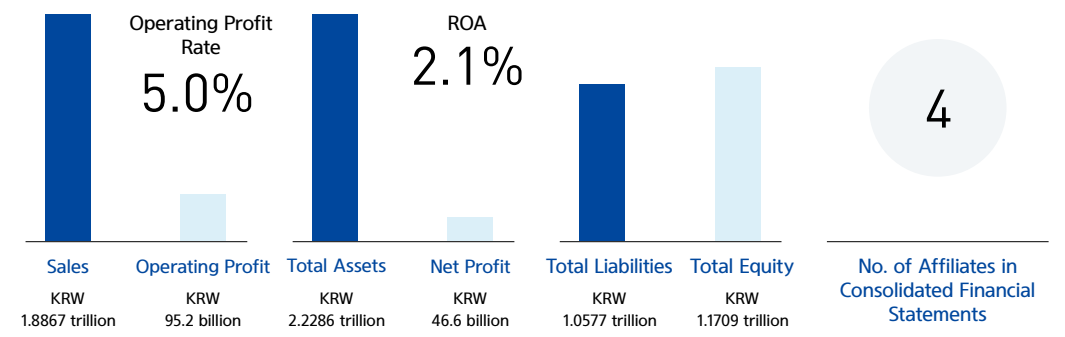


## Hyundai Electric



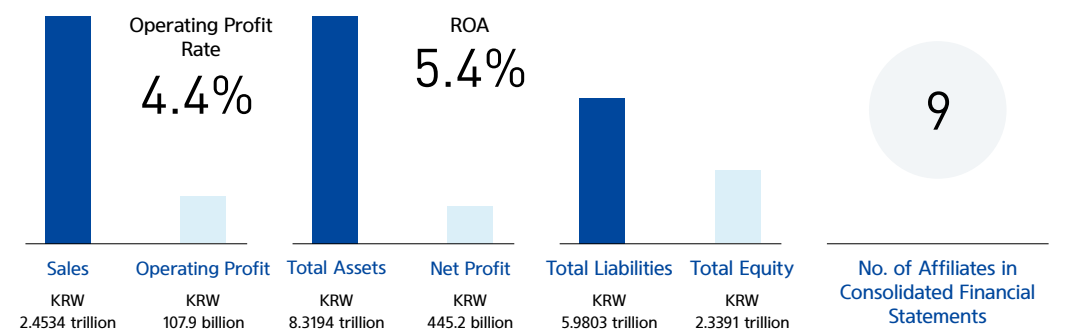
Consolidated Financial Statement Period: April 1 ~ December 31, 2017

## HCE



Consolidated Financial Statement Period: April 1 ~ December 31, 2017

## HMD



# HHI Holdings

## CEO Message

HHI Holdings has strived to maximize the business capabilities and values in a new management environment created after the business spin-off last April. In 2017, the Company won USD 190 million of new orders and posted sales revenue of KRW 197.2 billion, with the No.1 domestic market share of industrial robots. As HHI Holdings' business unit, the Robotics Business Division will secure robotic technology as a core engine for the group by placing focus on technology and quality. At the same time, HHI Holdings will concentrate efforts on unearthing future businesses and business restructuring while supporting each company under the HHI Group to promote independent and responsible management.

Kwon Oh-gap,  
HHI Holdings Vice Chairman & CEO



## Vision 2021

### Toward a Global Top-Tier Integrated Robot Company



Sales KRW **500** billion

Strengthening the Competitiveness of Flagship Products

Diversifying Product Line-Up and Markets



Operating Profit Rate **11%**

Creating New Business Models

Venturing into the Chinese Market

## Business Overview

HHI Holdings is engaged in business sectors encompassing robot and factory automation, engineering, installment, test operation and after-services. In particular, the Company is focusing efforts on building smart factories on the back of cutting-edge industrial robotic technologies.

### Industrial Robot

The industrial robots of HHI Holdings rank 1st place in terms of the domestic market share. Industrial robots refer to robots that perform various tasks within processes from manufacturing, production to shipment, and are mostly used in manufacturing sectors including the automobile, chemical and electro electric industries.

### Clean Robot

Following the introduction of the clean robot business in 2006, HHI Holdings succeeded in the localization of clean robots in 2008, cementing its position as an important supplier for major display manufacturers. The Company is making concerted efforts to become a global leader in the clean robot industry on the back of innovations in production and quality products.

## 2017 Performance Review

In 2017, the Robotics Division recorded orders of USD 190 million and sales revenue of KRW 197.2 billion. The total revenue taking into account dividend income posted KRW 465.2 billion. A new factory designed as a smart factory was built to boost productivity and quality competitiveness, which provided a foundation to nurture growth of the robotics business. Hyundai Oilbank, its major subsidiary, achieved sales revenue of KRW 16.38 trillion and operating profit of KRW 1.26 trillion in 2017. This was possible thanks to profit maximization, which was accomplished on the back of economic import sources of crude oil, improved process efficiency, and a bullish oil market. Breaking out of the previous structure where operating profits were concentrated on the oil refining industry, 32% of operating profits were generated from non-oil refining sectors such as Hyundai Chemical, Hyundai Cosmo, Hyundai-Shell Base Oil and Hyundai Oil Terminal, securing a more stable ground for profit-making.

## Financial Performance

Consolidated	2017	Seperate	2017
Sales (m. KRW)	14,289,388	Sales (m. KRW)*	465,241
Operating Profit (m. KRW)	934,837	Operating Profit (m. KRW)	282,227
Operating Profit Rate (%)	6.5	Operating Profit Rate (%)	60.7

\*Dividend income (KRW 267,998 million) included

	Industrial Robot	LCD Handling Robot	Others
Sales by Product Type (m. KRW)	113,526	74,484	9,234
Ration (%)	57.5	37.8	4.7

Period: April 1 - December 31, 2017





2018  
Outlook and Plan

The global robot market is expected to maintain strong double-digit growth on the back of emerging markets including China. Amid such promising prospect, the Robotics Division set new orders of USD 340 million and sales revenue of KRW 350 billion as the target for 2018, expecting for the total revenue including dividend income to reach KRW 650 billion. The Division will expand market share by strengthening the competitiveness of flagship products through enhanced design and quality management. Furthermore, market diversification will be pursued to include general industries such as the electronics and smelting industries, moving beyond the automobile industry by promoting new product development. Hyundai Oilbank will not stay satisfied with its achievement of the '10 million man-hours of zero accident', but continue to strive for the safe operation of factories. Not only regular maintenances of existing factories but also the establishment of the SDA, expansion of advanced process such as the DCU will be carried out successfully in 2018. Efforts will be concentrated to accomplish operating profit of KRW 2 trillion in 2022 on the back of market diversification, by unearthing new business both in the oil refining and non-oil refining sectors at home and abroad and reviewing plans for M&As.

Growth Strategy

In a bid to emerge as a global top-tier comprehensive robot enterprise, HHI Holdings will strengthen the competitiveness of flagship products, roll out new products and create new business models. Apart from measures for market diversification, efforts will be made to secure a global production base by venturing into the Chinese market.

- |   |  |
|---|--|
| <p>1. Secure differentiated competitiveness with enhanced product quality and modular components</p> <hr/> <p>Cost saving target through modularization of key product models: KRW 28 billion by 2021</p> | <p>2. Diversify products and markets by expanding product lineups and launching new models</p> <hr/> <p>Expansion to cover such areas as the automobile, display, semiconductor, and smart logistics</p>                     |
| <p>3. Explore new business models in service and system business areas</p> <hr/> <p>Joint development of targeted robot systems with clients to expand applications</p>                                   | <p>4. Make inroads into Chinese market based on multifaceted business cooperation</p> <hr/> <p>Strategic alliances with local companies and establishment of a joint production venture to open a global production base</p> |





# HHI

## CEO Message

Upon organizational restructuring into a company specializing in the shipbuilding and offshore industry, HHI is concentrating efforts on core business capabilities. By establishing an effective management system based on independence and responsibility, HHI is fostering a swift decision-making framework with organizational operations suited to the characteristics of each business division. In addition, HHI has secured strong fiscal soundness that stands out in the industry. HHI plans to make big strides forward this year under the goal of 'safety first', 'cost competitiveness', 'improved technology & quality' and 'trust & cooperation'.

Kang Hwan-goo,  
HHI President & CEO



## Vision 2021

### Restructuring into a Company Specializing in the Shipbuilding and Offshore Industry



Sales KRW **20** trillion

Positioning the Global No.1  
in the Market

World's Top-Tier Technology



Operating Profit Rate **10%**

World's Best Production  
Infrastructure

Strongest Fiscal Soundness

## Business Overview

### Shipbuilding Sector

Along with HHI Group's shipbuilding affiliates, Hyundai Samho Heavy Industries(HSHI) and Hyundai Mipo Dockyard(HMD), HHI is leading the shipbuilding business, which is seeing the improved environment with the recent increase of newbuilding orders alleviating excess supply. Amidst the trend of tighter environmental regulations and lower ship price shortening the replacement cycle for old vessels, HHI secured cost competitiveness on top of integrated sales and purchase activities.

### Engine Sector

HHI produces marine propulsion engines(large/medium) and power generation engines(medium) and boasts a dominant global market share of 1st place, with 36% for large engines and 28% for medium engines. It is the only company in Korea to possess proprietary technologies for medium engines and plans to expand the business by developing equipment to respond to environmental regulations.

### Offshore Sector

Emerging as the world best EPC contractor after building the Jubail Industrial Harbour Project in Saudi Arabia in 1976, HHI has Korea's largest production facilities and special equipment and positions itself as a first-tier offshore EPC player. HHI has secured independent capabilities across a broad value chain and plans to create markets for future growth based on its outstanding performances.

## 2017 Performance Review

Even amid difficult environments at home and abroad in 2017, HHI recorded business profits by cutting costs through restructuring and increasing production efficiency. In 2017, HHI won 148 orders(USD 9.9 billion, combined figures of HSHI and HMD) and the year-end order book recorded 261 ships(USD 20.7 billion), which can keep HHI shipyards operating for over 1 year. With strong competitiveness on the back of sound fiscal structure and establishment of the LNG carrier demonstration facility, HHI won 53% of the LNG carriers ordered for the year. Furthermore, HHI sealed orders for a variety of ships including VLCCs, mid-sized product/chemical tankers, very large ore carriers and containerships far exceeding the target set during the start of the year.

## Financial Performance

Consolidated	2015	2016	2017
Sales (m. KRW)	27,488,602	22,300,438	15,468,836
Operating Profit (m. KRW)	-2,336,466	391,530	14,646
Operating Profit Rate (%)	-8.5	1.8	0.1

Separate	Shipbuilding	Offshore & Plant	Engine & Machinery	Electro Electric System	Construction Equipment	Green Energy	Others
Sales by Product Type (m. KRW)	9,918,814	4,018,539	786,514	113,616	61,440	256,776	313,137
Ration (%)	64.1	26.0	5.1	0.7	0.4	1.7	2.0





**2018 Outlook and Plan**

Marine transport of gas is expected to increase due to China's Coal-to-Gas policy, increased investment in the petrochemical industries in the Middle East and South America, and growing demand for fuel gas to meet environmental regulations for ships. In addition, expanding crude oil production as a result of increased investment in the oil & gas industry in the US coupled with growth in the global economy are expected to drive up cargo volume for crude oil and containers, signaling strong recovery for the shipbuilding industry. For 2018, HHI shipbuilding group set an order target of USD 13.2 billion, which is a 57% increase compared to the previous year. HHI shipbuilding group will expand the market share for LNG carriers by developing a wide range of relevant technologies such as LNG fueled engines, LNG re-gasification & liquefaction system and proprietary models for the FSRU system. Also, participation of not only shipping companies but also energy traders will be encouraged to secure newbuilding orders for very large crude oil carriers and LPG carriers. Armed with state-of-the-art technologies, HHI will provide comprehensive solutions to environmental regulations, further strengthening its contracting competitiveness in the industry.

**Core Capabilities**

**Best Shipbuilding Technology and Production Facilities**

- Global No.1 in accumulative newbuilding
- Registered various World's Class Products
- First shipbuilder that delivered 2,000 ships (2015)
- built LNG-FSRU (2014)
- achieved the newbuilding milestone of 100 million GT (2012)
- built ships on the ground (2004)
- Korea's first that delivered the LNG carrier

**Strengthening Capabilities to Secure New Order**

Integrated Response	HHI Shipbuilding Group becomes a single channel of communication for clients with multiple fleets from small/mid-sized to large-sized ships
Cost Competitiveness	Design comparison for the same models across the Group to make additional improvements in fuel efficiency, and other areas, improving business competitiveness and saving cost
Organizational Efficiency	Integration of sales organizations sharing the resources of the three companies under HHI Shipbuilding Group to further their understanding and knowledge in all ship models HHI Shipbuilding Group delivers

**Growth Strategy**

**1. Short-term strategy (~2019)**

- Improved quality through a quality management system
- Cost reduction through strategic purchasing
- Strengthened productivity through ICT convergence

**2. Mid- to long-term strategy (~2022)**

- Become a leader in the eco-friendly and high-efficiency ship market based on prominent technologies
- Make inroads into future growth markets through active technological development
- Establish a technology-oriented management system for the future growth
- Establish business models for the next generation based on ICT convergence
- Shape HHI into a premium brand
- Expand projects for overseas cooperation

# Hyundai Electric

## CEO Message

Since the establishment as a Heavy Electric Machinery Division within HHI in 1977, Hyundai Electric has grown into a global electro electric company based on 40 years of continued R&D and business expansion. As a dominant No. 1 in the Korean market, Hyundai Electric provided power generation and distribution equipment, solutions, and other relevant infrastructure, thereby strengthening its global competitiveness. This year, Hyundai Electric is determined to develop into a premium company that makes the best quality products with advanced technologies, and preemptively secure the high value-added market.

Jung Myung-rim,  
Hyundai Electric & Energy Systems  
CEO & Senior Executive Vice President



## Vision 2021

### Essential for Today, Potential for Tomorrow



Sales KRW **5** trillion



Operating Profit KRW **500** billion

Building Up the Global Management System

Expanding the Sales of Mass-Produced Products

Making Premium for Flagship Products

Expanding Energy Solution Business

Reinforcing the Global R&D Competitiveness

## Business Overview

Hyundai Electric manufactures and provides a wide variety of electro electric and energy solutions needed across the entire stage of power supply from generation, transmission, distribution to consumption of electricity.

### Power Solution

As a business that provides power system within the grid for generation, transmission and transformation of electricity, Power Solution services are offered to state-owned power generation or transmission companies, private power generation companies and EPC contractors. Major products include ultra-high voltage transformers and high voltage circuit breakers.

### Industrial Solution

The Industrial Solution business provides power distribution system, control system, and drive systems to general industries such as process plants, servicing EPC contractors, steel companies, high-speed railroads and petrochemical companies. Some examples of major products are switchboards, distribution transformers, low and medium voltage circuit breakers, motors, inverters, generators and industrial control systems.

### Marine Solution

The Marine Solution business provides an electronic system to vessels or offshore facilities and is applicable to general ships, military ships and offshore plants. Major products include switchboards for ships, distribution transformers, rotating machinery and control systems for ships.

### Energy Solution

Based on the integrated management of the production, consumption, sales, and operation of electrical energy, the Energy Solution business designs, procures and builds systems that allow efficient usage of electrical energy. ESS (Energy Storage System), BEMS (Building Energy Management System), FEMS (Factory Energy Management System) and MG (Microgrid Solution) are some of the major products and services.

## 2017

### Performance Review

Our major customers include electric power authorities of each country, private sector utility businesses, and EPC contractors. The order volume is sensitive to states' power policies and the global construction industry. The year 2017 posted orders of KRW 1.63 trillion and sales revenue of KRW 1.45 trillion, while consistently improving the structure with debt-to-equity ratio of 101% and borrowing ratio of 50%. Hyundai Electric made notable achievements such as the signing of a long-term supply contract for transformers worth KRW 50 billion with UK state-owned National Grid and sealing an order for the world's largest industrial ESS. Furthermore, the Company won a KRW 20 billion order from the Electricity Generating Authority of Thailand for high voltage circuit breakers, positioning itself as a prominent electric and electro provider on the global stage.

## Financial Performance

Consolidated	2017
Sales (m. KRW)	1,449,573
Operating Profit (m. KRW)	62,419
Operating Profit Rate (%)	4.3

Period: April 1 – December 31, 2017





**2018 Outlook and Plan**

The global electrical equipment market can be seen to be in a maturity stage in terms of the growth of the industry. Although gradual recovery of market demand is expected in some regions across North America (the US) and Asia, market conditions remain unstable and competition is becoming fiercer by day. Meanwhile, with the creation of a new market related to high efficiency and eco-friendly use of energy, crisis and opportunity exist alongside one another in the electric and electro industry. Hyundai Electric has set order of KRW 2.13 trillion and sales revenue of KRW 2.23 trillion as the target for 2018. To accomplish this goal, Hyundai Electric will focus efforts on three initiatives: improve quality by opening a reliability center and enhance process with the establishment of a smart factory; foster a stable profit structure based on portfolio diversification that includes new businesses and low- to mid-voltage products; accelerate target marketing by preemptively establishing a responsible management system.

**Growth Strategy**

Hyundai Electric is striving to reinvent itself as a Total Energy Solution Provider that delivers advanced energy solutions as well as quality electric/electronic products. To this end, the company is building upon its technical capabilities and knowhow from over 40 years of experience to expand the R&D investment and global network.

- |   |  |
|---|--|
| 1. Premiumizing flagship products               | Strengthen product competitiveness through Smart Factory flagship products implementation and deliver premium quality customer service that converges with new ICT businesses  |
| 2. Expanding ICT-based energy solution business | Grow the emerging ICT energy solution business that focuses on renewable energy generation and energy management system implementation and foster the business as the company's new growth engine in a proactive response to the changing energy market conditions |
| 3. Establishing a global management system      | A global management system that flexibly responds to market trend changes  |
| 4. Focusing on R&D capability building          | Enhance product quality by highlighting technology-driven management, securing core talents at home and abroad and promoting the Reliability Center  |
| 5. Expanding the sale of mass products          | A stable profit structure by increasing the sale of standardized, mass products  |

# HCE

## CEO Message

Established as a Heavy Machines Division within the HHI, HCE currently has factories covering an area of 248,000m<sup>2</sup> that can produce 50,000 units of construction equipment and industrial vehicles on a yearly basis. For the past 30 years, the Company has spread its distribution channel through 540 dealer networks present in 140 countries. HCE will foster confidence of customers by developing world-class construction equipment and develop new markets with diverse marketing. Efforts will be made to pursue value management that focuses on profitability, secure technological competitiveness and create a safe and interactive corporate culture based on a strong global management system.



Kong Ki-young,  
HCE President & CEO

## Vision 2021

### Boosting Global Sales of KRW 5 Trillion by 2021



Global Sales KRW **5** trillion



Operating Profit Rate **10%**

2017  
Securing Cost Competitiveness &  
Focus on Emerging Markets

2019  
Quality Enhancement & Expanding the  
Performance in Advanced Markets

2021  
Global Sales of KRW 5 Trillion

## Business Overview

HCE is engaged in the business of producing and selling construction equipment such as excavators and wheel loaders, as well as industrial vehicles such as forklift, tow and transport vehicles. In particular, overseas production bases were established in emerging markets showing rapid growth since the mid-2000s, including India and Brazil, securing a leading position in major markets for construction equipment.

### Construction equipment

HCE produces and sells machines that are used broadly for excavating, transporting of material and crushing across a wide range of locations for mining, agriculture, forestry and large-scale infrastructure construction such as roads and buildings. Medium- and large-sized excavators and wheel loaders are some of the Company's flagship products.

### Industrial vehicles

HCE produces and sells vehicles needed in various industries including logistics, distribution, shipbuilding, steel, automobile, and chemicals. Examples of major products include forklift, tow and transport vehicles.

## 2017 Performance Review

Increased government spending with the economic recovery of advanced countries in 2017 and accelerated growth of exporters on the back of recovered commodity prices have encouraged the recovery of the global construction equipment market. Notably, the demand for excavators in the Chinese market saw a significant expansion compared to 2016. The sales volume growth of medium-sized excavators of HCE exceeded the market expansion rate, leading to a market share of 3.1% in 2017. Construction equipment demand in the domestic market rose as well as construction investment increased amid a booming housing industry. In particular, the sales volume of mini excavators surged, driving market share up from 26.6% in 2016 to 34.8% in 2017.

## Financial Performance

Consolidated	2017		
Sales (m. KRW)	1,886,747		
Operating Profit (m. KRW)	95,233		
Operating Profit Rate (%)	5.0		
	Construction Equipment	Forklift truck	Others
Sales by Product Type (m. KRW)	1,407,331	329,941	149,475
Ration (%)	74.6	17.5	7.9

Period: April 1 – December 31, 2017





**2018 Outlook and Plan**

HCE's sales revenue goal for 2018 is set at KRW 3.28 trillion. On the global market, HCE targets newly industrialized countries and currently ranks first in terms of market share in nine countries including Vietnam, Myanmar, and Russia. As of 2018, China is the largest excavator(mini/medium/wheel) market, explaining the HCE's focus on China and India. China's excavator market is expected to increase from approximately 130,000 units in 2017 to 170,000 units in 2018, driven by large infrastructure investment for the Xiong'an New Area project in Hebei province south of Beijing. Consequentially, HCE plans to expand excavator sales to the Chinese market to 7,000 units, a big jump from 4,000 units in 2017. The Indian market is also projecting a growth in excavator demand from 19,000 units in 2017 to 22,000 units this year, as a result of strong economic growth and rising investment in infrastructure and manufacturing. HCE plans to increase excavator sales to India as well to 5,000 units, up 34% compared to 2017.

**Growth Strategy**

HCE will pursue expansion of advanced markets and achieve KRW 5 trillion of global sales revenue by 2021 based on three growth strategies: innovations in cost and quality; strong targeted approach for core markets; and development of future R&D and ICT.

- |   |  |
|---|--|
| <p>1. Innovations in cost and quality</p>           | <ul style="list-style-type: none"> <li>·10% cost reduction through product standardization and parts modularization</li> <li>·Advancement of the production system based on smart factories</li> </ul>   |
| <p>2. Strong targeted approach for core markets</p> | <ul style="list-style-type: none"> <li>·Secure competitiveness toward the Chinese market through OEM via local Chinese producers</li> <li>·Expand dominance in emerging markets by strengthening sales network and offering customized products</li> <li>·Increase the sale of mini excavators through strategic partnerships</li> </ul> |
| <p>3. Development of future R&amp;D and ICT</p>     | <ul style="list-style-type: none"> <li>·Develop new products through technological innovation</li> <li>·Introduce ICT-applied businesses</li> <li>·Improve the Total Solution capabilities based on technology</li> </ul>  |





# HMD

## CEO Message

Even amid the prolonged struggle in the global shipbuilding and shipping industry, HMD has put a constant focus on improving productivity and competitiveness as a way to build its business capabilities to win more contracts. To this end, the company revamped production and designing processes, improved product quality and remove unnecessary steps and costs. In addition, significant efforts have been made to secure future growth engines through construction of new ships. The efforts have paid off as in 2017 we posted KRW 2.44 trillion and KRW 81.6 billion in sales revenue and operating profit respectively, and won orders to deliver 64 ships worth USD 2.32 billion. In the face of challenges posed by protectionism on the rise, stronger Korean won, and higher steel prices, HMD will further solidify the fundamentals, focus more on profit-generating sales activities, and laying the groundwork for future growth.

Han Young-seuk,  
HMD President & CEO



## Vision 2021

### Great HMD, the Highest Value Creator



Global Sales KRW **4.5** trillion

Maintaining the Competitiveness in Flagship Products



Operating Profit Rate **10%**

Expanding Market Share for Strategic Ships

Sustainable Growth & Capability Enhancement

## Business Overview

HMD ranks first in the global market share for mid-sized vessels. Since its establishment, HMD has repaired and remodeled around 8,500 ships and built 9000 ships. On top of a site covering 710,000m<sup>2</sup>, the Ulsan Head Office is equipped with three 400,000-ton docks, one 350,000-ton dock, 2.36km quay wall, 21 jib cranes and cutting-edge automation facilities, building premium ships tailored to the need of each customer.

## 2017 Performance Review

HMD is successfully overcoming the global recession of the shipbuilding and shipping industry by implementing various innovative activities. Sales revenue of KRW 2.44 trillion and operating profit of KRW 81.6 billion was achieved in 2017, and orders worth USD 2.32 billion were won throughout the year. Recently, a design and business processing system utilizing AI technology was developed, and a project is underway to visualize ship assembly information in a three dimensional drawing. Furthermore, a 660,000m<sup>2</sup> of production area adjacent to the headquarter office was acquired to boost production capacity for future growth.

## Financial Performance

Consolidated	2017	2016	2015
Sales (m. KRW)	2,453,433	3,446,458	3,702,450
Operating Profit (m. KRW)	107,949	191,070	13,618
Operating Profit Rate (%)	4.4	5.5	0.4







**2018 Outlook and Plan**

The global market for newbuilding orders dipped in 2016 before starting to recover in 2017, while full recovery is expected for 2018. The strong economic growth in China is projected to fuel import of raw materials, which will in turn nurture sound growth of the global economy. This will lead to increases in cargo volume and newbuilding orders, the two factors that will drive the recovery of the shipbuilding industry. Furthermore, the rebound in oil prices in 2018 is expected to encourage the recovery of the offshore plants market and the gas carrier market which has suffered a recession. HMD plans to focus its capacity in the gas carrier market for which it has competitive advantage, along with the product/chemical carriers and small/mid-sized containerships which are seeing a continuous flow of orders.

**Growth Strategy**

HMD aims to achieve KRW 4.5 trillion of sales revenue and 10% increase in operating profit by 2021 based on three growth strategies: maintaining competitiveness in flagship products; expanding market share of ships targeted for growth; and strengthening capabilities for sustainable growth.

**1. Establishing a global management system**

- |   |   |
|---|---|
| <p><b>PC</b></p> <ul style="list-style-type: none"> <li>·Build eco-friendly, cost- and quality-competitive PCs</li> <li>·Maintain PC market share through delivering optimized standard carriers</li> </ul> <p><b>Gas Carrier</b></p> <ul style="list-style-type: none"> <li>·Improve the competitiveness of small- to mid-sized LPG and LNG carriers</li> <li>·Build C-type tanks at home</li> <li>·Secure proprietary technology for cargo handling system</li> </ul> | <p><b>RO-RO, PCTC</b></p> <ul style="list-style-type: none"> <li>·Increase cartech precision of PCTC</li> <li>·Make blocks larger and more specialized</li> <li>·Enhance the competitiveness of RO-RO ships</li> </ul> <p><b>Containership</b></p> <ul style="list-style-type: none"> <li>·Define and develop a standard ship</li> <li>·Improve cost competitiveness</li> <li>·Improve performance and energy efficiency design index (EEDI)</li> </ul> |
|---|---|

**2. Expanding the market share of strategic models**

- |   |  |
|---|--|
| <p><b>Environmentally friendly conversion of vessels</b></p> <ul style="list-style-type: none"> <li>·Mount CSR system to reduce NOx emissions</li> <li>·Install LNG fuel supply system</li> </ul> <p><b>Small-sized LNG carriers</b></p> <ul style="list-style-type: none"> <li>·Develop hull forms for small LNG carriers</li> <li>·Secure technologies for FSRU (Floating Storage Regasification Units)</li> <li>·Obtain LNG cargo containment system technologies</li> </ul> | <p><b>RO-PAX</b></p> <ul style="list-style-type: none"> <li>·Select RO-PAX strategic models</li> <li>·Identify domestic interior vendors</li> <li>·Secure the technology to build small-sized cruise ships</li> </ul> <p><b>Multi-purpose special carriers</b></p> <ul style="list-style-type: none"> <li>·Acquire capabilities to build high value-added special carriers</li> <li>·Enter the shuttle tanker market</li> <li>·Secure in-house capability to design OSV/PSV</li> </ul> |
|---|--|

**3. Strengthening capabilities to sustain growth**

- |   |  |
|---|--|
| <p><b>HR development</b></p> <ul style="list-style-type: none"> <li>·Nurture specialists in all job lines</li> <li>·Achieve a stable labor-management relations and obtain future talents</li> </ul> <p><b>Expansion of profitable businesses</b></p> <ul style="list-style-type: none"> <li>·Operate additional docks and quays</li> <li>·Increase revenue and profit from overseas business (HVS)</li> <li>·Identify additional production factories</li> </ul> | <p><b>Securing of top-notch technology and design capabilities</b></p> <ul style="list-style-type: none"> <li>·Adopt environmentally-friendly shipbuilding technologies</li> <li>·Smart connected ships</li> <li>·Acquire the capabilities to design and construct special-purpose ships</li> </ul> <p><b>Creation of an optimized smart workplace</b></p> <ul style="list-style-type: none"> <li>·Streamline the production process</li> <li>·Build an ICT-based database</li> <li>·Implement an integrated safety system</li> <li>·Secure in-house capability to design OSV/PSV</li> </ul> |
|---|--|



PART 3

SUSTAINABILITY  
PERFORMANCE

3

Sustainable Management System  
Strategic Direction and Performance  
Indicators of Sustainability Management  
Materiality Assessment

Enhancing Corporate Value Through  
Continual Growth

Upholding Fair and Transparent Business  
Practices

Pursuing Safe and Environmentally Friendly  
Business Practices

Upholding a Corporate Culture of Mutual  
Respect and Trust

Contributing to the Development of a  
Society as a Global Corporate Citizen

PART 3

SUSTAINABILITY  
PERFORMANCE





# Sustainable Management System

## Operating Principles and Process

HHI Group operates an efficient and sustainable management system by assigning professionals and departments for each sustainability initiative. Relevant departments perform comprehensive management for planning activities, execution, assessment and company-wide strategic planning. Collected information is utilized to plan and execute new sustainability initiatives and also used for integrated report.

### Sustainable Management Policy



#### Transparent Disclosure

- Communication channels customized to different groups of stakeholders
- Transparent disclosure to stakeholders on sustainable management



#### Systematic Performance Management

- Activities and performance management by classifying areas based on the five management philosophies



#### Continuous Improvement

- Multidimensional analysis of sustainable management activities and performance
- Overcoming weaknesses and enhancing strengths

## Stakeholder Communication

Customers, shareholders and investors, partners, communities, industries and employees are our key stakeholders that influence one another. HHI Group operates various communication channels for stakeholders' participation in sustainable management.

### Customers



- Receiving feedback on products and services via regular communication
- Endeavouring to improve customer satisfaction

**Key Communication Channels**  
Warranty & Lifetime Service, Feedback Service, Smart Service

### Shareholders & Investors



- Enhancing transparency of management information
- Building a consensus on vision and new growth engines

**Key Communication Channels**  
Shareholders' meeting, IR news, Business reports, IR meetings, Conference call

### Partners



- Building a business environment for shared growth
- Providing training programs and consulting services for subcontractors

**Key Communication Channels**  
Group Shared Development Committee, Shared Growth Expansion Council, Conferences and a New Year's party for subcontractors

### Employees



- Inducing interest and participation in sustainable management through active internal communication
- Striving to build a cooperative labor-management relationship

**Key Communication Channels**  
Collective bargaining, Wage negotiations, Labor management council, Industrial health & safety committee, HHI Group webzine

### Communities



- Contributing to growth and development of local communities through various activities

**Key Communication Channels**  
Charitable Bazaar with Love, Making Kimchi with Love, Employees' Volunteer Activities

### Industries



- Strengthening competitive edge through fair competition
- Benchmarking, sharing information and forming partnerships to resolve common issues

**Key Communication Channels**  
Korea Offshore & Shipbuilding Association, Meetings of practitioners from the same industries

# Strategic Direction and Performance Indicators of Sustainability Management

## Direction and Strategy

Philosophy	Direction	Strategy	Stakeholders
Enhancing corporate value through continual growth	<ul style="list-style-type: none"> <li>Securing core capability to drive future growth</li> <li>Implementing flexible business management &amp; global business systems</li> </ul>	<ul style="list-style-type: none"> <li>R&amp;D expense, no. of researchers</li> <li>Quality management performance</li> <li>Technology empowerment performance (programs implemented, no. of participants)</li> </ul>	<ul style="list-style-type: none"> <li>Customers</li> <li>Employees</li> <li>Partners</li> <li>Shareholders</li> </ul>
Upholding fair and transparent business practices	<ul style="list-style-type: none"> <li>Supporting open and fair competition</li> <li>Fostering fair business relationships with suppliers</li> </ul>	<ul style="list-style-type: none"> <li>Compliance and ethics management performance (no. of training and participants)</li> <li>Shared growth performance (fund size, early settlement amount)</li> </ul>	<ul style="list-style-type: none"> <li>All stakeholders</li> </ul>
Pursuing safe and eco-friendly business practices	<ul style="list-style-type: none"> <li>Creating a pleasant and safe work environment</li> <li>Environmentally-friendly production activities and technology development</li> </ul>	<ul style="list-style-type: none"> <li>Energy consumption, GHG emissions reduction, air/water pollution generation and percentage decrease</li> <li>Safety management performance (on-the-spot rewards for good practices, no. of emergency drills conducted)</li> </ul>	<ul style="list-style-type: none"> <li>Employees</li> <li>Local Communities</li> </ul>
Upholding a company culture of mutual respect and trust	<ul style="list-style-type: none"> <li>Fostering a vibrant organizational culture based on trust and equality</li> <li>Performing all duties and responsibilities to enhance corporate competitiveness</li> </ul>	<ul style="list-style-type: none"> <li>Job specific programs (no. of labor-management relations training and participants)</li> <li>Talent nurturing programs</li> </ul>	<ul style="list-style-type: none"> <li>Employees</li> <li>Partners</li> </ul>
Contributing to the development of a society as a global corporate citizen	<ul style="list-style-type: none"> <li>Contributing to national development through faithful tax payment and job creation</li> <li>Contributing to human prosperity through making efforts to create and deliver values</li> </ul>	<ul style="list-style-type: none"> <li>Social contribution programs, their frequencies, and no. of participants</li> </ul>	<ul style="list-style-type: none"> <li>Customers</li> <li>Employees</li> <li>Local Communities</li> </ul>

## Performance Indicators

Category	Indicator	Unit	HHI Holdings	HHI	Hyundai Electric	HCE	HMD	Total
Research & Development	R&D Investments	bn. KRW	6.1	90.7	39.3	37.7	included in HHI's performance	173.8
	R&D Investments/Sales	%	1.3	0.6	2.7	2.0	included in HHI's performance	0.9
Quality Management	Quality Evaluation of Subcontractors	Cases	16	332	350	59	132	889
Technology Empowerment	No. of personnel who completed Production Training Program	Person	(Combined) 4,522				1,195	5,717
Compliance Management	Inspection into risks associated with transactions in subcontracting	Teams	(Combined) 73				73	
Business Ethics	Participants of the Business Ethics Training Course	Person	(Combined) 21,000				21,000	
Shared Growth	Amount of the Shared Growth Fund	bn. KRW	-	353.6	-	-	69	422.6
Safety Management	Accident Rate	%	0.00	0.33	0.34	0.45	0.30	-
	Immediate Rewards	Cases	-	71,489	1,683	890	316	74,378
Environment Management	Total Amount of GHG Emissions	tCO <sub>2e</sub>	(Combined) 682,640				118,818	801,458
Advancement of Management-Labor Relations	Percentage of Employees' Union Membership	%	91.3	94.2	92.6	95.2	100	-
HR Development	Training Time Per Employee	hrs.	18	32	18	16	25	28
	Participants of On-Job Trainings	Person	164	4,388	587	55	568	5,762
Social Contribution	Salary Donation	m. KRW	1.44	152.36	16.38	5.39	31.55	207.12
Arts & Culture	Total Visitors of Performance in Hyundai Arts Center	Person	(Combined) 335,071				335,071	

Period: 2017. 4. 1 ~ 12. 31

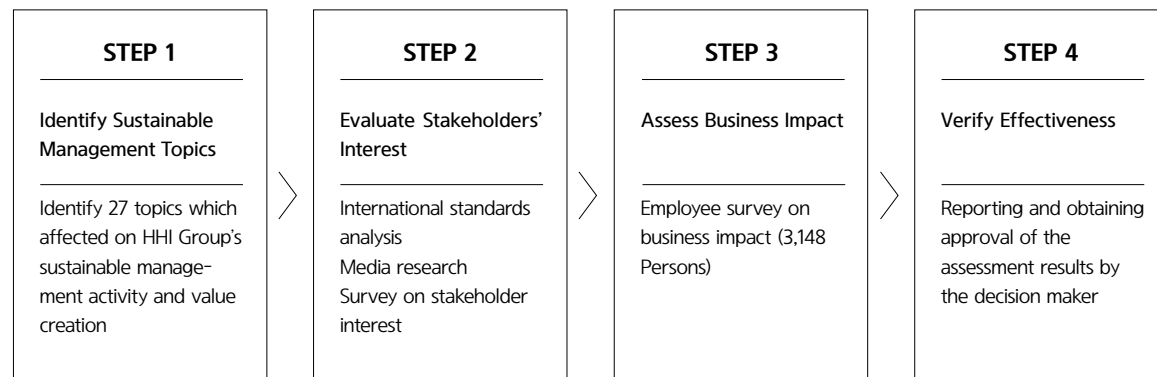


# Materiality Assessment

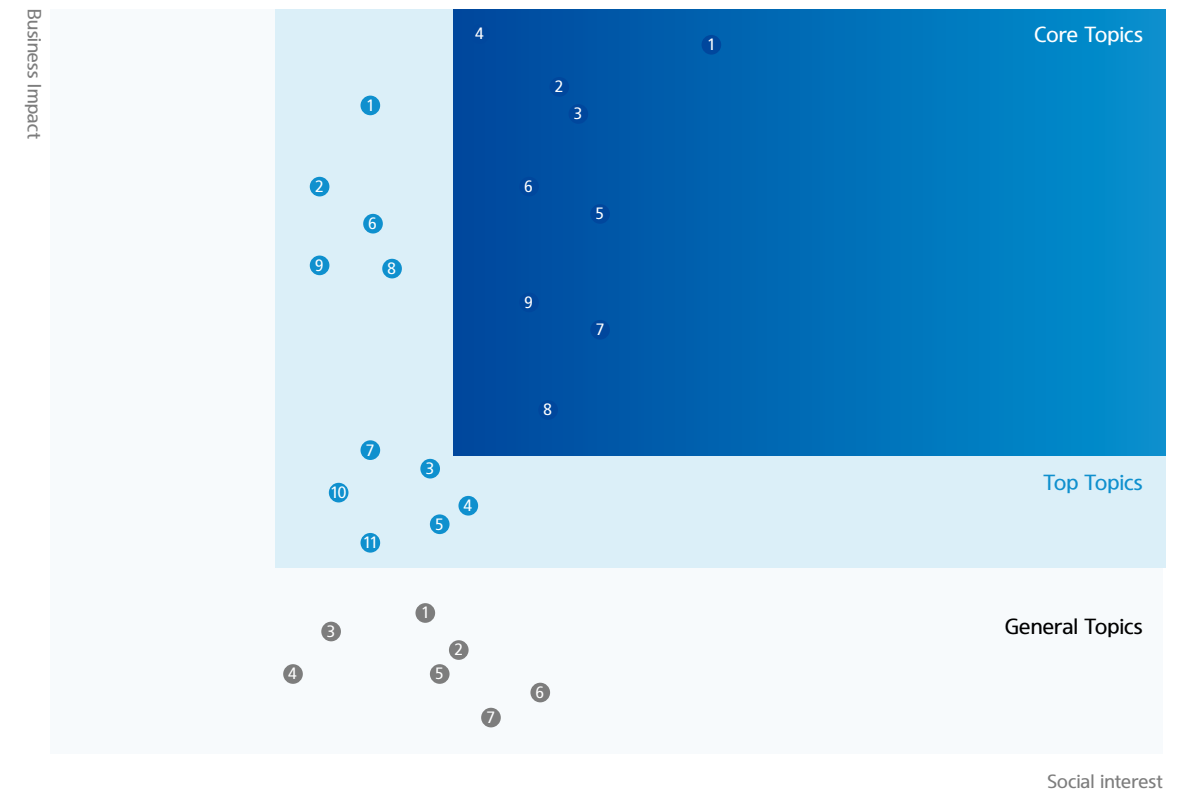
## Materiality Assessment Process

To select core topics of its integrated report, HHI Group conduct materiality assessments regarding stakeholders' interests, improvements and business impact levels on corporate activities. The assessment of 2018 identified a pool of 27 topics by media research, benchmarks and analyzing global reporting standards such as GRI G4 Standards, UN Global Compact and UN Sustainable Development Goals and other international standards. The identified issues are classified into core, top and general topics according to importance and relevance.

The 2018 HHI Group Integrated Report discloses the Group's management approach and key performance of core topics. Key activities and achievements on other topics have been discussed if deemed necessary for continuity with past reports and for complete disclosure of information regarding value creation.



## Material Assessment Result



### 5 Key Management Philosophies

1. Enhancing corporate value through continual growth
2. Upholding fair and transparent business practices
3. Pursuing safe and environmentally friendly business practices
4. Upholding a company culture of mutual respect and trust
5. Contributing to the development of a society as a global corporate citizen

### Core Topics

Core Topics	Page	GRI	Score
1 Promoting employment stability and cooperative industrial relations	98-101	402-1	82.8
2 Developing new technology through R&D	56-59	N/A	75.8
3 Creating safe workplace and enhancing safety awareness	80-84	403-1,2	75.6
4 Quality management for customer satisfaction	60-64	416-1,2	74.1
5 Creating value with change and innovation	18-19	N/A	74.0
6 Compliance management and business ethics	72-75	102-16,17, 205-1,2, 206-1, 307-1	68.4
7 Environmental management through developing eco-friendly technology	91	302-1,4,5	63.4
8 Employee competency development	102-104	404-1,2,3	60.9
9 Ensuring integrity of governance	14-15, 18-19	102-18, 22, 23	55.1

### Top Topics

- 1 Fair distribution of economic performance
- 2 Information security management
- 3 Respecting human and labor rights of employees at subcontractors
- 4 Ensuring diversity and fair opportunity
- 5 Enhancing fair trade system
- 6 Pursuing shared growth with business partners
- 7 Exploring new businesses and diversifying businesses
- 8 Enhancing employees' quality of life by improving welfare system
- 9 Ensuring customers' health and safety
- 10 Enhancing material and energy efficiency
- 11 Promoting communications with stakeholders

### General Topics

- 1 GHG emissions management and climate change response
- 2 Reducing waste and pollutant emissions
- 3 Reducing environmental impacts of business partners
- 4 Social contribution
- 5 Operating integrated risk management system
- 6 Setting up and operating resource circulation, reusing and recycling framework
- 7 Commitment to shared growth of local communities

# Enhancing Corporate Value Through Continual Growth



Research &  
Development

---



Quality  
Management

---



Technology  
Empowerment

Creating new growth engines through continued change and innovation is crucial to pursue sustainable growth in the fast-paced global business environment. HHI Group will enhance its competitiveness and shareholders' values by spinning-off our businesses, and deliver customer satisfaction by prioritizing quality and technology top priorities.



# Research & Development

HHI Group is committed to creating new values for customers with differentiated technology. As a global top-tier business group, HHI Group leads quality enhancement with technology development and tries to build a solid base for continual growth with cost competitiveness. HHI Group will make utmost efforts for R&D to maintain its leadership in the market and establish creative and innovative culture for the sustainable growth.

## R&D Management System

	HHI Holdings		HHI*
<b>Vision</b>	A Leader in the Global Robot Industry	<b>Vision</b>	World's Best Trusted R&D Center in Heavy Industry Sector
<b>Mission</b>	Developing new technologies and products Ensuring high performance and quality Securing cost competitiveness	<b>Mission</b>	Engaging in R&D activities to reinforce technology, product quality, and cost competitiveness for product differentiation
<b>Strategy and Direction</b>	<ul style="list-style-type: none"> <li>Improve performance and quality of robots/controllers</li> <li>Explore new markets through developing new models</li> <li>Develop robot intelligence technology</li> <li>Develop smart diagnosis technology</li> </ul>	<b>Strategy and Direction</b>	<ul style="list-style-type: none"> <li>Develop innovative technologies that enhance cost competitiveness</li> <li>Develop eco-friendly smart ships</li> <li>Develop digital smart-yard building technology</li> <li>Develop technologies to produce low-cost, high-quality products</li> </ul>
			*including HMD
	Hyundai Electric		HCE
<b>Vision</b>	Global top-tier electro electric system solutions supplier	<b>Vision</b>	Moving You Further
<b>Mission</b>	Driving innovation through cooperation, driving the business with technology	<b>Mission</b>	2023 Global Top 5
<b>Strategy and Direction</b>	<ul style="list-style-type: none"> <li>Deliver key products of premium quality through differentiation from other products</li> <li>Develop eco-friendly, highly efficient technologies that will drive future growth</li> <li>Develop ICT platform (INTEGRICT)-based solutions</li> <li>Further improve product quality by implementing a reliability test &amp; verification process</li> </ul>	<b>Strategy and Direction</b>	<ul style="list-style-type: none"> <li>Ensure product reliability with strengthened development verification</li> <li>Boost cost competitiveness through launching economic models</li> <li>Achieve inhouse development of key parts and obtain new technologies</li> <li>Implement ICT solutions and Smart Factory</li> </ul>

## R&D Organization

	HHI Holdings	HHI	Hyundai Electric	HCE
<b>Discussion Forum</b>	Mid-term Business Plan Workshop	Technology Development Committee	Technology Development Committee	Product Development Council
<b>Dedicated Organization</b>	Robot Research Institute	<ul style="list-style-type: none"> <li>Corporate Technology Institute (Ulsan/Seongnam)</li> <li>Maritime Research Institute</li> <li>Engine&amp;Machinery Research Institute</li> </ul>	<ul style="list-style-type: none"> <li>R&amp;D Center</li> <li>Overseas Technologies Center</li> </ul>	<ul style="list-style-type: none"> <li>Technology Institute (Seongnam/Yongin)</li> <li>Reliability Assessment Center</li> </ul>

## R&D Performance Indicator

	Unit	HHI Holdings	HHI	Hyundai Electric	HCE
<b>R&amp;D Investments(Ratio to Sales)</b>	bn. KRW(%)	6.1(1.3)	90.7(0.6)	39.3(2.7)	37.7(2.0)
<b>R&amp;D Researchers</b>	Person	68	426	225	229

HMD's R&D investments is included in HHI's performance

## R&D Achievements of Each Entity

### HHI Holdings

#### Clean Robots for Returning 11th Generation Glass/Panel

We have developed two types of clean robots that return 11th-generation glasses and 86-inch large-sized panels, respectively, for the 11th-generation LCD and OLED factories. The development secured us deals to deliver a significant volume of robots to our clients at home and China. The robots, which have improved the previous model in terms of return speed, stability and maintainability, are expected to contribute to the sales increase of the 11th generation LCD robots in the future.

#### Painting Robot and Controller

HHI Holdings laid the groundwork for entering the industrial painting market in 2017 by completing the development of a painting robot (YP015-28) and controller (HI5a-P10), and obtain IECEx certification for explosive environment equipment. Painting requires extremely sophisticated techniques as well as links to the robot technology and explosion prevention technologies. Knowing this, HHI Holdings plans to forge cooperation with a specialized painting service provider starting 2018 so as to make serious inroads into the robot painting systems market.

#### Flexible robotic jig System

A mixed-model production is widely applied in the vehicle body production line, where different jigs and tools are used to assemble multiple models. HHI Holdings has developed HJ-300, which robotizes jigs to respond in a more flexible manner in a multiple-model production environment. The company also plans to develop and apply a Flexible Robotic Gripper System that utilizes robot's additional axis.

#### 3D Stereo Vision System

We have developed a three-dimensional stereo vision system where a robot adjusts an object's location and orientation using two cameras. With the system, a workpiece placed in an arbitrary pose can be handled, and installation and maintenance become easier as any changes in camera location will automatically be adjusted. A proprietary technology of HHI Holdings, this system is currently applied to the panel handling process of a domestic automobile company and is expected to have a wide range of applications in the future.

**HHI****In-House Regasification Model for LNG FSRUs**

The LNG regasification system for FSRUs developed indigenously by HHI adopts the indirect heating of seawater and glycol. The system (Hi-ReGAS) uses glycol as an intermediate heating medium, significantly increasing the safety and reliability compared to existing products. We could reduce the overall power consumption by 14 percent by housing the facilities used to circulate glycol in the lower part of a ship, and made the system 15 percent lighter than our competitors' through module optimization. In March 2017, we invited shipowners and classifications to hold a ceremony for the pilot plant demonstration for the first time in Korea and received an order to deliver two FSRUs that adopted the regasification system.

**Ship Design Optimized for Higher Speed for Low-Speed Full Ships**

HHI Maritime Research Institute developed a new ship design for low-speed full ships by expanding the Parallel Middle Body (PMB). The Hi-Bow, a newly-adopted feature for the development, effectively reduces added resistance in waves, and thereby the horsepower in waves by eight percent on average. If the PMB is extended from 34 meters (from 101.4 m to 135.5 m) to meet VLCC port entry criteria at major ports around the world, it is expected to reduce the vessel speed by 0.05 knots on CFD analysis. However, with the development of the new ship design, it was able to improve the vessel speed of 0.11 knots and apply to 45 low-speed full ships.

**Commercialization of High Pressure Selective Catalytic Reduction (HP-SCR) System**

In response to the stricter NOx Tier III regulations from the International Maritime Organization, HHI jointly developed a high-performing NOx reduction catalyst and HP-SCR that uses the catalyst. Mounted on an LPG tanker (KMD8173) for the first time in the world, the HP-SCR removes NOx from the exhaust gas of high-temperature and high-pressure large-sized engines (max. 5 bar and 500 °C). With the versatility to be used selectively depending on the fuel used for the engine, it is the first product of its kind that can be adopted for all major engines. In 2017, we achieved over 90 percent global market share and received orders to deliver 57 units.

**Hyundai Electric****145kV 40kA Self-Blast GIS**

Hyundai Electric succeeded in developing an improved model (2nd generation) of the 145kV 40kA GIS used for overseas power systems. The most noticeable feature of the 2nd generation product is the compact installation space requirement, which was reduced by 51 percent from the 1st generation model, allowing a smaller space for the substation. We plan to complete major PQ tests in the presence of National Grid Saudi Arabia, to launch the cost-effective 2nd generation model in Saudi Arabia, the target market, in the first half of 2018. We will also explore sales opportunities in new markets.

**High-Speed Synchronous Generator for Turbines**

We have completed high-speed synchronous generators with the maximum capacity of 50MVA and now ready to enter the high-capacity turbine generator market. New development was achieved by modifying the rotor from salient pole type to cylindrical type, bringing about 37% cost reduction from the existing models. From this process, we have also acquired and standardized key technologies such as optimal lubricating system analysis technologies and bearing temperature increment assessment program.

**Solutions Based on ICT Platform (INTEGRICT)**

To realize our vision to commercialize ICT solutions, we completed the development of three solutions: Smart Ship, Energy Management, and Electric Equipment Asset Management. The Smart Ship solution (economical navigation) targets to reduce fuel consumption by 6 percent and will be embedded to all ships to be built by HHI Group. The Energy Management solution for factories and buildings provide energy monitoring, demand forecasting, and optimal ESS operation, among others, to client. Adopted in Seamarq Hotel and Hyundai Electric Reliability Center, the solution has obtained the first grade on Korea Energy Agency's Building Energy Management System (BEMS) installation verification. Furthermore, the world's largest 150MWh ESS was installed in Korea Zinc and operated with the target to save over KRW 10 billion a year. The Electric Equipment Asset Management solution is designed to help clients save maintenance cost, reduce downtime, and extend equipment life cycles. The system is being utilized for electric devices and equipment in HHI's 154kV substations.

**HCE****Construction Equipment Demand Forecasting System (Hi-MATE)**

Based on the data collected, Hi-MATE is capable of forecast construction equipment demand up to 12 months in the future, and already delivered about 90 percent forecasting accuracy in the European and US markets. Hi-MATE provides demand to sales ratio of a specific component by computing component consumption of a dealer or a region from equipment operation data the solution collects and comparing it with the actual sales data. Going forward, we expect to further increase the scope and accuracy of demand forecasting with the increased application of the solution over time. We will also start developing a solution that assists users in making informed decisions based on data collected.

**Integrated Controller for Construction Equipment**

The company has developed the machine control unit for integrated control of all excavator operations by combining three existing models, thereby achieving both cost saving and greater maintenance convenience. The solution integrates the company's proprietary controller design and machine control technologies. In addition, we reflected the international standard testing approach to update our reliability test standard and redefine the acceptance criteria for software quality inspection, further improving the company's technological capabilities.

**Excavator Cabin Mounting Design Technology**

We have secured technologies for optimizing the excavator cabin mounting design by incorporating ten design assessment standards, including static deflection, vibration response and shock behaviors during cabin mounting design. By satisfactorily addressing product quality issues associated with excavator cabin vibration and shock, the development is expected to bring revenue growth worth KRW 2.03 billion a year.

**2018 R&D Initiatives**

Entity	Initiative
HHI Holdings	<ul style="list-style-type: none"> <li>Strengthen competitiveness of key products (welding robots, LCD handling robots, etc.)</li> <li>Develop painting robots and vacuum robots successively in a series for entry into new markets</li> <li>Launch development of small high-speed robots and collaborative robots for the electronics industry</li> <li>Improve cost competitiveness of robot controllers</li> <li>Reinforce service business based on advanced robot malfunction and failure diagnosis technology</li> </ul>
HHI	<ul style="list-style-type: none"> <li>Promote differentiated technology competitiveness through identifying innovative business items in a systematic manner</li> <li>Reinvent the organization by operating a project-centered research organization and technology consulting center for supporting business functions</li> <li>Increase research productivity by establishing a performance-oriented research culture based on self-motivation</li> <li>Accelerate technological development and attract competent researchers by relocating the research organization to the Seoul metropolitan area</li> </ul>
Hyundai Electric	<ul style="list-style-type: none"> <li>Develop environmentally-friendly, high-efficiency products</li> <li>Pursue convergence of standard mass products (e.g., M/LV circuit breaker, low voltage motors, inverters) to cater to market needs</li> <li>Develop ICT energy solutions and technologies (industrial automation, emerging energy businesses, asset management)</li> <li>Develop products for Smart Ship/electric ferry solutions and on-ferry/on-land DC distribution solution</li> <li>Promote the competitiveness to win orders and drive down cost in order-based product segment (e.g., transformers, high voltage breakers, rotators, distribution)</li> </ul>
HCE	<ul style="list-style-type: none"> <li>Develop new models to meet the stringent technology regulations in Europe and North America</li> <li>Develop next-generation models targeting direct export regions</li> <li>Beef up reliability infrastructure through virtual design verification and reliability center</li> <li>Develop intelligent equipment and smart services/solutions leveraging Hi-MATE</li> </ul>



# Quality Management

HHI Group strives to build customer trust by delivering quality products and services. To this end, all entities obtained the ISO 9001 and incorporate the standard in their business activities. In addition, under the customer-oriented quality management policy, HHI Group manages the quality of its products and services in a strategic manner and heeds customer complaints and feedback.

## Quality Management System

Entity	Operating System
HHI Holdings	HHI Holdings has obtained the quality management system certification and adopted to all its production processes a quality management system that focuses on managing risks and ensuring continued growth. We also appoint technology advisors and apply the Advanced Product Quality Planning (APQP) approach to new product development in an effort to minimize quality failure cost when launching a new product model.
HHI	HHI has set the quality management directions for 2018 as quality failure cost minimization, preventive quality control, and customer-oriented quality management. To reduce quality failure cost and promote quality competitiveness, the company is strengthening the process around imputation determination for quality-related issues, and engaging in quality enhancement activities. Work process realignment is also in the progress with a focus on prevention of quality issues.
Hyundai Electric	Our direction for quality management in 2018 can be summarized as total quality management, strengthened risk management, and establishment of an innovative quality system. All departments and functions have developed and been implementing detailed goals and tasks in alignment with KPIs relating to quality management.
HCE	The company declared its quality direction for 2018: setting up a global quality system, preemptive effort to ensure outsourcing quality, assurance for basic quality and reliability enhancement and minimized quality failure cost. To deliver on the goals, we strive to strengthen the quality competitiveness of final production factories through factory assessment and assure the competitiveness of outsourced parts through the global sourcing certification system.
HMD	The company aims to sharpen its quality competitive edge based on its 'Leading, Smart, Dynamic' strategies for zero-defect quality. Under these strategies, we are making a wide range of efforts to deliver products and services of premium quality, including 'Vision 1234*', reinforcing communication, reducing quality failure cost, securing technologies for strategic ship models, and enforcing the statistical quality management approach.

\*Ship delivery and construction inside dock to be completed within 12 months and 34 days, respectively.

## Quality Management Organizations

Entity	Discussion Forum	Dedicated Organization
HHI Holdings	·Quality advisors' meetings	·QM Team
HHI	·Weekly report on basic quality trend ·Weekly morning meeting brief for each business division	·QM Dept. of each business division
Hyundai Electric	·Advisors' meeting (weekly) ·Quality meeting (bimonthly)	·QM Dept.
HCE	·Monthly quality meeting ·A/S expatriates meeting	·QM Dept.
HMD	·Weekly quality brief ·Special council on quality-accuracy-A/S issues	·QM Dept.

## International Certification Status (ISO 9001)



## Quality Management Performance Indicator

Entity	Unit	Quality Internal Audit	Quality Evaluation	Critical Quality Diagnosis	
			Subcontractors	Internal Dept.	Subcontractors
HHI Holdings	Cases	21	16	8	14
HHI	Cases	50	332		
HCE	Cases	10	59		
Hyundai Electric	Cases	41	350		
HMD	Cases	40	132		

## Quality Training Status

	Training Program*	Participant
Group's Five Entities	12 Programs	563 Persons

\*On-Job, Group and Cyber trainings

## Key Quality Management Programs

### Renewal of Quality Management System

HHI Group ensures activities to further enhance the quality management system are performed in a consistent manner across all entities. HHI conducts quality management maturity assessment to quantify the performance of the quality management system and compare it with that of global companies. HCE and HMD assure the reliability and effectiveness of the system through periodic internal reviews. Since the business spin-off in 2017, the HHI Holdings has also created and revised standard procedures that reflect applicable specifications requirements as well as actual work processes.

### Quality Failure Cost Management

HHI Group revamped the management system of quality failure costs so as to ensure such costs can be tracked with clear ownership and corrective actions assigned, rather than just aggregating failure costs. We have added quality failure cost to KPI to ensure effective quality management, while continuously striving to reduce the cost through a wide range of quality campaigns and inspections.

### Quality Audits

HHI Group conducts quality audits to boost the quality management level of each entity. Material quality issues observed in regular quality audits are followed up with root cause analysis with the intention to make a fundamental improvement in quality. Our efforts also include assisting business partners in raising their quality management level.

## Achievements in Quality Management of Each Entity

### HHI Holdings

#### Assuring Quality in Product Development

Knowing the importance of assuring quality in the development phase, we have appointed technology advisors and revised the APQP procedure to require durability test for proto products and production test for pilot products as prerequisites for mass production approval. This addresses issues associated with design errors or durability/degradation that used to arise after product launch, by strictly reinforcing quality assurance from the development phase.

#### Quality Assurance TF

We have formed a task force composed of experts in quality, technology, research, production and customer support to identify recurring issues(improvement themes) and target its effort to addressing them. To do so, the team analyzes quality complaints received for a specific month, during manufacturing as well as after product delivery to customers. In 2017, we selected a total of 16 themes, around which we built and performed improvement activities.

### HHI

#### Customer-oriented Quality Management

HHI is committed to elevating customer satisfaction by evaluating and improving the quality of its products and services from a customer's perspective. As part of our effort for customer-oriented quality management, we have a set of strategic guidelines. Under the guidelines, we are streamlining business processes affecting customer satisfaction and establishing an integrated quality management system. We will also redefine the roles and responsibilities of each team and standardize operational processes.

#### National QA Competition

In September 2017, the company's quality team won a Bronze Presidential Award in the National Quality Team Competition, a venue for quality teams from across the country to share their quality innovation activities and good practices. The Presidential Award was recognition of HHI's quality excellence.

### Hyundai Electric

#### Design Quality Enhancement

After introducing a design issue feedback program in 2017 where the company listens to opinions from various teams and partners to improve design quality, the company expanded the program to entire factories. The program is expected to help minimize recurrence of design defects, perform an integrated analysis of design defects thus far, and develop a set of fundamental solutions. In addition, we revamped the process to insert a QR code to drawings starting October 2017, allowing workers to access the latest drawing (e.g., revisions, confirmation status, and designer information) in real time using their smart-phone before starting production, regardless of their work site. Our efforts for design quality improvement support the establishment of a Smart Factory in the future, and are receiving favorable reviews from our customers.

#### Technological Mentoring for Partners

To increase the quality level of partners, we introduced the Supplier Management System (SMS) program in 2018. We provide targeted technical assistance to chosen partners that need to improve certain processes or address certain defects. The company started preparation for this program in late 2017 by forming an expert group on quality management to deliver effective technology mentoring service to partner companies. Also, given the nature of the

order-based industry, the company strives to cater to various needs of customers and focuses on enhancing the quality of services and products that are often provided as part of project delivery.

#### Advanced Product Quality Planning (APQP)

The company has adopted the APQP to confirm the quality of the preceding process as a way to minimize defects in the following processes and assuring quality early in production. The APQP approach ensures gate-keeping of key checkpoints and assessment areas throughout the production process, from product planning to mass production, delivering greater satisfaction to customers. We plan to first roll the new technique out to transformers, our core products, and expand to all product segments gradually over time.

#### Reliability Center Establishment

HHI Reliability Center opened in September 2017 with the aim of delivering greater customer satisfaction through ensuring quality reliability. Located in the R&D Division in Yongin, Korea, the center is equipped with 13 labs and 51 types of testing devices. Under the slogan of 'Go back to the basics and leap for technological advancement', the center will play a pivotal role in reducing product development period, ensuring quality before mass production and enhancing product durability through failure analysis after mass production.

### HCE

#### Quality Team Activities

Close cooperation with the Production Division through various channels helps reduce quality observations before product delivery. Enhancements are recognized with rewards, which motivates workers and instill them with a sense of responsibility and teamwork.

#### Implementing a global quality system

The quality assurance activities at the Head Office is cascaded to its plants across the globe to ensure standard product quality. For close coordination of quality activities, overseas branches and offices hold regular meetings and discussion forums to manage key focus areas and issues relating to quality in an integrated manner. Furthermore, a global plant assessment is carried out to identify and implement improvement items for each plant, which contributes to delivering greater customer satisfaction.

#### Ensuring quality in outsourcing

HCE is accelerating its effort to ensure quality of the outsourced components in global markets by identifying and sourcing from quality suppliers. The company places overseas outsourcing parts under rigorous verification using its global quality assurance program, and implement a standardized end-to-end process from supplier selection to development and manufacturing to make sure parts are validated prior to entering production.

#### Minimizing quality failure cost

HCE is implementing a set of measures intended to minimize quality failure cost by encouraging each division to set and achieve goals. The company also tries to prevent recurrence of quality issues and better reflect customer needs through the preliminary product quality management system. A periodic validation of partners' quality assurance program is carried out based on close cooperation with partners to maintain a high level of quality throughout the production including parts supply and OEM.



HMD

**Risk Management System for QA**

The company utilizes the risk management system to analyze its business environment and internal/external issues, and engage in activities to reduce probable risks in the future while increasing opportunities based on the analysis result. By conducting quality issue prevention activities in a more systematic manner, the Company will minimize losses and deliver sustained performance.

**QA System**

The company has renovated the QA system to require production to turn over products with perfect quality through self-directed quality management, which will dramatically reduce quality failure costs. We have also added quality assurance to the quality index and been updating the system on a regular basis to firmly establish a highly efficient QA system.

**QDC Innovation Activities**

The company sets goals in Quality, Delivery, and Cost (QDC), and implements innovation activities to improve production performance in a systematic manner. All employees of the company as well as partners participate in the activities, and good practices are shared and rewarded through the monthly presentation sessions.

2018  
Quality  
Management  
Initiatives

Entity	Initiative
HHI Holdings	<ul style="list-style-type: none"> <li>· Revamp the quality index system</li> <li>· Improve the data traceability management system</li> <li>· Introduce the preliminary product quality management system</li> </ul>
HHI	<ul style="list-style-type: none"> <li>· Minimize quality failure cost</li> <li>· Build a work environment that focuses on preventive quality activities</li> <li>· Engage in customer-oriented quality maintenance activities</li> </ul>
Hyundai Electric	<ul style="list-style-type: none"> <li>· Reinforce proactive quality activities</li> <li>· Streamline work processes through external/internal risk analysis</li> </ul>
HCE	<ul style="list-style-type: none"> <li>· Increase market share through implementing the 'quality-first' policy</li> <li>· Deploy quality improvement measures across the organization for stabilization of strategic businesses</li> <li>· Enable real-time quality monitoring with Hi-Sys (ISP)</li> </ul>
HMD	<ul style="list-style-type: none"> <li>· Aim for early delivery of ships</li> <li>· Reduce quality failure cost</li> <li>· Establish quality assurance system early on</li> <li>· Strengthen technology for product quality</li> </ul>

# Technology Empowerment

HHI Group is dedicated to hiring and nurturing talented technical professionals and researchers in order to reinforce its technological capabilities. Each entity of HHI Group nurtures technical professionals through well-thought-out technology training programs.

Operation of  
Technical Education  
Institute

Since the establishment of Technical Education Institute in 1972, we have been nurturing technical professionals through systematic training and education programs.

Operating Policy of the Technical Education Institute

Roles

Strengthening Worker's Competency with a Systematic Training Framework, and Contributing to the Advancement of the Company's Technical Competitiveness

Vision

World Top-Tier  
Technical Education  
Institute That  
Leads HHI Group's  
Technological  
Competitiveness

Objectives

- Business-oriented training on task-based skills
- Securing fundamental skills by retaining core production workforce
- Provide onsite support for technical issue resolution

Quantitative  
Indicators of  
Technical Education  
Institute

	Unit	HHI Holdings	HMD
In-House Qualification Program Passer	Person	453	0
No. of Beneficiaries of Employment Stepping Stone Program	Person	387	23
No. of Personnel on Work and Learning Dual System	Person	-	10
No. of Beneficiaries of Job-Oriented Training Program	Person	44	17
No. of Personnel who Completed Production Training Program	Person	4,522	1,195

Achievements in Technology Empowerment of Each Entity

HHI

**Expanding In-house Qualifications System**

To help production workers and technicians improve their job competence and technical competitiveness, HHI has in place the in-house qualifications system. The company covers in the qualifications scope not only its employees but also employees of other entities under the Group as well as business partners. In 2017, a total of 453 workers passed the qualifications in 13 certification types, motivating employees to continue developing their skills.

**Core Skill Transfer Program**

The company has been implementing the core skill transfer program since 2013 in a bid to maintain its technical competence by systematically securing and transferring core skills inherited from highly skilled technicians. In 2017, HHI evaluated the 51 core skills passed on through the program and certified 46 of them, and also awarded HHI Technology Master Prizes to excellent performers.

**Employment Stepping Stone Program**

Following 2016, HHI continued its technical training program in partnership with the Employment Stepping Stone Program by the Ministry of Employment and Labor, providing job-seeking youths with opportunities for training or internship and supporting employment in relevant fields afterward. In 2017, 387 young people seized the opportunity of training and employment through the program.

**HHI Technical College**

Since 2013, HHI has been operating HHI Technical College, an in-house college granting bachelor degrees accredited by the Ministry of Education. HHI provides full support so that students can find a balance between studying and working. As a result, the college graduated 47 students of the Class of 2017.

**World Skills Abu Dhabi**

All three employees of HHI who participated in the 44th World Skills Competition won medals. In the competition held in October 2017, in Abu Dhabi, UAE, the three HHI employees won a gold medal in the steel structure category and bronze medals in the pipe and CNC lathe, respectively, playing a pivotal role for Team Korea in securing the second place on the total ranking.

**In-house Skills Contest**

HHI holds the in-house skills contest every year to create a virtuous organizational culture of self-development and motivate employees to continue developing their technological competencies. In 2017, 156 participants from HHI and partner companies competed in six categories, and 64 of them won awards.

HMD

**National HRD Consortium Business**

HMD has signed an agreement to join a consortium business for national human resources development. Led by the Ministry of Employment and Labor and Human Resources Development (HRD) Service of Korea, the consortium business allowed the company to tap into its faculty, facilities and resources to train new employees as well as workers of business partners. In 2017, the company completed the training for 435 people and nurtured 15 new technicians.

**Job-oriented Training Program**

The company offers an employment-based training program for students of meister schools in order to foster and attract a skilled workforce. We help them to build technical capabilities through systematic training and inspire their sense of membership to HMD.

**Training for Production Workers**

HMD conducts training for production workers to upgrade their job-related skills and offer motivation for productivity improvement. In 2017, 17 training courses were offered and 1,195 employees completed the training.

2018 Initiatives for Technology Training Center

Entity	Initiative
HHI	<ul style="list-style-type: none"> <li>· Lay down a systemic career path for nurturing high performing production workers</li> <li>· Offer customized technical training based on the diagnosis of individuals' work competence</li> <li>· Establish a global training system and roll out technology training programs to overseas sites in a phased manner</li> </ul>
HMD	<ul style="list-style-type: none"> <li>· Establish a technical training system for production skills transfer</li> <li>· Provide partners with technical trainees through a talent-nurturing program</li> <li>· Open new training programs for new hires</li> <li>· Offer training programs outside work hours to motivate self-development</li> </ul>



# Upholding Fair and Transparent Business Practices



Compliance  
Management

---



Business  
Ethics

---



Shared  
Growth

HHI Group aims to be a transparent and reliable company. By upholding sound ethical practices and compliance, we will work to create a market environment that contributes to the growth of all our stakeholders and the sustainability of the society

# Compliance Management

HHI Group has implemented compliance guidelines in all businesses to enhance the compliance awareness and prevent legal violations. Since 2004, we have introduced the Fair Trade Compliance Program, which is responsible for maintaining the compliance management system and the planning of support activities such as diagnosis, inspection and training.

## Organization Status

Entity	Organization
HHI Holdings, HHI, Hyundai Electric, HCE, HMD	Integrated Compliance Team

## Quantitative Indicators of Compliance Management

		Unit	Performance
Compliance training	No. of training	Classes	38
	No. of participants	Person	1,157
Inspection into risks associated with transactions in subcontracting	No. of teams in inspection scope	Teams	73
No. of legal counseling related to fair trade		Classes	127
No. of legal counseling related to anti-corruption or economic sanction		Classes	67

## Compliance Management Achievements

### Compliance Training

HHI offered on-site compliance training where a lecturer visits a requesting team and delivers training on the subject chosen by the team. Given the heightened interest in the Improper Solicitation and Graft Act in our society, the company also made available on its website a video clip on the subject so that employees can watch it whenever they need or want to. In addition, we also assist other entities in identifying and managing compliance risks in a preemptive manner through providing overall support in compliance relation areas, such as compliance system establishment, employee training, legal consultation, and compliance information sharing.

### Compliance Newsletter

We regularly publish compliance newsletters on the intranet to introduce changes in relevant laws and heighten the compliance awareness of all employees. In 2017, we published 11 issues of compliance newsletters, containing the revisions of Transactions in Subcontracting and the Anti-Graft acts.

### Legal & Anti-Corruption Approval and Review

HHI Group has an anti-corruption pre-approval system and conducts legal reviews to cultivate clean and fair management culture, and to prevent legal risks. In the first half of 2017, the Group conducted the special site inspection of anti-graft risk management for HHI's Special & Naval Shipbuilding Division and reviewed 67 legal provisions related to fair trade, illegal dispatch and economic sanction, and inspected 45 cases of approval of economic benefits and stakeholder due diligence.

## Achievements in Fair Trade Compliance

### Fair Trade Training Sessions

HHI Group conducted training sessions on the Subcontracting Act for the employees in charge of suppliers' management, and Fair Trade Act for the purchasing departments. In addition, 90 employees in total took online training courses on the Fair Trade Act.

### Inspection on Fair Trade Compliance Program

During the first half of 2017, HHI Group conducted special site inspections for the purchasing organizations and recommended the improvement of purchasing process and procedures. During the second half, the Group conducted documentary inspections on 73 departments where risk management should be addressed regarding inappropriate benefits. The Group also provided 127 cases of legal advice on fair trade and dispatched workers' acts.

### Revision of Fair Trade Compliance Handbook

In the view of tightened regulations by the Fair Trade Commission under the Fair Transactions in Subcontracting Act in the second half of 2017, the company has updated the subcontracting section of its fair trade compliance handbook by reflecting the revised act and distributed it to relevant parties.

## 2018 Compliance Initiatives

	Initiative
Compliance Training Expansion	<ul style="list-style-type: none"> <li>Conduct a special training on the Subcontracting Act to departments whose business activity entails fair trade or subcontracting</li> <li>Offer a training on Fair Trade Act as part of HR Center's training program given to newly-appointed team leaders</li> </ul>
Reinforcement of Periodic On-Site Inspections	<ul style="list-style-type: none"> <li>Strengthen on-site inspection into departments whose business activity entails fair trade or subcontracting based on the result of a paper-based survey</li> <li>Conduct a paper-based survey to departments with high chances of violating anti-corruption regulations, including Improper Solicitation and Graft Act</li> </ul>
Strengthened Management of Economic Sanctions	<ul style="list-style-type: none"> <li>Develop and distribute a guidebook on economic sanctions, including those on Iran and Russia</li> <li>Continue tracking economic sanctions trends and share the information with relevant teams such as Sales Department, as well as other entities</li> </ul>
Creating a Compliance Culture and Raise Awareness	Create a compliance culture through encouraging employees to share personal experience related to compliance, cascading good practices, and offering compliance pop quiz

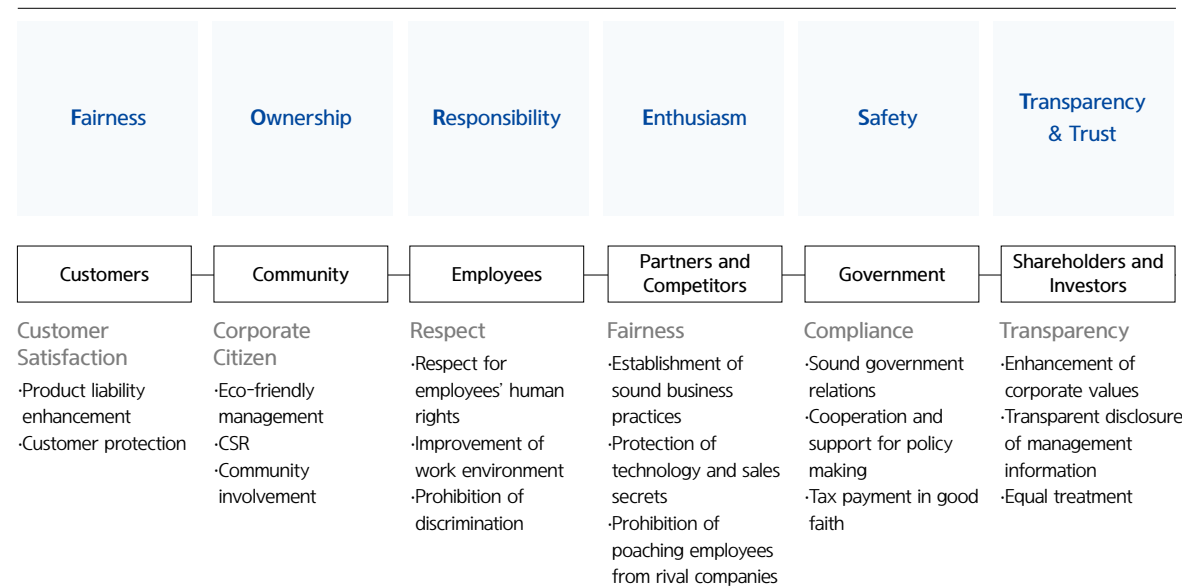


# Business Ethics

Like a 'FOREST' that contributes to the coexistence of all surrounding lives, we will foster an environment for all stakeholders' growth and development and pursue a sense of fairness, ownership, responsibility, enthusiasm, safety, transparency and trust. HHI Group will put its best effort into becoming a company that customers and partner companies want to do business with, a company that investors want to make an investment in, a company that employees want to work at, and a company that fulfills its responsibility for the nation and communities.

## Direction

### FOREST



## Operating System

Charter of Ethics	Code of Conduct	Special Code of Conduct	Business Ethics Guidelines
Declaration of HHI's management philosophies based on business ethics	Specific ethical standards in the Charter of Ethics by sectors	Standards for employees engaged in business functions, which require specific standards and stricter ethical obligation	Detailed job guidelines for the implementation of business ethics in the workplace
Code of Conduct for Business Partners	Business Ethics Action Program	Training and Promotion	
Ethical standards for shared growth with partners through transparency and fairness in business	Specific institution and process to develop fair and transparent corporate culture	Efforts for active employee participation in ethics management and diffusion of ethical corporate culture	

## Charter of Ethics

Since the adaptation of ethics regulations for procurement position in 1994, HHI Group has been active in practicing and expanding its ethics program, online ethics violation reporting platform and training courses. In October 2005, HHI Group also declared its 'Charter of Ethics' which proclaims its ethical management philosophy.

**We pursue to be a respected and trusted company that positively contributes to its customers, shareholders and society with the Hyundai Spirit.**

1. We shall be an ethical company that abides by all domestic and international laws and regulations through fair and transparent management practices.
2. We shall achieve customer satisfaction by meeting their needs and expectations.
3. We shall pursue to maximize shareholder's value through fair and efficient management.
4. We shall work to fulfill our social responsibilities and duties as a member of our community, and contribute to the development of our nation and society.
5. We shall work to create a transparent and clean corporate culture through fair competition and trading practices.
6. We shall pursue to be a company with the highest quality human resources that offer equal opportunities to our employees in a safe and comfortable working environment.

## Materializing Business Ethics

HHI Group gives shapes to 'Charter of Ethics' by each job, and enacts as well as revises 'Code of Conduct', the benchmark for business and 'Business Ethics Guidelines'. In addition, we enhance our effectiveness by regularly making revisions that reflect social demands on ethical management and amending ethics regulations in tandem with the statutory laws and regulations including the Prevention of Corruption Act.

Employees	Business Partners		
Code of Conduct	Special Code of Conduct	Business Ethics Guidelines	Code of Conduct for Business Partners
·Enforced on Oct. 4, 2005 ·First revised on July 25, 2014 ·Criterion for action and valuation	·Enforced on May 2, 2007 ·Additional duties of employees engaged in six jobs requiring higher integrity and morality	·Enforced on Jan. 1, 2002 ·Sixth revised on July 25, 2014 ·Business process standards for understanding and ·practicing business ethics policies	·Enforced on Oct. 4, 2005 ·Second revised on July 1, 2016 ·Duties and obligations of trading partners of HHI Group

Organization Status

Entity	Organization
HHI Holdings, HHI, Hyundai Electric, HCE, HMD	Integrated Business Ethics Team

Quantitative Indicators of Ethics Management

		Unit	Performance
Participants of the Business	Employees	Person	21,000
Ethics Training Course	Employees of Partners	No. of firms	159
Business Ethics Field Session	Employees	Person	620
	Employees of Partners	No. of firms	59

Ethics Management Achievements

**Ethics Management System Operation Following Company Breakup**  
 HHI's Ethics Management Team coordinates activities relating to ethics management of the Group by creating an operation plan for all entities following the company split-up. The team not only engages in regular ethics management business activities, but also manages the relevant policies, the official channel for filing a report, and practical programs, and conducts training and promotional awareness campaigns. The team also offers ethics management education to employees of other entities and closely collaborates with a designated team in each entity to put ethics management programs into practice.

**Commitment to Business Ethics Management**  
 HHI Group's employees and its partners are required to annually submit a pledge of commitment to business ethics, which is a commitment to understanding the relevant regulations and abiding by corporate policies and guidelines. The pledge requires compliance with ethics regulations and the anti-corruption law to avoid unfair trades, corruption, illegal solicitation and graft as prohibited by relevant regulations.

**Conflicts of Interest Reporting**  
 When a possible conflict of interest is identified, the employee in question is obligated to report the issue in advance to prevent any unfair practices. The process is advised to executives and employees engaged in the six key positions in procurement, personnel, sales, finance/accounting, design and IT, as well as employees of partners on an annual basis.

**Ethical Violation Reporting and Whistle Blower Protection**  
 HHI Group runs an ethical violation reporting and reward system to eradicate unethical behaviors and promote an ethical corporate culture. We aim to keep the whistleblowers' identity strictly confidential and protect them from any disadvantages. In 2017, we informed staff of the types of information that should be provided with specific examples, so as to ensure a certain level of granularity of the reports to be filed through the ethics management website. We opened a channel through which we let the result of corrective actions notified to the whistle blower.

**Ethics Management Self-Evaluation**  
 HHI Group's employees find improvements and enhance the understanding of business ethics through self-monitoring and evaluation.

**On-Site Hearings of Business Ethics**  
 HHI conducts field sessions to hear opinions from employees and partner companies to diagnose and improve the level of ethics compliance. HHI also ensures whether those opinions are reflected in the work process. We also visited the major partners to introduce our ethical management system and heard their opinions. HHI Group conducted field sessions at its affiliates' head office and overseas construction sites, and took improvement measures.

**Training and Promotion of Business Ethics**  
 HHI Group runs group training courses and online courses on business ethics. To enhance employees' understanding and motivation, the materials are presented in viewer-friendly formats such as animated movies and cartoons. Each business site delivers case-based ethical training for the newly hired, the newly promoted and overseas representatives. Furthermore, HHI held HHI Council, a discussion forum for HHI contractors, to introduce HHI's ethical management system, and visited key partners to give on-site ethical management training.

**Clean Notice System**  
 When employees receive gifts unavoidably from stakeholders, this system helps them return the gift to its source or donate to the charities only with a simple process.

**Clean National Holiday Campaign**  
 Prior to major national holidays such as the Lunar New Year and Chuseok, we send off letters to our partners not to provide any gift to our employees. We advise our partners to report any bribery demands or attempts to the Business Ethics Team.

2018 Ethical Management Initiatives

	Initiative
Provide training to a wider audience	·Special and on-the-job trainings for assets managers
Enhance promotions on ethical management	·Accelerate activities through newly published news letters ·Contribute to promotion by renewing HHI Group's ethical website
Enhance submission requirement for ethical pledge & interest disclosure	·Expand the scope to technical manager level in the production sector
Support ethical programs for partners	
Identify ethical risks and take preventive actions	



# Shared Growth

HHI Group supports the development and growth of our business partners. HHI Group will build a healthy corporate ecosystem where everyone can grow together by implementing fair trade practices and support the partners' competency.

## Policy and Operating System

Core Value	Just, Fair and Legitimate Performance		
<b>Core Policy</b>	<b>Continuous System Improvements</b> ·Protect partners' market ·Encourage businesses of small and mid-sized companies ·Build up support system	<b>Establishing Fair Trade Practices</b> ·Introduce and comply with the four key guidelines of the Fair Trade Commission ·Establish reasonable trade practices ·Improve communication with subcontractors	<b>Enhancing Competitiveness of Partners</b> ·Support partner's sales ·Training, employment, technology and finances ·Adjust prices in consideration of business circumstances
<b>Supporting Organizations</b>	<b>Group Shared Development Committee</b> ·Company-wide coherent policy, activity planning and consultation for shared growth	<b>Shared Growth Diffusion Council</b> ·Develop policies for mutual growth and cooperation with primary and secondary subcontractors	<b>Shared Growth Organizations</b> ·Implement shared growth policy and activities, and provide performance management and feedbacks

## Quantitative Indicators of Shared Growth

	Unit	HHI Holdings	HHI	Hyundai Electric	HCE	HMD
Size of the Shared Growth Fund	bn. KRW	-*	353.6	-*	-*	69.0
Early settlement amount	bn. KRW	0.02	196.5	71.5	110.5	13.0
No. of participants from partners	Person	←-----			1,408	468

\*HHI Holdings, Hyundai Electric and HCE are newly-established and will form a Shared Growth Fund going forward

## Shared Growth Activities and Achievements

### Financial Support for Partners

The listed companies under HHI Group made early payments of KRW 391.5 billion to their business partners prior to the Lunar New Year and Chuseok holidays in 2017. Each entity also deposits a certain amount in financial institutions to create a Shared Growth Fund for our partners' loan interest payments. For newly-created entities, work is in progress to create their own shared growth fund. Since 2011, we have set a system to fully pay in cash to the partners for material costs in an effort to improve their liquidity. Payments are made within ten days of bill issuance and earlier than scheduled in the runup to the national holidays and summer vacation season to help our partners efficiently manage their funds.

### Vibrant Communication with Partners

Each entity of HHI Group holds dialogues with their partners to take heed and develop solutions to grievances and challenges partners are faced with. HHI, in particular, has implemented a system that monitors cash payments made between primary and secondary subcontractors so

as to prevent any potential issues arising from business dealings and improve payment conditions for secondary partners. HHI Holdings and HCE, on their part, have contributed to enhancing partners' productivity by leasing controllers and supplying jigs and fixtures.

### Support for Training and Human Resources

HHI Group provides the partners with skilled workforce for specific works and trainings for their employees. HHI offers 800 online courses, including work, computing and languages, and 60 courses to secondary and tertiary partners at the Shared Growth Training Center. In addition, HHI supports its partners' quality management by assigning product quality inspection experts.

### Support for Technical Development and Sales Expansion

HHI Group provides technical support to the partners in various ways by transferring new technology and unused patents or partially sharing licenses of technology. In addition, the Group develops new technologies in tandem with the partners and help improve their technical competency by applying for a patent. The Group also assists the partners in increasing their sales by jointly venturing into international markets and promoting partners' technological competitiveness to potential customers in domestic and international industrial trade shows.

### Global Hyundai Integrated Procurement System (G-Hipro)

Via the electronic bidding system G-Hipro, HHI Group transparently discloses our procurement in quotes, technical review, bidding and internal review, and enhance the efficiency of the contract process such as contract, delivery, transaction receipt and payment.

### Recognized as 'Excellent Company' in Shared Growth

In recognition of ceaseless shared growth activities and efforts, HHI and HMD were ranked 'Excellent' by the Korea Commission for Corporate Partnership (KCCP) in Shared Growth Index Evaluation announced on June 30, 2017.

## 2018 Shared Growth Initiatives

Entity	Initiative
HHI Holdings	·Provide training and technical support for after-sales service providers and sales agencies
HHI	·Help increase sales and provide financial support for partners ·Provide technical, training and resource support ·Operate Global Hyundai Integrated Procurement System(G-Hipro)
Hyundai Electric	·Provide technical training support ·Expand opportunity to participate in product development to improve their technical competency ·Execute quality training and audits regularly to improve quality levels
HCE	·Operate a dedicated shared growth organization ·Establish a road-map for shared growth ·Share issues and new developments relating to the subcontracting laws ·Establish ethics code for partners and provide training
HMD	·Establish a process through which partners can request sharing of technical documents ·Encourage partners to share ideas and suggestions for improvement

# Pursuing Safe and Environmentally Friendly Business Practices



Safety  
Management

---



Health  
Management

---



Environmental  
Management

HHI Group implements measures to reduce the risk of accidents at worksites and to enhance the health and welfare of our employees. We also strive to minimize any environmental impact arising from our business activities.



# Safety Management

Guided by the management policy that puts safety first, HHI Group operates its workplaces in compliance with global safety standards such as Occupational Health and Safety Assessment Series (OSHAS 18001). Not only have we encouraged all staff to observe safety regulations as a way to beef up work site safety, but we have worked to promote the safety culture through providing safety prevention training.

## Safety Management System

HHI Group developed and operated Hyundai Integrated Health, Safety and Environment System (HiSEs). This computerized system integrates all tasks related to safety, health and environment issues across the Group. HiSEs allows employees to easily access training materials, current status of risky tasks and accident reports and search for information on HSE-related standards and regulations via web and mobile platforms.

## Autonomous Safety Management System

HHI Group operates a dedicated organization that serves as the control tower for safety management of respective entities and directly reports to the CEO. Industrial health and safety managers are also designated to driving safety activities in each business division, ensuring practical safety measures in place on site and reinforcing the responsibilities for autonomous safety management. In addition, the Occupational Safety and Health Committee (OSHC) consisting of the management and the labor union periodically convenes to discuss overall safety issues and guarantee attendance of labor union representatives in work environment assessment and safety accident investigations.

## Safety Management Organization

Entity	Discussion Forum	Dedicated Organization
HHI Holdings	·OSHC consisting of 5 members from the management and the labor union respectively to discuss worksite safety	·Management Support Team
HHI	·OSHC consisting of 10 members from the management and the labor union respectively to convene and discuss safety	·Safety Management Office: A company-wide safety management control tower where the CEO is appointed as the function head ·Dedicated safety management organizations for each business division ·Designated safety champions for each production team
Hyundai Electric	·OSHC consisting of 6 members from the management and the labor union respectively, including honorary safety & health inspectors to convene and discuss safety	·Safety & Environment Team: a company-wide safety, health, and environment team directly reporting to the CEO ·Designated safety champions for each production team and safety manager for each partner
HCE	·OSHC consisting of 5 members from the management and the labor union respectively to discuss worksite safety	·Safety & Environment Team: safety management control tower for domestic and overseas offices ·Designated safety champions for each production team and safety manager for each partner
HMD	·OSHC consisting of 8 members from the management and the labor union respectively to convene and discuss safety on a quarterly basis	·A dedicated safety organization directly reporting to the CEO

## Safety Performance Indicator

	Unit	HHI Holdings	HHI	Hyundai Electric	HCE	HMD
Accident Rate	%	0	0.33*	0.34	0.45	0.30
Immediate Rewards	Cases	N/A	71,489	1,683	890	316
Safety Academy Participants	Person	N/A	857	35	35	N/A

\*As for work-related accidents of the corporation after merger, the spun-off firms such as Hyundai Electric and HCE were not counted.

## Safety Management Activities

### Enhancing On-Site Inspections

HHI Group frequently conducts on-site safety inspections with all levels of management, from the CEO to the first-level supervisor, and addresses potential safety risks identified from such inspections for further improvement. At HHI, in particular, the CEO and the head of the labor union walked around the work site together in 2017 to encourage safe work practices and monitor potential risk factors on site. In parallel, efforts are being made to eliminate risk factors in advance and ensure safe and reliable operation of equipment through periodic safety checks on various hazardous equipment and devices, safety diagnosis of obsolete equipment, and pre-use inspections.

### On-the-Spot Rewards for Best Safety Practices

Workers with excellent safety performance are rewarded on the spot at HHI Group. By motivating employees to continue on with voluntary safety activities, HHI is aiming to build a culture of encouragement and inspire the safety awareness among employees.

### Safety Golden Rules and Safety Academy

HHI Group enacted Safety Golden Rules that everyone entering the Group's worksites should abide by, in order to nurture a safety culture that observe the fundamentals and principles. Safety Golden Rules feature safety awareness, strict disciplines and the list of on-site risk management requirements. As a handbook of HHI's core value of safety, zero-tolerance principle will be applied in case of violation. Sanctions are imposed on workers violating the rules. For example, any violators should complete two-day programs in the Safety Academy to prevent recurrence.

\*Safety Golden Rules: No smartphone and earphone (on move/work), No smoking, No faster than 30km/h (forklift: 8km/h), Fasten seatbelt when working in high places, No entrance under hoisting unit, No arbitrary removal of safety equipment on machinery, While in electricity work, observance of 'Lock Out Tag Out' rules

Safety Management Achievements of Each Entity

HHI Holdings

Enhancing Safety Training

HHI Group has further diversified its in-house and external safety training into more targeted programs for new hires, specific jobs and positions, and supervisors, as well as periodic training for all employees. In addition, the company fully cooperates joint safety training and management with the labor union. We organize a special training session led by a professional lecturer from a relevant safety organization on a yearly basis as well.

HHI

Advisory Committee for Safety Innovation

HHI Group formed an advisory committee for safety innovation composed of external experts including professors and industry specialists from leading companies and organizations in safety management. HHI was advised of main safety issues in the Committee's quarterly meetings. HHI will continue to renew the company's safety awareness, receive assessment and suggestions for innovation plans and reflect them on HHI's safety policy.

Publication of Safety Manual and Guideline

The company has published and distributed the reader-friendly safety manual and safety guideline that are based on the company-wide Safety & Environmental Standards and Work Instructions. Covering a total of 227 cases broken down to areas of general, shipbuilding/maritime, and non-maritime, the newly-developed safety guideline is utilized for pre-job safety training and as the criteria for job site safety. Also, the company made the guideline available on mobile devices, increasing user convenience and accessibility.

Applying Safety Leading Indicators (SLIs)

Safety Leading Indicators (SLIs) have been developed and applied to forecast the risk level of each production team and further promote the autonomous safety management system across the board. The SLIs measure areas indicative of an organization's safety level such as safety rule violation, accidents, and safety training, and set the collected data into safety scores and four grades of safety, caution, warning, and danger. Through measuring the SLIs and taking improvement actions set out for each grade, the company strives to keep the risk level low. Going forward, we are planning to establish a preemptive safety management system by continuing to add more indicators and enhancing the reliability of our safety risk forecast.

Establishing Win-Win Safety Culture

HHI helps business partners build expertise in safety management and strengthen their own autonomous safety management capabilities. HHI not only ensures all business partners with 50 full-time employees or above appoint a safety manager, but also operates an external safety consulting agency dedicated for partners. The company incentivizes partners during the grace period for the autonomous safety system implementation. And safety experts from the consulting agency provide walkthroughs on safety risk assessment, safety management consulting and various technical supports for autonomous safety management system implementation.

Hyundai Electric

Customized Safety Training

Hyundai Electric offers customized safety trainings by position, job duty and equipment and also educates specialized instructors for relevant trainings. Trainees are evaluated on their understanding of the material to boost the effectiveness of trainings.

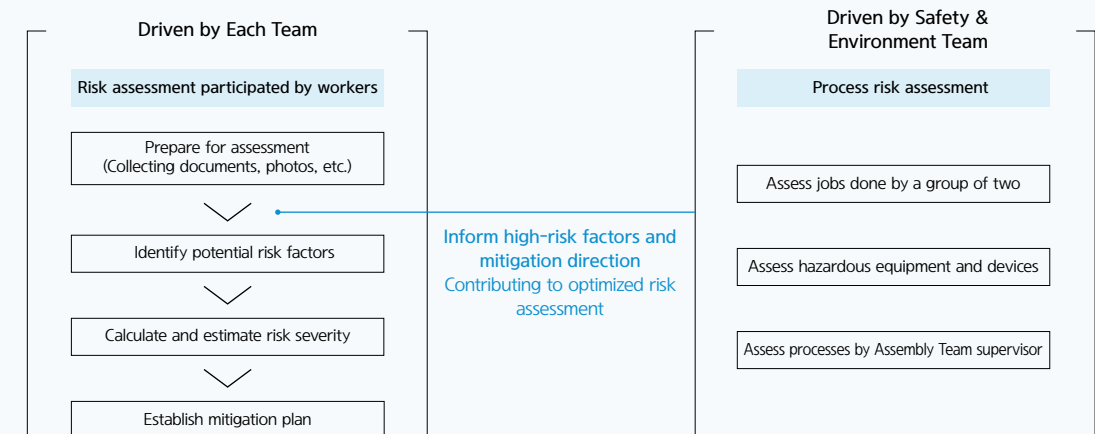
Safety Audits for Teams and Partners

Internal audits are carried out with the aim of increasing the safety and health management level of production and supporting functions of the company as well as its partners. For the areas for improvements observed from audits, we implement actions, track the result, and provide necessary assistance including advice and guidance, for win-win worksite safety and health management.

HCE

All-staff Risk Assessment

The company engages workers in risk assessment, thereby effectively identifying and mitigating risk factors through the eyes of workers and increasing the effectiveness of its trainings. The Safety and Environment Team optimizes risk assessment by communicating to all teams a standardized direction for risk identification and mitigation and the company's commitment to zero accident. In 2018, the company intends to further enhance risk assessment by replacing the existing video-guided general safety training with more targeted risk training with a focus on the characteristics of the production line. To do so, we will continue the risk assessment know-how transfer across different job positions.



Safety Campaign

We hung in the plant a hand printing zero-accident banner participated by all staff and held an event that reaffirms our commitment to creating a zero-accident workplace. To improve safety awareness across the organization, the company puts up the accident prevention flag on the main street in front of its premises every month and whenever relevant.



HMD

**Establishing MIPO Safety System (MIPOSS)**

Tapping on the big data for all yards, the company has implemented MIPOSS, uploading the checklist to be used for safety & health checks for each cell. The system also allows the designated Line Safety Controller(LSC) of each cell to provide real-time feedback from mobile devices or computers for any unsafe practices or situations they identify on site. In 2018, we plan to further enhance the system by streamlining the big data feed, LSC mobilization, and the feedback system.

**Human Error Reduction through Behavioral Changes**

The company shifted the focus of safety checks from unsafe conditions to unsafe behaviors as a way to induce behavioral changes and reduce human errors. We are planning VR safety training sessions to make it more meaningful, which will lead to a much more alert working environment. Furthermore, as part of the safety campaign for 2018, we will collect pledges from all production employees, inspiring them to fundamentally change their safety mindset and behavior.

**2018 Safety Management Initiatives**

Entity	Initiative
HHI Holdings	<ul style="list-style-type: none"> <li>·Target: zero-accident workplace (management priority for 2018)</li> <li>·Strengthen accident prevention safety trainings</li> </ul>
HHI	<ul style="list-style-type: none"> <li>·Target: zero fatalities with accident rate of 0.193 (40% less than previous year)</li> <li>·Continue practicing safety first management policy</li> <li>·Firmly establish the safety management accountability system</li> <li>·Preemptive safety management using SLIs in real time</li> <li>·Invest for, and support, partners to establish the autonomous safety management system</li> <li>·Expand safety infrastructure including the integrated safety training center</li> </ul>
Hyundai Electric	<ul style="list-style-type: none"> <li>·Target: 35% YoY reduction of worksite accidents and zero fatalities</li> <li>·Onsite safety inspections taking into account high-risk jobs and seasonal/regional risk factors</li> <li>·Fatality prevention activities</li> <li>·Communication promotion through periodic safety dialogue</li> <li>·Further strengthening the autonomous safety management system by bolstering supervisors' role</li> </ul>
HCE	<ul style="list-style-type: none"> <li>·Target: zero fatalities with accident rate of 0.157%</li> <li>·Enhance safety activities based on risk assessment results</li> </ul>
HMD	<ul style="list-style-type: none"> <li>·Target: zero fatalities with accident rate below 0.17%</li> <li>·Reduce human error through inducing behavioral change</li> <li>·Introduce a safety culture that values the basics and principles</li> </ul>

**Disaster and Emergency Responses**

HHI Group has adopted a company-wide disaster prevention manual to protect employees and assets from natural disasters. Divisional emergency response teams that are organized under the Corporate Disaster Prevention and Response Head Office are mobilized in the event of an incident to take appropriate actions according to the level of the crisis. Preventive checks and scenario-based drills are planned and performed to build the capability to respond to emergencies that could occur at and around our business sites in an efficient manner.

**Integrated Safety Control Center**

HHI Group operates an integrated control center to enable real-time communication and quick responses to disaster or emergency across all its entities. The company-wide integrated control center allows for 24/7 monitoring of internal and external threats and risks and protects the company's business sites and surrounding areas. HHI, in particular, utilizes state-of-the-art ICT technology, such as motion detecting sensors and intelligent video analysis solutions to prevent falls into the sea near a quay and has a special rescue on standby 24 hours a day for prompt response and preemptive safety management.

**Emergency Response Drills Performance**

	Unit	HHI Holdings	Hyundai Electric	HCE	HMD
Emergency Response Drills	Cases	63	3	4	6

**Disaster and Emergency Response of Each Entity**

HHI

**Disaster Prevention System**

HHI set up and operates a company-wide detailed emergency response manual to protect employees and assets from natural disasters. Divisional emergency response teams are organized under the Corporate Disaster Head Office. In case of an incident, the teams take appropriate actions according to the level of the crisis (forecast, warning, alert and clearance). In case of fires in our worksites or disasters on the sea, HHI's special rescue team composed of life saving and emergency response experts are deployed.

HMD

**In-house Emergency Medical Technicians (EMTs)**

The company has been working to train and develop in-house EMTs and 14 staff have obtained the license thus far. Going forward, the company will continue to train and provide EMTs in an effort to save the golden time in the pre-hospital medical care in the event of a disaster.

# Health Management

HHI provides regular medical checkups and financial support, and offers in-house medical service such as Health Promotion Center, Traditional Oriental Medicine Clinic and Psychotherapy Center. In addition, we provide special medical examinations for employees with new job duties.

## Key Support Programs and Facilities

Program	Program Summary
Disease Prevention Program	HHI Group operates programs to prevent hearing loss and musculoskeletal diseases that may occur to workers exposed to noisy work environment and those treating hazardous chemicals, respectively. Health promotion programs are also available for employees who have been diagnosed with certain disease or health conditions.
Health Care & Financial Support	HHI Group provides regular and special medical checkups for employees who are routinely exposed to dust, noise, harmful rays, metals or organic compounds. The Group also offers comprehensive medical testing to long-serving employees and runs customized disease prevention programs for each job type. HHI Group provides financial support for cardiac surgeries and treatment of cancers for employees and their families. Employees with occupational illnesses are offered health care costs and sick leaves.
Health Promotion Center	HHI Group runs health promotion centers at worksites to improve employee health and help the injured recover quickly. HHI Group also provides immediate treatment and high-quality medical care with consultation rooms, health promotion center, physical therapy rooms, rehabilitation rooms and local medical offices.
Oriental Medical Clinic	HHI Group runs an Oriental Medical Clinic with 20 beds to treat musculoskeletal pains such as backache and shoulder discomfort with acupuncture, moxibustion and cupping.
'Mind Garden' Center	HHI Group runs a counseling center that offers specialized services including psychological examination, group consultation and group psychological training to help promote the employee's psychological well-being.
Smoking Cessation Clinic	HHI Group runs a smoking cessation clinic to encourage employees to quit smoking, providing expert counseling. HHI started providing a quit smoking program in 2007 and has provided active stop-smoking assistance, including financial incentives, expert counseling, and supplements. In 2018, the Group launches a quit smoking fund to further incentivize and assist workers willing to quit.

## Health Management Performance

Category	Unit	HHI Holdings	HHI	Hyundai Electric	HCE	HMD
Visitors of Oriental Medical Center	Person				1,482	1,087
Participants in 'Quit Smoking Program'	Person	0	207	0	0	106

## Health Management Activities of Each Entity

Entity	Activity
HHI Holdings	· Operating an in-house health center · Health Promotion Programs
HHI	· Obesity Prevention Program
Hyundai Electric	· Body Change Program
HCE	· Health Promotion Programs
HMD	· Psychology Counseling Program · Health Promotion Fair

## 2018 Health Management Initiatives

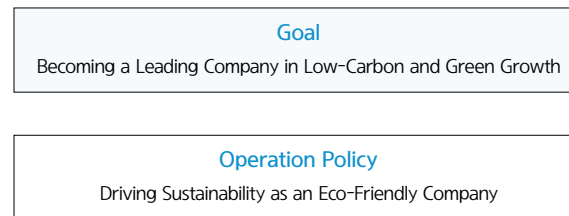
Entity	Initiative
HHI Holdings	· Goal: Promote a healthier lifestyle for employees · Automate dangerous work processes · Provide support to in-house health promotion clubs
HHI	· Goal: Create a healthy workplace by highlighting prevention · Focus more on prevention by offering health promotion programs and targeted counseling · Reinforce HHI Ergonomics Management Program (HEMP)
Hyundai Electric	· Goal: Guarantee workers' right to health · Analyze the work environment to address unhealthy factors and prevent work-related conditions
HCE	· Goal: Build a pleasant and healthy workplace · Improve the work environment for each process · Identify harmful substances and replace them with alternatives · Reinforce tracking of workers subject to limited work hours or at higher risk of a certain condition
HMD	· Goal: Promote workers' health by creating a healthy and pleasant work environment · Improve ventilation systems · Remove factors posing risks to musculoskeletal disorders



# Environmental Management

HHI Group practices Environmental Management to set goals of 'Becoming a Leader in Low-Carbon and Green Growth' in compliance with international standards. In 2017, HHI Group strives to reduce the impact of its business on the environment by initiating the Group's vision and objectives of environmental management.

## Environmental Management Policy



## Main Initiatives

<p><b>Regulatory Compliance</b></p> <p><b>Chemical Substance Regulations</b></p> <ul style="list-style-type: none"> <li>·Establish response measures for chemical regulations</li> <li>·Enhance operational capabilities</li> <li>·Strengthen chemical treatment facilities management</li> </ul> <p><b>GHG Regulations</b></p> <ul style="list-style-type: none"> <li>·Establish response system for GHG regulations</li> <li>·Enhance operational capability</li> <li>·Procure means of GHG reduction</li> </ul>	<p><b>Institutional Framework for Green Management</b></p> <p><b>EMS</b></p> <ul style="list-style-type: none"> <li>·Conduct educational programs for EMS* managers</li> <li>·Create and maintain EMS standards</li> </ul> <p><b>Environmental Information Management and Reporting</b></p> <ul style="list-style-type: none"> <li>·Build and manage environmental information system</li> <li>·Support the publishing of integrated reports</li> </ul> <p>*Environmental Management System</p>	<p><b>Pollution Prevention Activities</b></p> <p><b>Establish Inspection System</b></p> <ul style="list-style-type: none"> <li>·Rearrange emergency contact network</li> <li>·Conduct quarterly detailed inspection for entire production process</li> </ul> <p><b>Pollution Prevention Training</b></p> <ul style="list-style-type: none"> <li>·Organize group training sessions for EMS operators and managers and sessions on marine pollution prevention</li> </ul>	<p><b>Environment Protection Activities</b></p> <p><b>Clean-Up Activities in Local Community</b></p> <ul style="list-style-type: none"> <li>·Regularly participate in local community's clean-up activities</li> <li>·Support local environmental preservation events</li> </ul> <p><b>Voluntary Agreement</b></p> <ul style="list-style-type: none"> <li>·Voluntarily comply with the green purchasing system</li> <li>·Promote the green purchasing system</li> </ul>
--	---	---	---

## International Accreditation for Environment Management (ISO 14001)



## Environment Management Performance

	Unit	HHI Holdings	HHI	Hyundai Electric	HCE	HMD
Direct Energy	TJ	←.....			3,581	488
Indirect Energy	TJ	←.....			8,730	1,717
Total	TJ	←.....			12,311	2,205

HHI is subject to GHG emissions control and submits to the government its annual GHG emissions and energy consumption with a third-party assurance. Please note that the report for 2017 includes the performance of HHI before the split-up, as the transfer of relevant rights and obligations following the split-up was not completed at the time of the report preparation.

## Energy Consumption Reduction Activities by Entities

### HHI Holdings

The motors used in the Daego business site require three times more electricity than the rated current and have low energy efficiency. HHI Holdings is exploring installing high-efficiency inverters for conveyor motors, hot/cold water pump motor, HVAC fan motors to reduce energy consumption by 40 percent, achieve higher efficiency, and lower noise.

### HHI

The company has established the Factory Energy Management System (FEMS), an ICT-intensive energy optimization system that integrates all equipment and systems. In addition, the company has practiced energy saving through replacing obsolete production equipment with high-efficiency models and promoting team-level saving campaigns.

### Hyundai Electric

The company has invested in obsolescent equipment replacement for higher energy efficiency and encouraged teams to set their own goals to reduce energy consumption. We have been replacing light bulbs with LED and save electricity outside of business hours.

### HCE

In 2017, the company made facility investment worth about KRW 500 million, installing a standby power control system and low-power digital welding machine and replacing lighting with high-efficiency LED lamps. Workers also perform energy saving behaviors voluntarily in their day-to-day work.

### HMD

The company reported a significant cut in electricity consumption in 2016 through successfully installing the zonal/ remote/combined air compressor auto control system. The system is designed to reduce energy used to produce compressed air, which accounts for over 40 percent of the electricity consumption at a shipbuilding yard. The company does its best to implement other measures of energy conservation, including installation of a system for temperature/humidity monitoring inside a painting factory and painting equipment remote control and converting to LED lights.

GHG Emission Performance

	Unit	HHI Holdings	HHI	Hyundai Electric	HCE	HMD
Direct GHG	tCO <sub>2</sub> e	<-----			258,632	35,205
Indirect GHG	tCO <sub>2</sub> e	<-----			424,008	83,613
Total	tCO <sub>2</sub> e	<-----			682,640	118,813
	tCO <sub>2</sub> e/Sales	N/A	0.049	0.021	0.011	0.049

As a company whose GHG emissions are regulated, HHI is audited by a third party and submits a total amount of GHG emission and energy usage to the government every year. In 2017, as spin-off affiliates' legal obligation and rights are not transferred to every entity, the scope of these indicators has been calculated based on HHI's performance before the spin-off.

Sales(m. KRW): HHI Holdings(465,241), HHI(10,105,839), Hyundai Electric(1,449,608), HCE(1,829,972)

GHG Emissions Reduction Efforts of Each Entity

HHI Holdings & HHI

Actions have been taken on various fronts to reduce GHG emissions. We use LNG instead of bunker C oil or kerosene for furnaces and boilers. And the metal halide lights (250kW, 400kW) and other lights in the factory are being replaced with energy-efficient, long life LED bulbs to reduce both GHG emissions and maintenance cost and create an environmentally friendly worksite. HHI continues its Green Factory movement where waste incineration heat is used to generate renewable energy, thereby contributing to GHG emissions reduction. We intend to expand the Green Factory movement to all entities of HHI Group.

Hyundai Electric

Since the spin-off in April 2017, the company is striving to establish a reliable GHG inventory. Tapping into the data collected, we faithfully engage in various GHG emissions reduction initiatives, preparing for the implementation of the GHG & Energy Target Management System by the Korean government.

HCE

The management system is utilized across HHI Group enabling online GHG emissions monitoring by facilities. The company also makes diverse efforts for energy conservation, such as optimizing ventilation fan operation, controlling standby power, and turning off lights when not in use.

HMD

The company had already started making thorough preparations even before the implementation of the GHG & Energy Target Management System, successfully establishing the GHG inventory in September 2010 and publishing its own guidance for reporting of GHG emissions in September 2009. As the GHG & Energy Target Management System was rolled out in 2012, we participated in the pilot emissions trading business for the industry development sector and received rewards for good performance. Since 2015, we have been participating in the emissions trading scheme and carrying out activities to mitigate GHG emissions.

Eco-Friendly Technology Development

Aware of the serious threats posed by climate change, HHI Group is stepping up R&D in environmentally friendly technologies and facilities.

R&D in Eco-Friendly Technologies of Each Entity

HHI

HHI is the world's only engine manufacturer that is capable of producing all types of Nitrogen Oxide (NOx) reduction systems, also known as Selective Catalytic Reduction (SCR) systems, for all medium- and large-sized ships and has won orders for a total of 500 ships thus far. The company is leading the environmentally friendly shipbuilding industry also with new LNG carriers that replace conventional fuel with the cleaner fuel, offering the ability to reduce sulfur oxide and nitrogen oxide emissions significantly.

Hyundai Electric

The company has developed an original method of replacing SF<sub>6</sub> that has high Global Warming Potential (GWP) with NOVEC gas. We expect a significant reduction in GHG emissions when new products applied with this method hit the market. Hyundai Electric is focusing its capabilities on expanding eco-friendly business in various areas such as adopting a more eco-friendly vegetable transformer insulation oil and stepping up R&D commitment to the Energy Storage System (ESS).

HCE

The company succeeded in developing an exhaust-free, eco-friendly excavator in 2016. Building on to the successful development of the 21-ton excavator powered by rechargeable batteries, we are focusing on highly promising mini-sized excavators of below 5 tons so as to preempt the eco-friendly construction equipment market.

Green Factory

HHI is implementing the Green Factory movement where waste incineration heat is used to generate renewable energy, thereby contributing to GHG emissions reduction. The company intends to expand the Green Factory movement to all entities of HHI Group.

Green Factory Status

	Worksites	Operating System
Wind Power	Ulsan Office	1.65MW Wind Turbine
Waste Energy	Incineration Plant	150-Ton Incineration Plant

GHG Emissions reduced through Energy Saving Activities: 49,904 ton

Renewable Energy Generation

	Unit	HHI
Steam	ton	78,756
Power	MWh	2,281



**Air Pollutant Emission Compounds**

	Unit	HHI Holdings	HHI	Hyundai Electric	HCE	HMD
Dust	ton	3.4	98.1	14	15.8	8.1
NOx	ton	3.7	22.6	0.1	N/A	N/A
SOx	ton	0.01	N/A	N/A	N/A	N/A

**Air Pollutant Control of Each Entity**

**HHI Holdings**

HHI Holdings has installed air pollution prevention facilities at each of the major air pollutant emission sources, and been using such facilities after reporting their operations to the Free Economic Zone Authority. At the Daegu Plant, which is categorized into the Type 5 Worksite group, we self-assess the air pollution levels every six months to ensure the levels do not exceed the allowable concentrations. Facility operating hours (h/day) are also captured in the relevant log to make the emissions data traceable.

**HHI**

The major air pollutants from HHI worksites are dust and volatile organic compounds (VOCs) emitted during manufacturing(pre-treatment) and painting processes. HHI practices multifaceted efforts in reducing air pollution such as setting internal environmental standards that are 50% stricter than the legal requirement and installing prevention facilities. Signing the second Shipbuilding Industry VOCs Reductions Agreement (2007~2016) with the Ministry of Environment and local government, HHI has cut VOCs emissions through voluntary action in order to create pleasant environments for the local community. Starting 2018, the company plans to accelerate its effort for air pollutant control by entering into a voluntary agreement for fine dust reduction.

**Hyundai Electric**

Recently-built 14 ships are installed with additional pollution prevention facilities designed for minimization of air pollutant emissions and stable equipment operations. With the measure, the company succeeded in reducing composite odor concentration below the legal threshold of 20 percent. We are also planning to expand the voluntary patrol program by environmental engineers as well as additional facility investments.

**HCE**

The company has set rigorous internal environmental standards that are 50% stricter than the legal threshold. It also makes various efforts to minimize air pollutant emissions such as periodic performance checks on prevention facilities, environment facilities operator training, and periodic emissions check.

**HMD**

The company is making multifaceted efforts for air pollution control, installing prevention facilities, replacing filters regularly, and commissioning a third-party verification service provider to conduct onsite assessments. We are planning to install prevention facilities in all painting plants in our worksites by 2020 to minimize the emission of volatile organic compounds (VOCs).

**Wastewater & Water Pollutant Emission**

	Unit	HHI Holdings*	HHI	Hyundai Electric**	HCE	HMD
Wasterwater	ton	N/A	3,227	746	6,168	1,338
BOD <sup>1)</sup>	ton	N/A	0.01	N/A	0.2	2.8
COD <sup>2)</sup>	ton	N/A	0.02	N/A	0.3	6.2
SS <sup>3)</sup>	ton	N/A	0.005	N/A	0.01	4.5

1) Biochemical Oxygen Demand  
 2) Chemical Oxygen Demand  
 3) Suspended Solids

\* HHI Holdings: No registration/license for wastewater discharge facilities as the business does not have wastewater discharge  
 \*\* Hyundai Electric: Wastewater treatment is outsourced 100%

**Wastewater and Water Pollutant Control of Each Entity**

**HHI**

Wastewater generated in our worksites is treated by our own wastewater treatment facility or by external specialists. Each division conducts source-based management to reduce wastewater discharge. HHI's wastewater treatment facility located in the Head Office in Ulsan employs a physicochemical process that has 50 percent stricter standards than the legal requirement.

**Hyundai Electric**

We have made facility investment to collect even a small amount of wastewater generated from our worksites by installing outsourced wastewater collection tanks at major sources. We self-check major effluent facilities and outsourced wastewater collection tanks in an effort to ensure compliance with regulatory waste discharge requirements and to prevent external leakage incidents.

**HCE**

Wastewater generated mostly from car washing and painting facilities is processed at the company's in-house effluent treatment plant, in which water quality is monitored regularly for efficient operation of the plant.

**HMD**

The company runs an in-house wastewater treatment plant and has various programs in place for water pollutant control such as real-time monitoring and self-assessment by a third-party service provider.

**Waste Management**

Waste generated in the production processes is categorized into general and designated waste. All of waste is recycled, incinerated at our facilities, or entrusted by external specialists. We operate a waste treatment system and monitor the processes on a real-time basis to ensure a systematic and legally compliant treatment of waste.

	Unit	HHI Holdings	HHI	Hyundai Electric	HCE	HMD
General Waste	ton	65	67,710	2,776	2,277	12,705
Designated Waste	ton	8	7,426	300	345	1,251

**Chemical Substance Management**

HHI Group strictly manages the entire process of chemical substances usage from warehousing to disposal to ensure the health of employees, partners, customers and community members. Inspections and trainings are regularly conducted, and worksites are required to have Material Safety Data Sheets on-site.

**Chemicals Control of Each Entity**

**HHI Holdings**

All coating chemicals including urethane, hardener, diluents, and detergent, are safely kept in the on-site storage facilities. All designated chemical waste is properly discharged and reported to the environmental authority.

**HHI & HMD**

Efforts are being made to prevent any event caused by chemical substances, such as monitoring the use of chemical substances and developing alternative products that do not contain hazardous chemicals.

**Hyundai Electric**

The company reduced the hazardous chemical concentration by lowering sulfuric acid to below 8 percent. Hyundai Electric is managing chemical substances under the goal of excluding hazardous chemicals in the business site and promoting alternative substances instead.

**HCE**

Hazardous chemical substances are managed appropriately in compliance with relevant laws through an end-to-end monitoring from the delivery and use to discharge. Emergency drills against chemical leakage are conducted periodically as well.

**Environmental Investment & Green Purchasing**

HHI Group continues to make investments in environmental management in order to minimize our businesses' environmental impact. We classify the investment into pollution prevention, environment load reduction, environment risk management and social costs for effective management.

HHI Holdings is exerting efforts to procure more green products such as eco-friendly cutting fluid and grease. In 2017, a total of KRW 800 million was spent on green purchasing. HMD is working to increase the share of green products in its total procurement by setting up a green purchasing policy and promoting eco-friendly paint, asbestos-free products. In 2017, we spent KRW 3.8 billion on green purchasing.

	Unit	HHI Holdings	HHI	Hyundai Electric	HCE	HMD
Investments	bn. KRW	0.02	8.2	4.5	0.5	3.7

**2018 Environmental Management Initiatives**

Entity	Initiative
HHI Holdings	<ul style="list-style-type: none"> <li>·Target: a safety and environmentally friendly management</li> <li>·Create a pleasant and safe work environment</li> <li>·Establish and promote the autonomous safety management system</li> <li>·Accelerate preemptive development and distribution of eco-friendly technologies</li> <li>·Promote eco-friendly production practices</li> </ul>
HHI	<ul style="list-style-type: none"> <li>·Target: continued realization of eco-friendly management system</li> <li>·Enhance pollution prevention control</li> <li>·Strengthen responses to environmental regulations and eco-friendly activities</li> </ul>
Hyundai Electric	<ul style="list-style-type: none"> <li>·Target: zero legal/regulatory violations</li> <li>·Periodically verify the appropriateness and effectiveness of environmental management</li> <li>·Make investments into facilities for GHG reduction</li> <li>·Respond to environmental regulations</li> <li>·Build institutional foundations for environmental management</li> <li>·Engage in pollution prevention and other eco-friendly activities</li> </ul>
HCE	<ul style="list-style-type: none"> <li>·Target: continuous improvement through implementation of environmental management system</li> <li>·Redefine the processes through which environmental pollutants are identified</li> <li>·Comply with environmental laws and regulations through strengthening monitoring</li> <li>·Minimize pollutant discharge through improved production processes</li> <li>·Establish a separate waste discharge system</li> <li>·Develop and launch eco-friendly products</li> </ul>
HMD	<ul style="list-style-type: none"> <li>·Target: pursue development as an environmentally friendly business</li> <li>·Respond to environmental laws and regulations</li> <li>·Reinforce on-site environment management</li> <li>·Improve waste recycling</li> </ul>



# Upholding a Corporate Culture of Mutual Respect and Trust



Advancement of  
Management-Labor  
Relations

---



Human Resources  
Development

---



Evaluation and  
Rewards

---



Employee's  
Quality of Life

HHI Group is trying to build a corporate culture that upholds co-existence through constant communication.

We pursue an aim to create shared value by establishing trust in the industrial relations and seeking mutual growth with our business partners.

# Advancement of Management-Labor Relations

HHI Group strives to create an environment where every employee can work with passion and happiness based on mutual respect and trust. We respect the rights of workers, strictly comply with the related laws and regulations, and continue to establish industrial relations that embody the culture of cooperation and mutual growth by engaging in sincere dialogues.

## Collective Bargaining and Labor-Management Council

HHI Group ensures matters related to employees' working conditions and benefits are discussed at each entity through various channels including biennial collective bargaining, annual wage negotiations, and the quarterly Labor-Management Council meetings. In 2017, collective bargainings were renewed at each entity, and collective wage negotiation and Labor Management Council meeting were held as scheduled.

Entity	Result of Labor-Management Council Convened in 2017
HHI	<ul style="list-style-type: none"> <li>· Briefing on management status and HR mobilization plan (quarterly)</li> <li>· Discussed eight current issues including dormitory menu selection and operation of Retiree Support Center for Dong-gu, Ulsan</li> </ul>
HMD	<ul style="list-style-type: none"> <li>· In-house cafe (Aphrodite) installed inside the main entrance</li> <li>· Distribution of thermal shirts for winter</li> <li>· Additional lounge areas on site</li> </ul>

\*HHI Holdings, Hyundai Electric, and HCE did not hold the Labor Management Council meeting in 2017, as organizational structure was not defined yet.

## Advancement of Management-Labor Relations Performance

Category	Unit	HHI Holdings	HHI	Hyundai Electric	HCE	HMD	
Labor Union	Eligible Employees	Person	109	10,485	1,512	753	2,263
	Union Members	Person	99	9,877	1,436	717	2,263
	Rate of Union Membership	%	91.3	94.2	92.6	95.2	100
Management Status Briefing	Cases	2	4	22	4	6	
Labor Relations* Training	No. of Trainings	Cases	3	3	18	3	4
	Participants	Person	160	1,226	152	150	458

\*New Recruits Training, Team Leader Training, Position Level Training, Manager Training, Junior Board, Master Board, Management Strategy Education

## Efforts to Promote Internal Communication and Employee Relations

### Management Status Briefing

HHI Group holds regular management status briefings for employees and members of the labor union. In 2017, the necessity and vision for business spin-offs were shared via the briefing before the splitting of divisions. Briefings hosted at each business division shared the management improvement plans to overcome the crisis and held Q&A sessions, aiming to create a sense of common understanding. Even after the spin-off, briefings at each affiliate are held to build consensus on the need to improve competitiveness to wade through challenging times, as well as to nurture the ownership of employees. According to the collective agreements, the company is obliged to inform the labor union of major changes related to management.

### Labor Relations Training

HHI Group provides labor relations trainings to employees to raise awareness about the importance of sound labor-management relations and reinforce communicative capabilities. Seven classes are offered including various internal programs, organizational culture camps, and external training courses, contributing to a healthy labor-management relation based on shared growth.

### Dialogue with the Management

HHI Group holds meetings between employees and the management and fosters a lively organizational culture. Heads of divisions, chiefs of the headquarters and executives participated in the meeting sharing the vision, policy and direction of the Group. These events provided opportunities for employees to freely ask questions about current issues while suggesting ideas and opinions.

### Mentoring Program

HHI Group operates a mentoring program for employees to enhance their job competencies, adjust to the organization and maintain a work-life balance. The one-on-one mentor and mentee relationships between junior and senior employees help build greater competency for junior staff and promote a voluntary cooperative culture.

### Monthly Team-Building Meetings

To improve the work environment and welfare, department heads and managers hold monthly meetings with team members. Regular communication helps resolve employees' concerns, enhance work satisfaction and bolster trust.

### Publication of Newsletters

After the spin-off, each affiliate publishes newsletters to promote internal communication. For example, once every two weeks, Hyundai Electric and HCE each publishes a newsletter called 'Hyundai Electric News' and 'HCE News', respectively. These newsletters contain important management activities, major plans or good deeds of fellow employees, contributing to active communication and interaction.



Inter-Communication Activities of Each Entity

HHI Holdings

Internal Knowledge Sharing Platform

Since 2015, HHI has been operating Hi-Square, an internal knowledge sharing platform where employees can ask and answer company- or work-related questions on a real-time basis. An average of five company-related questions is posted everyday on the venue for free communication and sharing, where employees can exchange their opinions and answer questions posted by their colleagues. Also, open votes on company policies or qualifications for rewards are registered to collect opinions, which promote fairness and active interaction.

Joint safety Inspection and Engagement by the Labor and Management

Under the goal of creating a zero-accident workplace, HHI has been organizing joint safety inspections by the labor union and management since December 2017. Representatives from the labor union and management gather together periodically not only to perform safety inspection on site but also to meet with site workers, gather ideas for accident prevention and listen to their grievances. The company is striving to ensure such site-based communication activities are translated to accident prevention.

HMD

Company-Wide Discussion

HMD held a discussion for all the employees in May 2017, in order to boost their sense of membership to the Company and to develop a healthy organizational culture. Employee opinions were collected on how HMD could foster sustainable growth and development, and small-group discussions dealt with ways to boost productivity and improve the organizational culture. Small-group discussions were a good opportunity for everyone to deliberate on the way forward as employees freely shared ideas for the growth of the Company as well as concerns they face in work.

Grand Award for Labor Relations

HMD received the 29th Grand Award for Labor Relations from the Korea Employers Federation, along with the Korea Electric Power Corporation. The award was an acknowledgment of the fact that sound labor relations were maintained despite the difficulties in the shipbuilding industry, recording 20 consecutive years of no dispute arising from collective bargaining (as of 2016) HMD will continue to preserve the reputation of having excellent labor relations, and strive to build cooperative relations.

2018 Industrial Relations Management Plan

Entity	Plan
HHI Holdings	· Embrace positive employee relations with a sense of shared destiny
HHI	· Reach a consensus on overcoming the crisis · Launch activities to stabilize the organization and regain the right work culture
Hyundai Electric	· Hold events participated by Labor Union and Management (e.g., marathon, walking) · Organize a corporate culture camp intended to create a sense of belonging for employees, resolve conflicts, and bridge generation gap
HCE	· Define a new employee culture for HCE · Labor Union and management to drive CSR activities as a community friendly company · Instill the organization with the sense of shared destiny and ownership
HMD	· Reinforce the organizational culture based on communication and cooperation · Work toward dispute-free collective bargainings for 22 consecutive years

# Talent Cultivation

HHI Group endeavors to secure business competitiveness and yield performance achievements through employees' competency enhancement focusing on leadership, job functions and global talents. Additionally, HHI Group emphasizes the importance of continuous self-development and provides opportunities to improve job-related capabilities for employees at the affiliates and business partners.

## Operating System

Entity	Strategy	Focus Areas
HHI Holdings	·Facilitate early onboarding of new hires and develop expertise building training programs	·Build leaders who will drive the future of the robot business ·Cultivate mid-level managers with practical capability ·Instill core values in employees to foster a positive corporate culture
HHI	·Nurture leaders, job-specific specialists and global talents who will build HHI's future	·Develop a leadership building program for core talents ·Cultivate job-specific specialists in each business division ·Nurture talents who will lead the global business
Hyundai Electric	·Foster job experts for each business ·Cultivate smart talents who will lead the global electric/electronic appliances industry based on extensive experience and knowledge	·Develop a leadership building program for core talents ·Cultivate job-specific, and product-specific specialists in each business division ·Nurture talents who will lead the global business
HCE	·Secure next-generation leaders and reinforce job competency	·Train leaders who will drive organizational growth ·Nurture job-specific specialists contributing to performance growth ·Strengthen effort to cultivate global talents
HMD	·Nurture core talents who are equipped with leadership and job expertise	·Implement strategic leadership programs for achieving sustainable growth ·Nurture specialists in all job areas

## Key Training Programs

HHI Group has developed training programs customized by working situations and positions to help the employees utilize their full capabilities in their workplace.

	Key Programs
Leadership Training	5-phase HLC course, Junior Board, Master Board, Junior Master Board, newly-appointed manager training
Job-Specific Specialist Training	Collective specialist training, on-the-job/night-time vocational training, cyber training, distance training
New Hires Training	On-boarding training for new hires, mentoring program
Nurturing of Convergence Talents	Engineering training for humanities/business graduates
Nurturing of Global Talents	Expatriates training, overseas corporation head candidate training
Nurturing of Technical Talents	Technical trainee program, up-skilling programs for employees, certificate programs, mastery program, World skills competition preparation program, HHI Technical College, etc.
Shared Growth Training	Core job-specific training, on-site business partners training, up-skilling training for new employees
Other Training	Retirement planning training, substantial management practices

## HR Development Performance

Program	Item	HHI Holdings	HHI	Hyundai Electric	HCE	HMD
Talent Cultivation	Participants in Training (Cumulative)	452	25,249	2,850	843	8,345
	Total Training Hours	4,558	526,600	49,532	21,016	79,601
	Investment in Training (m. KRW)	4 <sup>1)</sup>	2,797 <sup>2)</sup>	58	97	179

1) As HHI Holdings' technical training center is shared with the subcontractors, the training cost has been excluded from the above investment.  
2) The amount is calculated based on the company's training fee allocation and handling guidelines that deal with training cost reimbursement by National Employment Insurance.

## Talent Cultivation

### Job-Specific Training System

HHI Group ensures that each affiliate has a job-specific training system that takes into consideration the characteristics of its business and products. Building onto the existing training system and plans, we further develop the system through close co-work with HHI Group's HR Development Center and external organizations.

### Job Training Courses

HHI Group continuously develops job training courses under the job-specific training system and plans. Each affiliates set the direction for training and conducts learning and upskilling programs to fully support employees' development objectives.

## Key Initiatives in 2017

Entity	Major Activities
HHI Holdings	·Opened the Robot Training Center ·To operate job-specific training courses and consortium training programs
HHI	·Developed 47 job-specific training courses, including 14 for Shipbuilding Division and 8 for Offshore Division
Hyundai Electric	·Conducted 'Customer Satisfaction Training' to enhance customer service levels ·Expanded specialist training courses, including 'a special lecture on Middle Eastern markets' ·Conducted specialist job training
HCE	·Conducted basic training on products and equipment for new hires and those newly assigned to a position ·Offered training for after-service agents and sales representatives for maintenance and technology training programs ·Provided financial support for language training and improved second foreign language courses
HMD	·Supported employees for external educational programs ·Promoted a self-driven learning environment through autonomous training programs and cyber/distance training programs



On-Job Training Performance

			HHI Holdings	HHI	Hyundai Electric	HCE	HMD
On-Job Training	Group Training	Course	3	34	23	11	17
		Participant	4	779	550	34	99
	Self Study	Course	0	205	20	22	60
		Participant	0	2,508	37	21	469
	Consortium Training	Course	23	133	N/A	N/A	0
		Participant	160	1,101	N/A	N/A	0

On-Job Training Performance

Enhancing Leadership Nurturing System

HHI Group has launched Hyundai Heavy Industry Leader Course (HLC) in order to enable a more systematic approach to leadership building. Based on the existing talent nurturing system and training programs, the HLC is made up of five levels, some of which will be provided as part of a month-long job-off training and progress is tracked through rigorous weekly monitoring. In addition, HHI Group has in place various programs such as leadership multi-dimension diagnosis, Junior Board, and Master Board, with the aim to develop leaders who will lead the Group in the future.

2018 HR Development Initiatives

Entity	Initiative
HHI Holdings	<ul style="list-style-type: none"> <li>· Increase the quality of HR development</li> <li>· Expand the quantity of tailored job training</li> <li>· Foster a learning culture in alignment with capability diagnosis and mandatory training programs</li> </ul>
HHI	<ul style="list-style-type: none"> <li>· Set up shared growth by defining a systematic HR development system</li> <li>· Increase the quality of HHI Group's HR development system based on vibrant exchanges among affiliates</li> <li>· Enhance training effectiveness by mandating rigorous progress monitoring</li> <li>· Present a tailored solution for each individual</li> </ul>
Hyundai Electric	<ul style="list-style-type: none"> <li>· Define the HR development system</li> <li>· Reinforce training for next-generation leaders and managers</li> <li>· Present a tailored solution for each individual</li> </ul>
HCE	<ul style="list-style-type: none"> <li>· Nurture talents befitting the company's business needs through defining HR development system</li> <li>· Enhance training effectiveness by mandating rigorous progress monitoring</li> <li>· Present a tailored solution for each individual</li> </ul>
HMD	<ul style="list-style-type: none"> <li>· Cultivate strategic leaders for strengthening organizational competitiveness</li> <li>· Identify specialists and nurture in-house lecturers for job training</li> <li>· Create a consensus for overcoming a crisis</li> <li>· Create a corporate culture of communication</li> </ul>

# Evaluation and Compensation

HHI Group is operating transparent and objective performance evaluation and compensation system to assess our employee's efforts with fairness. In addition, various reward systems are in place to motivate the employees and build a work environment to feel a sense of accomplishment.

Evaluation System

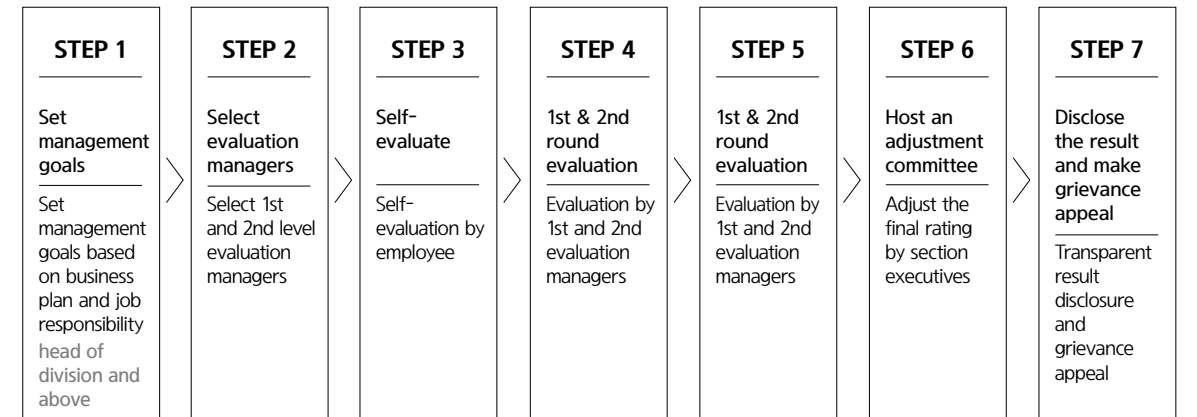
Every employee is subject to performance evaluation during the first and the second half, which will be used to determine promotion, reward, capacity building and leader selection. Performances are managed on a regular basis throughout the year to establish the foundation of evaluation. Employee's performance and work capability are comprehensively evaluated. Management personnel at the level of division head and above are evaluated by comparing their personal goals against the actual achievements, while annual comprehensive leadership examinations are conducted and results are used as preliminary data to change manager's position.

Evaluation Performance

	Unit	HHI Holdings	HHI	Hyundai Electric	HCE	HMD
Percentage of employees evaluated for performance	%	100	91.1	95.5	91.0	98.2

Employees newly hired, on leave, or planning to retire have been excluded from the figure.

Evaluation Process



Compensation System

HHI Group reflects inflation rates on salary increase to support stable living of employees. Managers and above are subject to performance-based salary system, through which employee receives different compensation based on performance evaluation which corresponds to actual achievements. Assistant managers and below receive bonus, merit pay, and allowances for birthdays, wedding anniversaries and holidays on top of their monthly salaries. HHI Group applies the same standard to both male and female employees in determining the salary level.

Reward Policy

Under the principle that 'where there is performance, there is reward', HHI Group operates the on-the-spot reward program for excellent performance. Various reward and recognition programs are implemented at each affiliate, all aiming at fostering harmony and encouragement within the organization.

Entity	Reward & Recognition	Remarks
HHI Holdings	<ul style="list-style-type: none"> <li>Hyundai Robot Award</li> <li>Half-yearly next-generation talent recognition</li> <li>Core talent program</li> </ul>	<ul style="list-style-type: none"> <li>All division heads participate in the evaluation to ensure fair selection of award winners</li> <li>Award is given to high performers who are assistant managers or below</li> <li>The program is intended to recognize performance of promising young employees and foster them into future leaders</li> </ul>
HHI	<ul style="list-style-type: none"> <li>HHI Award</li> <li>On-the-spot reward for excellent performance</li> <li>Hidden Hero Recognition, Praise Your Colleague program</li> </ul>	<ul style="list-style-type: none"> <li>In four categories of technological development, innovation, sales and special contribution, the highest performers of the year are recognized. The best performer of all areas is rewarded with an increased amount of KRW 50 million</li> <li>On the spot reward of up to KRW 100 million is given depending on the profit improvement amount</li> <li>Mobile reward programs to create a vibrant organizational culture where employees encourage each other for virtuous deeds</li> </ul>
Hyundai Electric	<ul style="list-style-type: none"> <li>Hyundai Electric Award</li> <li>Quality and Safety Organization recognition</li> <li>Partner recognition, Praise Your Colleague program</li> </ul>	<ul style="list-style-type: none"> <li>Provision of a reward of up to KRW 50 million</li> <li>Monthly or quarterly reward</li> <li>Monthly or quarterly reward</li> </ul>
HCE	<ul style="list-style-type: none"> <li>HCE Award</li> <li>High-performing production team awards</li> <li>Praise Your Colleague program</li> <li>Excellent and core talent</li> </ul>	<ul style="list-style-type: none"> <li>An increased reward of up to KRW 100 million</li> <li>Quarterly and year-end award ceremonies</li> <li>A Peer-to-peer praise program that contributes to creating an organizational culture of trust</li> <li>The program is intended to recognize performance of young employees and foster them into future leaders</li> </ul>
HMD	<ul style="list-style-type: none"> <li>Mipo Award of the Year</li> <li>Recognition of high performing executives, managers, production teams, and partners</li> <li>Hidden Hero Recognition, Praise Your Colleague program</li> </ul>	<ul style="list-style-type: none"> <li>Reward of up to KRW 30 million (external experts to be part of evaluation committee)</li> <li>Quarterly evaluation and selection of the best performing teams and partners in productivity, safety, and quality</li> <li>Expansion of the culture of praise and encouragement through monthly (Praise Your Colleague) and quarterly (Hidden Hero) programs</li> </ul>

# Employees' Quality of Life

HHI operates its welfare program under the principle of providing practical supports to employees' needs. HHI helps the employees maintain the work-and-life balance by offering systematic supports, including intra-company labor welfare fund, reward system for long-serving employees, medical support system, scholarship system, and family event support.

Welfare Programs

Stable Housing & Living Support	Medical & Health Support	Retirement Planning
<ul style="list-style-type: none"> <li>Loan interest support</li> <li>Incentives for family events</li> </ul>	<ul style="list-style-type: none"> <li>Financial support for treatment</li> <li>Support medical checkups for family members</li> </ul>	<ul style="list-style-type: none"> <li>Retirement planning support</li> <li>Retirement pension</li> </ul>
Educational Support	Maternity Support	Support for Leisure Activities
<ul style="list-style-type: none"> <li>Tuition for children</li> <li>Overseas study programs</li> </ul>	<ul style="list-style-type: none"> <li>Corporate childcare facilities</li> <li>Happy Mom Package Plan</li> </ul>	<ul style="list-style-type: none"> <li>Vacation facilities (hotel, condominiums, resorts, etc.)</li> <li>In-company hobby club support</li> </ul>

Key Activities

Retirement Planning

HHI Group developed supporting programs for employees' post-retirement life. Will-be retirees learned how to manage the asset and health care, and shared information to prepare for the new chapter of their lives.

	Unit	HHI Holdings	Hyundai Electric	HCE
Participants of Retirement Planning Program (Consolidated)	Person	503	46	32

Retirement Pension

HHI offers retirement pension benefits to every employee who worked over one year. HHI adopted Defined Benefit (DB) Pension System as per the agreement with the union.

	Unit	HHI Holdings	HHI
Retirement Pension Fund	bn. KRW	356	897

Parental Leave

The company is building a culture where male employees, as well as female employees, are encouraged to take the parental leave for their families.

Employees on Parental Leave	Unit	HHI Holdings	HHI	Hyundai Electric	HCE	HMD
Male	Person	2	109	13	1	8
Female	Person	0	27	8	2	6



# Contributing to the Development of a Society as a Global Corporate Citizen

HHI pursues a society of shared happiness under the core values of love, sharing and happiness. We will make a better future, by creating shared values with strategic social contribution activities.



Social  
Contribution

---



Arts &  
Culture

# Social Contribution

HHI Group has conducted various activities to improve the lives of local residents under the philosophy of 'contributing to the development of the nation and society as a global corporate citizen.' HHI Group offers diverse sharing programs where employees and volunteers can participate, committed to helping the marginalized and redistributing profits to the society, thereby duly fulfilling its social responsibility.

## Social Contribution Performance

Activity	Unit	HHI Holdings	HHI	Hyundai Electric	HCE	HMD
Salary Donation	m. KRW	1.44	152.36	16.38	5.39	31.55

The donation of HHI Holdings, Hyundai Electric and HCE is calculated during the period of April 1 to December 31, 2017.

## Community Development Program

### One-Company One-Village Campaign

HHI Group has forged sisterhood relations with many rural villages in an effort to promote mutual growth with these agricultural communities. We have purchased food ingredients for the in-house cafeterias from our sister villages in a way to provide them with stable income streams, and volunteers to help them during busy seasons.

### Vitalize Traditional Market Campaign

HHI Group has been purchasing and sharing Onnuri gift certificates that can only be used in local traditional markets in an effort to encourage local residents to use traditional markets more often. In 2017, HHI Group purchased KRW 215 million worth of Onnuri gift certificates and provided them for its employees as well as the underprivileged and social welfare facilities in the local area.

### Sharing with Local Senior Citizen Centers

HHI Group has supported local senior citizen centers to show respect for the elders and share love with neighbors for the past 20 years. HHI Group has forged relationships with 57 senior citizen centers and conducted volunteer activities such as HHI's delivering 102 bags and HMD's 45 bags of rice every month, and cleaning, painting and repairing of the senior centers.

### Environmental Protection Activity

We have been actively involved in environmental protection activities such as Happy Seed Campaign for Clean Community, One Company One Stream Cleaning Campaign and Clean Seashore Campaign in surrounding mountains, rivers and seaside areas. We also hold environment-related photo contests in a way to raise awareness about environmental protection among local residents.

## Sharing Events Participated by Employees

### Charity Bazaar with Love

During the 24rd Charity Bazaar with Love held in November 2017, donations were collected from employees of HHI and its affiliates, local community organizations, heads of external organizations, local celebrities, Ulsan Hyundai Football Club, foreign shipowners and supervisors for the charity sales. A total 14,000 pieces of donations (7,000 clothings, 400 books, and 300 electronic/home appliances) were collected including 10,000 from employees of HHI and its affiliates. Donations from celebrities and soccer shoes worn by players of Ulsan Hyundai Football Club also caught the eyes of the guests. The proceeds were used to hold the 'Making Kimchi with Love' event and were awarded as scholarships for students in Ulsan.

### Making Kimchi with Love

This annual event is making and sharing kimchi with neighbors in need. The event has become one of the signature philanthropic activities of HHI Group, which began in 1991. In December 2017, about 350 employees and volunteers made kimchi from 10,000 heads of cabbage and then shared them with 30 local welfare facilities and 1,500 underprivileged households in the community. The event was even more meaningful since 7,000 organic cabbages and 3,000 radishes used in the event were harvested from the Children's Nature Learning School of Hyundai Institute run by HHI Group.

### Sharing Funds

HHI Group operates various fundraising programs, including One Dollar for Love, for our underprivileged neighbors in need of our attention and assistance. With the enthusiastic support from our employees, the raised funds are donated to our neighbors in need via ChildFund Korea.

Salary Donation Campaign	Our employees donate the woosuri(odd money under KRW 1,000) of their monthly salary. The fund raised from the campaign are given to the Ulsan branch of Community Chest of Korea, the Korea Heart Foundation, and the Korean Association for Children with Leukemia and Cancer (KACLC). A total of 21,428 employees joined in the meaningful Woosuri Movement, raising a total of KRW 207.1 million in 2017.
Smoking Cessation Clinic Fund	The fund has collected a total of KRW 133.26 million to help out the less privileged ever since its creation in 2005. Continuing on for 13 years, the Fund raised KRW 3.5 million from 35 employees in 2017 and donated the money to the low-income families via the Ulsan Chapter of Korean Red Cross.



### Sharing Events Participated by Employees

#### Spring Picnic with People with Disabilities

Since 1992, HHI Group has been a proud sponsor of 'Roly Poly (oddugi) Party', the largest festival for the people with disabilities in Ulsan. In 2017, the Group invited 2,000 disabled students from special schools and social welfare facilities to a picnic to an amusement park at Gyeongju. The participants having difficulties going out at ease enjoyed rides under the warm sunlight of spring with help from volunteers.

#### Praise Your Colleague Campaign

The Praise Your Colleague Campaign was introduced in April 2016, with an aim of developing an energetic organizational culture where employees respect one another. In this campaign, employees can give up to 10 points to a colleague they want to praise through the company online portal, and the employees with the most points on a weekly and monthly basis are awarded. For every one point given to an employee, HHI Group donates KRW 100 to the society. In 2017, a fund of KRW 40 million was donated to offer daily supplies, food and tuition support to the less privileged.

#### Relay Sharing

In March 2017, HHI Group invited 250 children from community child centers to see a musical designed for children. Also, in order to encourage and send appreciation to the staff working in community welfare centers for their support and volunteer work, HHI Group invited 150 personnel to the Hyundai Arts Center for them to enjoy cultural performances. During the second half of 2017, HHI Group sponsored multicultural families to see cultural performances, contributing to narrowing the cultural gap in the local community. A relay of donating rewards spread among employees, not to mention company club's donation for training talents and private donation from employees, fostering the spirit of sharing to the marginalized throughout 2017.

### Sharing Programs of Each Unity

#### HHI

##### Support for Gray Areas of Welfare

With an aim of promoting emergency responses and eliminating the gray areas of welfare, HHI Group launched an emergency support project for distressed families in April 2016. In 2017, a funding of KRW 36 million was used to support children in need of social protection from 25 households, providing them with aid for emergency housing and cost of living. In addition, KRW 54 million was set aside to provide tuition and textbook to child breadwinners and students from 45 households supported by the national basic living security system.

##### Jajangmyeon Project

In August 2016, HHI signed an agreement with Hanmaeum Food and Ulsan Dong-gu Social Welfare Center to provide jajangmyeon (black-bean-sauce noodles) and tangsuyuk (pork with sweet and sour sauce) to 250 marginalized citizens at the welfare center on a monthly basis. HHI bears the entire expense for ingredients and chefs from Hanmaeum Food cook the food for the marginalized class to enjoy, promoting activities for sharing.

##### Sharing Activities of New Recruits

Newly recruited HHI employees donated part of their first salary to welfare centers in order to join in the spirit of sharing with others. The donation came from the salary of about 20 employees newly recruited during early 2017, earned between July 3~5 when they participated in volunteer activities at the Kkottongnae (Flower Village Center) located in Eumsung, Chungbuk to help low-income families. HHI also donated over 400 natural soaps made by new recruits at the workshop held in September 2017.

##### Dream High Concerts

The Dream High Band, created at the Ulsan House of Chamsarang, aims to nurture the creativity and musical talent of people with intellectual disabilities. With the combined funding from the Asan Foundation and HHI, Dream House was launched in October 2016 at the Ulsan House of Chamsarang to recruit those with musical talent. 15 band members were selected through an audition, and the first regular concert was held in May 2015 after long hours of practice. HHI sponsored sound and lighting equipment, taking part in the valuable occasion of the intellectually disabled people stepping out to the society to display their talent.

#### HMD

##### Scholarship Support

Every year since 2006, HMD has provided scholarship to children from low-income families through ChildFund Korea. In 2017, KRW 6 million of scholarship was provided, KRW 2 million each for children either from a single-parent family, receiving help from the national basic living security system and placed in foster care.

##### Company Campaigns

Although HMD is faced with difficulties from the continued recession in the shipbuilding industry, the Company has not given up on internal campaigns to encourage regular donations, aiming to support the future of children living in less privileged environments. Many employees agreed on the value of helping children in need and participated in the regular donations. Acknowledged for such effort, HMD was selected as the first 'Company of Hope' in Ulsan.

# Arts & Culture

HHI operates Hyundai Arts Center and Hanmaeum Center in order to provide access to high quality cultural activities for local residents. Based on our accumulated experiences of management know-how, we contribute to expanding the horizon of culture and arts for the benefit of the local residents by providing a variety of cultural programs.

## Facilities Status

Facility	Open Year	Introduction
Hyundai Arts Center	1998	The largest cultural center in Ulsan with a high quality performance theater, art gallery, cinema and sport facilities
Hanmaeum Center	1991	Provides continuing education programs for local communities with sports facilities, cinemas, galleries, an art academy and a children's library

## Arts & Culture Performance

Hyundai Arts Center	Concert Hall	Planned Programs	18
		Venue Programs	12
		Seat Occupancy	75%
		Visitors	33,394
	Chamber Hall	Planned Programs	3
		Venue Programs	4
		Seat Occupancy	92%
		Visitors	10,494
	Movies	Screenings	164
		Visitors	261,051
Exhibitions	Exhibitions	7	
	Visitors	30,132	
Hanmaeum Center	Culture Class	948	
	Sports Class	96	

## Hyundai Arts Center's Key Performance and Exhibition

Activity	Title
Performance	·Cultwo Show Concert
	·Richard Clayderman Concert
	·Chris Norman Concert
	·Dave Koz Concert
	·Tango Fire Performance
	·Moscow Philharmonic Orchestra Concert
Exhibition	·Forte di Quattro Concert
	·National Geographic
	·Local Artists' Exhibition
	·Hyundai Arts Center Collection Exhibition
	·Vincent van Gogh Collection of Replica
	·Special Exhibition of Korea's Figurative Artists
	·Smithsonian Photo Exhibition

## Promoting Culture & Arts in Community

### Supporting Local Arts Organizations

Hyundai Arts Center support four local amateur arts organizations: Dong-gu Ladies Choir, Ulsan Men's Choir, HHI Orchestra and Hyundai Boy's and Girl's Choir. All organizations play a vital role in raising awareness of local arts among the community by winning prizes from national contests and regular performances.

### Lobby Concert

At these special concerts, Hyundai Arts Center provides venues and musical instrument for local residents, students, hobbyists and other amateur musicians to perform at the lobby of Hyundai Arts Center. Lobby Concert have been held twice a month to expand the base of arts in the region and to provide opportunities for local residents to enjoy musical performances in their daily lives.

## Arts & Culture Plan

We will expand our culture and arts programs customized to students and local residents. HHI Group will also continue to contribute to enhancing the quality of life for local residents by offering high quality culture and arts experiences. HHI will also make efforts to create synergy by establishing cultural partnerships with arts centers in other areas.

## 2018 Scheduled Performances at Hyundai Arts Center

Classics	Musicals	Plays	Live Performances	For Children	Korean Traditional Music	Dance	Crossover	Total
2	1	3	9	2	1	1	3	22

PART 4

APPENDIX

4

Consolidated Financial Statement Summary  
 Independent Auditor's Report  
 Information Disclosure  
 Third Party's Assurance Statement  
 GRI Standards  
 Membership Status

PART 4

APPENDIX

## Consolidated Financial Statement Summary for HHI Holdings

Unit: m. KRW

	2017
Current asset	8,030,239
Cash and cash equivalents	1,184,885
Trade and other receivables	3,145,086
Short-term financial assets	155,183
Inventories	3,341,955
Other current assets	203,130
Non-current assets	13,179,874
Investments in associates and joint ventures	3,226,385
Long-term trade and other receivables	119,247
Long-term financial assets	8,603
Investment property	10,635
Property, plant and equipment	7,537,036
Intangible assets	2,159,722
Other non-current assets	118,247
<b>Total assets</b>	<b>21,210,114</b>
Current liabilities	6,554,734
Non-current liabilities	4,429,456
<b>Total liabilities</b>	<b>10,984,191</b>
Capital stock	81,433
Capital surplus	6,775,299
Capital adjustments	(500,444)
Accumulated other comprehensive income	185,982
Retained earnings	945,495
Non-controlling interests	2,738,158
<b>Total Equity</b>	<b>10,225,923</b>
	<b>2017. 4. 1 ~ 12. 31</b>
Sales	14,289,388
Operating profit	934,837
Net profit	1,042,895
Owners of the parent company	932,250
Non-controlling interests	110,645
Comprehensive income	1,022,776
Owners of the parent company	915,940
Non-controlling interests	106,836
Earnings per share(KRW)	74,312



# Consolidated Financial Statement Summary for Other Affiliates

## HHI Unit: m. KRW

	2017	2016	2015
Current asset	17,663,720	26,036,646	27,176,013
Cash and Cash equivalents	3,239,727	4,326,868	3,105,303
Trade and other receivables	1,942,374	5,189,256	5,340,950
Due from customers for contract work	3,357,947	5,275,520	6,599,947
Inventories	845,360	3,907,314	4,492,240
Other current assets	8,278,312	7,337,688	7,637,573
Non-current assets	12,745,128	23,212,529	22,556,823
Investments in associates and joint ventures	142,287	299,529	270,052
Long-term financial assets	134,966	502,567	1,189,483
Investment property	233,864	240,607	347,868
Property, plant and equipment	11,046,256	19,011,266	16,320,002
Intangible assets	105,443	1,962,966	2,140,185
Other non-current assets	1,082,312	1,195,594	2,289,233
<b>Total assets</b>	<b>30,408,848</b>	<b>49,249,175</b>	<b>49,732,836</b>
current liabilities	15,614,871	23,237,169	23,060,645
non-current liabilities	2,421,939	8,122,255	11,173,229
<b>Total liabilities</b>	<b>18,036,810</b>	<b>31,359,424</b>	<b>34,233,874</b>
Capital stock	283,327	380,000	380,000
Capital surplus	1,049,896	1,124,896	1,124,896
Hybrid bonds	428,589	428,589	428,589
Capital adjustments	(8,355,403)	(1,367,899)	(1,341,552)
Accumulated other comprehensive income	1,478,130	1,937,430	325,411
Retained earnings	16,236,902	13,433,436	12,818,776
Non-controlling interests	1,250,597	1,953,299	1,762,842
<b>Total Equity</b>	<b>12,372,038</b>	<b>17,889,751</b>	<b>15,498,962</b>
Sales	15,468,836	22,300,438	27,488,602
Operating profit	14,646	391,530	(2,336,466)
Net profit from continuing operations	(93,390)	15,543	(1,718,567)
Net profit from discontinued operations	2,796,681	641,125	355,344
<b>Net profit</b>	<b>2,703,291</b>	<b>656,668</b>	<b>(1,363,223)</b>
Owners of the parent company	2,458,243	545,121	(1,349,912)
Non-controlling interests	245,048	111,547	(13,311)
Comprehensive income	2,617,198	2,490,722	(1,900,085)
Owners of the parent company	2,377,131	2,247,681	(1,853,939)
Non-controlling interests	240,067	243,041	(46,146)
계속영업주당(원)	(3,550)	(718)	(30,368)
중단영업주당이익(원)	48,357	9,486	6,019

## Hyundai Electric Unit: m. KRW

	2017
Current asset	1,490,453
Cash and Cash equivalents	241,374
Trade and other receivables	841,533
Due from customers for contract work	5,185
Inventories	357,615
Other current assets	44,746
Non-current assets	604,124
Long-term financial assets	1,790
Long-term Trade and other receivables	1,140
Property, plant and equipment	471,562
Intangible assets	55,463
Other non-current assets	74,168
<b>Total assets</b>	<b>2,094,577</b>
current liabilities	588,831
non-current liabilities	465,631
<b>Total liabilities</b>	<b>1,054,463</b>
Capital stock	51,029
Capital surplus	925,475
Capital adjustments	(15,241)
Accumulated other comprehensive income	62,923
Retained earnings	15,625
Non-controlling interests	303
<b>Total Equity</b>	<b>1,040,114</b>
Sales	1,449,573
Operating profit	62,419
Net profit	14,281
Owners of the parent company	14,281
Non-controlling interests	-
Comprehensive income	13,098
Owners of the parent company	13,098
Non-controlling interests	-
Earnings per share(KRW)	3,379

2017. 4. 1 ~ 12. 31

※Continuing operations and discontinued operations are separately written in the Consolidated Statements of Comprehensive Income, while the Consolidated Statements of Comprehensive Income during the period after spin-off has been newly written.

## HCE Unit: m. KRW

	2017
Current asset	1,553,478
Cash and Cash equivalents	426,006
Trade and other receivables	425,471
Inventories	691,156
Other current assets	10,845
Non-current assets	675,179
Property, plant and equipment	539,002
Intangible assets	121,600
Other non-current assets	14,577
<b>Total assets</b>	<b>2,228,657</b>
current liabilities	785,619
non-current liabilities	272,100
<b>Total liabilities</b>	<b>1,057,719</b>
Capital stock	49,381
Capital surplus	1,024,120
Capital adjustments	(12,431)
Accumulated other comprehensive income	65,639
Retained earnings	44,993
Non-controlling interests	(764)
<b>Total Equity</b>	<b>1,170,938</b>
Sales	1,886,747
Operating profit	95,233
Net profit	46,609
Owners of the parent company	46,609
Non-controlling interests	-
Comprehensive income	46,495
Owners of the parent company	46,495
Non-controlling interests	-
Earnings per share(KRW)	11,098

2017. 4. 1 ~ 12. 31

## HMD Unit: m. KRW

	2017	2016	2015
Current asset	6,776,201	6,546,317	6,853,971
Cash and Cash equivalents	562,238	804,379	656,702
Short-term financial assets	23,112	4,038,565	4,182,593
Trade and other receivables	867,137	1,342,066	1,488,768
Inventories	95,935	161,881	255,467
Other current assets	147,260	199,426	270,441
sale of non-current assets held for sale	5,080,519		
Non-current assets	1,543,238	2,680,000	2,584,040
Investments in associates and joint ventures		12,486	12,492
Long-term Trade and other receivables	286,420	1,281,007	1,177,872
Property, plant and equipment	1,089,747	1,126,344	835,786
Intangible assets	3,112	178,850	288,759
Other non-current assets	163,960	81,313	269,131
<b>Total assets</b>	<b>8,319,439</b>	<b>9,226,317</b>	<b>9,438,011</b>
current liabilities	5,904,637	5,471,850	5,618,262
non-current liabilities	75,660	1,496,078	2,022,943
<b>Total liabilities</b>	<b>5,980,298</b>	<b>6,967,928</b>	<b>7,641,205</b>
Capital stock	100,000	100,000	100,000
Consolidated capital surplus	82,500	82,500	82,500
Consolidated capital adjustment	(40,854)	(41,041)	(41,041)
Consolidate accumulated other comprehensive income	356,266	721,303	290,639
Consolidated earned surplus	1,718,864	1,279,692	1,242,885
Non-controlling interests	122,365	115,935	121,823
<b>Total Equity</b>	<b>2,339,141</b>	<b>2,258,389</b>	<b>1,796,806</b>
Sales	2,453,433	3,446,458	3,702,450
Operating profit/loss	107,949	191,070	13,618
Consolidated net income/loss for the year	445,157	39,600	25,679
Owners of the parent company	436,934	34,573	38,190
Non-controlling interests	8,223	5,027	(12,512)
Comprehensive income	81,073	472,840	(144,864)
Owners of the parent company	74,135	467,471	(131,703)
Non-controlling interests	6,939	5,369	(12,961)
Gain/Loss EPS from continuing (KRW)	27,716	7,333	589
Gain/Loss EPS from discontinued operation (KRW)	(5,806)	(5,599)	1,346

# Independent Auditor's Report

## On the consolidated financial statements of Hyundai Robotics (formerly HHI Holdings) and its affiliates

The Board of Directors and Stockholders  
Hyundai Robotics Co., Ltd.:  
March 22, 2018

We have audited the accompanying consolidated financial statements of Hyundai Robotics Co., Ltd. and its affiliates (the 'Company'), which comprise the separate statements of financial position as of December 31, 2017, the separate statements of comprehensive income (loss), changes in equity and cash flows for the nine months reporting period then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

### Management's Responsibility for the Separate Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with Korean International Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

### Auditors' Responsibility

Our responsibility is to express an opinion on the consolidated financial statements based on our audits. We conducted our audits in accordance with Korean Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement

of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the current financial position of the Company as of December 31, 2017 and its financial performance and its cash flows for the nine months of reporting period then ended in accordance with Korean International Financial Reporting Standards.

### Highlight

The following is a reference to the reasonable decision-making for the users of the auditor's report on the consolidated financial statements. As stated in Footnotes 1 and 45 of the consolidated financial statements, Hyundai Robotics Co., Ltd. was newly established with the purpose of engaging in industrial and LCD robot manufacturing and investment businesses through the spin-off from Hyundai Heavy Industries Co., Ltd. (Hyundai Heavy Industries Co., Ltd. prior to the spin-off) on April 1, 2017. Stocks were re-listed on KOSPI on May 1, 2017.

Samjong KPMG CEO Kim Kyo-tae



This report is effective as of March 22, 2018, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying consolidated financial statements and notes thereto. Accordingly, the readers of the audit report should understand that the above audit report has not been updated to reflect the impact of such subsequent events or circumstances, if any.

# Information Disclosure

## Information Disclosure Channels

	Details
HHI Group Website	HHI Group operates its website to provide information on the company's overall management activities, as well as its history, management philosophy, and business models. The website also has links to ethics management, recruitment and affiliates' websites for user convenience.
Investor Presentations	We regularly hold investor conference calls for analysts and institutional investors. HHI Group strives to provide timely and accurate information on our performance and outlook, and enhance investors' trust and confidence in HHI Group.
Business Ethics Website	HHI Group operates a website dedicated to ethics management, which contributes to strengthening stakeholder trust. Through the website, HHI Group introduces its direction, structure and practice of business ethics and receives reports on unethical business activities, taking the lead in practicing fair and transparent management.
Integrated Report	The Integrated Report is the result of HHI Group's efforts and achievements to create a sustainable company. Since 2015, the company has integrated the annual report and the sustainability report in order to provide HHI Group's business activities from a more balanced perspective.
Webzine	Our monthly magazine, Magazine H, is made available on the Group's website to disclose the management activities of HHI Group, as well as major events inside and outside the Group. Our magazine serves as a communication channel across HHI Group.

## About Supply Chains

HHI Group's supply chains consist primarily of suppliers of raw materials required to manufacture our products. In 2017, the companies subject to the reporting used a total of KRW 10.22 trillion for purchase from suppliers.

Company	Raw materials	Key products	Purpose	Amount (bn. KRW)
HHI Holdings*	Casting materials, copper	Driving devices, tools, electrical parts	Robot manufacturing	107
HHI	Steel, angle, paint, etc.	Equipment, steel parts, outfitting, etc.	Shipbuilding, etc.	7,404
Hyundai Electric	Steel, electrolytic cathode copper	Electric devices, steel outfitting, steel, etc.	Transformer manufacturing, etc.	939
HCE	Excavator bucket parts, wheel loader, control valve	Excavator parts, wheel loader parts, etc.	Construction equipment manufacturing	1,761
<b>Total</b>				<b>10,221</b>

\*The data above for HHI Holdings is applicable to its robot business, and the R&D expenditure of HMD is included in that of HHI.

## About Government Grants

Government grants are recognized only when there is reasonable assurance that the entity will comply with any conditions attached to the grant and the grant will be received. For grants related to assets, the company receives government grants that come with conditions that the grant shall be used for acquisition or construction of non-current assets, for which the book value will be calculated by deducting government grants and be recognized in profit or loss after depreciation over the period when the grant becomes receivable. For 2017, the remaining government grants from the tangible assets of HHI Holdings (consolidated) and HHI amounted to KRW 9.78 billion (see page 226 of HHI Holdings Business Report for 2017) and KRW 7.85 billion (see page 63 of HHI Business Report for 2017), respectively.

## Sanctions Status

With regards to the sanctions disclosure on the pages 454 ~ 458 of HHI Holdings Business Report for 2017, there was no sanction issued for competition inhibition (206-1), environmental regulation violation (307-1), violation of regulations relating to product/service safety/health (416-1), violation of marketing/labelling regulations (417-1, 2), violation of customer personal information protection (418). For sanctions for compliance with various other social and economic regulations (419-1), please see pages 454 ~458 of HHI Holdings Business Report for 2017.

# Third Party's Assurance Statement

## To the Readers of HHI Group Integrated Report 2018

### Foreword

Korea Management Registrar Inc. (hereinafter "KMR") has been requested by of Hyundai Heavy Industries Group (hereinafter "HHI Group") to verify the contents of its Integrated Report 2018 (hereinafter "the Report"). HHI Group is responsible for the collection and presentation of information included in the Report. KMR's responsibility is to carry out assurance engagement on specific data and information in the assurance scope stipulated below.

### Scope and standard

HHI Group describes its efforts and achievements of the corporate social responsibility activities in the Report. KMR performed a Type 2, moderate level of assurance using AA1000AS (2008) as an assurance standard. KMR's assurance team(hereinafter "the team") evaluated the adherence to Principles of Inclusivity, Materiality and Responsiveness, and the reliability of the selected GRI Standards indices as below, where professional judgment of the team was exercised as materiality criteria.

The team checked whether the Report has been prepared in accordance with the 'Core Option' of GRI Standards which covers the followings.

- GRI Reporting Principles
- Universal Standards
- Topic Specific Standards)
  - Management approach of Topic Specific Standards
  - Economic Performance: 201-1, 201-2, 201-3, 201-4
  - Indirect Economic Impacts: 203-2
  - Anti-Corruption: 205-1, 205-2
  - Materials: 301-1

- Emissions: 305-1, 305-2, 305-4, 305-5, 305-7
- Effluents and Waste: 306-1, 306-2
- Employment: 401-2, 401-3
- Diversity and Equal Opportunity: 405-1, 405-2
- Child Labor: 408-1
- Forced or Compulsory Labor: 409-1
- Rights of Indigenous Peoples: 411-1
- Local Communities: 413-1
- Public Policy: 415-1
- Marketing and Labeling: 417-2, 417-3
- Customer Privacy: 418-1
- Socioeconomic Compliance: 419-1

This Report excludes a data sand information of joint corporate, contractor etc. which is outside of the organization, i.e. HHI Group, among report boundaries.

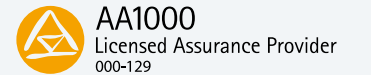
### Our approach

In order to verify the contents of the Report within an agreed scope of assurance in accordance with the assurance standard, the team has carried out an assurance engagement as follows

- Reviewed overall report
- Reviewed materiality test process and methodology
- Reviewed sustainability management strategies and targets
- Reviewed stakeholder engagement activities
- Interviewed people in charge of preparing the Report

### Our conclusion

Based on the results we have obtained from material reviews and interviews, we had several discussions with HHI Group on the revision of the Report. We reviewed the Report's final version in order to confirm that our recommendations for improvement and our revisions have been reflected. When reviewing the



results of the assurance, the assurance team could not find any inappropriate contents in the Report to the compliance with the principles stipulated below. Nothing has come to our attention that causes us to believe that the data included in the verification scope are not presented appropriately.

#### • Inclusivity

Inclusivity is the participation of stakeholders in developing and achieving an accountable and strategic response to sustainability

- HHI Group is developing and maintaining stakeholder communication channels in various forms and levels in order to make a commitment to be responsible for the stakeholders. The assurance team could not find any critical stakeholder HHI Group left out during this procedure.

#### • Materiality

Materiality is determining the relevance and significance of an issue to an organization and its stakeholders. A material issue is an issue that will influence the decisions, actions, and performance of an organization or its stakeholders.

- HHI Group is determining the materiality of issues found out through stakeholder communication channels through its own materiality evaluation process, and the assurance team could not find any critical issues left out in this process.

#### • Responsiveness

Responsiveness is an organization's response to stakeholder issues that affect its sustainability performance and is realized through decisions, actions, and performance, as well as communication with stakeholders.

- The assurance team could not find any evidence that HHI Group's counter measures to critical stakeholder issues were inappropriately recorded in the Report.

We could not find any evidence the Report was not prepared in accordance with the 'Core Option' of GRI standards.

### Recommendation for improvement

We hope the Report is actively used as a communication tool with stakeholders and we recommend the following for continuous improvements.

- HHI Group became a holding company to reinforce managerial transparency. Also, thanks to high interest in the matter shown by CEOs of its subsidiaries and systematic sustainability plans, the organization has seen great improvement in sustainability. To establish a culture of sustainability in the organization, we advise to deploy a standardized quantitative data management system.

### Our independence

With the exception of providing third party assurance services, KMR is not involved in any other HHI Group's business operations that are aimed at making profit in order to avoid any conflicts of interest and to maintain independence.

KMR CEO Eun Ju Hwang



# GRI Standards

## GRI Universal Standards

Topic	Disclosure	Contents	Page
GRI 102: Organizational profile	102-1	Name of the organization	13
	102-2	Activities, brands, products, and services	13, 24~25
	102-3	Location of headquarters	13
	102-4	Location of operations	13, 17
	102-5	Ownership and legal form	14~15
	102-6	Markets served	17
	102-7	Scale of the organization	13, 24~25
	102-8	Information on employees and other workers	13
	102-9	Supply chain	121
	102-10	Significant changes to the organization and its supply chain	15
	102-11	Precautionary Principle or approach	88
	102-12	External initiatives	126
	102-13	Membership of associations	126
GRI 102: Strategy	102-14	Statement from senior decision-maker	10~11, 26, 30, 34, 38, 42
	102-15	Key impacts, risks, and opportunities	18~19, 26~45
GRI 102: Ethics and Integrity	102-16	Values, principles, standards, and norms of behavior	12, 73
GRI 102: Governance	102-17	Mechanisms for advice and concerns about ethics	74, 75
	102-18	Governance structure	14~15
	102-22	Composition of the highest governance body and its committees	14
102-23	Chair of the highest governance body	14	
GRI 102: Stakeholder Engagement	102-40	List of stakeholder groups	49
GRI 102: Reporting Practice	102-41	Collective bargaining agreements	98
	102-42	Identifying and selecting stakeholders	49
	102-43	Approach to stakeholder engagement	49, 52, 121
	102-44	Key topics and concerns raised	49
GRI 102: Reporting Practice	102-45	Entities included in the consolidated financial statements	24~25, 117~119
	102-46	Defining report content and topic boundaries	52~53
	102-47	List of material topics	52~53
	102-48	Restatements of information	N/A
	102-49	Changes in reporting	Cover
	102-50	Reporting period	Cover
	102-51	Date of most recent report 36 Disclosure 102-52 Reporting cycle	Cover
	102-52	Reporting cycle	Cover
	102-53	Contact point for questions regarding the report	Cover
	102-54	Claims of reporting in accordance with the GRI Standards	124~126
	102-55	GRI content index	124~126
	102-56	External assurance	122~123

## GRI Topic Specific Standards(Priority Issues)

Topic	Disclosure	Contents	Page
<b>Anti-Corruption</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	72
	103-2	The management approach and its components	72~73
	103-3	Evaluation of the management approach	72~73
GRI 205: Anti-Corruption	205-1	Operations assessed for risks related to corruption	74~75
	205-2	Communication and training about anti-corruption policies and procedures	74~75
<b>Anti-Competitive Behavior</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	76
	103-2	The management approach and its components	76~77
	103-3	Evaluation of the management approach	76~77
GRI 206: Anti-Competitive Behavior	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	121
<b>Energy</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	88
	103-2	The management approach and its components	88
	103-3	Evaluation of the management approach	88
GRI 302 : Energy	302-1	Energy consumption within the organization	89
	302-4	Reduction of energy consumption	89
	302-5	Reductions in energy requirements of products and services	5, 91
<b>Environmental Compliance</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	88
	103-2	The management approach and its components	88
	103-3	Evaluation of the management approach	88
GRI 307: Environmental Compliance	307-1	Non-compliance with environmental laws and regulations	121
<b>Labor/Management Relations</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	98
	103-2	The management approach and its components	98
	103-3	Evaluation of the management approach	98
GRI 402: Labor/Management Relations	402-1	Minimum notice periods regarding operational changes	99
<b>Occupational Health and Safety</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	80
	103-2	The management approach and its components	80
	103-3	Evaluation of the management approach	80
GRI 403 : Occupational Health and Safety	403-1	Workers representation in formal joint management –worker health and safety committees	80
	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	81
<b>Training and Education</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	102
	103-2	The management approach and its components	102
	103-3	Evaluation of the management approach	102
GRI 404 : Training and Education	404-1	Average hours of training per year per employee	51
	404-2	Programs for upgrading employee skills and transition assistance programs	102~104, 107
	404-3	Percentage of employees receiving regular performance and career development reviews	105
<b>Customer Health and Safety</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	60
	103-2	The management approach and its components	60~61
	103-3	Evaluation of the management approach	60~61
GRI 416 : Customer Health and Safety	416-1	Assessment of the health and safety impacts of product and service categories	57~65
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	121

## GRI Topic Specific Standards(Other Issues)

Topic	Disclosure	Contents	Page
GRI 201: Economic Performance	201-1	Direct economic value generated and distributed	18~19, 24~25
	201-2	Financial implications and other risks and opportunities due to climate change	26~45, 91
	201-3	Defined benefit plan obligations and other retirement plans	107
	201-4	Financial assistance received from government	121
GRI 203: Indirect Economic Impacts	203-2	Significant indirect economic impacts	110
GRI 301: Materials	301-1	Materials used by weight or volume	121
GRI 305: Emissions	305-1	Direct (Scope 1) GHG emissions	90
	305-2	Energy indirect (Scope 2) GHG emissions	90
	305-4	GHG emissions intensity	90
	305-5	Reduction of GHG emissions	90~91
	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	92
GRI 306: Effluents and Waste	306-1	Water discharge by quality and destination	93
	306-2	Waste by type and disposal method	93
GRI 401: Employment	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	107
	401-3	Parental leave	107
GRI 405: Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	14
	405-2	Ratio of basic salary and remuneration of women to men	105
GRI 408: Child Labor	408-1	Operations and suppliers at significant risk for incidents of child labor	N/A
GRI 409: Forced or Compulsory Labor	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	N/A
GRI 411: Rights of Indigenous Peoples	411-1	Incidents of violations involving rights of indigenous peoples	N/A
GRI 413: Local Communities	413-1	Operations with local community engagement, impact assessments, and development programs	108~117
GRI 415: Public Policy	415-1	Political contributions	N/A
GRI 417: Marketing and Labeling	417-2	Incidents of non-compliance concerning product and service information and labeling	121
	417-3	Incidents of non-compliance concerning marketing communications	121
GRI 418: Customer Privacy	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	121
GRI 419: Socioeconomic Compliance	419-1	Non-compliance with laws and regulations in the social and economic area	121

## Membership Status

Entity	Name of Association	Entity	Name of Association	
HHI Holdings	Korea Association of Robot Industry	Hyundai Electric	Korea Electric Association	
	Korea Electric Engineers Association		Korea Electrical Manufacturers Association	
HHI	Korea Offshore & Shipbuilding Association		Korea Smart Grid Association	
	Korea Defense Industry Association		Korea Electrical Manufacturers Association	
	Korea LNG Bunkering Association		Conseil International des Grands Reseaux Electriques (CIGRE)	
	The Society of Naval Architects of Korea		Korea Electric Engineers Association	
	International Towing Tank Conference (ITTC)		HCE	Korea Construction Equipment Manufacturers Association
	Society of Computational Design and Engineering		HMD	Korea Offshore & Shipbuilding Association
	The Korean Society for Nondestructive Testing			
	Korea Association for Radiation Application			
	Korea Plant Industries Association			
	Korea Association for Space Technology Promotion			
	The Korean Society of Ocean Engineers			
Construction Association of Korea (KAC)				
Korea Specialty Contractors Association				
Korea Construction Engineers Association				
Korea Engineering & Consulting Association				
Korea Federation of Combustion Engines (KOFCE)				
Korea Marine Equipment Association				
Korea Association of Ballast Water Management System				

## Contributing Departments

HHI Holdingss	Administration Team	Hyundai Electric	Business Strategy Team
	Customer Support Team		Technology Planning Team
	Production Team		Industrial Relations Team
	Application and Control Team		SHE Management Team
	Finance Team		Human Resources Team
	QM Team		Finance Team
HHI	IR Team	HCE	Strategic Materials Purchasing Team
	Procurement Planning Team		General Affairs Team
	Technical Education Institute		QM Dept.
	Technology Planning Team		Powertrain and Hydraulic system
	Corporate Planning Office		Purchasing Team
	Industrial Relation Dept.		Industrial Relations Team
	Health Management Team	SHE Management Team	
	Social Contribution Team	Marketing Strategy & PR Team	
	Safety Planning Team	HR Strategic Planning Team	
	Engine & Machinery QM Dept.	HR General Affairs Team	
	Business Ethics Team	Finance Team	
	HR Administration Team	Product Development Dept.	
	Human Resources Development Team	QM Dept.	
	Power & Utility Planning Team	HMD	Education & Training Team
	Shipbuilding QM Dept.		Industrial Relations Team
	Compliance Team		Facility Maintenance Team
	Patent Team		Safety Team
QM Team	Raw Material Procurement Team		
Plant QM Team	Personnel Support Team		
Offshore QM Team	Finance Analysis Team		
Hyundai Arts Center	General Affairs Team		
Environment Management Team	QM Dept.		
		Environment & Health Team	

Please contact our Corporate Affairs Team with any questions and comments about the 2018 HHI Group Integrated Report.

**HHI Corporate Affairs Team**

Phone +82 2 746 4738 / Fax +82 2 746 4661 / Email [csr@hhi.co.kr](mailto:csr@hhi.co.kr)