

### **About This Report**

The '2016 Hyundai Elevator Sustainability Report' is the first such report published by Hyundai Elevator for the purpose of sharing the company's economic, social and environmental achievements as well as the progress and goal of the sustainability management with domestic and international shareholders. The report contains the sustainability management activities carried out at Hyundai Elevator's head office and other domestic and overseas business units and focuses on reporting contents that are of high interest to our stakeholders. The report was prepared in accordance with the standards and procedures specified in the 'GRI (Global Reporting Initiative) G4 Guidelines.'

#### **Reporting Period**

The '2016 Hyundai Elevator Sustainability Report' covers Hyundai Elevator's business activities conducted between January 1 and December 31 of 2015. It also includes the company's activities and performance results from the latter half of 2014 and the first half of 2016 for whenever such information may be deemed to be of importance to stakeholders. When listing quantitative performance, we also included data from the three previous years of 2013, 2014 and 2015 to demonstrate the changes in the trend. Data that reflected annual change was calculated based on the account closing date (December 31) and the data collection period was separately provided whenever disclosure was necessary.

#### Reporting Scope

The 2016 Hyundai Elevator Sustainability Report covers the business activities of the company's Icheon head office, Seoul office and distribution centers. We are planning on reporting the sustainability man agement of overseas business units including China and Brazil in the future. It is our ultimate goal to develop a comprehensive report that discloses the sustainability achievements of all of our business units

#### **Reporting Principles and Assurance**

report has been prepared in accordance with the "Core Options" of the GRI G4 Guidelines. The reporting status of items recommended under the GRI Guidelines may be checked in the GRI Guidelines. Index on page 90. To ensure the reliability of the report, the contents of the report were also assured by a third-party verification agency.

#### Additional Information

The Hyundai Elevator Sustainability Report can be downloaded from the website (www.hyundaielevator.co.kr). Please feel free to contact us for further questions. We look forward to hearing from our esteemed stakeholders

Public Relations Department, Hyundai Elevato

Phone +82-2-3670-0717



#### **COVER STORY**

Hyundai Elevator's first sustainability report summarizes the company's impressive history of becoming the leading elevator company in the Korean market and provides insights into its promising future of becoming the top elevator company in the world. The company's commitment to prosper alongside its stakeholders is well-expressed in the graphical motif that represents the essence of Hyundai Elevator and the color gradation that symbolizes the company's brand value.

#### CONTENTS

#### **OVERVIEW**

- O4 CEO Message
  O8 2015 Highlights
  10 Company Profile
  14 Governance
  18 Ethical Management
- 18 Ethical Managemen
- 22 Risk Management
- 23 Vision
- 24 Materiality Test
- Our Business At a Glance

#### **SUSTAINABILITY ISSUES**

ISSUE 1 Technical Competitiveness
ISSUE 2 Customer Satisfaction
ISSUE 3 Talent Development
ISSUE 4 Safe Work Environment
ISSUE 5 Mutual Growth with Partners
ISSUE 6 Work-related Social Contributions
ISSUE 7 Environmental Impact

#### **MANAGEMENT REPORT**

- Economic PerformanceSocial Performance
- 79 Environmental Performance

#### **APPENDIX**

- **84** Financial Highlights
- 87 GHG Emissions Assurance Report
- 88 Independent Assurance Report
- 90 GRI Index
- 92 UN Global Compact
- 93 Contributing Departments

# **CEO Message**



Dearest customers, shareholders and partners, On behalf of Hyundai Elevator and its employees, I would like to extend my deepest gratitude for your continued support for the company.

Since its inception in 1984, Hyundai Elevator has grown into a top tier elevator company with outstanding technological prowess. We will continue to do our best to grow alongside our shareholders, partners, society and its members by providing superior products and services worldwide.

In 2015, Hyundai Elevator was named the top elevator company in the new installation category for the ninth consecutive year, and simultaneously achieved a dominant market share, managing over 100,000 elevator units on a paid basis in the service category. We also attained significant achievements both domestically and internationally including the first-ever operation of a double-deck elevator in Korea, the completion of our technology training center for elevator professionals and procurement of the construction contract for all elevators inside Yongsan Hotel and Water Garden, the largest hotel in Korea and the largest shopping mall in the world located inside the Istanbul International Financial Center, respectively.

In April 2015, to fulfill our responsibility as a global corporate citizen, we joined the UNGC (United Nations Global Compact) and have strived to comply with the ten principles under the four categories of human rights, labor, environment and anti-corruption when carrying out all business activities.

Based on these achievements and efforts, Hyundai Elevator now aims to take a bold leap forward towards the global standard through sustainability management. Hyundai Elevator was able to achieve amazing growth over the past 32 years thanks to our stakeholders' warm encouragement and candid advice. We plan on fortifying the sustainability management system and create social and economic values through implementing management strategies such as strengthening of R&D capability, innovation of quality and price competitiveness, development of differentiated services and cultivation of new talents. Following the core concept of 'Glocal (Think Global, Act Local),' we will continue to establish more overseas branches and share our values with the world.

Under the current system of Glocal economy, sustainability management is no longer an option but a core value required to achieve a symbiotic relationship between humanity and nature/corporations and society. Governments and civil societies emphasize that corporate citizens should practice both economic justice, namely lawabiding management and ethical management, and social justice. Money-blinded corporations that neglect such duties are greatly frowned upon and may be apt to become a thing of the past.

The '2016 Hyundai Elevator Sustainability Report' is the first work published by Hyundai Elevator for the purposes of sharing the company's economic, social and environmental achievements with domestic and international shareholders and promoting mutual growth.

Hyundai Elevator will continue to strive to grow into a trustworthy global corporation. We kindly ask for our customers, shareholders and partners to show us continued interest and encouragement.

Thank you.

July 2016

**Bob Jang,** CEO / Representative Director, Hyundai Elevator

5 岁于



# Hyundai Elevator on the Global Stage

Hyundai Elevator is receiving global recognition in diverse areas through the development of new technologies and taking on new challenges. With outstanding technological prowess and years of international experience, Hyundai Elevator became the leading elevator company in Korea and is now making forays into the global market.

 $_{\text{KRW}} \textbf{1,448.7}_{\text{billion}}$ 

015 sales

KRW 156.5 billion

2015 operating income



Largest domestic market share for the ninth consecutive year

Market share 43.3%

13.3%

Average annual growth rate in global orders

122,600 units

Leading elevator maintenance company in Korea

Down later of Figure Costs (BIF

## Economy

#### **Installation and Operation of** Korea's First Double-deck Elevator (LG U+'s office building in Yongsan, Seoul)

Korea's first double-deck elevator, installed inside the new office building of LG U+, began operation on February 3, 2015, after passing the elevator inspection by the Korea Elevator Safety Agency. A double-deck elevator is different from a single-deck elevator in that two elevators are vertically connected inside one shaft to allow two consecutive floors to use the elevator simultaneously. It is a highly efficient system with increased transportation capability and shorter passenger wait time.



Hyundai Elevator received the Gold Tower Order of Industrial Service Merit at the 39th National Productivity Awards, the highest honor in its category. The award was presented in recognition of the outstanding results of the company's companywide productivity innovation campaign, which yielded a 41% increase in production volume and a 44% increase in labor productivity

# Society



### Inducted into the Hall of Fame for Businesses with Outstanding **Quality Competitiveness**

Hyundai Elevator was designated as an outstanding business for quality competitiveness at the '2015 Businesses with Outstanding Quality Competitiveness' competition hosted by the Ministry of Trade, Industry and Energy and Korea Agency for Technology and Standards and sponsored by the Korea Standards Association. The company's outstanding quality competitiveness was further recognized as it passed the hall of fame screening that honors businesses which maintained outstanding quality competitiveness for over 10 years.

### **Designated as the Top Elevator Brand in the Korea Brand Power** Index (K-BPI) in 2015 for the **Fourth Consecutive Year**

Hyundai Elevator was elected as the leading elevator brand in the 2015 Korea Brand Power Index (K-BPI) by the Korea Management Association Consulting (KMAC). It received the highest score in the brand loyalty category and received 784.5 points in the overall Brand Power Index. Hyundai Elevator remains the top company in brand power in the elevator category for the fourth consecutive year since 2012.

### Completed the 'Training Center, Korea's First Technical Training **Center for Elevator Installation** and Repair Professionals

The Hyundai Elevator Technical Training Center was completed on August 27, 2015, in order to train elevator professionals. The first of its kind in Korea, the center has five ground levels and occupies a total floor area of 975.5m<sup>2</sup>. Roughly 4,000 elevator professionals will be trained each year in elevator installation, maintenance and production quality.



# **Don't hurry** Be safe



Paid Maintenance of More Than

In 2015, Hyundai Elevator held a 43.3% do-

mestic market share in the new installation cat-

egory and defended its top elevator company

title for the ninth consecutive year. It also ele-

vated itself into becoming the leading elevator

maintenance provider in 2015, managing over

100,000 elevator units on a paid basis. Out of

the 583,165 elevator units in Korea (data as of

the end of 2015, Korea Elevator Safety Agen-

cy), Hyundai Elevator provides maintenance

service for 122,600 elevator units (data as of

the end of 2015).

100,000 Elevator Units

#### **Enhancement of Co-Existence with Partners**

Hyundai Elevator, which received an 'excellent' grade in the '2014 Mutual Growth Index Assessment' published by the Korea Commission for Corporate Partnership, continued to make unsparing efforts for mutual growth with Partners in 2015 as well. As part of such efforts, at the 2015 Mutual Growth Convention, we presented an appreciation plaque to four outstanding partners in each category and signed a mutual growth Agreement with our partners and the Korea Commission for Corporate Partnership.

#### **Practicing Sustainability Management**

In 2015, Hyundai Elevator publicly announced its support for principles on human rights and labor by joining the UN Global Compact. We do not discriminate against our employees based on their gender, race, religion or place of origin and instead provide a fair work environment where all employees are given an equal opportunity to demonstrate their skills

# Sustainability •

### Received 'AA' Grade in the CP Rating

Hyundai Elevator participated in the first-ever CP rating evaluation hosted by the Korea Fair Trade Commission in 2015 and earned the top rating of AA grade.

# **Environment**

### 2015 Safety & Health Slogan -'Don't Hurry, Be Safe'

'Don't Hurry, Be Safe' was selected as the 2015 safety & health slogan to prevent safety incidents and establish a corporate safety culture & Safety among all employees, on-site workers and partners of Hyundai Elevator. 'Don't hurry, Be Safe' contains the message that a safe workplace should be accident-free by conducting all work safely without rushing.

### Established a **Greenhouse Gas Inventory**

For the purpose of reducing energy consumption and greenhouse gas emissions, Hyundai Elevator established a greenhouse gas inventory system that manages energy consumption and greenhouse gas emissions. Through the Greenhouse Gas Inventory, Hyundai Elevator is able to secure objective and reliable data concerning greenhouse gas emissions and actively respond to the greenhouse gas energy goal management system.

# **Company Profile**

### **Corporate Overview**

### Total Moving Solution Provider evolving alongside its customers

Hyundai Elevator, with leading R&D-based technological prowess and differentiated products that actively reflect customer demand, is maintaining its position as the top elevator company in Korea in the new installment category for the ninth consecutive year. As the leading elevator company in Korea, the company operates a diverse range of business units including an elevator division which includes elevators, escalators and moving walks as well as material handling system, platform screen doors and auto parking system. Our production bases and sales networks in China and Brazil allow us to be on par with other global elevator companies. Hyundai Elevator will provide its customers with the best products and services and share outstanding performance results and values with its shareholders and partners in order to become a global corporation that leads the global elevator market.

#### Corporate Overview

Company Name	Hyundai Elevator Co., Ltd.
Date of Establishment	May 23, 1984
CEO	Bob Jang
Major Businesses	Production, sales and maintenance of elevators and other products
Head Office Location	2091, Gyeongchung-daero, Bubal-eup, Icheon-si, Gyeonggi-do, Korea
No. of Employees	1,873 (as of the end of 2015)

### **Financial Performance**

Hyundai Elevator is the leading elevator company in Korea with the highest sales and operating income in the industry and an average growth rate of 11.8% (2010~2015, consolidated basis). In 2015, despite the harsh economic climate, we deployed over 100,000 elevator units in the service category, elevating ourselves as the leading elevator maintenance company.



**Total Assets** 



Sales



**Total Capital** 



Operating Income

KRW 156.5 Billion

Globalization

[Data from 2015, consolidated basis]



## **Company History**

Since 1980s Establishment

1990s Momentum

2010S Take-off 2000s Growth

### 1982~1989

Launched the Transport Machine Business Division

Established Hyundai Elevator Co., Ltd. (1984.05) Completed the elevator factory in Icheon (1985.05) Approved for the establishment of a technology R&D center (Ministry of Science and Technology) (1986.04)

Completed the test tower at Icheon Head Office (1986.11)

Formed the labor union (1987.08)

Decapitalized Westinghouse Electric Corp. (1988.06) Completed second escalator factory (1988.07)

### 1990~1995

Completed third factory at Icheon Head Office

Formed Employee Stock Ownership Association

Exceeded production of 10,000 elevator units (1992.04)

Established Shanghai-Hyundai Elevator Co. in a joint venture with China (1993.08)

Established Hyundai Elevator Service Philippines in a joint venture with the Philippines (1993.09) Awarded the Management Innovation Grand Prize

Completed the R&D building for the Technical Research Center at Icheon (1995.04)

Began operations of the Cheonan Distribution Center (1995 11)

### 1996~1999

Listed on the Korea Exchange (KRX) market (1996.07)

Awarded the USD 50 Million Export Tower on Trade Day (KFTA & Ministry of Trade, Industry and Energy) (1997 12)

Acquired ISO 9001 & ISO 14001 certifications for all business lines of elevators, parking and distribution systems (1998.03)

Developed the first machine room-less elevator in Korea (1999.09)

### 2000~2005

Acquired CE mark for all elevator units (2002.04)

Produced 50,000 elevator units (2002.06)

Installed the first PSD (Platform Screen Doors) in Korea (Two stations in Gwangju Subway) (2003.10)

Appointed Chairwoman Hyun

Jeong-eun (2003.10) Manufactured 70.000 elevator units (2005.07)

### 2006~2009

Opened the first GIS customer center in the industry (2006.03)

Designated as a Labor-Management Culture Model Company (Ministry of Employment and Labor) (2006.09)

Awarded the Green Energy Grand Prize (Ministry of Knowledge Economy) (2008.03)

Established Hyundai Elevator Indonesia Ltd. (2008.03)

Established Hyundai Elevator India Ltd. (2009.04) Completed the "Hyundai Asan Tower," the tallest elevator test tower in the world (205m) (2009 04)

Shipped 100,000 elevator units (2009.04)

### • 2010~2016

Achieved KRW 100 billion sales in service business (2011.12)

Acquired the OHSAS 18001 and Green Management System (GMS) marks (DNV) (2012.01) Awarded the first presidential citation on eleva-

tor safety management in the industry (Group category) (Ministry of Public Administration and Security) (2012.12)

Established HYUNDAI ELEVADORES DO BRAZIL LTDA (2013.01)

Established HYUNDAI ELEVATOR MALAYSIA Sdn Bhd(HEM) (2013.01)

Opened Hyundai Elevator Customer Care Center (CCC) (2013.03)

Awarded the Presidential Award at the Labor-Management Awards (Ministry of Employment and Labor) (2013.10)

Established Hyundai Thanh Cong Elevator Vietnam Co. Ltd.(HETCV) (2014.01)

Completed the factory in Brazil (2014.04) Designated as 100 job creating businesses for two consecutive years (2014.04)

Installed the fastest (600m/min) elevator in Korea (Busan International Finance Center) (2014.06)

30th Anniversary (2014.05)

Started operation of the first double-deck elevator in Korea (2015. 04)

Reached maintenance of more than 100,000 elevator units (2015.04)

Completed the first elevator technology training center in Korea (2015.10)

Received the Gold Tower Order of Industrial Service Merit at the 39th National Productivity Awards (2015.10)

Inducted into the Hall of Fame for Businesses with Outstanding Quality Competitiveness (2015.11)

Received 'AA' Grade in the CP Rating

11

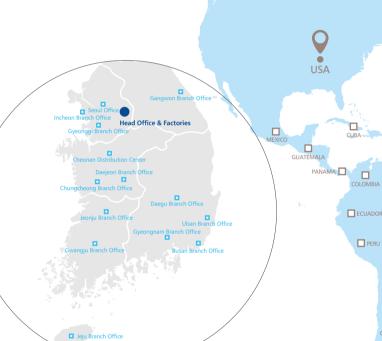


### **Major Business Units**

Hyundai Elevator operates a head office, a number of production factories and 12 branch offices domestically and 9 corporations and 51 business offices overseas. Based on a well-connected global network, the company is taking a bold leap forward into engaging the global market.



- Head Office **Factories**
- Icheon | Factory 1, Factory 2, Factory 3, Technical R&D Center, Customer Care Center
- Domestic Branch Offices
- Gyeonggi Branch Office | Busan Branch Office | Incheon Branch Office | Daejeon Branch Office | Daegu Branch Office | Ulsan Branch Office | Gangwon Branch Office | Jeonju Branch Office | Gwangju Branch Office | Gyeongnam Branch Office | Jeju Branch Office
- Distribution Center Cheonan Distribution Center
- Overseas **Business Units**
- Overseas Corporations
- China [Shanghai, Yantai] | Brazil | Malaysia | Vietnam | Indonesia | India | Turkey | United States
- Overseas 9 in Asia | 14 in the Middle East | 11 in North / South America Agencies 9 in Europe & CIS | 8 in Africa









BRAZIL



#### Icheon Head Office (Gyeonggi-do)

Overview of Business Units

- [Factories 1, 2 and 3] Advanced production
- | Manufactures elevators, material handling systems, parking systems and platform screen doors (PSD)

#### **Major Facilities**



#### Seoul Office (Yeonji-dong, Jongno-gu, Seoul)

- Sales: Korea Elevator Business Division, Overseas Business Division
- | Service: Service Business Division Planning and Management: CHO, CFO, CSO,

### China Factory (Shanghai, China)

Scale: 28,716m<sup>2</sup> Manufactures elevators and escalators Elevator test tower (height: 72m)

Brazil factory (Sao Leopoldo, Brazil) Advanced facilities (13,337m²) Manufactures elevators



#### Hyundai Asan Tower



#### lyundai Customer Care Center (ccc)

Offers real-time remote management service (HRTS: Hyundai Real Time Service) and customer counseling

12 HYUNDAI ELEVATOR Sustainability Report 2016

13

# Governance

# **Board of Directors Organization**

#### **Board of Directors**

The Hyundai Elevator Board of Directors is the company's highest decision-making organization that deliberates and votes on important matters concerning laws and articles of association, consigned items from the general shareholders meeting, principles regarding business management and implementation of tasks. The board is composed of three internal directors, three external directors and one non-executive director. To ensure efficient decision-making, we also operate three sub-committees under the Board of Directors: the Audit Committee, the External Director Recommendation Committee and the Personnel Management Committee.

Organizati	on		Data from 2016
Job Title		Key Experiences	
	Jeong-Eun Hyun	Chairman of Hyundai Group	Vice Chairwoman of Seoul Chamber of Commerce and Industry
Internal Directors	Bob Jang	CEO of Hyundai Elevator	Former CEO of Otis Elevator
Directors	Ki Seon Kwon	CFO of Hyundai Elevator	Former Deputy Managing Director of Hyundai Group, Strategic Planning Division
External Directors	Jongsang Yu	Former Assistant Planning Director at the Office for Government Policy Coordination	Former Visiting Professor at Myongji University, Department of Public Administration
	Sangjae Ok	Former Auditor at Inport Develop- ment	Former Head of Korea Development Bank, Ireland Branch
	Dongbeom Seo	Managing Director at Yieum Private Equity	Managing Director at Kamur Investment Partners, PE Division
Non-execu- tive Director	Hojin Kim	Executive Managing Director at Hyun- dai Group Strategic Planning Division	Former Executive Managing Director at Daewoo Securities IB Division

#### Independence

Hyundai Elevator seeks to achieve a balance in power dynamics between its internal executives and external directors while reaching logical and fair resolutions by designating three external directors for the Board of Directors. Directors with special interests cannot cast a vote in a particular matter that concerns them. Further independence and transparency are secured in the decision-making process by operating three subcommittees under the Board of Directors and requiring the attendance of at least one external director at each committee meeting to keep a check on major shareholders and executives. The Audit Committee, in particular, has the right to request sales reports, investigate the financial condition of the company, demand related employees or external auditors to attend a meeting and receive advice from an expert at the company's expense.

#### **Transparency and Expertise in Director Election**

Hyundai Elevator's internal and external directors are elected at the general shareholders meeting in accordance with related laws and articles of association. Internal directors are recommended by the Board of Directors while external directors are recommended by the External Director Recommendation Committee composed of five members. We select people with expertise in different fields to enhance the overall expertise of the Board of Directors. Our current directors include one former professor (Jongsang Yu), one accounting specialist (Dongbeom Seo) and one international finance specialist (Sangjae Ok).

Election Process	Recommendation of candidates >	Review and deliberation of candidates	Approval by general share- holders meeting		
	Internal Directors   Board	of Directors			
	External Directors   External Director Recommendation Committee				

### **Board of Directors Operation**

Unit: KRW Million

Amount

2,722

78

34.9

Remuneration

Highest wage

Ratio (times)

Employee average

#### **Operation and Activities**

Hyundai Elevator votes on key business items through the Board of Directors. Shareholder opinions and employee requests from general shareholders meetings and investor relations presentations are shared with the Board of Directors before each meeting. All directors are allowed to participate in Board of Directors meetings via a means of communication, and their attendance is acknowledged in such cases. Board of Director meetings can be summoned as necessary on an emergency basis. To ensure efficient decision-making, the Board of Directors sub-committees are given partial authority to handle certain matters that would ordinarily be authorized by the Board of Directors. The validity of establishment and resolution at the Board of Directors meeting shall be confirmed by majority attendance and consent to the execution of an item, respectively. When the law or regulation requires an increased majority, the Board of Directors shall comply with its stipulations. A director's vote cannot be exercised by proxy and directors with special interest in a particular matter cannot exercise their voting right in that matter either. In 2015, 11 Board of Directors meetings were held with 30 introduced and handled agendas and an average attendance of 85%.







times

### **Evaluation and Compensation**

Hyundai Elevator sets the compensation limit of its directors at the general shareholders meeting in accordance with Article 388 of the Commercial Act and the Articles of Association. Once determined at the general shareholders meeting, compensation is offered in a fair and transparent manner in consideration of the management evaluation and payment standards.

#### **Communication with Stakeholders**

The Board of Directors communicates with stakeholders via diverse channels including disclosures and company presentations. The highest decision-making is carried out at the general shareholders meeting, and important resolutions are immediately announced so that management information is provided to our shareholders and stakeholders in the most efficient manner.

#### **Sub-committees**

Classification	Members	Activities
Audit Committee	Jongsang Yu, Sangjae Ok and Dongbeom Seo	Matters regarding the general shareholders meeting Matters regarding the directors and Board of Directors Matters regarding audits
External Director Recommendation Committee	Jongsang Yu, Sangjae Ok, Dongbeom Seo, Bob Jang and Ki Seon Kwon	Recommendation, evaluation and selection of external directors candidates who are to be appointed at the general shareholders meeting
Personnel Management Committee	Jongsang Yu, Sangjae Ok, Bob Jang and Ki Seon Kwon	Appointment, dismissal and promotion of executives Matters regarding the compensation of executives including remunerations and bonuses Treatment regarding executives and incentive systems Granting of stock options and their quantity Changing and installing key HR systems

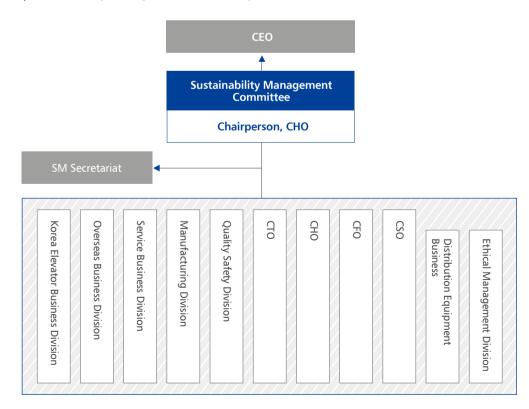
### Sustainability **Management** Framework

The Sustainability Management Committee is the highest decision-making organization in the company's sustainability management category. The committee is in charge of setting strategic directions for sustainability management, reviewing business activities from a sustainability management aspect, and deducing improvement projects and reviewing plans in progress. The organization consists of a Chairperson and members in each business division and sector. Sustainability management sectors include Sustainability Management in General, Human Rights and Labor, Compliance, Mutual Growth, Social Contributions, Environment and Safety, Technology and Products, etc. Each sector handles improvement projects as consigned by the Sustainability Management Committee and reports outcomes and future plans at the biannual Sustainability Management Committee meeting.

The Sustainability Management Committee carries out sustainability management activities in the most systematic manner. We have conducted a sustainability management diagnosis to identify the economic, social and environmental risks and opportunities involved in sustainability management and reported the results to the chairperson and heads of each business division in the Corporate Social Responsibility Committee. Based on this report, working level teams gathered in the Sustainability Management Working Level Consultation Committee and deduced improvement projects, established plans and reported their conclusions to the Sustainability Management Committee. After receiving review and approval by the Sustainability Management Committee, we shared the outcomes and plans that were established at the Sustainability Management Committee with internal/external stakeholders in the sustainability report.

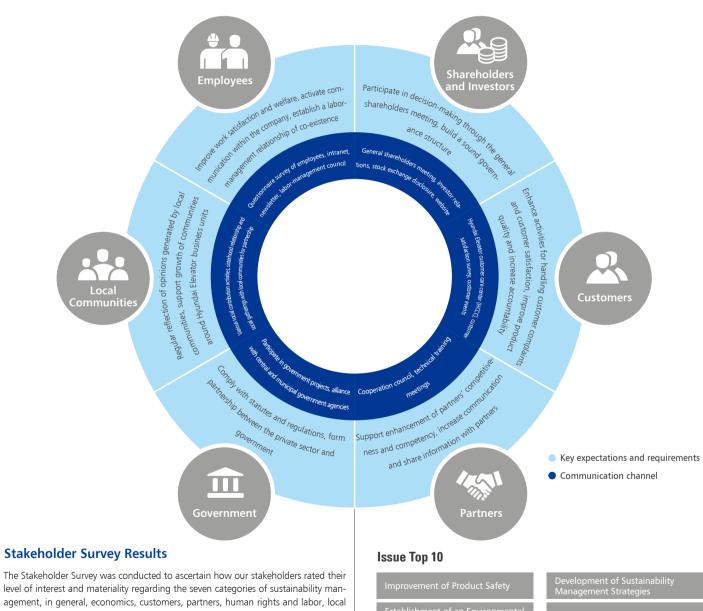
### **Committee Organization**

#### | Sustainability Management Execution System



### Stakeholder **Engagement**

Hyundai Elevator defines "stakeholders" as groups that directly or indirectly influence our business activities. Our stakeholders include shareholders, customers, partners, employees, local communities and the government. To better listen to and reflect the opinions of our stakeholders, we operate various communication channels that allow us to identify key expectations and requirements of our stakeholders. We plan on further solidifying sustainability management through active communication with our stakeholders and hope to disclose the outcome of stakeholder engagement in our sustainability report.



#### **Stakeholder Survey Results**

level of interest and materiality regarding the seven categories of sustainability management, in general, economics, customers, partners, human rights and labor, local communities and the environment. Stakeholders responded that priority should be given to the improvement of product safety and also showed strong interest in the enhancement of environmental management and social contribution. Further analysis of the survey revealed that stakeholders considered the categories of "Improvement of Product Safety," "Establishment of an Environmental Management System," "Business Units with Work-related Social Contributions," "Improvement of Occupational Health and Safety" and "Selection of Fair and Transparent Partners" most important in their respective order. The survey results were reflected in the materiality test.

17

# **Ethical Management**

### Ethical Management Structure

### **Establishment of Ethical Management Structure**

The Ethical Management Department was established in 2007 in accordance with the permanent organization guidelines, which is implemented under the direct supervision of the CEO of Hyundai Elevator's affiliated companies. In 2012, the organization was restructured to strengthen its diagnostic function across all business activities. In order to achieve continued growth and reach management goals, the Ethical Management Department inspects, evaluates and improves the company's compliance with regulations and fulfillment of instructions. The Department aims to effectively perform internal control as well as secure sincerity, transparency, fairness and responsibility in the company's business management. The Cyber Report Center page on our website strives to achieve enhanced work transparency, fair transaction and reinforced ethics.

#### **Ethical Management Structure**



#### **Code of Conduct**

"Ethics" is the primary value of Hyundai Elevator's business activities. We seek sustainable growth alongside our customers, partners and employees by not merely complying with the laws and regulations but also fulfilling our duty as a responsible corporate citizen. To ensure a clean and transparent corporate culture, all employees are well-versed in the code of ethics, and the company is actively promoting ethical management activities to allow ethics to become firmly rooted throughout the company. A Code of Ethics Handbook, written in four languages (Korean, English, Chinese and Portuguese) to improve the ethical awareness of our employees, is available on our website for stakeholders to read.

### **Enhancement of Ethical Management Execution**

To practice ethical management, Hyundai Elevator has published and distributed a "Code of Ethics Handbook" and an "Ethical Management Self-diagnosis Card" to all employees and partners. In 2014, we distributed an "Ethical Management Self-diagnosis Card" to form a corporate culture of self-inspection and ethical management. In 2015, we conducted the "Ethical Management Survey" to identify employees' level of awareness in ethical management and promote continual advancement of the corporate culture. We are planning on carrying out the Ethical Management Survey each year to improve the ethical awareness of employees.

#### **Operation of the Cyber Report Center**

The Cyber Report Center is a reporting system that allows people to report complaints anytime and anywhere. Cyber reports made via the ethical management division are categorized into civil complaints and valid reports. On-site complaints and simple afterservice reports are transferred to relevant departments and handled promptly. Valid reports include malpractice, unfair transactions and corruption. They are first reported to the CEO, and the handling results are notified to the informant after going through a special diagnosis. The ethical Management Department updates reports and handling results each month, keeps a casebook for each sector and provides ethics violation training to newly appointed heads of departments and branch offices.



### Voluntary Compliance of Fair Trade

#### **Declaration of Will for Compliance**

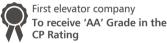
All employees are required to strictly comply with the Fair Trade Act to instill a fair trade culture and ensure effective business management. Hyundai Elevator's CEO announces the importance of the Fair Trade Act to all employees, external stakeholders and customers through management meetings and CEO letters.

#### **Monitoring and Sanctions Structure**

The essence of the Fair Trade Compliance Program is prevention and supervision of legal violations. Twice a year, Hyundai Elevator conducts a cartel vulnerability survey, inspects fair transactions of subcontracting and unfair special subcontractor agreements, and inspects overall operations to check for any possible violations of the Framework Act on Construction Industry and the Subcontracting Act. Through regular inspections, we evaluate departmental risks and apply strict disciplinary systems to prevent legal violations.



# **AA** Grade



(CP rating assessment hosted by the

# Regular Monitoring Internal Risk

Domestic and overseas sales Purchasing division Quality assurance division Installation division Service division System solutions division

#### **Systematic CP Education**

Hyundai Elevator is working on establishing a voluntary fair trade compliance culture through conducting preventative training on Fair Trade Act violations, unfair collective acts and cartel activities. We conduct regular compliance education for our employees twice a year. Special education is offered to high-risk departments and officers, newly hired employees, employees working at agencies, and sales representatives. We also sponsor CP manager workshops and CP-based management declaration ceremonies to allow employees to directly participate in the compliance program. These programs help employees develop preemptive perception and ex post facto discernment.

#### **Publication of Compliance Newsletters**

Hyundai Elevator has been informing employees of the compliance program through the CP newsletter since 2014. The newsletter is uploaded on groupware and compliance support systems and also directly provided to employees via e-mail. The newsletter helps employees to adhere to the operational procedures by providing them with corporate CP-related news, matters to improve in connection with transactions, information on the Fair Trading Act and changes in market conditions.

#### Received 'AA' Grade in the CP Rating

Hyundai Elevator received AA grade in the CP rating assessment hosted by the Fair Trade Commission in 2015. This was the first time AA grade was awarded to an elevator company and the highest grade ever granted by the Fair Trade Commission.

#### **Management System for Preemptive Prevention of Fraud**

In response to the rising need for systems of corruption risk management and response structure, Hyundai Elevator has collected many risk scenarios and developed a fraud prevention system to ensure effective monitoring. The fraud prevention system constructed by the Ethics Management Department was designed to regularly monitor relevant work (domestic sales, overseas sales, installation, service, purchasing, S/S, distribution PSD, quality management) by creating an inspection checklist to offset fraud risk and other risk factors. Issues detected from the list are inspected each month to promote awareness among employees and establish a transparent and fair corporate culture.

# Propagation of a Culture of Mutual Growth

### Signed Agreements on Fair Trade and Ethical Management

Hyundai Elevator signs fair trade agreements with our partners each year to enhance mutual competitiveness through co-existence. We also signed ethical management agreements for transparent deals with partners and practicing of ethical management.

# Compliance with the Four Rules for Subcontracting and Use of the Standard Subcontract Form

To develop a fair trade order with our partners, Hyundai Elevator uses standard subcontract forms while adhering to the four rules related to subcontracting. The standard forms are available on our website (http://www.hyundaielevator.co.kr) for employees as well as partners to view.



Leremony for compliance-based management



CP education



Visit to primary partners (Daehyun



Visit to secondary partners (Selim E8

#### Four rules to follow in subcontracting Regulations for Practical rules for Practical Practical rules for the operation of issuing or archivcontracting rules selecting and ing subcontracting the mutual growth for co-existence managing partners review committee documents

#### Complying with the Fair Trade Act through CP Activities

Hyundai Elevator performs preventive activities through compliance programs and education on fair trade law. We also monitor enterprise-wide performance through periodic inspections. In addition, we have deployed systems for ex post facto administration, including improvement of vulnerable areas and disciplinary actions on violators.

#### **Support for Secondary Partners**

Hyundai Elevator propagates a culture of mutual growth by offering mutual growth programs to our secondary partners after signing a fair trade agreement between primary and secondary partners. We also stage improvement activities by operating a win-win payment system, technical support and visitation of secondary partners by executives in charge of purchasing and the CEO.

# **Risk Management**

#### **Risk Management Policies and Strategies**

Due to rapid changes in the business environment, internal and external risks are diversified and more interconnected now. Accordingly, it has become more important to identify and prevent risks through preemptive management on a companywide basis. Hyundai Elevator detects and responds to risks by developing means for identifying, defining and managing risks that threaten the overall management.

#### **Risk Management Structure**

Hyundai Elevator's preventative structure was established to minimize the company's risks and losses. Through classifying risks into financial risks and non-financial risks and further dividing them into sub-risk categories, we preemptively respond to risks that impede the company from attaining its business goals from a comprehensive perspective.

#### **Financial Risk Management**

Hyundai Elevator is exposed to diverse financial risks including market risks, credit risks and liquidity risks. Financial risk management concentrates on minimizing potential uncertainties that may impede financial performance. Our goal is to accomplish management plans by enhancing the soundness of our financial structure and improving the predictability of management indices through conducting appropriate risk hedging in the unstable market.

Foreign Exchange Risk

Foreign exchange risks arise from fluctuations in currency exchange rates in assets or liabilities expressed in foreign currencies. As Hyundai Elevator is exposed to the risk of currency fluctuations through foreign contracts and purchasing of raw materials, we periodically conduct forex risk measurement.



Risk exists with changes in interest income and expenses arising from deposits and borrowings depending on fluctuations in future market interest rates. Hyundai Elevator preemptively manages interest rate risk by improving the borrowing structure, maintaining an adequate ratio of fixed and variable interest rate deposits, monitoring interest rate movements on a weekly and monthly basis, and developing plans to address interest rate changes.



Liquidity risk refers to the possibility of a problem rising in foreign payment due to lack of liquidity. Hyundai Elevator maintains a sufficient cash reserve through active sales activities and utilization of funds within our credit ceiling and adequately manages liquidity risks.

#### **Non-financial Risk Management**

Hyundai Elevator classifies key non-financial risks that may arise in the categories of safety, environment, quality and reputation into business risks, legal risks, and operational risks and defines control processes to minimize financial loss. Hyundai Elevator pursues sustainability management by deducing risks that directly or indirectly affect management activities, developing quantitative indicators for identifying them and improving them through process compatibility review.

# **Vision**



### **Management Policies**



Pursuing Globalization Drive



Strengthening R&D Capabilities



Innovating
Quality and Cost
Competitiveness



Promoting a Service Mindset



Fostering Human Resources

Four Major Implementation Strategies









# **Materiality test**

Hyundai Elevator strived to include all relevant information by selecting the stakeholders' core interests derived through a materiality test as core issues. We reported these in accordance with the formats of the reporting principles of the GRI G4 Guidelines for global sustainability reporting.

#### **Materiality Test Process**

Hyundai Elevator performed the materiality test considering the GRI reporting principles of "Stakeholder Inclusive-ness", "Sustainability Context", "Materiality" and "Completeness" The materiality test was conducted by assessing stakeholder impact and business relevance of 32 issues in consideration of the characteristics of the industry and the current circumstances of Hyundai Elevator.

#### | Materiality Test Process and Reporting of Issues



# Global benchmarking International standard analysis Media Analysis

Organization of a pool with **32** issues

To organize a pool of 32 issues for our 2016 Sustainability Report, Hyundai Elevator consulted our own analysis of related industry groups (elevators and escalators) at home and abroad including the management status and related issues, related business-related articles since 2013, and sustainability guidelines, including GRI G4.0 Guidelines and ISO 26000 Guidance.



#### **Business relevance assessment**

Global benchmarking results
International standard analysis results
Media analysis results

#### Stakeholder impact assessment

Qualitative analysis results of employee interviews
Results of the stakeholder survey

Business relevance assessment | Global benchmarking results revealed "improving customer satisfaction" and "propagating sustainability of the supply chain" as material issues. Analysis of international standards showed "fair and transparent selection of partners" and "social contribution" as material issues. Media analysis revealed that "new market exploration" and "business-related social contribution activities in local communities" were frequently reported on.

Stakeholder impact assessment | Stakeholder survey results revealed that stakeholders are highly interested in "improvement of product safety," "establishment of an environmental management system," "business-related social contribution activities," and "improvement of occupational health and safety." Interviews with key stakeholders revealed that "R&D investment and activities" and "management of environment pollutants" were considered to be the most important.

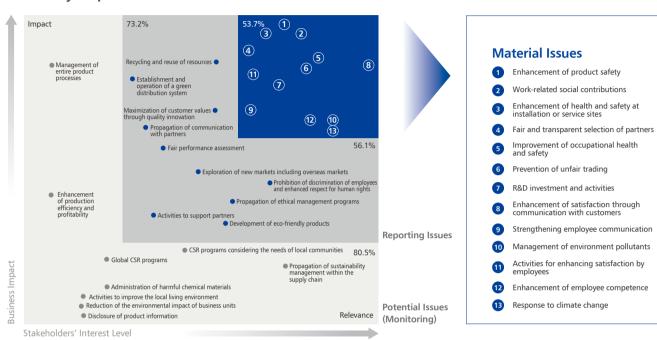


# Reflect outcomes of the materiality test report

Selection of **13** material issues

Hyundai Elevator selected 13 issues in the economic, social and environmental sectors from the results of the materiality test for the 2016 sustainability report. In the economics sector, material issues were "R&D investment activities," "improvement of product safety," and "enhancement of customer satisfaction through communication." In the environment sector, material issues were "improvement of occupational health and safety," "management of pollutants," and "response to climate change." In the social sector, material issues were "enhancement of employee competence and communication" and "activities for the enhancement of employee satisfaction." In addition, "prevention of unfair trading," "fair and transparent selection of partners," and "business-related social contribution activities" were also chosen as material issues.

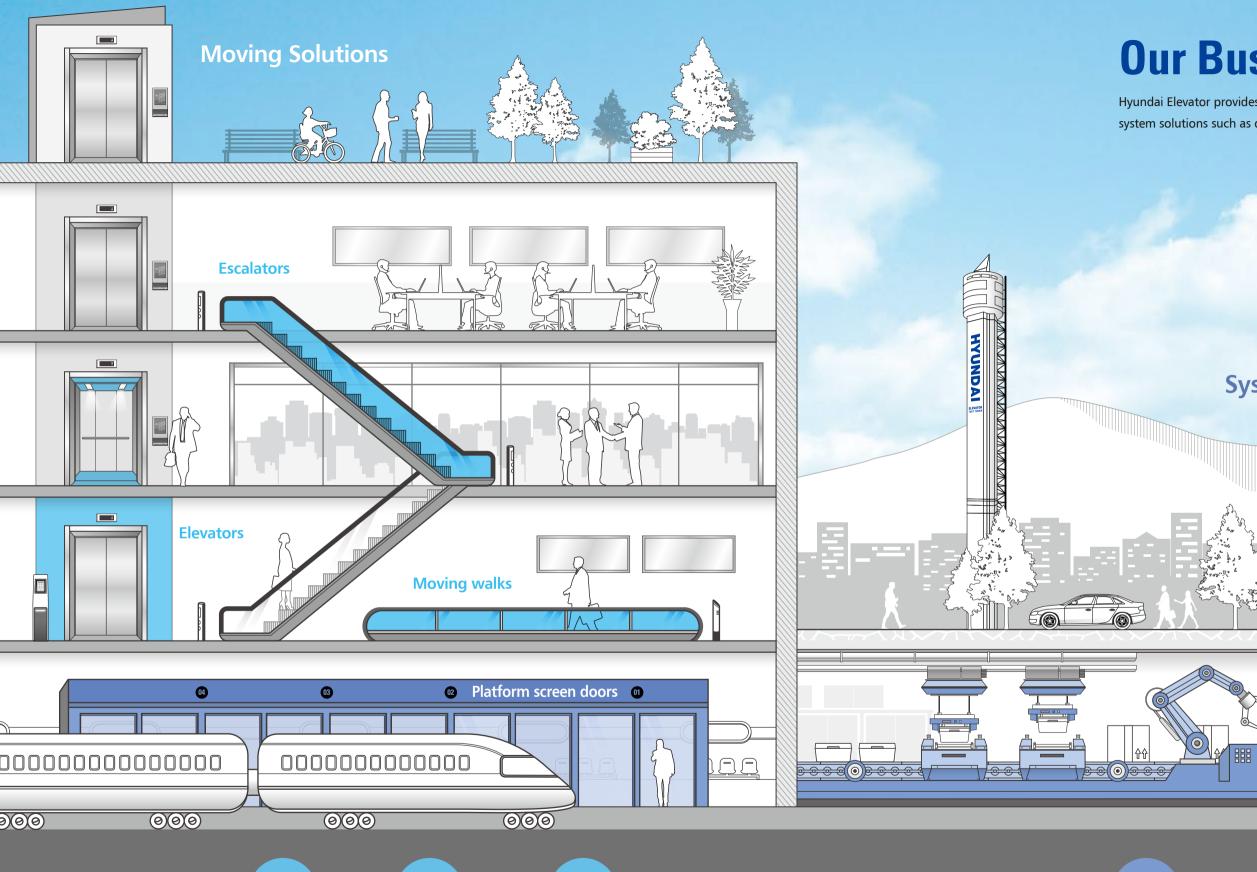
#### **Materiality Map**



<sup>\*\*</sup> Policy/structure-related issues were excluded from the materiality map. (Sustainability strategies, organization and operation of a sustainability committee, securing sound governance structure, augmentation of stakeholder engagement processes, management team leadership, enhanced risk management structure, mutual growth policies, CSR strategies and policies, and establishment or implementation of an environmentally-friendly management structure)

#### **Materiality Test Processes and Reporting**

	Impact on Hyundai Elevator				Business		
Material Issues	Customers	Employees	Shareholders / Investors	Partners	Community / Gov. / NGOs	GRI G4 Aspect	Cases
Prevention of unfair trading		•				Anti-competitive	19, 20
Fair and transparent selection of partners	•		behavior .	21			
R&D investment and activities			•			Products and services	37, 38
Improvement of product safety	•					Products and services	41
Enhancement of satisfaction through customer communication	•					Marketing communications	41
Enhancement of employee competence		•				Training and education	45, 46
Improvement of occupational health and safety		•				Occupational health and _	49, 50
Enhancement of health and safety at installation or service sites				•		safety	51
Business-related social contribution activities					•	Local communities	57
Management of environment pollutants	•	•		•	•	Effluents and waste	61, 62
Response to climate change					•	Energy and Emissions	63
Strengthening employee communication		•				Labor practices and complaint handling mechanisms	74, 75
Activities for enhancing employee satisfaction		•				Employment	72, 73



# **Our Business At a Glance**

Hyundai Elevator provides moving solutions to accommodate customers and system solutions such as distribution systems, parking facilities and screen doors.















**Material handling** 

systems

# Moving Solutions

Hyundai Elevator has patented technologies for elevators, escalators and moving walks and continues to increase its market share in the moving solution sector.

数型法

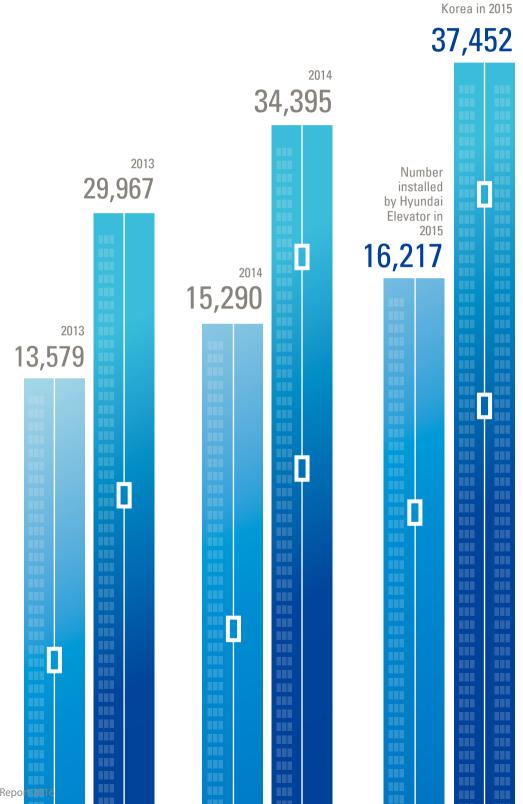
43.3%

Leading domestic market share of 43.3% for the ninth consecutive year in 2015



2015 Korea Brand Power Index (K-BPI) designates Hyundai Elevator as the leading elevator company for four consecutive years

Number of elevators installed in Korea (2013~2015, Unit: elevators)





Total number of elevators installed in

**Elevators** 

Since its former US partner Westinghouse withdrew business from Korea in 1989, Hyundai Elevator has focused on obtaining original technology and achieved quantum growth through continued efforts. Our elevator business obtained the leading domestic market share in 2007 and has maintained that status since for nine consecutive years. In 2009, we completed construction of Hyundai Asan Tower, a first-class elevator test tower. In 2010, we showcased our leading technological prowess by manufacturing the 1,080m/min ultra-high speed elevator, the fastest in the world, and the 600m/min ultra-high speed double-deck elevator using pure original technology. The 600m/min elevator has been successfully installed and is in operation inside the BIFC. Hyundai Elevator continues to lead the market while continually expanding its market share.



Hyundai Elevator has actively promoted the escalator business along with the elevator business. Upon our establishment, we built an escalator production facility at the Icheon Factory and expanded the sales base for our escalator products by releasing top-notch escalators that target both the domestic and international markets. In 2002, we received a lot of attention for developing the Millennium Escalator using ergonomic design and microprocessor control. In 2005, we installed the first escalator inside a ship in Korea and in 2007, procured a contract to build a 100m-long escalator in Kazakhstan. Based on such diverse construction experiences and technological prowess, we continue to lead the industry to this day.



Since starting the moving walk business through signing a technical contract with foreign companies, we have focused on securing original technology and developing our own models. Our main accomplishments include the 1999 Incheon International Airport Transportation Center Project and the 2003 construction of the longest moving walk in Korea inside Jongno 3-ga Station. Our moving walks, which are flexibly connected in horizontal directions and slopes and therefore are extremely comfortable to ride on, are installed in a wide range of buildings including large transportation facilities, welfare facilities, culture and sports centers and commercial buildings.







Elevators

Escalators

Moving walks

Source | Estimated by Hyundai Elevator based on the data registered with the Korea Elevator Safety Agency. Includes

passenger elevators, cargo elevators, escalators, moving walks, dumbwaiters and wheelchairs. Elevators are in operation as of 2015 and exclude disused

elevators.

# System Solutions

Hyundai Elevator strives to enhance customer convenience by developing and providing diverse system solution products.

Sales by product (data from 2015) Volume of new orders for 39.1 billion parking systems KRW **31,082** million Domestic market share of material handling system  $(2011 \sim 2015)$ 36% 35% KRW 26,909 million 21% 20% KRW **24,060** million '11 '12 '13 '14 '15 Market share of parking systems 18.2% 15.93%



Hyundai Elevator launched the Material Handling System throughout the entire enterprise with the goal of improving customer productivity and employee work environment by accomplishing unmanned automation, integration and standardization of production, storage and shipment facilities. We provide distribution solutions such as automated distribution consulting and engineering, production distribution system and product distribution system. Our supply facilities include stacker cranes for automated warehouses, unmanned transfer vehicles (automated guided vehicles and laser guided vehicles), conveyors, roving transfer vehicles, automated overhead traveling vehicles (SKY-RAV), and automated sorting and picking systems. We pioneer the industry by maintaining our lead of the domestic market share in the material handling system market.



Hyundai Elevator launched the Auto Parking System line as part of the company's business diversification plan. Our auto parking products are distinguished for their outstanding quality and performance. In 2005, we entered the global market by developing the E650 model with a maximum speed of 180m/min and in 2015, manufactured a fork type parking facility. We are also constantly expanding the scope of our business. In 2009, we engaged the bicycle parking facility business, which meets the government's low carbon green growth policy and contributes to enhancing citizens' living convenience.



In 2003, we installed the first platform screen door in Korea at Docheong and Geumnamno Stations of Gwangju Subway. We also installed platform screen doors at subway stations in Seoul, Busan, Daegu and Daejeon, which amounts to 51.2% of all platform screen doors in Korea. Hyundai Elevator continues to lead the industry with leading market share.







Material Handling System

Auto Parking System

Platform Screen Door

30 HYUNDAI ELEVATOR Sustainability Report 2016

2013

2014

31

## MOVING SOLUTION



Busan International Finance Center (BIFC) Venezuela Centro Simon Bolivar | Caracas, Venezuela

[High-speed elevators] 600m/min., 2 units | 540m/min., 3 units | 480m/min., 2 units | 420m/min., 4 units | 360m/min., 2 units | 15 units in total

Songdo I-Tower | Incheon, Korea

Lerthai Center | Shijiazhuang, China

Hanoi Landmark Tower | Hanoi, Vietnam

LG U+ Yongsan Office Building

[Double-deck elevators] 240m/min., 2 units | 12 units in total

Elevators



Seoul Integrated Freight Terminal
| Seoul, Korea

Paju Book Center [Publications distribution center] | Gyeonggi-do, Korea

Airport railroad (AREX) | Seoul - Incheon, Korea

Sinbundang line (DX line)
| Seoul - Seongnam, Korea

Hyundai Department Store Cheonho [Large-scale cubic parking facility] | Seoul, Korea

Public parking lot, Guui-dong | Seoul, Korea

Material handling system | Platform screen doors | Auto Parking System



Tallest test tower

in the world

**205**<sub>m</sub>

Height of Asan Tower

Fastest elevator

in the world

1,080 m/min

Maximum speed

# ISSUE **01**

# **Technical Competitiveness**

# Research and development

#### **CONTEXT AND APPROACH**

Strengthening our technological edge on a continual basis is tantamount to satisfy customers and gain market dominance. When product quality does not meet the market standard, it becomes difficult for a company to achieve long-term development. Hyundai Elevator hopes to upgrade its R&D infrastructure by diversifying existing technologies and developing new technologies. We hope to solidify our position as a global corporation with outstanding performance.

#### **ACTIVITIES**

Established the advanced remote service system

Developed variable speed hybrid system

Applied the eco-friendly, anti-virus handrails

#### **PERFORMANCE**





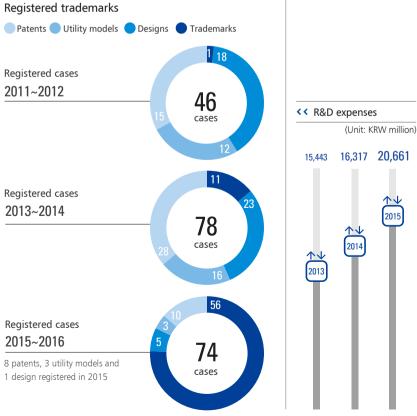
Patents, designs, utility models. trade and service marks



### **R&D Structure**

#### **Establishment of R&D infrastructure**

Hyundai Elevator established its R&D infrastructure to focus on systematic technology development. The Technology Research Institute was founded in 1986 for new product development where 100 researchers are currently dedicated to technology development. At Hyundai Asan Tower, one of the tallest elevator test towers in the world (205m) with ultra-high-speed elevators, the reliability and safety (e.g. vibration, noise and pressure) of ultra-high speed systems and related parts are tested. The tower operates the fastest elevator in the world (1,080m/min), the 600m/min ultra-high speed double-deck and single-deck elevators, and the fastest observation elevator in the world (420m/min). Based on this R&D infrastructure, we have registered a total of 93 patents, 35 utilities, 74 designs, and 68 trades and service marks.





Hyundai Asan Tower

# INTERVIEW

Hyundai Elevator developed synchronized traction machines using ferrite magnets, a newly discovered non-rare material, through joint research with Department of Automotive Engineering at Hanyang University. They first contacted the school and requested for joint research and active discussions ensued throughout the entire research process involving development direction and required testing. Through such exchanges, I was convinced that Hyundai Elevator was determined to further their technology development through developing energy-efficient elevators as well as future-generation elevators that are differentiated from competitors' products. Hyundai Elevator's executives and researchers are all aware of the importance of R&D and hope to further improve its research development capability. I hope that Hyundai Elevator will strengthen its research development capability from a long-standing point of view through training employees on core technologies, buying testing and measuring equipment and securing talented employees through industry-academia scholarship programs.

Jung-Pvo Hong Professor of Department of Automotive Engineering at Hanyang University

37

# **Key R&D Achievements**

**Hyundai Elevator Develops Ultra-high Speed Elevator Technology** 



Global elevator companies are engaging in cutthroat competition in order to develop ultra-high-speed elevator technologies for vertical transportation inside skyscrapers as tall as 1,000m. In 2010, Hyundai Elevator developed the fastest elevator in the world with a speed of 1,080m/min and installed it inside Hyundai Asan Tower (205m). Ultra-high-speed elevators that are currently in the market, however, are unable to perform vertical transportation for more than 600m in a single elevator shaft due to structural and physical constraints. To solve this problem, in 2014, Hyundai Elevator began developing a system with a stroke distance of 1,000m or longer, a loading capacity of 1,800kg (28 people) and a speed of 1,200m/min.

Key technologies of the 1,200m/min ultra-high-speed system include: △ super-strong lightweight suspension device for high stroke movement,  $\triangle$  ultra-high speed large-capacity traction system and drive-control system,  $\triangle$  technologies for monitoring of control system and system errors,  $\triangle$  safety devices for elevators,  $\triangle$  and sealed elevator cages and pressure control devices. We are also developing a vibration control system that will contribute to safe and comfortable elevator operation. We expect the 1,200m/min ultra-high speed elevator system to vitalize the domestic elevator industry and help us grow into an elevator exporting powerhouse

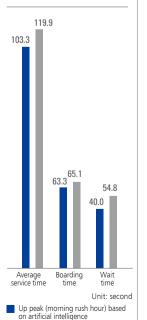
### **Business Case**

### Double-deck elevators at LG U+



The first double-deck elevator in Korea installed by Hyundai Elevator is in full operation. A double-deck elevator is different from a single-deck elevator in that two elevators are vertically connected inside one shaft to allow two consecutive floors to use the elevator simultaneously. It is a highly efficient system with increased transportation capability and shorter passenger wait time. Double-deck elevators are also equipped with a floor distance adjusting device which allows operation between floors with different heights. Other applied technologies include a special traction machine that can hoist two elevators at once and technologies for controlling vibration, noise and pressure during operation. The LG U+ new office building, which was completed in February 2015, operates both double and single-deck elevators.

Improved transport efficiency compared to existing systems through an Al-based group control system



Up peak (morning rush hour) based on conventional logic

### Al-based Group Management System

The increase in the number of skyscrapers demands a technology that can efficiently transport a large number of passengers to selected floors. To that end, Hyundai Elevator developed an upgraded AI-based group management system. When a passenger summons an elevator, this system supplies the best elevator through a simulation that uses a Gametree algorithm. Adaptive Neuro Fuzzy Inference System (ANFIS), a hybrid AI technology, studies patterns in previous data and applies them to Gametree, allowing for calculation-based group management through combining Gametree and ANFIS. The Al-based group management system is at least 15% more effective than existing systems and is expected to save energy. By securing original group management technologies based on a cutting-edge AI algorithm, we have enhanced our sales competitiveness accordingly.

## **Environmental and Safe R&D Achievements**

#### **Hybrid Acceleration & Transmission System**

Conventional high-speed elevators inside skyscrapers add burden to the building's electric power equipment by exceeding the power capability by 2 to 3 times above the rated load on the input power source during acceleration. Hyundai Elevator's hybrid acceleration and transmission system combine the capacitor and electronics technologies to transfer peak electricity that exceeds the rated power during acceleration at the energy storage device. In addition to cutting down on electricity loss of the building's the speed of the elevator for different load conditions to improve the operation efficiency of low- and high-speed elevators by 25% and 10%, respectively.



#### **Utilization of Environmentally-friendly Materials**

Hyundai Elevator does not use harmful substances such as ferric chloride, volatile organic compounds and total hydrocarbon in its materials and manufacturing processes. As an environment-friendly company, we hope to continue to manufacture eco-friendly materials and apply them to our elevators to create sustainable value and a competitive edge.

#### **Application of Environment-friendly Anti-virus Handrail**

To replace handrails made with general paint containing large amounts of heavy metal or plastic, we have developed the New Yzer handrail with anti-virus ceramic coating. This model takes up 60% of our handrail output and will be applied on future handrail models as well. Hyundai Elevator will grow into an environment-conscious corporation through continued efforts to reduce the use of harmful substances.

### **Synchronized Traction Machines Using New Materials**

Conventional Ferrite magnet-based synchronous traction machines use a rotor structure (SPM type) using rare magnets with powerful magnetic force to enhance output, but rare element supply is unstable and harmful substances are generated during production. To address these issues, Hyundai Elevator developed a new synchronous motor, a concentrated magnetic flux spoke type, using commonly used ferrite magnets. Ferrite magnets are procured locally, quaranteeing stable rare element supply and prices. It is also expected to reduce harmful substances including 63 million liters of waste gas containing sulfurous acid gas, 200,000 liters of acidic waste water, and 1.4 tons of radioactive industrial waste water (based on 1 ton of refined rare element). Further research must be conducted to reduce the size and raise the price competitiveness of synchronous traction machines using ferrite magnets which are bulky in size and expensive to process.



Comparison between convention SPM-type (using rare element magnets) and spoke type (using ferrite magnets) traction machines



### Conventional SPM type

Magnets are affixed to the rotor surface. Rare element (Nd) magnets are used to boost output.



### **SPOKE Type**

Magnets are inserted along the shaft to increase the effective area. Magnetic forces are arranged to face each other to concentrate magnetic fluxes and maximize magnetic force.

39

electric power equipment, the system also flexibly controls



<<

Bv **25**%

efficiency of highspeed elevators

Increased operational

# ISSUE 02

# **Customer Satisfaction**

### Customer Satisfaction

#### CONTEXT AND APPROACH

Recently, many companies are aiming at providing long-term customer-centered management for greater customer satisfaction rather than setting short-term goals like cost reduction and sales expansion. Neglecting customers may harm the corporate image and weaken market competitiveness. Prioritizing customer satisfaction, on the other hand, will lead to sustainable growth based on trust.

#### **ACTIVITIES**

Enhancing customer satisfaction

Prioritizing customer safety Strengthening quality competitiveness

#### **PERFORMANCE**



Received Gold Tower Order of Industrial Service Merit at the National Productivity

Inducted into Hall of Fame for Businesses with Outstanding Quality Competitiveness in 2015



94.8%

2015 Customer satisfaction



# **Management that Places Top-priority on Customer Convenience and Safety**

#### Safety test

Hyundai Elevator inspects elevator parts by conducting a safety test and obtaining certifications for each part. Our certified parts include emergency stop devices, governors, elevator locking devices, ascending over-speed protection brakes, draft gears (spring, hydraulic), a device for preventing elevator movement when doors open, and platform door assembly (450J). Each part is thoroughly tested to ensure customer safety.

### **Product Safety Certification**

Hyundai Elevator prioritizes customer safety above all else. To ensure product safety, we have obtained certification by KC-Mark and received the CE-Mark and UL/CSA by passing strict European and American standards.

### Case Study

Convergence between elevators and the Internet of Things (IoT)

Hyundai Elevator's Hyundai Real Time Service (HRTS) system is a 24/7 on-line real-time remote management service that monitors the operational condition of elevators installed in Korea to remotely conduct safety inspections and fix simple errors (excludes parts replacement). We also developed and launched the Mobile HRTS service that al-

lows people to check the operational status of elevators in real-time on their smart phone for the first time in the world.



#### Product safety certification

Emergency stop device Draft gear Governor

Ascending overspeed protection brake

Platform door locking device UCMP (unintended car move ment protection) certification EMI certification



Elevator safety (KC) certification



Mobile HRTS

#### **HRTS Remote Control Service**

Hyundai Elevator developed the Hyundai Real Time Service (HRTS) in response to the diversifying elevator usage that resulted from an increase in elevator supply and technical complexity. The remote management service effectively repairs and manages elevator units by monitoring elevators 24/7 and providing remote inspection and repair. The system reduces maintenance costs by decreasing the number of regular inspections and identifying an optimum replacement cycle of disposable parts. It also prevents breakdown through remote management, minimizes inconvenience through prompt repair service and prevents unnecessary repair work and parts usage through analysis of breakdown and operation data. We have increased the number of models that can be managed by the HRTS system through continued R&D efforts and plan on further expanding the service to include parking facilities and escalators.

| System Configuration |

3







Technician assigned to site Counselor

# **Enhancement of Quality** Competitiveness

#### **Quality Management Policy**

Hyundai Elevator provides outstanding products and services in strict adherence to the company's quality management standards. All employees are fully aware of and comply with the company's quality management system based on ISO9001 standards.

#### **Quality Management Structure**

Hyundai Elevator operates its quality management structure based on the quality management system. We have recently reorganized the entire quality management system that proceeds in the order of Sales, Development/ Design, Purchase, Production (Manufacturing/Installation), Inspection/Testing, Shipping and Service. To prevent defects and eliminate fundamental problems at the initial stage, we have also introduced the Advanced Product Quality Planning (APQP) technique.

Acquisition of quality management certificates





2015 National Productivity Competition Gold Industrial Medal awarded



2015 elected as a business that is outstanding in quality competitiveness for 12 consecutive years

Hyundai Elevator has acquired ISO9001 (Quality Management System), ISO14001 (Environmental Management System) and OHSAS18001 (Health & Safety Management System) certifications. We have also been selected as a business with outstanding quality competitiveness for the 12th consecutive year in 2015 and was the first elevator company to be inducted into the Hall of Fame at the '2015 Businesses with Outstanding Quality Competitiveness' event which was hosted by the Ministry of Trade, Industry and Energy and overseen by the Korea Standards Association. In addition, we received the Gold Tower Order of Industrial Service Merit at the 2015 National Productivity Award sponsored by the Ministry of Trade, Industry and Energy and overseen by the Korea Productivity Center.

**Quality Management System** 



2015 National Productivity Competition

#### | Quality management structure map |



# INTERVIEW

Ever since COEX was completed and escalators were installed inside the complex in 1988, Hyundai Elevator personnel have resided in and conducted maintenance work for the escalators. As escalators inside COEX are used by a significant number of people each day, it is important to prevent accidents well in advance. Hyundai Elevator conducts pre-inspections to identify possible problems and takes action preemptively. The company's superb inspections have indeed prevented accidents in the past, the most famous case being identification and repair of a damaged handrail. Hyundai Elevator is superior to other companies in its product and service quality. The company's diverse communication channels allow prompt response to problems and offer specialized information.

Taeseop Lee Manager | COEX

#### **Quality Enhancement in All Procedures**

#### | Enhancement of Product Quality Management Capability

Hyundai Elevator enhances the quality of its products by introducing advanced quality management techniques that prevent defects across all production stages. During the initial stages, development and quality management systems were reorganized and the APQP1) technique was introduced to prevent quality defects from the development stage. In 2015, the APQP1) technique was further systematized to enhance product quality. The FMEA2) technique was simultaneously introduced to improve quality across the production stages of development, processing and manufacturing.

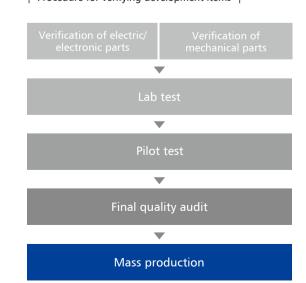
- 1) Advanced Product Quality Planning (APQP)

#### | Enhancement of Production Quality Management Capability

Hyundai Elevator is planning on reorganizing the quality management system according to the 2015 revised ISO9001 specifications and implement it in 2016. We are working on introducing D-FMEA1) to reinforce our guality prevention activities during the development stage and hope to realize customer satisfaction by minimizing quality issues in the production stages of development, processing and manufacturing. We are also planning on creating a control plan and training APQP professionals who will conduct systematic quality inspections in the future.

1) Design-Failure Mode Effects Analysis (FMFA)

#### | Procedure for verifying development items |





#### **Enhancement of Reliability Tests for Products in** Development

Hyundai Elevator is in the process of reorganizing the reliability structure of development products in order to improve the quality of its key safety parts. In 2016, we will begin to conduct large-scale investments, reorganize the structure of our reliability equipment and provide systematic training to employees in order to nurture them into becoming reliability experts. All employees at Hyundai Elevator are dedicated to providing safe elevator products to our customers.

First elevator company to be inducted into the Hall of Fame for Businesses with Outstanding Quality Competitiveness

## Case Study

### Inducted into the Hall of Fame for Businesses with **Outstanding Quality** Competitiveness



In 2015, Hyundai Elevator was once again recognized for its outstanding quality by being inducted into the Hall of Fame for Businesses with Outstanding Quality Competitiveness. Businesses with Outstanding Quality Competitiveness are awarded to manufacturing businesses, public enterprises and construction businesses by the Korea Standards Association after careful evaluation by professionals in academia and industry. Select companies among those commended for ten years or longer are inducted into the Hall of Fame after going through a strict review process. Since the award was established in 1997, only 17 of the 1,019 outstanding businesses were inducted into the Hall of Fame, and Hyundai Elevator is the first and only elevator company among them. As the leading elevator company in Korea, we will continue to pioneer the global market through continued efforts to enhance product quality.

# ISSUE 03

# **Talent Development**

# Human Resources

#### **CONTEXT AND APPROACH**

Hyundai Elevator's management goal is to lead the global market by breaking into the 'Global Top 7' list through 'establishing an effective task operation structure' and 'strengthening product competitiveness.' We are striving to accomplish our goals by learning from the creative and innovative examples of global talents, advancing our employees' work capability and promoting organizational vitalization.

#### **ACTIVITIES**

People development structure

Strengthening global capability

Work-life balance

#### **PERFORMANCE**



Training hours per



Completed the 'Training Center,' Korea's First **Technical Training Center** for Elevator Installation and Repair Professionals

5 stories above ground, 975.5m<sup>2</sup>



# **People Development** Structure

#### **People development Policy**

Hyundai Elevator regards 'People Development' as a core value required for securing an advantageous position in the competitive market and accomplishing the company's management goals. We train talents that can lead the company in the era of globalization in line with the company's management strategies and implement people development policies that focus on functional competency skill up. To train our employees as change management professionals who can flexibly respond to the rapidlychanging business environment, we also provide training on organizational change, innovation and crisis management.

#### **Direction for Enhancing Employee** Competence

Hyundai Elevator selects and trains core talents to ensure continued growth in the global market. Our training programs are developed and operated for the purpose of strengthening the three core capabilities of 'global people development,' 'advancement of specialized tasks,' and 'vitalization of the overall organization.



Training of global talents

| Regional expert training | Site expert training program

Advancement of

Analysis of specialized technical tasks Specialized task training

program

Vitalization of overall organization

specialized tasks

Promotion of communication

Strengthening of cooperative synergy

People development Map

Create business performance through training core talents

Top 7 elevator

companies in the

global market

Problem-solving leadership | Emotional leadership | Facilitator leadership |
Explore leadership strategies | Female leadership | Business Chinese |
Business English | Experts of global regions | Experts of global sites

Educate installing partners | Educate repair partners | Educate manufacturing partners | On-the-job training | Mentoring system Acquire national technique qualifications

44 HYUNDAI ELEVATOR Sustainability Report 2016

45

Grade

Business performance in

2015 National Human

Resources Development

Consortium (hosted by the

Ministry of Employment

and Labor)

# **People Development Program**

V(L)

75.9

Training hours per

employee

Hyundai Elevator operates

a specialized training pro-

gram in order to develop

the job competency of our

employees.

75.9

Task training hours per

Unit: hour

#### **Global People Development Program**

Hyundai Elevator is strengthening the global competence of its employees with the goal of creating future corporate values. Due to the expanding overseas elevator market, an increasing number of employees are dispatched to foreign countries. To develop global leaders, we provide task-oriented training including language training and regional and industrial site expert training. We also train workforces in newly established overseas corporations to enhance their work capability and provide global competence training to various workforces to raise them into becoming future global leaders.

#### **Job Competency Training Program**

Hyundai Elevator operates its job competency training program in response to increasing work complexity and the need for more specialized workers. We analyze tasks to deduce a people development capability model and develop and operate a training program for the purpose of enhancing job competency. Our task training structure is regularly updated to meet global market standards. We train our employees on shared capabilities such as tax and accounting as well as CAD, 3D Inventor, sales and installation technologies.

#### **On-Boarding Training Program**

Hyundai Elevator provides on-boarding training for new employees in order to maximize work competence and promote soft-landing to the company. We hope to establish a sense of belonging and promote the understanding of corporate culture to attain harmony among old and new employees and realize each employee's potential to the fullest.



Training cost per person (2015)

### **Corporate Vitalization Training Program**

Hyundai Elevator implements the Corporate Vitalization Training Program to improve training efficiency and employee satisfaction as well as to obtain a Great Work Place (GWP) status. In 2015, we implemented the 'One Mind Training' program to enhance cooperation between employees and departments and create a culture of communication. Recently, awareness on the importance of customer service and employee self-management is rising in relation to corporate vitalization. Accordingly, we are focusing on maximizing work concentration and worker satisfaction by providing training on CS leadership, employee mental health care and stress management.



'New 30 Years with Renewed Hearts.' 'One Mind Training' was conducted to promote a communication-oriented corporate culture at Bloom Vista, Hyundai Group's training center that opened in 2015. The program was carried out company-wide as a form of vitalization training centering on the three themes of 'Communication and Network,' 'Promoting Community Spirit' and 'Vision Sharing.' Employees actively participated in the training which was conducted for the first time in eight years since 2006. 1,565 employees completed the training excluding executives, dispatched workers and those on business trips. 800 of the participants, which amounts to about half of all participants, joined the company after the previous training in 2006, making the training all the more significant.

### **Bonding through** 'One Mind Training'

# Functional skill up training for partners

#### **Functional skill up Training Program**

Hyundai Elevator operates a technical training program to strengthen our partners' competitiveness in order to accomplish co-existence and mutual growth amongst small, medium and large businesses. Trainers focus on product quality, enhancement of elevator installation and repair skills to strengthen the market competitiveness of our products. Along with the implementation of the 'National HR Development Consortium' training project, a Ministry of Employment and Labor project, we are operating an elevator technology training program based on the National Competency Standard (NCS). The technical training program is conducted each year for partners. In 2015, 3,500 employees completed the program, and 4,000 are expected to receive training in 2016.



Technical education for Partners

#### Received 'A Grade' in the 2015 National HR Development Consortium

Hyundai Elevator received 'A Grade' in business performance from the 2015 National HR Development Consortium hosted by the Ministry of Employment and Labor and conducted by the Korean Skills Quality Authority. Hyundai Elevator provides unsparing support to enhance the technological prowess of all participating companies and promote the competence of all human resources.



Professional Workforce Training Program for Partners

#### **Employment Assistance for Partners**

Hyundai Elevator operates a 'prospective employees program' in order to refer prospective employees to partners in order to provide customized recruits. Prospective employees are hired by partners through matching after completing 4 weeks (160 hours) of elevator training. In 2015, more than 40 people were hired by our small and medium-sized partners.



Training program for prospective employees at partners

### Case Study

### Completed the 'Training Center,' Korea's First Technical Training Center for Elevator Installation and Repair Professionals

Hyundai Elevator established the first technical elevator training center in Korea with 5 ground level floors and an area of 975.5m<sup>2</sup> as part of the Ministry of Employment and Labor's National HR Development Consortium. Customized training programs are offered at all levels in lecture halls, repair rooms and installation practice rooms that are built to resemble actual sites. The center will foster 4,000 elevator professional each year. We are in the process of developing and operating diverse training programs on elevator installation, maintenance and production quality for partners as well as potential employees. We promote the mutual growth of small, medium and large businesses through building

a connected employment system with 300 small and medium-sized businesses and providing newly hired professionals. Hyundai Elevator fulfills its responsibilities as a corporate citizen through training a professional workforce to encourage SME HR development and creating new jobs through employment assistance for partners.



Dedication ceremony of the technical education center

47

# ISSUE **04**

# **Safe Work Environment**

# Health & Safety

#### **CONTEXT AND APPROACH**

Risk elements always exist at elevator sites and business units. Accidents can negatively impact business activities, even causing financial damages such as penalties, fines and delay in the manufacturing process as well as non-financial damages such as brand value depreciation. Hyundai Elevator strives to develop a safe work environment, by strengthening health and safety-centered management systems and promoting siteoriented safety activities.

#### **ACTIVITIES**

Strengthening health and safety systems

Steady management of health and safety at

Site-centered health and safety programs

#### **PERFORMANCE**





Safety education hours



# **Health and Safety Management Structure**

#### **Enhancement of Health and Safety Management Structure**

Hyundai Elevator implements systematic health and safety management based on OHSAS certification. Our Icheon factory has maintained its OHSAS '18001 certification' since 2011, and our business units, and branch offices are expanding upon OHSAS internal inspection. We have also developed a online health and safety management system for inspection and education in order to implement health and safety management in a more systematic manner.

#### **Occupational Accident Management** for each Division

The business divisions of Hyundai Elevator promote division-centered safety management activities to establish a practical system for health and safety management. Department heads and team leaders of each business divisions conduct safety inspections of sites once a week while the division head does so once a month. Each division manages its occupational accident rate.

### **Reorganizing and Enhancing Health** and Safety Regulations

Hyundai Elevator has strengthened its regulations on health and safety management because relevant statutes were strengthened due to the rising social concern over worker health and safety. We assess risks that occur during manufacturing and installation in advance and make improvements in the system. Regarding remodeling work, which is expanding on a regular basis, we operate a task force team composed of safety representatives, installation departments and partners and revised our safety manual to expand the practice of safety programs.





Health and safety certification

# INTERVIEW

2015 occupational accident rate

0.05 % 2015

2014 0.00

As Hyundai Elevator's installation partner, we are in charge of all elevator and escalator installation work from postcontract up to shipping. Installation work always poses a risk of accident as the worker goes inside the elevator to assemble parts. This is why Hyundai Elevator provides safety education to partners and new recruits twice a year for four hours each. They also provide regular safety education to the operation manager. Thanks to such training, no occupational accidents occurred at our company for the past five years.

Ki Rang Lee CEO | DAERYOON ELES CO.,LTD.

# **Steady Management** of Health and Safety at Factories

#### **Implementing Programs for Risk Assessment and Reduction**

Hyundai Elevator implements risk assessment in order to eliminate risk factors at work sites and strives to reduce risk factors that are identified through the assessment. Risk assessment refers to identifying and improving harmful risk factors such as unstable behavior or condition. The system categorizes work processes into units in order to find out the fundamental source of accidents and analysis and improve risk level so that workers can perform their duties in a safe environment. In 2015, we conducted a risk assessment in cooperation with the Korea Industrial Safety Association for all work processes and deduced 431 risk factors and corrected 115 factors of them which pose the highest risk. After completing each risk reduction activity, a reassessment was conducted, and all activities were reflected in the following year's plan to improve shortcomings. We also hold regular meetings to discuss the progress and results of risk assessments to share potential risk factors on sites and train risk assessment supervisors. The training was conducted for employees who were unable to complete the 2014 training and 2015 training of new supervisors.

#### **Enhanced Control over Dangerous Machines and Forklifts**

Safety accidents occur frequently at manufacturing sites due to negligent management and careless driving of dangerous equipment and forklifts. To prevent such accidents, Hyundai Elevator conducts regular safety training for forklift and dangerous equipment operators. We also designated a staff member to inspect our dangerous equipment and forklifts using a safety checklist each month and our certified internal inspectors carry out precise inspections at least twice a year. In 2016, our internal inspector will carry out a lot test on dangerous equipment and provide special safety training to all forklift drivers.

### Strengthening of Emergency Drills to 'Keep the Golden Time'

Accidents unattended to in their initial stages can lead to more devastating consequences. Hyundai Elevator puts emphasis on 'Golden Time' emergency training in order to respond quickly to accidents. In the event of fire and cardiac arrest, failure to respond within five minutes could lead to a larger fire or brain death. We set 5 minutes as the golden time and conduct regular training to enhance initial response ability. In 2016, we will train employees at the technical R&D building on evacuation procedures and carry out CPR training for all employees.



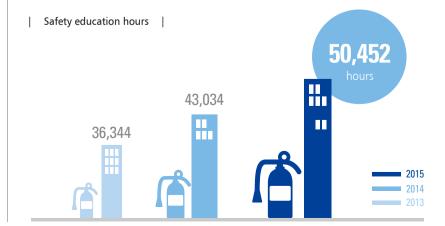
28

Safety education hours

per person



Golden time drill



# Site-centered Health and Safety Activities

#### Performing Safety Education by Rank and Division

Hyundai Elevator regularly trains employees to prevent occupational accidents and promote safety awareness. We train our employees on site safety for the ranks of Department Head, Team Leader, Part Manager and Foreman. Collective education is offered for each work position along with a safety awareness training program. Our special training for site supervisors include programs on installation, service, manufacturing and improvement of safety awareness. We train our employees to better respond to accidents through conducting department and team training based on possible accident scenarios at work sites including safety experience training and competency enhancing cluster training.

### **Operating the Coexistence Program Considering Safety**

Hyundai Elevator operates the co-existence program to identify potential risk factors and construct a pleasant work environment. The program involves firefighting, safety, training and conferences and invests heavily in improving workplace safety infrastructure such as fire facilities. We develop site-centered programs through business presentations and council meetings and reflect our partners' demands by conducting a circulatory inspection of partners. As a result of our efforts, we have received 'A Grade' in our co-existence program for four consecutive years since 2012 from the Ministry of Employment and Labor. We plan on enhancing workplace safety and improving the work environment through providing support to activities such as the musculoskeletal disorder prevention program.

### **Programs for Employee Health** improvement

Hyundai Elevator implements health enhancement programs to create a healthy work environment. Employees with abnormal findings are prioritized; they receive intensive health management training and counseling.

Employees perform stretches before starting work in order to prevent musculoskeletal diseases attributable to changes in work environment and use belt massage machines to help blood circulation. In addition, a total of five AEDs (automated external defibrillators) are installed – 3 at the Icheon factory, 1 at the R&D building, and 1 at Cheonan - as cardiac arrests are more likely to occur among aging employees. We also conducted CPR training including AED



### Case Study

Received A Grade in co-

existence program for four

consecutive years from the

Ministry of Employment and

'Don't Hurry, Be Safe' for Slower but Safer Sites

# **Don't hurry** Be safe

Hyundai Elevator instills a safety culture that allows employees and partners to work in a safe environment. Most accidents occur due to a lack of safety consciousness such as failure to comply with rules or not wearing protective gear. The 'Don't hurry, Be Safe' campaign enhances employees' safety awareness by implementing slogans that emphasize the importance of safety on protective gear and facilities and providing training to remind employees of safety rules and response plans. We preemptively control safety accidents that occur due to poor communication during processes by promoting communication concerning health and safety with employees of partners.

# **Mutual Growth with Partners**

# Supply Chain

#### **CONTEXT AND APPROACH**

Hyundai Elevator strives to enhance the overall competitiveness of the entire industry including its partners participating in manufacturing, installation and maintenance. Sustainable growth based on co-existence will help us grow into a global corporation alongside our partners.

#### **ACTIVITIES**

Enhancing the competitive edge of partners

Communication with partners

Financial, technical. employment and education-related support

#### **PERFORMANCE**



'Outstanding' in Mutual Growth Index Mutual Growth Index



Contest for Benefit Sharing among Multiple Parties 'Grand prize' in the private



# Strategies and **Operational Structure** for the Promotion of **Mutual Growth**

### **Strategies for the Promotion of Mutual** Growth

Hyundai Elevator seeks mutual growth with its partners through implementing three major strategies while deploying infrastructure and developing programs that provide direct aid to our partners.

#### 3 major strategies

#### **Enhancing** partner competitiveness

- Financial aid Technology support and
- protection
- Providing growth opportunity Supporting training and hiring
- people

#### Strengthening partnerships

- Communication with partners
- Mutual exchange Enhanced PR activities

#### Propagation of a mutual growth culture

- Continued signing of fair trade
- agreements
- Increased assistance to secondary partners and provision of business opportunities
- · Expand support for nonpartners

#### **Operational Structure for Mutual** Growth

Hyundai Elevator is strengthening communication with its partners by establishing a governance structure for practicing systematic mutual growth. We review and vote on key agendas related to mutual growth through a mutual growth review committee. The voices of our partners are reflected in our overall management through discussion meetings with partners and contractor council meetings.

# **Activities for Enhancing the Competitiveness of Partners**

Hyundai Elevator operates diverse programs including financial aid, technical support and protection, support in hiring, education, training, and welfare and benefits to help its partners become self-sufficient. We provide substantial assistance to our partners by lessening their financial burden through direct or indirect financial support as well as early payments. To help enhance their competitiveness, we provide technical support, training and human resources to small and medium-sized businesses. All in all, we propagate the culture of mutual growth by supporting secondary partners who do not directly do business with Hyundai Elevator.

Co-existence Team



#### Programs for Listening to and Improving Difficulties of Partners

Hyundai Elevator's CEO and procurement executives visit partners to listen to their difficulties and recommendations and take corrective actions. In 2014, we started visiting secondary partners as well. We strive to enhance our operational efficiency through substantial improvement. In addition, we have been surveying our partners' satisfaction regarding mutual growth each year since 2015 in order to reflect their feedback in our mutual growth policies or programs.





Refore improvement

After improvement

#### **Communication with Partners**

Hyundai Elevator listens to the voice of its partners through communication channels such as discussion meetings with partners and contractor council meetings as well as visitations to primary and secondary partners by the CEO and procurement executives. In 2015, we held 23 discussion meetings, 23 contractor council meetings and 229 visitations to partners. We also operate a fair trade reporting system (Please see the Hyundai Elevator CP website) to prevent unfair trade practices.

### Case Study

### "Outstanding" in the 2015 Mutual Growth Index

Hyundai Elevator received 'Outstanding' in the 2015 Mutual Growth Index announced by the Mutual Growth Committee in June 2016. The mutual growth index is divided into the four categories of Excellent, Outstanding, Fair and Average. We received Fair in the first year and was promoted one grade up in 2015. We signed a Fair Trade Agreement with partners in 2013 under the theme of 'Companions Working and Advancing Together' and are operating diverse programs on fair trade compliance, financial support, improving payment conditions, protecting technical support, and training and hiring support. We will strive to promote mutual growth with our partners through expanding our activities to include our secondary partners in order to develop a sound ecosystem of mutual growth

#### **Benefit Sharing**

Hyundai Elevator achieves cost reduction, process improvement, quality enhancement and parts and new products development through innovative activities in cooperation with partners and shares its profits through pre-agreed means including cash compensation, long-term contracts, unit cost adjustment and joint patent applications. 19 projects were signed between 2014 and 2015 and 7 of them are completed. Proceeds from completed projects were distributed to partners via cash compensation and longterm contracts. Since 2015, we have included secondary partners in our benefit sharing system.



Ceremony for the autonomous promotion of the multilateral

#### **Hyundai Elevator Mutual Growth** Convention

Hyundai Elevator hosted the '2016 Mutual Growth Convention' which involved 270 partner representatives of manufacturing, installation, service and distribution facility businesses and 30 Hyundai Elevator employees. At the event, appreciation plagues were handed out to four model partners and a Fair Trade Agreement was signed among Hyundai Elevator and its primary and secondary partners. Other programs included a special lecture on mutual growth, presentation of best practice cases, performances and a luncheon. The convention contributes to building a long-term partnership based on communication and trust between Hyundai Elevator and its partners. We hope to share the company's vision and plans at future mutual growth conventions.



Hyundai Elevator Mutual Growth Convention

Key areas	Mutual growth programs	s Details	Key achievements
Financial aid	Direct financial aid	Interest-free loans are provided to partners as an emergency operational fund, R&D fund, and equipment purchase fund.	KRW 1.91 billion provided in support to 185 companies from 2013 to 2015
₩	Mixed financial aid (Co-existence loan)	Deposits money to form funds at banks to help partners take out loans at a lower rate than the standard rate.	KRW 12.62 billion provided in support to 41 companies from 2013 to 2015
	Special financial aid (investment funds for mutual growth)	Funds invested in business cooperation foundations to help human resources development and enhancement of productivity for partners	KRW 470 million provided to 120 companies from 2013 to 2015
	Indirect support	Credit line provided by banks to partners recommended by Hyundai Elevator based on their sales	
Technical support/	Joint R&D	Joint development of new products and localization and purchase of prototypes (samples)	KRW 640 million provided in support to 132 companies from 2013 to 2015
protection	Free technology transfer	Technologies and know-how transferred to partners at no cost	3 technologies and know-how trans- ferred in 2015
	Benefit sharing system	Sharing of achievements from cooperative activities between Hyundai Elevator and partners based on pre-discussed methods	19 tasks registered and 7 tasks completed from 2014 to 2015
	Technical/quality guidance	Assignment of engineers, verification and calibration of measuring instruments, support for tests by certified agencies, deployment of quality assurance systems, co-existence program, etc.	4,300 cases supported from 2013 to 2015
	Joint patents and certifications	Protection of partners' technologies through support to joint filing of patents	5 cases supported from 2014 to 2015
	Technology retention system	The core information of small businesses is protected by retaining it at the business cooperation foundation. If technology is leaked, its ownership is evidenced by the retained information.	2 cases supported in 2015
Hiring & Training support	Job fair	Hire employees by participating in job fairs sponsored by the Federation of Korean Industries (FKI) and the Korea Commission for Corporate Partnership.	4 persons hired in 2014 and 11 persons hired in 2015 by participating partners
Management support	Training and hiring for prospective employees of partners	Help partners to hire trained prospective employees	66 persons trained and 37 hired in 2015
Welfare & Benefits	Job training	Training on job skills, quality and safety on behalf of partners	15,618 people trained from 2013 to 2015
support	Management consulting system	Co-existence consulting program designed to eliminate business obstacles of partners and improve their business conditions through a triangular cooperation system among small and large businesses and the management advisory group of FKI	12 companies participated from 2013 to 2015
100	Support for welfare and benefits	Provision of funeral supplies for partner employees, support for anniversary day events, recuperation, work uniforms and safety gear	



### **INTERVIEW**

Our company has been supplying electronic parts to Hyundai Elevator since 1991. We are benefitting greatly from Hyundai Elevator's campaigns to promote mutual growth with its partners. The multilateral benefit-sharing system is instilling a sense of ownership in our employees as partners of Hyundai Elevator. We have received consulting and training on technology, assets and productivity through the Management Consulting System and were able to hire recent college graduates through the Partner Joint Job Expo. Feedback collected at various partner meetings in the manufacturing, installation and distribution divisions are reported to Hyundai Elevator, and the processing results of such feedback are shared with all partners. We are more than confident that Hyundai Elevator will continue to act as a corporate citizen that contributes to the advancement of society on a long-term basis.

Young Chong Yim CEO | WOOJIN ELECTRIC CO.,LTD.

55

# ISSUE 06

# **Work-related Social Contributions**

## Social Contribution

#### CONTEXT AND APPROACH

Corporate social contribution programs advance the direction of development with local communities based on the core capabilities of the businesses. Furthermore, society expects businesses to perform their duty as responsible corporate citizens in addition to seeking profit. Hyundai Elevator actively plans and implements social contribution programs to benefit society as a whole.

#### **ACTIVITIES**

Campaign for the correct use of elevators

Supporting children's welfare facilities

Sharing happiness! Voluntary house repair service group

Matching grant fund activities

#### **PERFORMANCE**







# **Social Contribution** Structure

#### **Objectives and Key Activities of Social** Contribution

Hyundai Elevator seeks to establish a foundation for sustainability management by conducting social contribution activities under the mission of "Performing social contribution as a responsible market leader." We have systematized our social contribution activities by establishing a step-by-step operation system. Based on this system, we are improving the system for social contribution, conducting strategic social contribution related to business units and planning new social contribution programs.



#### Goal

Through its social contribution activities, Hyundai Elevator seeks to practice its responsibility as a corporate citizen in connection with the new corporate culture of 4Ts, creates synergy by implementing and institutionalizing enterprisewide social contribution programs in order to provide a foundation for sustainability management and enhance the company's image as a social business.

#### **Social Contribution Structure**







#### Target hours per person

Annual target of 12 hours per person / Reflected in individual performance evaluation (0.5 points added)

#### **CSR** reward system

Year-end citation of departments, individuals and clubs with outstanding social contribution service / Hosting of volunteer service festivals

### **Election of Departmental CSR**

Promotion of social contribution programs / Application of benefits to departmental CSR leaders (counts as two hours of service points)

#### Change-based mutual aid fund

Saving and donation of small sums below KRW 1,000 from employee payroll

#### Matching grant fund

The company sets aside an amount identical to the deduction of small sums each month to generate funds (operating a scholarship fund)

#### **Corporate card points**

Accumulating points based on purchases made with the corporate credit card (included in the matching grant fund)

#### **Donation by clubs and departments**

Funds raised through the donation of prize money and similar funds

#### Corporate social responsibility (CSR)

Enhancement of the corporate image for strategic CSR activities (Campaign for the proper use of elevators)

#### **Support for local communities**

Support for children's welfare facilities (Nuri Home), one company-one village support, help for farmers, year-end donations for the disadvantaged, etc.

#### Clubs and talent donation

Sharing happiness! Volunteer house repair service group, talent donation by the photography club

#### Launch of social service group

Registration and operation of clubs or communities (73 members, Leader: Jung-Han Lee, Executive Director)

### Strategic Social **Contribution Activities**

Hyundai Elevator plans and offers practical social contribution programs in consideration of the company's characteristics. These strategic programs create synergy and promotional effects as well.

#### **Promotion of the Elevator Safety** campaign

Hyundai Elevator conducts promotional activities for its safety campaign together with the Korea Elevator Safety Agency and the Ministry of Land, Construction and Transport. We promote campaign activities with related personnel in Seoul and other regions.



Promotion of the elevator safety campaign

Cumulative participants

3,836

2014

2015

Unit: person

4,358

in social contribution

programs

3.196

### **Elevator Safety Education for Children**

This program is for educating children aged 6 to 10 on how to use elevators safely in particular situations. We hope to reduce elevator safety accidents involving children and help them grow into responsible adults.

#### **Education on Lifesaving in Elevators**

This is a program to educate people on lifesaving techniques and prepare for accidents that occur inside elevators. It is expected that this program will enhance safety consciousness and reduce human damage as well as social costs. To ensure optimal results, the program will be implemented after consultation with related departments and target entities.

Talent Donation



#### **Employee Community Service Group**

Hyundai Elevator repairs houses of underprivileged, lowincome groups and seniors living alone. We have been awarded a plaque by the Gyeonggi provincial government in recognition of our contributions to activation of volunteer service. Our photography club members are planning on taking photos of elders and multicultural families as part of its talent donation.



House repair activities

#### **PR Activities to Encourage Employee Participation**

Hyundai Elevator provides diverse information to encourage employee participation in systematic volunteer service programs, including information concerning the guidelines of service programs, related agencies and recommended programs by theme. We share the achievements of social contribution activities by publishing social contribution guidebooks and the bimonthly 'Sharing' newsletter to induce further employee participation in social contribution activities.



Social contribution newsletter 'Sharing'

Communities

**Social Contribution** 

**Activities for Local** 



#### **Social Contribution Activities in Cooperation with NGOs**

Hyundai Elevator offers a lecture on sharing culture as part of its social contribution activities in cooperation with NGOs. The 'Fun Donation' lecture allows participants to indirectly experience sharing culture through practical information on sharing and donations. In addition, we seek to increase awareness of non-cash social contributions while instilling a culture of donation in daily life including talent and clothing donation.



Sharing bazaar with BeautifulStore

### One Company, One Village Sisterhood **Program**

Hyundai Elevator created the "One Company, One Village Sisterhood Program" to support underprivileged groups, including seniors living on their own and low-income households, and increase farm-based income and interaction between urban and rural residents through the direct supply of agricultural produce. We practice sharing management by donating directly purchased produce to regional welfare facilities.



One Company, One Village Rural Help Program

**4,358**<sub>persons</sub>

Personnel participating in social contribution activities in 2015



22,421 hour

Social contribution service hours in 2015

#### **Support for Child Welfare Facilities**

Hyundai Elevator provides educational programs to children's welfare facilities. We promote talent development in local communities and foster friendships between children of the welfare institution and our employees through sports activities. In addition, we provide financial support by purchasing fruit grown by the institution while providing school uniforms and bags to those who move on to higher grades. Fruit is donated to underprivileged groups in the local community, creating a virtuous cycle of support activities.



Autumn field day at Nuri Home

### **Donation and support activities**

Hyundai Elevator provides scholarships to students from underprivileged families through the matching grant scholarship and also hands out charcoal briquettes, rice and other necessities through the change-based mutual aid fund. We also contribute money for the treatment of children with cancer and donate blood through the Korea Childhood Leukemia Foundation.



Donation agreement between Hyundai Elevator and Purme Foundation

# **Environmental Impact**

## **Environment**

#### **CONTEXT AND APPROACH**

The government is gradually strengthening environmental regulations on the control and emission of greenhouse gases and other pollutants and public and media interest in the environment is rising accordingly. Hyundai Elevator complies with the government control policy for emitting greenhouse gas while minimizing pollutants by operating a zero discharge disposal system.

#### **ACTIVITIES**

Zero discharge disposal system	Reducing waste		
Air pollution monitoring system	Improving energy efficiency and saving energy		

#### PERFORMANCE







# **Water Resources** Management

#### **Zero Discharge Disposal System**

Hyundai Elevator strictly controls the small amount of waste water generated during the manufacturing process. Icheon Head Office Factory, in particular, is located within the Water Quality Preservation Special Measure Areas, making it more important to protect the Namhan River water system and co-exist peacefully with the local community. We operated a zero discharge disposal system and upgraded the old zero discharge disposal system which evaporated the waste without going through a preprocessing stage by adding a physicochemical processing system. Through such efforts, we were able to reduce the amount of pollutants that were emitted. We will continue to reduce environmental impact through reducing the load and improving evaporation efficiency at air pollution control facilities.



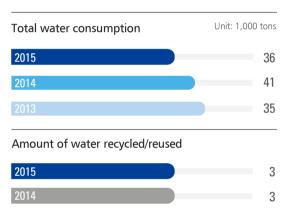
Saved 5,000 tons of water **Reduced 280 tons** of waste water

#### | Aggressive Efforts to Recycle/Reuse Water

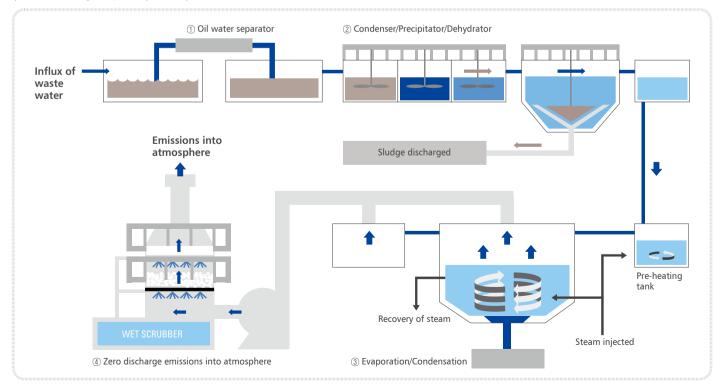
We saved 5,000 tons of water and reusing condensed steam water in heating. We also reduced 280 tons of waste water by reusing water from production facilities.

#### | Efforts for Reducing Water Usage

Hyundai Elevator has reduced the water consumption for its pre-processing facility by converting powder chemicals into liquids and enhancing solubility.



#### Zero discharge Disposal System



## **Waste Management**

#### **Promotion of Resource Recycling**

Hyundai Elevator reuses scrap steel, chips, stainless steel (SUS) and other waste materials generated in its production processes by reclassifying them into resources usable by other industries. We reused a total of 745 tons of waste materials through optimized recycling processes in 2015, including 425 tons of scrap steel, 315 tons of chips, and 5 tons of stainless steel. We also reduce air pollution from incineration and consumption of resources by reusing 30 tons of plastic resin discharge after thorough separation.

745 ton



Volume of reused by-products

373,760

520,570

425,690

476,690

Scrap steel

Stainless steel scrap

Chips

Reuse of waste (2015)

#### **Efforts to Reduce Disposable Product** Waste

Hyundai Elevator makes a concerted effort to reduce waste generation at business sites. We reduced 40 tons of vinyl waste per year by replacing vinyl material fasteners with mini-ratchet belts used for transporting materials inside the factory. We also blocked the unnecessary waste of resources and generation of waste by replacing wooden pallets with reusable pallets for parts or components supplied to us by our partners.



### **Recovery of Coating Material**

Hyundai Elevator recovers more than five tons of powder paint that have been sprayed with powder coating through a cyclone recovery system each year. By reusing recovered paint, we can reduce paint consumption and minimize environmental pollution.

### **Efforts to Manage Harmful Waste**

Hyundai Elevator strives to minimize the use of harmful material. All harmful materials are stored, discharged and controlled thoroughly pursuant to the relevant statutes. We conduct inspections and activities to prevent leakage and regularly perform environmental safety patrols of the factory. We also provide annual training to operators and

# Air Pollutant Management

### **Deployment of an Air Pollution Moni**toring System

Hyundai Elevator operates a system that inspects the general condition and emission status of air pollutants at air pollutant emission and prevention facilities. The air pollutant emission facility is strictly managed through the daily inspection checklist which is recorded by each management level including the operator, the environmental safety patrol and the supervisor. We also consistently monitor the pollutant emission concentration in compliance with relevant laws and regulations. Indoor air quality is monitored for each business unit to check leakage and secure a pleasant work environment. We plan on constructing a comprehensive environmental control system across the whole company to systematically control all environmental factors including air pollutant emission status, self-inspection, operational log and chemical substances usage.



Patrol activity for environmental safety

# Improvement of **Energy Efficiency** during Production

Hyundai Elevator performs a wide range of activities to enhance energy efficiency while minimizing waste during production.

#### | Enhancement of Operational Efficiency

Hyundai Elevator strives to minimize energy consumption by maintaining an optimized operation through steady inspection and maintenance of production and support facilities. In 2015, we saved 215,040kw of energy by replacing a superannuated compressor with a high-efficiency inverter compressor.

We also enhanced energy efficiency by replacing superannuated production equipment such as washers and heat exchangers with high-efficiency equipment and performing maintenance work on utility equipment such as valves and plumbing systems. We were able to enhance operational efficiency at our factories by deriving the optimized equipment layout through factory rationalization. Furthermore, we also reduced the energy used to ventilate Factory No. 3 by introducing powerless natural ventilation systems that emit air using the difference between indoor and outdoor temperature. We are in the process of applying this natural ventilation system to all of our factories.

#### | Reuse of Waste Energy

Hyundai Elevator deployed a system for reusing condensed water by feeding hot condensed steam water into boilers that heat our business units. Through the system, we saved 3,500 tons of water and 49,370Nm<sup>3</sup> of gas fuel used in our boilers each year.

#### **Established a Greenhouse Gas Inventory**

For the purpose of reducing energy consumption and greenhouse gas emissions, Hyundai Elevator established a greenhouse gas inventory system that manages energy consumption and greenhouse gas emissions. The inventory calculates the amount of energy used in all processes and the amount of greenhouse gas emitted as a result. Through the Greenhouse Gas Inventory, Hyundai Elevator is able to secure objective and reliable data concerning greenhouse gas emissions and actively respond to the greenhouse gas energy goal management system.

#### Campaign Staged to Propagate Energy **Saving Awareness**

Hyundai Elevator complies with the government's energysaving policy by providing all employees with cooling and heating appliance guidelines during peak power demand periods.

# (4) 215,040kw Energy saving

Enhancement of operational efficiency

49,370 Nm3 Gas saving

> Reusing waste energy

# Case Study

### Efforts to reduce greenhouse gas emissions by partners



Hyundai Elevator participates in the 'STOP CO2 Mentoring Project,' an agreement to reduce greenhouse gas emissions, in order to support the government's greenhouse gas control policy and lower the greenhouse emission volume across all business units. The STOP CO2 mentoring project is a mutual benefit business for both small and medium-sized businesses and large businesses. Large corporations provide greenhouse gas reduction technologies to small and medium-sized businesses that are faced with the tasks of facility improvement and new investments and purchase the right to emit additional amounts of greenhouse gas from small and medium-sized businesses. The project is expected to bring about greenhouse gas reduction for Hyundai Elevator's partners as well.



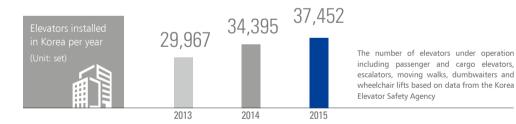




# Creation of Economic **Performance**

#### **Market Trend**

The elevator industry is developing new products with upgraded performance and efficiency such as the ultra-high speed inverter elevator and the machine room-less elevator. Our business units are striving to build a differentiated infrastructure by improving our hardware as well as software including the group management system and customer management system. While the elevator market is expected to fluctuate according to the state of the real estate business, absolute demand is consistent in the domestic market. More high-rise buildings are scheduled for construction in Korea and overseas, anticipating a sharp increase in demand for ultra-high-speed elevators, which is a high value-added model. Replacement of existing elevators will also increase due to the increasing number of building reconstructions and deterioration of elevators inside large buildings. The trend of gentrification and manhattanization of buildings will be reflected in the elevator business as well. From now on, we will have to concentrate on qualitative growth instead of quantitative growth.



#### **Market Share**

Hyundai Elevator maintains its lead of the domestic market share against global manufacturers through steady development of new and high value-added products, maximized efficiency in production, installation and repair, and an enhanced sales force. In addition, we are emerging as a global supplier of elevator and automated distribution equipment by enhancing international competitiveness through advancement into Southeast Asia, USA, Japan, China and Europe.



previous year

Classification	2013	2014	2015
Market share 1)	45.3%	44.5%	43.3%

<sup>1)</sup> Estimates based on data from the Korea Elevator Safety Agency

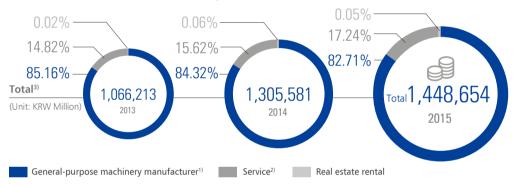
# Creation of **Economic Value**

Hyundai Elevator recorded KRW 1.662 trillion in sales in 2013, KRW 1.3056 trillion in 2014, and KRW 1.4487 trillion in 2015 despite the harsh economic climate. With 'Enhancement of business capability at domestic revenue bases and the global market' as our main management philosophy, we are securing future growth engines through targeting the high value-added ultra-high speed elevator market and expanding overseas

Sales figures			Unit: KRW Million
Classification	2013	2014	2015
General-purpose machinery manufacturer <sup>1)</sup>	908,033	1,100,864	1,198,220
Service <sup>2)</sup>	158,020	203,964	249,675
Real estate rental	160	753	759
Total <sup>3)</sup>	1,066,213	1,305,581	1,448,654

1) Sales of elevators, escalators, automated distribution equipment, parking equipment and platform screen doors

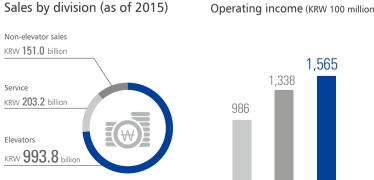


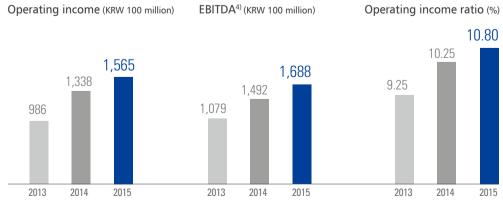


#### Financial information

Classification	2013	2014	2015
Sales (KRW 100 million)	10,662	13,056	14,487
Operating income (KRW 100 million)	986	1,338	1,565
EBITDA <sup>4)</sup> (KRW 100 million)	1,079	1,492	1,688
Operating income ratio (%)	9.25	10.25	10.80

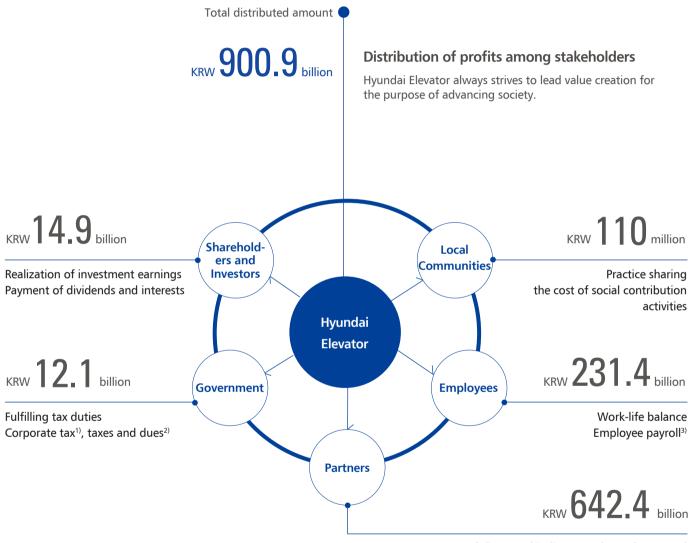
4) Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA)





# Distribution of Economic Performance

Hyundai Elevator continuously strives to lead value creation for the purpose of advancing society. In 2015 alone, we distributed a total of KRW 900.9 billion to our partners and stakeholders, including employees, local communities, shareholders, investors and the government.



Cost of direct and indirect purchases for mutual growth and support

# Social Performance

HR Management Customer Satisfaction Mutual Growth Social Contribution

# HR <u>Ma</u>nagement

#### **Principles of HR Management**

Hyundai Elevator values 'risk-taking and creative professionals with a flexible mindset.' Our HR management focuses on hiring talented individuals who take pride in the organization that they work for, equipped with professional knowledge and technologies in their respective area, and treated as the best workforce anywhere in the world.

A company where talented individuals come together

Pride

Professional

Priority

Have pride in the organization that they work for \_\_\_\_\_

Equipped with professional knowledge and technologies in their respective area

Treated as the best workforce anywhere in the world

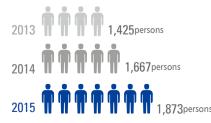
#### **Respect for Human Rights**

In 2015, Hyundai Elevator publicly announced its support for principles on human rights and labor by joining the UN Global Compact. We do not discriminate against our employees based on their gender, race, religion or place of origin and instead provide a fair work environment where all employees are given an equal opportunity to demonstrate their skills. We also prohibit child labor and forced labor and thoroughly comply with the relevant items ratified by domestic laws and the International Labor Organization. In 2015, not a single violation took place regarding child labor and forced labor.

#### **Employees**

Hyundai Elevator employed a total of 1,873 employees as of December 2015. They can be broken down into 49.8% of field workers and 50.2% of office workers. We strive to stabilize employment by making 'employment' the highest value in human resources management. We are proud to say that we have never laid off a single worker since the establishment of the company.

Total number of employees



Classific	ation	2013	2014	2015
Gender	Male	1,279	1,509	1,701
	Female	146	158	172
Job	Office workers	626	755	852
	Production/Technical workers	668	726	806
	Researchers	61	66	89
	Other	70	120	126

Classification	_	2013	2014	2015
Employment	Regular employees	1,355	1,547	1,747
type	Contract employees	70	120	126
Diversity	Handicapped	21	22	22
	Patriots and veterans	17	18	18
Age	30 or younger	287	447	531
	31 ~ 40	418	483	551
	41 ~ 50	534	518	547
	51 or older	186	219	244

Unit: persons

<sup>1)</sup> Distribution of profits – Corporate tax: Based on the consolidated cash flow statement rather than the actually paid amount

<sup>2)</sup> Distribution of profits – Taxes and dues: Only taxes and dues under sales and administrative expenses are indicated as a detailed breakdown of manufacturing costs is not available in the information disclosed, though manufacturing costs and sales and administrative expenses should be utilized.

<sup>3)</sup> Distribution of profits – employees: Prepared based on "Payroll + retirement allowance + welfare and benefits." Though the manufacturing costs and sales and administrative expenses should be utilized for retirement allowance and welfare and benefits, only the amounts under sales and administrative expenses are indicated as a detailed breakdown of manufacturing costs is not available in the information disclosed.

#### Recruitment

Hyundai Elevator's active participation in the government's job sharing policy to resolve the unemployment of young people resulted in the increase of the number of employees by 1.5 times from 1,230 persons in 2011 to 1,873 in December 2015. The company's efforts to create jobs and perform its social responsibility led to its designation as one of the 'Top 100 Job-creating Companies' in 2013 and 2015. We also secure global talents to expand our overseas operations. Our efforts to attract talented research professionals who will become the future growth engine include academia-industry cooperation programs, R&D scholarship, and recruitment through business plans of new or existing overseas subsidiary corporations or establishment of corporate bodies.

#### **Recruitment of Women and Local Talents**

Hyundai Elevator does not discriminate against candidates in the hiring process based on gender. We operate an internship system through an MOU with Duksung Women's University to increase recruitment of female employees. Candidates are recommended by local high schools or community colleges to secure technically skilled personnel. To hire more locals, we have developed a system for hiring outstanding candidates from local communities in cooperation with the placement information centers of leading local universities and colleges. Of the 358 employees newly hired in 2015, 28 were women, 102 were college graduates and 74 were high school graduates. Hyundai Elevator provides its employees with opportunities to explore and develop career paths by experiencing diverse jobs. We help them develop the ability to design a career that is compatible with their aptitude by instilling in them a comprehensive understanding of jobs and ownership toward their occupation. We hire many of our contract workers as regular employees and re-hire retirees as well.



1.5 times

2015

New hires and resignations (Dec. 2015)

Unit:	perso

Classification		2013	2014	2015
New recruits	Male	129	289	330
	Female	39	31	28
Resignation rate		5.5%	5.6%	8.9%
Number of resigning employees		79	93	166

#### Total number of new hires in last three years

Unit: persons







### **Talent Promotion**

#### **Education System**

Hyundai Elevator operates a standardized educational system to benefit all employees. We are developing and operating diverse educational courses for the purpose of strengthening the three core capabilities of global talent development (localization and globalization), professional work advancement, and corporate vitalization. Furthermore, we strategically develop core professionals through innovative external cooperation programs and overseas training.



75.9 hours

Task training hours per person



Task training expenses per person

### Key educational index

Classification	-	Unit	2014	2015
Task training	Training hours per person	hours	37.9	75.9

Classification		Unit	2014	2015
Compliance program(CP) training	Number of persons	Persons	525	1,785
Sexual harassment prevention training	Number of persons	Persons	1,559	1,690
Information protection training	Number of persons	Persons	429	1,446

#### **Educational programs**

	Leadership training				Professionals											
Classifica- tion	Leadershi	р	Core personnel Supervisor Common dut		n duties	Specialized I duties			Language skills	Corporate culture						
	Those assigned to positions		Leader's Forum													
Executives	New executives		HELDP (Hyundai Executive Leader Development Program)										6			
General Managers	Breakthrough leadership		HLDP	(Hyundai Leader Globaroment Program)	Coaching assessme	Manage- rial ac- counting					Per	GW One Se Per	P (voluntary la GWP One-m Sexu Perso			
Deputy Managers	Future strategy leadership				n n	Intermediate accounting	B	Outsourc	Internal instructor training	Language skill assessment	■ n; a ii ∞ ■ a	y learning) / I				
Managers	Facilitating leadership	Female le			developmen	developmen	developmen:	performance/ management	ediate nting	Doct prepa	Basic tasks course	Outsourcing training	uctor trainin	ll assessment	Corporation Vitalization d training Special lectur harassment prevention il information protection	M-Learning (
Assistant Managers	Executional leadership	leadership				Basic accounting	Document preparation	ırse		9		tion cture ion tion	by Creative 1			
Staffs	Introductio	n				ic iting	Basic skills Installation practice Mentoring						ક			

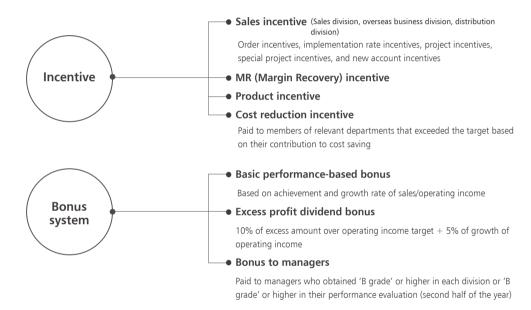
# Fair Performance Evaluation and Compensation

#### Performance-based HR Evaluation

Hyundai Elevator operates a fair performance-based HR evaluation system in order to motivate and boost the morale of employees. HR evaluations are performed twice a year – competence evaluation (in the first half) and performance evaluation (in the second half). Comprehensive evaluation is enabled through bottom-up leadership evaluations. Compensation is differentiated for the performance evaluation where December bonus and incentive payments are different by performance grade.

#### **Operation of a Performance-based Compensation System**

Hyundai Elevator operates a performance-based compensation system to motivate employees.



### **Employee Welfare**

#### **Citation of Employee Proposals**

Hyundai Elevator enhances competitiveness and productivity by collecting proposals on cost saving or efficiency through its internal proposal system. Outstanding proposals receive citations and prize money to encourage active participation. KRW 10,900,000 was awarded as prize money to 43 employees in 2015.

### **Operating Committees to Enhance Employee Welfare**

Hyundai Elevator enhances employee welfare through communicating with employees at quarterly labor-management council meetings, the cafeteria improvement committee, health and safety committee, etc. and providing daily amenities, promoting employee morale, and supporting cultural activities and housing. We also operate diverse welfare programs including scholarships for children, welfare cards, paid leaves and citations for long-term employees, employee housing rental, and welfare fund management. We are dedicated to protecting the health of our employees through offering periodic checkups of employees and their spouses, aid for medical expenses and propagation of safety exercises.

# Employee went



2015 reward payments

#### **Encouragement of Annual Leave**

Hyundai Elevator encourages all employees to take annual leave to motivate them and increase their job efficiency. In order to establish a proactive culture of annual leave, we accept annual leave utilization plans from each department (division). We hope that the annual leave activation campaign will achieve a work-life balance and increase employees' work satisfaction.

#### **Expanded Implementation of Family Day**

Hyundai Elevator implements the 'Family Day' (overtime-free day) system to enhance job satisfaction through work-life balance. Every Friday is designated as Family Day to enhance productivity by encouraging employees to leave work on time so that they can relieve stress and become motivated after spending time with family.

#### **Promotion of Maternity Protection System**

Hyundai Elevator established the maternity protection system to promote a culture that is sympathetic toward female employees whose careers are interrupted due to pregnancy, childbirth or nursing. We improve the work environment of female employees so that they can reach their full potential without concern. Employees can take advantage of reduced work hours during pregnancy and take maternity leave before or after childbirth. In 2015, five employees (one male and four female employees) used the child care leave and five female employees used their leave before or after childbirth. Hyundai Elevator further supports its female employees through providing a special employee card for pregnant women and building nursing rooms at the head office and Seoul office for resting and breastfeeding.

#### **Operation of Retirement Pension**

Hyundai Elevator operates retirement pensions to provide for employees after they leave the company. We operate a defined benefit retirement pension under the Act on the Guarantee of Workers' Retirement Benefits (KRW 80.4 billion in 2015) and a personal pension fund (50-50 contribution by company and employees) as a better alternative to general annuity systems including the National Pension Fund and retirement pay.

# Corporate Culture and Employee Communication

#### **Promotion of Corporate Culture**

Hyundai Elevator has achieved Great Workplace (GWP) status by promoting corporate vitalization and enhancing employee satisfaction. We came up with the slogan 'Work hard, Play Hard' and prepared customized corporate culture vitalization plans for each division to achieve work-life balance, enhance employee morale, expand communication and promote mentoring.

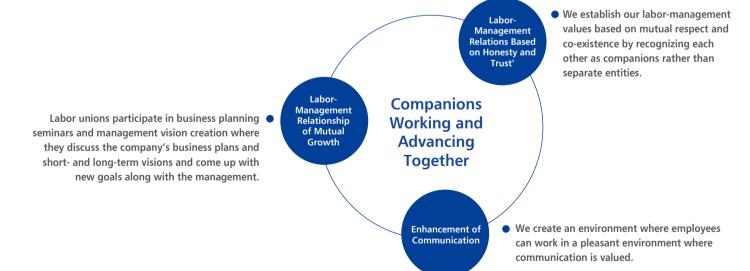
#### **Junior Board**

The '1st junior board,' an autonomous consultative body to realize Hyundai Elevator's vision and enhance its productivity, was launched on June 5, 2007, as part of the company's internal communication policy. The junior board seeks fresh management ideas from young employees by offering them a chance to participate in management and encouraging communication across departments and ranks. Section managers and lower level employee representatives explore new ideas and discuss ways to improve the corporate culture through monthly meetings and workshops. They proactively contribute to the company's development through reflecting employee interests and suggestions throughout the process.

# Communication-based Labor-Management Relationship

#### **Deployment of a Labor-management Culture**

Hyundai Elevator pursues 'communication' and 'co-existence' as the core of labor-management culture. To develop a co-existence-based labor-management culture, we promote 'labor-management relationship of mutual growth,' 'labor-management relationship based on honesty and trust,' and 'enhancement of communication.'



Forming a Labor-Management Relationship of Mutual Growth

Dispute-free business for 27 consecutive years



Presidential prize for an outstanding labormanagement culture



Presidential Award at the Labor-Management Culture Awards



Selected as Company with Outstanding Labor-Management Culture

#### **Labor-Management Relationship of Mutual Growth**

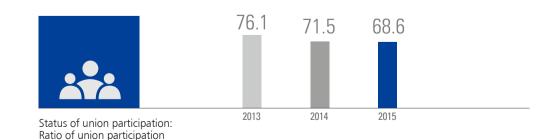
Hyundai Elevator establishes labor-management values based on mutual respect and co-existence by recognizing each other as companions rather than separate entities. Our management respects the labor union and the labor union engages in business management. We are further developing the labor union culture of three NOs (no labor disputes, no employment regulations and no occupational accidents) to carry on the company's honorable legacy of developing a healthy and productive labor-management relationship. Creation of a stable employment environment is one of the many positive outcomes of our amicable labormanagement relationship. Another noteworthy accomplishment is recording no labor disputes across all business units for 27 consecutive years since 1989. As part of the company's social contribution project, the labor union and management engage in co-existence programs and social contribution activities. In recognition of such efforts, we were selected as an 'outstanding labor-management corporation' in June 2013 and received the 'Presidential Award,' awarded to the single company which demonstrated an outstanding labor-management culture of co-existence through exemplary labor-management partnership, at the Labor-Management Culture Awards sponsored by the government in September 2013. Furthermore, we were selected as a 'Representative Benchmarking Corporation with Outstanding Labor-Management Culture' by the Korea Labor Foundation. Tripartite commissions from other countries made a visit to the company through an event hosted by the Ministry of Employment and Labor and the Korea Labor Foundation to benchmark Hyundai Elevator's labor-management relationship. This generated substantial overseas sales, promotion and marketing effects and led to the opening of new Hyundai Elevator agencies in Cambodia.

#### **Communication Channel between Labor and Management**

Hyundai Elevator establishes a cooperative labor-management relationship by holding discussion meetings with field workers and reflecting their opinions in management activities. This allows our employees to become more committed to and confident of their work. We also practice transparent management. The labor union participates in the annual management strategy meeting where they share information about management performance and future prospects. At the labor union executive workshop, in turn, the Chief Human-resource Officer (CHO) solidifies the close relationship between labor and management by discussing management achievements and strategies. Our labor and management strive to promote mutual growth by engaging in joint productivity improvement and factory innovation efforts. The company also hosts joint training programs, quarterly labor-management council meetings and labor-management hiking events to promote communication and understanding between the two corporate entities. Finally, our complaint handling and proposal mechanisms pursue open management, improvement of work environment and employment stabilization.

#### **Labor Union**

Hyundai Elevator's labor union currently has 806 members. Thanks to the cooperative labor-management relationship, there has been no labor dispute or strike to date.



# Management for Customer Satisfaction

#### **Customer Satisfaction Execution System**

Hyundai Elevator conducts customer satisfaction activities to truly impress customers. We strengthen our management structure through enhancing customer satisfaction activities, prioritizing customer safety and improving quality competitiveness.

System for promoting customer satisfaction execution system

**Enhancing customer** satisfaction activities

Conducted customer satisfaction survey Enhanced customer Enhanced education for customer service

Prioritizing customer safety

Obtained safety-related certifications Performed regular safety Improving quality competitiveness

Established quality management policy and structure Operated quality management Implemented quality enhancement activities in all processes

#### **Strengthening Customer Service Training**

Hyundai Elevator regularly trains employees of partners to enhance their skills and service-oriented mindset as they provide service to customers. Collective training is offered at the Head Office in Icheon while itinerant training is provided at each business unit. The company elevates customer satisfaction so that employees can promptly respond to system failures and customer complaints.

#### Collective training

Training on new model systems, understanding the system for existing models, hand-on training on repairing key failures, and training for parts inspection

#### Itinerant training (technical)

Characteristics and adjustment of systems by model, theory for parts inspection, understanding of elevator drawings and circuits, troubleshooting

Performance | 310 persons 4,960 hours

Performance | 404 persons 1,212 hours

#### Service mindset training

Training attitude and technique for inspection, training for rescuing passengers from elevators, customer response and prevention of reoccurring complaints



#### Prospective employee training

Understanding of the elevator industry, basics of inspection work and role playing, basics of failure handling, and technical training

Performance | 1,484 persons 4,452 hours

Performance | 29 persons 3,480 hours

Employee training for customer satisfaction

2015 Customer satisfaction survey

### **Customer Satisfaction Survey**

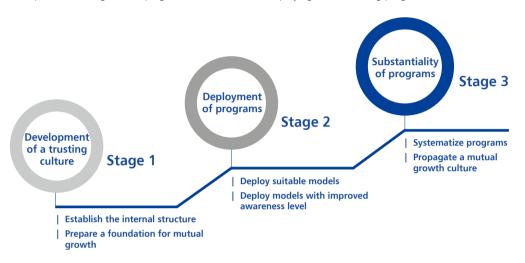
Hyundai Elevator conducts its customer satisfaction survey to provide better service through identifying customers' requirements and complaints. Each year, we ask elevator users and managers about the friendliness of technicians, service speed, and response to products and reflect customer opinions in our activities to improve product performance and customer satisfaction. In 2015, we conducted 5,011 cases of survey to measure customer satisfaction.

Degree of satisfaction Degree of kindness Speed 2015 94.2 2015 94.8 2015 94.5

# Mutual Growth

#### **Promotion of Step-By-Step Mutual Growth**

Hyundai Elevator engages in business with many partners for the production, installation and maintenance of products including elevators and escalators. Businesses need to promote mutual growth in order to create new values. Hyundai Elevator implements systematic strategies and objectives to enhance the competency of its partners through developing a culture of trust and deploying and stabilizing programs.



#### Mutual growth outcome

Classification		Unit	2013	2014	2015
	Number of partners provided with financial support	companies	19	149	178
Financial support	Amount of financial support	KRW 100 million	50	59	41
	Ratio of cash (or equivalent) payment	%	100	100	100
	Number of Payments	times	1~2	1~2	1~2
Technological support/protection	Number of technical development support cases	cases	998	1,546	1,778
	Number of technical protection support cases	cases	0	3	4
Support for education/	Support for education	persons	4,334	3,917	7,367
HR management/ hiring	Recruitment at job fairs	persons	0	4	11

System and **Achievement** of Partner **Procurement** 

#### **Procurement Structure and Performance**

Hyundai Elevator engages in business with many partners for production, installation and maintenance.

#### Mutual growth outcome

Broad classification	Mid classification	Detailed classification	Unit	2013	2014	2015
Dantagan	Number of key partners		Number of companies	257	250	258
Partners  Total amount purchased from key partners		KRW Million	521,303	568,987	642,440	

77

# Social Contribution

Hyundai Elevator, under a slogan of 'Business Growth through Sharing,' pursues sustainable growth alongside all members of society by steadily communicating with and returning benefits back to society as a responsible corporate citizen.

#### Social Contribution and Performance Management Reflecting the Demands by Local Communities

Hyundai Elevator performs social contribution activities reflecting the demands and ideas of stakeholders and local communities. We plan on measuring the outcome of social contribution activities and heightening the expertise and efficiency of our 'strategic social contribution programs' by conducting satisfaction surveys and deploying feedback systems such as expert diagnosis.



#### **Amount Invested in Social Contribution**

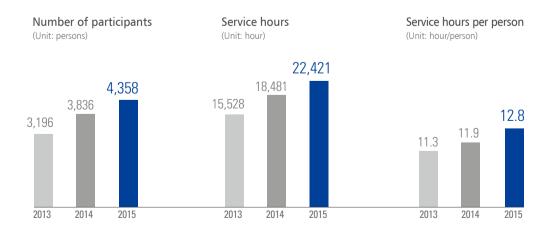
In 2015, Hyundai Elevator invested KRW 108 million in local communities. KRW 60 million was paid in donations and KRW 47 million was used to subsidize various activities.

			Unit: KRW Million
Classification	2013	2014	2015
Donation <sup>1)</sup>	21.1	350.5	60.7
Amount paid <sup>2)</sup>	20.6	21.9	47.2

<sup>1)</sup> Donations: Net donation amount

#### **Participation in Social Contribution**

In 2015, 4,358 people participated in Social Contribution activities. Each person volunteered for an average of 12.8 hours. The number of people participating in Social Contribution activities and their hours of participation are increasing each year. Participation in volunteer work increased due to the introduction of the individual setup of target hours.



# Environmental Performance

Environmental Management Health and Safety

# **Environmental Management**



#### **Environmental Management Organization**

Hyundai Elevator has a department dedicated to environmental management for the purpose of developing environmental management strategies, maintaining environmental facilities, and complying with environmental statutes. The organization consists of representatives from the Global Planning Department, head office business unit management department, and technology development departments at the Research Institute. The planning department develops environmental management strategies of business units at home and abroad. The business unit management department administers matters related to the environment and energy arising from production activities, including response to environmental regulations at home and abroad, treatment of environmental pollutants, and energy management. Lastly, the technology development department performs R&D work, including the development of technologies for reducing environmental impact and improving processes.

#### **Environment Policy**

Hyundai Elevator seeks globalization in the production, installation, and service of its elevators. We consistently perform the below activities to deploy an environmental management system that complies with the outcome of the environment management assessment and the Group's environmental management policies. Our goal is to realize a better global environment while minimizing emission of environmental pollutants:

- We develop and operate enhanced internal regulations while complying with environmental statutes and related regulations
- We consistently perform environmental improvement activities to prevent pollution and minimize the emission of environment pollutants.
- We strive to enhance environmental awareness by regularly evaluating performance related to environmental objectives and delivering information to all employees, and conducting thorough environmental training.
- We publish our objectives and policies regarding environmental management to the general public to ensure transparency

Therefore, all employees faithfully carry out their given missions in order to realize environmental policies and objectives while efficiently operating the environmental management system.

January 3, 1997 Hyundai Elevator Co., Ltd.



<sup>2)</sup> Amount paid: Amount including expenses for activities, preparation and meals

#### **Environmental Investment**

Hyundai Elevator is gradually increasing its environmental operation fund to reduce environmental impact during production. We also invest in the environment in order to create a pleasant work environment.

I Init:	VD\A/	N Ail	lion

109%

Increase in environment investment

Classification	2013	2014	2015
Environmental investment	581	264	553

#### **Atmospheric Environment Management**

Hyundai Elevator strives to maintain a pleasant atmospheric environment by controlling dust, odor and noise that occur during production. We control dust and other atmospheric pollutants whose total amount is regulated at 30% of the statutorily allowed standard emissions.

			Unit: kg
Classification	2013	2014	2015
Atmospheric pollutants (dust)	3,381	4,173	3,961

#### **Raw Material Usage**

Hyundai Elevator uses different kinds of raw materials to manufacture key elevator parts. We will contribute to reducing environmental impact by using raw materials in an efficient manner.

Unit	KRW	Million

Classification		2013	2014	2015
Purchased amount of raw materials	Total	493,774	580,575	663,799
	Steel sheets and beams	24,797	28,053	28,413
	Traction Machine	22,193	38,872	39,974
	Castings	15,047	13,755	18,332
	Control Pannel	41,633	47,996	57,712
	Guide Rail	24,802	35,607	42,721
	Cable	13,245	21,588	23,215
	Wire Rope	9,255	11,517	15,299
	Step & Chain	300	10,057	12,577
	Drive Unit	182	2,938	6,575
	Hatch parts of hoistway	75,425	100,730	114,543
	Other	266,895	269,462	304,438

#### **Waste Management**

Hyundai Elevator manages the waste generated at its factories in the categories of recycling, landfill and incineration. We conduct regular evaluation of and training on waste disposal companies to ensure transparent and lawful waste disposal while adhering to relevant statutes.

Unit: ton

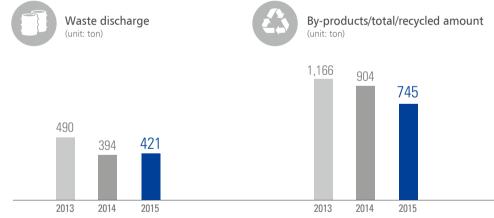
				Offic. torr
Classification		2013	2014	2015
Waste discharge	Total	490	394	421
	Landfill	24	21	19
	Incineration	263	225	255
	Recycling	153	101	107
	Designated waste	50	47	40

Unit: ton Classification 2013 2014 2015 By-product total 1,166 904 745 By-products 684 520 425 Steel scrap 476 373 chip 315 sus 11 904 745 Recycled amount 1.166 Ratio of recycled waste (%) 100 100



100 /0

Recycling rate of by-products



#### **Climate Change Response Structure**

Hyundai Elevator seeks to minimize greenhouse gas emissions through actively participating in the government's response to the new climate change agreement. We are surveying energy usage and greenhouse gas emissions at our business units and replacing and upgrading excessive energy consumers. Our goal is to deploy a greenhouse gas inventory and organize a dedicated managerial department to operate a more efficient energy management structure. By participating in government-sponsored greenhouse gas reduction policies such as the greenhouse gas emission trading, mandatory reduction and preparation of response measures, we hope to fulfill our civil responsibility towards society.

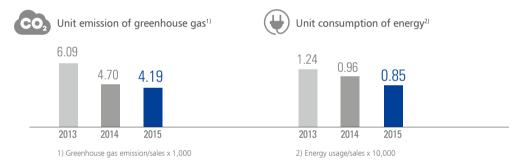
#### **Greenhouse Gas Emissions and Energy Usage**

Hyundai Elevator calculated greenhouse gas emissions from its Icheon head office, distribution center and Seoul office. In 2015, the company emitted 6,530tCO2eq of greenhouse gas and consumed 123 TJ of energy. We plan on reducing energy consumption through systematic reduction activities.

Unit: tCO2ea

Reduced unit emission of greenhouse gas

			,		Offit: tCO2eq
Classification			2013	2014	2015
Greenhouse gas emissions	Total		6,871	6,568	6,530
	Scope 1		1,987	1,794	1,802
	Scope 2		4,510	4,342	4,268
	Scope 3		374	433	460
Classification		Unit	2013	2014	2015
	Total	TJ	132	125	123
Energy usage	Electric power	kwh	9,672,724	9,311,748	9,154,448
	Gas	$Nm^3$	888,736	797,303	800,038



# **Health and** Safety

# OHSAS 18001

Health and safety certification

#### **Health and Safety Outcome**

Hyundai Elevator operates customized and systematic safety management systems at business or work sites through acquisition of OHSAS 18001 certification.

			Unit: persons
Classification	2013	2014	2015
Accident rate <sup>1)</sup> %	0.07	0	0.05
Number of victims	1	0	1
Number of accidents	1	0	1

1) Number of victims/total employees x 100

#### Operation of the Occupational Health & Safety Committee

Hyundai Elevator fosters a culture of occupational health and safety by operating the Occupational Health & Safety Committee. The Committee consists of an equal number of labor and management representatives and includes an employee rep and a management rep. The company improves employee health and safety by reviewing and deciding on important health and safety issues and preventing risks or hazards that pose danger to employees' health and safety.

# APPENDIX

- Financial Highlights
- GHG Emissions Assurance Report
- Independent Assurance Report
- GRI Index
- UN Global Compact
- Contributing Departments

# **Financial Highlights**

32<sup>nd</sup> term as of December 31, 2015 31<sup>st</sup> term as of December 31, 2014 30<sup>th</sup> term as of December 31, 2013

#### **Consolidated Statements of Financial Position**

Classification	32 <sup>nd</sup> term	31st term	30 <sup>th</sup> term
Assets			
Current assets	1,014,834,502,764	552,482,729,615	652,261,601,74
Cash and cash equivalents	429,503,480,822	126,819,019,126	114,983,668,30
Short-term financial instruments		8,000,000,000	
	7,000,000,000		5,000,000,00
Held-to-maturity financial assets	761,050,000	1,513,520,000	867,085,00
Trade receivables	245,190,565,952	215,173,610,311	172,853,912,07
Due from customers for contract work	120,170,428,164	99,944,963,660	112,474,008,30
Other receivables	15,098,136,948	12,410,822,908	3,361,787,40
Derivative financial assets	6,462,345	301,505,182	436,989,36
Inventories	33,467,518,829	29,812,734,336	12,486,513,15
Other financial assets	144,275,566,689	43,764,461,506	204,006,779,08
Other current assets	15,257,571,616	14,064,980,181	25,790,859,05
Current income tax assets	4,103,721,399	677,112,405	
Non-current assets	757,850,065,725	520,429,333,686	552,070,239,95
Long-term financial instruments	18,000,000	8,142,970,330	835,485,12
Available-for-sale financial assets	2,281,289,898	2,559,473,609	23,538,154,62
Held-to-maturity financial assets	2,587,172,153	3,146,540,000	4,362,735,00
Investments in jointly controlled entities and associates	175,722,305,483	257,540,610,213	279,565,425,37
Derivative financial assets	8,190,570,000	0	575,06
Investment property	13,430,343,071	13,539,927,499	14,556,156,91
Property, plant and equipment	439,159,367,027	120,851,188,402	99,959,058,76
Intangible assets	48,028,695,243	6,559,741,689	5,631,477,06
Other financial assets	17,833,718,389	16,536,924,631	15,684,849,39
Other non-current assets	18,754,812,060	2,690,078,446	7,987,110,87
Deferred income tax assets	31,843,792,401	88,861,878,867	99,949,211,75
Total assets	1,772,684,568,489	1,072,912,063,301	1,204,331,841,70
Liabilities			
Current liabilities	647,739,460,355	567,195,613,095	737,572,346,46
Accounts payables	150,146,204,852	137,035,681,247	116,536,185,90
Other payables	98,314,121,966	52,395,836,462	44,873,037,56
Borrowings and debentures	162,798,349,819	187,624,041,569	120,425,095,87
Derivative financial liabilities	18,275,734,852	44,695,181,160	336,022,741,81
Advances received	29,251,142,050	22,359,982,529	7,185,302,72
Liabilities from overcharged contract work	144,091,424,537	98,242,730,751	81,348,431,08
Provisions	18,923,209,433	10,168,152,753	9,972,450,46
Other financial liabilities	661,880	1,099,040	1,393,80
Other current liabilities	22,842,009,771	13,181,570,522	12,711,081,50
Current term income tax liabilities	3,096,601,195	1,491,337,062	8,496,625,72
Non-current liabilities	483,142,891,044	134,030,841,529	306,687,447,82
Other liabilities			
	75,601,972,592	689,500,000	770,500,00
Long term unearned revenue	177,964,929,605	105 402 211 026	104 641 264 66
Borrowings and debentures	194,701,862,900	105,402,211,036	194,641,364,58
Derivative financial liabilities	4,704,406,053	626,359,939	96,836,135,29
Provisions	627,308,000	0 740 000 704	40.000.000.7
Net fixed pay liabilities	23,494,321,794	20,710,602,734	10,926,386,73
Long-term employee benefit obligations	5,890,282,937	5,139,742,038	3,513,061,22
Deferred income tax liabilities	157,807,163	1,462,425,782	
Total liabilities	1,130,882,351,399	701,226,454,624	1,044,259,794,29

Classification	32 <sup>nd</sup> term	31st term	30 <sup>th</sup> term
Capital			
Shares owned by dominant company	641,517,557,231	370,621,466,824	159,221,829,566
Capital stock	123,162,565,000	98,162,565,000	68,162,565,000
Consolidated capital surplus	469,224,378,554	678,534,277,559	530,240,065,159
Other consolidated components of equity	31,192,972,200	0	0
Consolidated accumulation of other comprehensive income	(17,633,477,291)	(5,409,401,513)	9,022,915,646
Consolidated retained earnings	35,571,118,768	(400,665,974,222)	(448,203,716,239)
Non-controlling interest	284,659,859	1,064,141,853	850,217,845
Total equity	641,802,217,090	371,685,608,677	160,072,047,411
Total liabilities and equity	1,772,684,568,489	1,072,912,063,301	1,204,331,841,704

32<sup>nd</sup> term as of December 31, 2015 31<sup>st</sup> term as of December 31, 2014 30<sup>th</sup> term as of December 31, 2013

# **Consolidated Statements of Changes in Equity**

Classification	32 <sup>nd</sup> term	31st term	30 <sup>th</sup> term
Sales	1,448,653,887,563	1,305,580,741,993	1,066,212,843,099
Cost of goods sold	1,138,026,321,805	1,047,283,518,957	879,037,034,937
Gross profit	310,627,565,758	258,297,223,036	187,175,808,162
Selling and administrative expenses	154,117,053,936	124,534,588,459	88,552,510,884
Operating income	156,510,511,822	133,762,634,577	98,623,297,278
Other income	20,381,010,916	18,729,170,525	5,069,330,633
Other expenses	19,444,658,697	15,732,136,113	15,654,034,747
Profit and loss of investment in associates according to the equity method	(128,550,994,676)	4,848,216,022	(166,412,724,726)
Profit and loss from disposal of investment in associates	18,253,632,872	504,673,263	5,260,561,747
Financial income	17,050,270,649	8,987,158,284	9,656,925,078
Financial expenses	30,210,905,028	79,661,327,158	326,382,200,522
Profit (Loss) before income tax	33,988,867,858	71,438,389,400	(389,838,845,259)
Income tax expenses (benefit)	39,025,499,883	21,018,936,495	(47,176,688,545)
Profit (Loss) for the year	(5,036,632,025)	50,419,452,905	(342,662,156,714)
Other inclusive income or loss (after income tax)	(31,044,441,916)	(17,339,861,542)	8,969,091,934
Items not reclassified as net profit (loss)			
Re-measured elements of net fixed pay liabilities	(17,185,482,295)	(1,688,151,261)	8,463,308,158
Share of re-measured elements of net fixed pay liabilities of associates	(1,726,746,301)	(1,239,562,881)	968,772,439
Items that can be subsequently reclassified into net profit			
Income (loss) for assessment of negotiable financial assets	81,417,677	(8,692,877,899)	321,423,890
Share of other inclusive income or loss of associates or joint ownership companies	(9,170,320,284)	(6,410,531,799)	2,226,528,396
Exchanged gain or loss in overseas operations	(3,043,310,713)	691,262,298	(3,010,940,949)
Total consolidated comprehensive profit (loss)	(36,081,073,941)	33,079,591,363	(333,693,064,780)
Attribution of consolidated profit (loss)			
Stocks owned by dominant company	(4,050,678,414)	50,465,456,159	(342,331,766,285)
Non-controlling interest	(985,953,611)	(46,003,254)	(330,390,429)
Attribution of total consolidated comprehensive profit (loss)			
Stocks owned by dominant company	(35,186,982,788)	33,105,424,858	(333,077,008,515)
Non-controlling interest	(894,091,153)	(25,833,495)	(616,056,265)
Income per share of shares owned by dominant company			
Basic or diluted earnings (loss) per share	(185)	2,711	(26,473)

32<sup>nd</sup> term as of December 31, 2015 31<sup>st</sup> term as of December 31, 2014 30<sup>th</sup> term as of December 31, 2013

#### **Consolidated Statements of Cash Flows**

Unit: KRW

Interest received	Consolidated Statements of Cash Flows			Unit: KRW
Cash generated from operations	Classification	32 <sup>nd</sup> term	31st term	30 <sup>th</sup> term
Interest received	Cash flow from operating activities	150,051,941,818	143,483,273,967	104,352,583,220
Interest paid	Cash generated from operations	162,020,947,794	164,736,531,896	117,497,740,117
Dividends received	Interest received	11,956,018,134	3,068,262,269	6,151,986,967
Income tax paid	Interest paid	(14,398,400,761)	(13,130,826,836)	(22,036,421,511)
Cash flow from investing activities         (178,595,528,384)         (289,245,534,477)         (212,431,583,576)           Disposal of held-to-maturity financial assets         1,513,520,000         841,308,070         326,815,000           Disposal of available-for-sale financial assets         172,315,188         19,108,687,257         116,783,033           Disposal of preemptive rights         5.00,581,971         0         0           Deposit recovered         42,422,837,987         164,867,463,333         17,514,844,400           Decrease in derivative financial assets         465,732,683         505,270,941         77,658,1831           Proceeds from disposal of property, plant and equipment         170,064,821         1,301,215,599         229,552,007           Proceeds from disposal of intangible assets         965,654,555         0         793,334,635           Obecrease in long-term loans         169,707,375         0         0         0           Acquisition of short-term financial instruments         3,008,881,800         0         0         0           Net cash flow of the acquisition of equity investment by subsidiaries         13,001,249,544         7,240,848,430         104,926,833           Increase in short-term financial instruments         0         (280,051,600)         10         10           Acquisition of long-ter	Dividends received	41,053,300	765,218,993	186,152,976
Disposal of held-to-maturity financial assets   1,513,520,000   841,000,070   326,615,000   Disposal of available-for-sale financial assets   172,315,188   19,108,847,257   116,783,103   Disposal of investment in jointly controlled entities and associates   0   1,233,973,77   0   0   0   0   0   0   0   0   0	Income tax paid	(9,567,676,649)	(11,955,912,355)	2,553,124,671
Disposal of available-for-sale financial assets   172,315,168   19,108,847,257   116,763,103   Disposal of investment in jointly controlled entities and associates   0   1,283,379,737   0   0   0   0   0   0   0   0   0	Cash flow from investing activities	(178,595,528,384)	(289,245,534,477)	(212,431,583,576)
Disposal of investment in jointly controlled entities and associates   0   1,283,979,777   0   0   0   0   0   0   0   0   0	Disposal of held-to-maturity financial assets	1,513,520,000	841,308,070	326,615,000
Disposal of preemptive rights	Disposal of available-for-sale financial assets	172,315,168	19,108,647,257	116,763,103
Deposit recovered	Disposal of investment in jointly controlled entities and associates	0	1,293,979,737	0
Decrease in derivative financial assets	Disposal of preemptive rights	5,305,851,971	0	0
Proceeds from disposal of property, plant and equipment         170,064,821         1,301,215,599         229,552,007           Proceeds from disposal of intangible assets         985,454,545         0         793,354,683           Government subsidy received         1,300,000,000         0         0           Decrease in long-term loans         169,707,375         0         0           Acquisition of short-term financial instruments         3,608,681,630         0         0           Acquisition of long-term financial instruments         5,516,288,700         817,485,120         3,000,000           Net cash flow of the acquisition of equity investment by subsidiaries         13,001,249,564         7,840,848,430         104,926,693           Increase in short-term loans         0         (260,051,600)         0         0           Increase in Ing-term loans         0         (260,051,600)         (184,361,621)           Acquisition of short-term financial instruments         0         (3,000,000,000)         (5,000,000,000)           Acquisition of Ing-term financial instruments         0         (8,140,610,651)         (817,485,120)           Acquisition of Ing-term financial instruments         0         (8,140,610,651)         (817,485,120)           Acquisition of Ing-term financial instruments         0         (50,188,2510)	Deposit recovered	42,422,837,987	164,867,436,333	17,514,844,400
Proceeds from disposal of intangible assets         985,454,545         0         793,354,653           Government subsidy received         1,300,000,000         0         0           Decrease in long-term loans         169,707,375         0         0           Acquisition of short-term financial instruments         3,608,881,630         0         0           Acquisition of long-term financial instruments         5,516,288,700         817,485,120         3,000,000           Net cash flow of the acquisition of equity investment by subsidiaries         13,001,249,564         7,840,848,430         104,926,693           Increase in short-term loans         (139,200,000,000)         0         0         0           Increase in long-term loans         0         (260,051,600)         (184,361,621)           Acquisition of short-term financial instruments         0         (30,000,000)         5,000,000,000)           Acquisition of short-term financial instruments         0         (81,406,610,561)         1817,485,621           Acquisition of long-term financial instruments         0         (81,406,610,561)         1817,485,621           Acquisition of held-to-maturity financial assets         (1,175,055,000)         (297,325,000)         (1,900,690,000)           Acquisition of available-for-sale financial assets         0         (51,866,931,	Decrease in derivative financial assets	465,732,653	503,270,941	716,581,831
Government subsidy received         1,300,000,000         0         0           Decrease in long-term loans         169,707,375         0         0           Acquisition of short-term financial instruments         3,608,681,630         0         0           Net cash flow of the acquisition of equity investment by subsidiaries         13,001,249,564         7,840,848,430         104,926,683           Increase in short-term loans         (139,200,000,000)         0         0         0           Increase in long-term loans         0         (260,051,600)         (184,381,621)           Acquisition of short-term financial instruments         0         (3,000,000,000)         (5,000,000,000)           Acquisition of short-term financial instruments         0         (3,140,610,561)         (817,485,120)           Acquisition of long-term financial instruments         0         (8,140,610,561)         (817,485,120)           Acquisition of held-to-maturity financial assets         (1,175,055,000)         (297,225,000)         (1,900,680,000)           Acquisition of investment in associates         (51,366,931,440)         0         (59,489,738,179)           Increase in deposits         (4,530,995,108)         (979,653,306)         (88,013,887,745)           Acquisition of property, plant and equipment         (10,674,947,963)         (27,048,	Proceeds from disposal of property, plant and equipment	170,064,821	1,301,215,599	229,552,007
Decrease in long-term loans         169,707,375         0         0           Acquisition of short-term financial instruments         3,608,681,630         0         0           Acquisition of long-term financial instruments         5,516,288,700         817,485,120         3,000,000           Net cash flow of the acquisition of equity investment by subsidiaries         13,001,249,564         7,840,848,430         104,926,683           Increase in short-term loans         (139,200,000,000)         0         0         0           Increase in long-term loans         0         (260,051,600)         (184,361,621)           Acquisition of short-term financial instruments         0         (3,000,000,000)         (5,000,000,000)           Acquisition of long-term financial instruments         0         (8,140,610,561)         (817,485,120)           Acquisition of long-term financial instruments         0         (8,106,10,561)         (817,485,120)           Acquisition of held-to-maturity financial assets         (1,175,055,000)         (297,325,000)         (1900,680,000)           Acquisition of wailable-for-sale financial assets         (1,175,055,000)         (297,325,000)         (190,889,000)           Acquisition of investment in associates         (5,136,931,440)         0         (59,489,738,179)           Increase in deposits         (4,509,	Proceeds from disposal of intangible assets	985,454,545	0	793,354,653
Acquisition of short-term financial instruments         3,608,681,630         0         0           Acquisition of long-term financial instruments         5,516,288,700         817,485,120         3,000,000           Net cash flow of the acquisition of equity investment by subsidiaries         13,001,249,564         7,840,848,430         104,926,683           Increase in short-term loans         0         (260,051,600)         (184,361,621)           Acquisition of short-term financial instruments         0         (3,000,000,000)         (5,000,000,000)           Acquisition of short-term financial instruments         0         (8,140,610,561)         (817,485,120)           Acquisition of long-term financial assets         (1,175,055,000)         (297,325,000)         (1,900,890,000)           Acquisition of investment in associates         (51,366,931,440)         0         (59,489,738,179)           Increase in deposits         (4,500,995,108)         (979,653,306)         (88,013,887,745)           Acquisition of property, plan	Government subsidy received	1,300,000,000	0	0
Acquisition of long-term financial instruments         5,516,288,700         817,485,120         3,000,000           Net cash flow of the acquisition of equity investment by subsidiaries         13,001,249,564         7,840,848,430         104,926,693           Increase in short-term loans         (139,200,000,000)         0         0           Increase in long-term loans         0         (260,651,600)         (184,361,621)           Acquisition of short-term financial instruments         0         (3,000,000,000)         (5,000,000,000)           Acquisition of long-term financial instruments         0         (8,140,610,561)         (817,485,120)           Acquisition of held-to-maturity financial assets         (1,175,095,000)         (297,325,000)         (1,900,800,000)           Acquisition of investment in associates         (51,366,931,440)         0         (50,882,510)         (79,782,750)           Acquisition of property, plant and equipment         (10,874,947,963)         (27,048,855,284)         (25,851,922,717)           Acquisition of intangible assets         (7,031,406,124)         0         (1,798,493,072)           Decrease in derivative financial liabilities         (39,247,897,163)         (445,591,347,703)         (49,120,860,059)           Cash flow from financial activities         333,075,685,724         156,935,522,669         (35,604,012,467)	Decrease in long-term loans	169,707,375	0	0
Net cash flow of the acquisition of equity investment by subsidiaries         13,001,249,564         7,840,848,430         104,926,693           Increase in short-term loans         (139,200,000,000)         0         0         0           Increase in long-term loans         0         (260,051,600)         (184,361,621)           Acquisition of short-term financial instruments         0         (3,000,000,000)         (5,000,000,000)           Acquisition of long-term financial instruments         0         (8,140,610,661)         (817,485,120)           Acquisition of held-to-maturity financial assets         (1,175,055,000)         (297,325,000)         (1,900,800,000)           Acquisition of available-for-sale financial assets         0         (501,882,510)         (79,782,750)           Acquisition of investment in associates         (51,366,931,440)         0         (59,469,738,179)           Increase in deposits         (4,530,995,108)         (979,653,306)         (88,013,887,745)           Acquisition of property, plant and equipment         (10,674,947,963)         (27,048,855,284)         (25,861,922,717)           Acquisition of intangible assets         (7,031,406,124)         0         (1,798,493,072)           Decrease in derivative financial liabilities         (39,247,897,163)         (445,591,347,703)         (49,102,860,059)	Acquisition of short-term financial instruments	3,608,681,630	0	0
Increase in short-term loans	Acquisition of long-term financial instruments	5,516,288,700	817,485,120	3,000,000
Increase in long-term loans	Net cash flow of the acquisition of equity investment by subsidiaries	13,001,249,564	7,840,848,430	104,926,693
Acquisition of short-term financial instruments         0         (3,000,000,000)         (5,000,000,000)           Acquisition of long-term financial instruments         0         (8,140,610,561)         (817,485,120)           Acquisition of held-to-maturity financial assets         (1,175,055,000)         (297,325,000)         (1,900,690,000)           Acquisition of available-for-sale financial assets         0         (501,882,510)         (79,782,750)           Acquisition of investment in associates         (51,366,931,440)         0         (59,469,738,179)           Increase in deposits         (4,530,995,108)         (979,653,306)         (88,013,887,745)           Acquisition of property, plant and equipment         (10,674,947,963)         (27,048,855,284)         (25,851,922,717)           Acquisition of intangible assets         (7,031,406,124)         0         (1,798,493,072)           Decrease in derivative financial liabilities         (39,247,897,163)         (445,591,347,703)         (49,102,860,059)           Cash flow from financial activities         333,075,085,774         156,935,522,669         (35,604,012,467)           Increase in borrowings and debentures         357,015,655,520         79,225,812,642         64,909,850,000           Issuance of common stock         275,073,259,006         178,533,969,900         95,755,326,200 <t< td=""><td>Increase in short-term loans</td><td>(139,200,000,000)</td><td>0</td><td>0</td></t<>	Increase in short-term loans	(139,200,000,000)	0	0
Acquisition of long-term financial instruments         0         (8,140,610,561)         (817,485,120)           Acquisition of held-to-maturity financial assets         (1,175,055,000)         (297,325,000)         (1,900,690,000)           Acquisition of available-for-sale financial assets         0         (501,882,510)         (79,782,750)           Acquisition of investment in associates         (51,366,931,440)         0         (59,469,738,179)           Increase in deposits         (4,530,995,108)         (979,653,306)         (88,013,887,745)           Acquisition of property, plant and equipment         (10,674,947,963)         (27,048,855,284)         (25,851,922,717)           Acquisition of intangible assets         (7,031,406,124)         0         (1,798,493,072)           Decrease in derivative financial liabilities         (39,247,897,163)         (445,591,347,703)         (49,120,860,059)           Cash flow from financial activities         333,075,085,774         156,935,522,669         (35,604,012,467)           Increase in borrowings and debentures         357,015,655,520         79,225,812,642         64,909,850,000           Issuance of common stock         275,073,259,006         178,533,969,900         95,755,326,200           Capital returned to jointly-controlled entities         (200,000)         0         (200,000)           Repayment	Increase in long-term loans	0	(260,051,600)	(184,361,621)
Acquisition of held-to-maturity financial assets         (1,175,055,000)         (297,325,000)         (1,900,690,000)           Acquisition of available-for-sale financial assets         0         (501,882,510)         (79,782,750)           Acquisition of investment in associates         (51,366,931,440)         0         (59,469,738,179)           Increase in deposits         (4,530,995,108)         (979,653,306)         (88,013,887,745)           Acquisition of property, plant and equipment         (10,674,947,963)         (27,048,855,284)         (25,851,922,717)           Acquisition of intangible assets         (7,031,406,124)         0         (1,798,493,072)           Decrease in derivative financial liabilities         (39,247,897,163)         (445,591,347,703)         (49,120,860,059)           Cash flow from financial activities         (332,075,085,774         156,935,522,669         (35,604,012,467)           Increase in borrowings and debentures         357,015,655,520         79,225,812,642         64,909,850,000           Issuance of common stock         275,073,259,006         178,533,969,900         95,755,326,200           Capital returned to jointly-controlled entities         (200,000)         0         (200,000)           Repayment of borrowings and debentures         (298,931,896,656)         (100,824,259,873)         (196,668,984,206)	Acquisition of short-term financial instruments	0	(3,000,000,000)	(5,000,000,000)
Acquisition of available-for-sale financial assets         0         (501,882,510)         (79,782,750)           Acquisition of investment in associates         (51,366,931,440)         0         (59,469,738,179)           Increase in deposits         (4,530,995,108)         (979,653,306)         (88,013,887,745)           Acquisition of property, plant and equipment         (10,674,947,963)         (27,048,855,284)         (25,851,922,717)           Acquisition of intangible assets         (7,031,406,124)         0         (1,798,493,072)           Decrease in derivative financial liabilities         (39,247,897,163)         (445,591,347,703)         (49,120,860,059)           Cash flow from financial activities         333,075,085,774         156,935,522,669         (35,604,012,467)           Increase in borrowings and debentures         357,015,655,520         79,225,812,642         64,909,850,000           Issuance of common stock         275,073,259,006         178,533,969,900         95,755,326,200           Capital returned to jointly-controlled entities         (200,000)         0         (200,000)           Repayment of borrowings and debentures         (298,931,896,656)         (100,824,259,873)         (196,668,984,206)           Dividends paid         (81,732,096)         0         0         399,995,539           Increase (decrease) in cash an	Acquisition of long-term financial instruments	0	(8,140,610,561)	(817,485,120)
Acquisition of investment in associates         (51,366,931,440)         0         (59,469,738,179)           Increase in deposits         (4,530,995,108)         (979,653,306)         (88,013,887,745)           Acquisition of property, plant and equipment         (10,674,947,963)         (27,048,855,284)         (25,851,922,717)           Acquisition of intangible assets         (7,031,406,124)         0         (1,798,493,072)           Decrease in derivative financial liabilities         (39,247,897,163)         (445,591,347,703)         (49,120,860,059)           Cash flow from financial activities         333,075,085,774         156,935,522,669         (35,604,012,467)           Increase in borrowings and debentures         357,015,655,520         79,225,812,642         64,909,850,000           Issuance of common stock         275,073,259,006         178,533,969,900         95,755,326,200           Capital returned to jointly-controlled entities         (200,000)         0         (200,000)           Repayment of borrowings and debentures         (298,931,896,656)         (100,824,259,873)         (196,668,984,206)           Dividends paid         (81,732,096)         0         0         399,995,539           Increase (decrease) in cash and cash equivalents         304,531,499,208         11,173,262,159         (143,683,012,823)           Beginning ca	Acquisition of held-to-maturity financial assets	(1,175,055,000)	(297,325,000)	(1,900,690,000)
Increase in deposits	Acquisition of available-for-sale financial assets	0	(501,882,510)	(79,782,750)
Acquisition of property, plant and equipment         (10,674,947,963)         (27,048,855,284)         (25,851,922,717)           Acquisition of intangible assets         (7,031,406,124)         0         (1,798,493,072)           Decrease in derivative financial liabilities         (39,247,897,163)         (445,591,347,703)         (49,120,860,059)           Cash flow from financial activities         333,075,085,774         156,935,522,669         (35,604,012,467)           Increase in borrowings and debentures         357,015,655,520         79,225,812,642         64,909,850,000           Issuance of common stock         275,073,259,006         178,533,969,900         95,755,326,200           Capital returned to jointly-controlled entities         (200,000)         0         (200,000)           Repayment of borrowings and debentures         (298,931,896,656)         (100,824,259,873)         (196,668,984,206)           Dividends paid         (81,732,096)         0         0         0           Payment of non-controlling interest         0         0         399,995,539           Increase (decrease) in cash and cash equivalents         304,531,499,208         11,173,262,159         (143,683,012,823)           Beginning cash and cash equivalents         126,819,019,126         114,983,668,303         259,999,021,577           Effects of exchange rate fluct	Acquisition of investment in associates	(51,366,931,440)	0	(59,469,738,179)
Acquisition of intangible assets         (7,031,406,124)         0         (1,798,493,072)           Decrease in derivative financial liabilities         (39,247,897,163)         (445,591,347,703)         (49,120,860,059)           Cash flow from financial activities         333,075,085,774         156,935,522,669         (35,604,012,467)           Increase in borrowings and debentures         357,015,655,520         79,225,812,642         64,909,850,000           Issuance of common stock         275,073,259,006         178,533,969,900         95,755,326,200           Capital returned to jointly-controlled entities         (200,000)         0         (200,000)           Repayment of borrowings and debentures         (298,931,896,656)         (100,824,259,873)         (196,668,984,206)           Dividends paid         (81,732,096)         0         0         0           Payment of non-controlling interest         0         0         399,995,539           Increase (decrease) in cash and cash equivalents         304,531,499,208         11,173,262,159         (143,683,012,823)           Beginning cash and cash equivalents         126,819,019,126         114,983,668,303         259,999,021,577           Effects of exchange rate fluctuation for cash and cash equivalents         (1,847,037,512)         662,088,664         (1,332,340,451)	Increase in deposits	(4,530,995,108)	(979,653,306)	(88,013,887,745)
Decrease in derivative financial liabilities         (39,247,897,163)         (445,591,347,703)         (49,120,860,059)           Cash flow from financial activities         333,075,085,774         156,935,522,669         (35,604,012,467)           Increase in borrowings and debentures         357,015,655,520         79,225,812,642         64,909,850,000           Issuance of common stock         275,073,259,006         178,533,969,900         95,755,326,200           Capital returned to jointly-controlled entities         (200,000)         0         (200,000)           Repayment of borrowings and debentures         (298,931,896,656)         (100,824,259,873)         (196,668,984,206)           Dividends paid         (81,732,096)         0         0         399,995,539           Increase (decrease) in cash and cash equivalents         304,531,499,208         11,173,262,159         (143,683,012,823)           Beginning cash and cash equivalents         126,819,019,126         114,983,668,303         259,999,021,577           Effects of exchange rate fluctuation for cash and cash equivalents         (1,847,037,512)         662,088,664         (1,332,340,451)	Acquisition of property, plant and equipment	(10,674,947,963)	(27,048,855,284)	(25,851,922,717)
Cash flow from financial activities         333,075,085,774         156,935,522,669         (35,604,012,467)           Increase in borrowings and debentures         357,015,655,520         79,225,812,642         64,909,850,000           Issuance of common stock         275,073,259,006         178,533,969,900         95,755,326,200           Capital returned to jointly-controlled entities         (200,000)         0         (200,000)           Repayment of borrowings and debentures         (298,931,896,656)         (100,824,259,873)         (196,668,984,206)           Dividends paid         (81,732,096)         0         0         399,995,539           Increase (decrease) in cash and cash equivalents         304,531,499,208         11,173,262,159         (143,683,012,823)           Beginning cash and cash equivalents         126,819,019,126         114,983,668,303         259,999,021,577           Effects of exchange rate fluctuation for cash and cash equivalents         (1,847,037,512)         662,088,664         (1,332,340,451)	Acquisition of intangible assets	(7,031,406,124)	0	(1,798,493,072)
Increase in borrowings and debentures         357,015,655,520         79,225,812,642         64,909,850,000           Issuance of common stock         275,073,259,006         178,533,969,900         95,755,326,200           Capital returned to jointly-controlled entities         (200,000)         0         (200,000)           Repayment of borrowings and debentures         (298,931,896,656)         (100,824,259,873)         (196,668,984,206)           Dividends paid         (81,732,096)         0         0         0           Payment of non-controlling interest         0         0         399,995,539           Increase (decrease) in cash and cash equivalents         304,531,499,208         11,173,262,159         (143,683,012,823)           Beginning cash and cash equivalents         126,819,019,126         114,983,668,303         259,999,021,577           Effects of exchange rate fluctuation for cash and cash equivalents         (1,847,037,512)         662,088,664         (1,332,340,451)	Decrease in derivative financial liabilities	(39,247,897,163)	(445,591,347,703)	(49,120,860,059)
Issuance of common stock         275,073,259,006         178,533,969,900         95,755,326,200           Capital returned to jointly-controlled entities         (200,000)         0         (200,000)           Repayment of borrowings and debentures         (298,931,896,656)         (100,824,259,873)         (196,668,984,206)           Dividends paid         (81,732,096)         0         0         0           Payment of non-controlling interest         0         0         399,995,539           Increase (decrease) in cash and cash equivalents         304,531,499,208         11,173,262,159         (143,683,012,823)           Beginning cash and cash equivalents         126,819,019,126         114,983,668,303         259,999,021,577           Effects of exchange rate fluctuation for cash and cash equivalents         (1,847,037,512)         662,088,664         (1,332,340,451)	Cash flow from financial activities	333,075,085,774	156,935,522,669	(35,604,012,467)
Capital returned to jointly-controlled entities         (200,000)         0         (200,000)           Repayment of borrowings and debentures         (298,931,896,656)         (100,824,259,873)         (196,668,984,206)           Dividends paid         (81,732,096)         0         0           Payment of non-controlling interest         0         0         399,995,539           Increase (decrease) in cash and cash equivalents         304,531,499,208         11,173,262,159         (143,683,012,823)           Beginning cash and cash equivalents         126,819,019,126         114,983,668,303         259,999,021,577           Effects of exchange rate fluctuation for cash and cash equivalents         (1,847,037,512)         662,088,664         (1,332,340,451)	Increase in borrowings and debentures	357,015,655,520	79,225,812,642	64,909,850,000
Repayment of borrowings and debentures         (298,931,896,656)         (100,824,259,873)         (196,668,984,206)           Dividends paid         (81,732,096)         0         0           Payment of non-controlling interest         0         0         399,995,539           Increase (decrease) in cash and cash equivalents         304,531,499,208         11,173,262,159         (143,683,012,823)           Beginning cash and cash equivalents         126,819,019,126         114,983,668,303         259,999,021,577           Effects of exchange rate fluctuation for cash and cash equivalents         (1,847,037,512)         662,088,664         (1,332,340,451)	Issuance of common stock	275,073,259,006	178,533,969,900	95,755,326,200
Dividends paid         (81,732,096)         0         0           Payment of non-controlling interest         0         0         399,995,539           Increase (decrease) in cash and cash equivalents         304,531,499,208         11,173,262,159         (143,683,012,823)           Beginning cash and cash equivalents         126,819,019,126         114,983,668,303         259,999,021,577           Effects of exchange rate fluctuation for cash and cash equivalents         (1,847,037,512)         662,088,664         (1,332,340,451)	Capital returned to jointly-controlled entities	(200,000)	0	(200,000)
Payment of non-controlling interest         0         0         399,995,539           Increase (decrease) in cash and cash equivalents         304,531,499,208         11,173,262,159         (143,683,012,823)           Beginning cash and cash equivalents         126,819,019,126         114,983,668,303         259,999,021,577           Effects of exchange rate fluctuation for cash and cash equivalents         (1,847,037,512)         662,088,664         (1,332,340,451)	Repayment of borrowings and debentures	(298,931,896,656)	(100,824,259,873)	(196,668,984,206)
Increase (decrease) in cash and cash equivalents         304,531,499,208         11,173,262,159         (143,683,012,823)           Beginning cash and cash equivalents         126,819,019,126         114,983,668,303         259,999,021,577           Effects of exchange rate fluctuation for cash and cash equivalents         (1,847,037,512)         662,088,664         (1,332,340,451)	Dividends paid	(81,732,096)	0	0
Beginning cash and cash equivalents         126,819,019,126         114,983,668,303         259,999,021,577           Effects of exchange rate fluctuation for cash and cash equivalents         (1,847,037,512)         662,088,664         (1,332,340,451)	Payment of non-controlling interest	0	0	399,995,539
Effects of exchange rate fluctuation for cash and cash equivalents (1,847,037,512) 662,088,664 (1,332,340,451)	Increase (decrease) in cash and cash equivalents	304,531,499,208	11,173,262,159	(143,683,012,823)
	Beginning cash and cash equivalents	126,819,019,126	114,983,668,303	259,999,021,577
Ending cash and cash equivalents 429,503,480,822 126,819,019,126 114,983,668,303	Effects of exchange rate fluctuation for cash and cash equivalents	(1,847,037,512)	662,088,664	(1,332,340,451)
	Ending cash and cash equivalents	429,503,480,822	126,819,019,126	114,983,668,303

# **GHG Emissions Assurance Report**

No.: AS PRJC-546664-2016-AST-KOR

#### Introduction

DNV GL Business Assurance Korea Ltd. ("DNV GL" hereinafter) performed verification of the greenhouse gas emission volume of Hyundai Elevator Co., Ltd. ("Hyundai Elevator" hereinafter) in 2013 through 2015 under limited assurance. Hyundai Elevator is responsible for preparing data concerning greenhouse gas emissions based on the principles specified under ISO 14064-1: 2006, WRI / WBCSD GHG Protocol: 2004 or IPCC Guidelines: 2006. DNV GL will not be responsible for this verification statement regarding any third party, except for the parties to the verification service contract under the contract terms.

#### **Scope of Verification**

The volume of greenhouse gas emissions dealt with under this verification statement includes the direct emissions (Scope 1), energy indirect emissions (Scope 2) and other indirect emissions (Scope 3) provided under the "Greenhouse Gas Inventory Computing Tool".

- Emission volume subject to verification: Greenhouse gases emitted in 2013 to 2015
- Scope of the emission report and verification service: Hyundai Elevator home office and Cheonan distribution center

#### **Verification Methods**

This verification was performed based on the verification principles and standards under ISO 14064-3 from May to June 2016. DNV GL performed the verification based on the materiality test standard of 5% after developing a verification plan to obtain information and data required to present verification opinions concerning the greenhouse gas emission volume and completion of the greenhouse gas inventory reported by Hyundai Elevator. As part of the verification processes, the following have been checked:

- Hyundai Elevator greenhouse gas inventory tools
- Hyundai Elevator processes for the management or collection of greenhouse gas data, calculation of emission volume and reporting

#### Conclusion

The declaration of greenhouse gas emission volume and related information have been duly described without error, omission or false statement pursuant to the above-mentioned verification standards. Hyundai Elevator greenhouse gas emission volumes in 2013 to 2015 have been confirmed as follows:

#### Hyundai Elevator greenhouse gas emission volumes in 2013 to 2015

(Unit: ton CO2eq)

Hyundai Elevator	Direct emission (Scope 1)	Indirect emission (Scope 2)	Other indirect emission (Scope 3)	Total emission volume
2013	1,987	4,510	374	6,871
2014	1,794	4,342	433	6,568
2015	1,802	4,268	460	6,530

<sup>%</sup> The above greenhouse gas emission volume may have a tolerance of less than  $\pm$  1 tCO2 from the actual system value as the figure has been rounded off to report in whole numbers.

June 10, 2016

Sehui I Assurance team lea

Country Representative, DNV GL Business Assurance Korea

This verification statement by an outside verification service provider is valid as of the day it is published (June 10, 2016). This verification statement may be revised because of any event or situation that may arise between the day it is published and the time it is read to have a material impact on the calculation of Hyundai Elevator greenhouse gas emission volume.

<sup>\*\*</sup> Total emission volume = direct + indirect + other indirect emissions

# **Independent Assurance Statement**

### **DNV-GL**

#### Introduction

Hyundai Elevator Co., Ltd. (hereinafter referred to as "Hyundai Elevator") commissioned DNV GL Business Assurance Korea Ltd. (hereinafter referred to as "DNV GL"), part of DNV GL Group, to undertake independent assurance of the 'Hyundai Elevator Sustainability Report 2016' (the "Report"). The directors of Hyundai Elevator have sole responsibility for the preparation of the Report. The responsibility of DNV GL in performing the assurance work is to the management of Hyundai Elevator in accordance with the terms of reference. DNV GL's assurance engagements are based on the assumption that the data and information provided by the client to us as part of our review have been provided in good faith.

#### Scope of assurance

The scope of assurance included a review of sustainability activities and performance data over the reporting period 1st January to 31st December 2015. This included:

- Evaluation of the principles for defining the sustainability report content in the Global Reporting Initiative (GRI) Sustainability Report-
- Verification of disclosures to check the Report is prepared 'In accordance' with the GRI Guidelines G4 (Core option) (Verification on aggregated level of data and activities that refers to the period between January and December in 2015)
- Evaluation of the process for determining material aspects for reporting and the management approach to material issues and the process for generating, gathering and managing the quantitative and qualitative data in the Report.

#### Basis of our opinion

We performed our work using DNV GL's assurance methodology VeriSustain<sup>TM1</sup>, which is based on our professional experience, international assurance best practice including International Standard on Assurance Engagements 3000 (ISAE 3000). We applied the limited level of assurance. The audit was carried out in May 2016. The site visits were made to Hyundai Elevator Head office. We undertook the following activities as part of the assurance process:

- challenged the sustainability-related statements and claims made in the Report and assessed the robustness of the underlying data management system, information flow and controls;
- interviewed representatives from the various departments;
- conducted document reviews, data sampling and interrogation of supporting databases and associated reporting system and associated reporting systems as they relate to selected content and performance data;
- reviewed the outcomes the materiality assessment report.

The engagement excludes the sustainability management, performance and reporting practices of Hyundai Elevator's associated companies, subsidiaries, suppliers, contractors and any third-parties mentioned in the Report. DNV GL did not interview external stakeholders as part of this Assurance Engagement. Economic performance based on the financial data is cross-checked with internal documents, the audited consolidated financial statements and the announcement disclosed at the website of Korea Financial Supervisory Service (http://dart.fss.or.kr) as well as Hyundai Elevator's website (http://www.hyundaielevator.co.kr). These documents, financial statements and the announcements are not included in this Assurance Engagement. Limited depth of evidence gathering including inquiry and analytical procedures and limited sampling at lower levels in the organization were applied. The baseline data for Environmental and Social performance are not verified, while the aggregated data at the corporate level are used for the verification. DNV GL expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Assurance Statement

#### <sup>1</sup> The VeriSustain protocol is available upon request at www.dnvgl.com/assurance/reporting/verification.html

#### **Opinion and Observation**

On the basis of the work undertaken, nothing comes to our attention to suggest that the Report does not properly describe the adherence to the Principles for defining report content in GRI G4 nor is prepared 'in accordance' with GRI G4 Core option. Further opinions with regards to the adherence to the following Principles are made below;

#### Stakeholder Inclusiveness

Hyundai Elevator has identified internal and external stakeholder groups such as Customer, Shareholder & Investors, Employees, Suppliers, Government and Local Communities. The Report presents the stakeholder engagement process. Stakeholder survey has been carried out to identify stakeholders' interests and importance of issues for this first Report. Hyundai Elevator has identified key issues and effects on each other, through various channels with stakeholder at major worksite levels.

#### **Sustainability Context**

The Report discloses the background and approach to sustainability, key activities and performance by each key issue. Hyundai Elevator is expected that the sustainability concept with respect to economy, environment and social aspects, will be embedded in the corporate management philosophy and core values, organization's performance needs to be reported in relation to broader concepts of sustainability. For better understanding, it is recommended to present sustainability management strategies and related outcomes.

The Report presents the material assessment process. The relevant issue pool was formed from various sources, such as international peer group benchmarking, international standard and media research. Key issues were selected in terms of the business relevance and stakeholder impact. The audit team has reviewed and confirmed that the main issues selected through the materiality assessment process have been included in the report.

The Report covers sustainability aspects of economic, environmental and social impacts. Hyundai Elevator discloses information on the performance of the key sustainability issues for the reporting period. The report does not omit important information that influences or informs stakeholder assessments or decisions in the stakeholder engagement process and materiality assessment process.

#### **Accuracy and Reliability**

DNV GL audit team has evaluated the accuracy of data and information by sampling of several data sets. Any errors or misstatements identified during the engagement were corrected prior to the Report being published. Data and information contained in the report has been described as an accurate and reliable way on the basis of the work undertaken. The reference and aggregate method of internal and external data and information should be clearly recorded and maintained to ensure the consistency with the future reporting.

#### Competence and Independence

DNV GL Business Assurance is part of DNV GL Group and a global provider of certification, verification, assessment and training services, helping customers to build sustainable business performance. Our environmental and social assurance specialists are present in over 100 countries. The assurance work was performed by independent team which meets DNV GL's competence requirements. DNV GL was not involved in the preparation of any statements or data included in the Report except for this Assurance Statement.

8 June 2016 Seoul, Korea

In Kyoon Ahn DNV GL Business Assurance Korea Ltd.

Country Representative

# **GRI Index**

#### **GENERAL STANDARD DISCLOSURES**

Aspect	G4 Disclosure	Disclosure Title		
STRATEGY AND ANALYSIS	G4-1	Statement from senior decision-maker	•	5
	G4-3	Name of the organization	•	10
	G4-4	Activities, brands, products, and services	•	26~33
	G4-5	Location of headquarters	•	12, 13
	G4-6	Location of operations	•	12, 13
	G4-7	Ownership and legal form	•	2, 2015 Annual Report 5
	G4-8	Markets served	•	12, 13
ODC ANIIZATIONIAL DDOCILE	G4-9	Scale of the organization	•	10, 11
ORGANIZATIONAL PROFILE	G4-10	Information on employees and other workers	•	69
	G4-11	Collective bargaining agreements	•	75
	G4-12	Supply chain	•	77
	G4-13	Significant changes to the organization and its supply chain	•	2, 2015 Annual Report 5
	G4-14	Precautionary Principle or approach	•	22
	G4-15	External initiatives	•	92
	G4-16	Membership of associations	•	92
	G4-17	Entities included in the consolidated financial statements	•	2015 Annual Report 4, 5
	G4-18	Defining report content and topic Boundaries	•	24, 25
IDENTIFIED MATERIAL	G4-19	List of material topics	•	24, 25
ASPECTS AND BOUNDARIES	G4-20	Explanation of the material topic and its Boundary	•	24, 25
	G4-21	Explanation of the material topic and its Boundary	•	24, 25
	G4-22	Restatements of information	•	2
	G4-23	Changes in reporting	•	2
	G4-24	List of stakeholder groups	•	17
STAKEHOLDER	G4-25	Identifying and selecting stakeholders	•	17
ENGAGEMENT	G4-26	Approach to stakeholder engagement	•	17, 24, 25
	G4-27	Key topics and concerns raised	•	24, 25
	G4-28	Reporting period	•	2
REPORT PROFILE	G4-29	Date of most recent report	•	2
	G4-30	Reporting cycle	•	2
	G4-31	Contact point for questions regarding the report	•	2
	G4-32	Claims of reporting in accordance with the GRI Standards, GRI content index, External assurance	•	2
	G4-33	External assurance	•	2
GOVERNANCE	G4-34	Governance structure	•	14~16
ETHICS AND INTEGRITY	G4-56	Values, principles, standards, and norms of behavior	•	18, 19

#### SPECIFIC STANDARD DISCLOSURES

Aspects	G4 Disclosure	Disclosure Title	Assurance	Page
ENVIRONMENTAL				
	DMA	Generic Disclosures on Management Approach	•	60
ENERGY	G4-EN3	Energy consumption within the organization	•	82
	G4-EN4	Energy consumption outside of the organization	•	82

	G4			
Aspect	Disclosure	Disclosure Title	Assurance	Page
	G4-EN5	Energy intensity	•	82
ENERGY	G4-EN6	Reduction of energy consumption	•	63
	G4-EN7	Reductions in energy requirements of products and services	•	63
	DMA	Generic Disclosures on Management Approach	•	60
	G4-EN15	Direct (Scope 1) GHG emissions	•	82
	G4-EN16	Energy indirect (Scope 2) GHG emissions	•	82
EMISSIONS	G4-EN17	Other indirect (Scope 3) GHG emissions	•	82
	G4-EN18	GHG emissions intensity	•	82
	G4-EN19	Reduction of GHG emissions	•	63
	G4-EN20	Emissions of ozone-depleting substances (ODS)	•	ODS not discharged
	DMA	Generic Disclosures on Management Approach		60
FEELLIENITE AND MACTE	G4-EN22	Water discharge by quality and destination	•	61
EFFLUENTS AND WASTE	G4-EN23	Waste by type and disposal method	•	81
	G4-EN24	Significant spills	•	No spill cases
	DMA	Generic Disclosures on Management Approach	•	58
PRODUCTS AND SERVICES	G4-EN27	Mitigation of environmental impacts of products and services	•	39
LABOR PRACTICES AND	DECENT \	WORK		
	DMA	Generic Disclosures on Management Approach		69
51.451.61.41.51.5	G4-LA1	New employee hires and employee turnover	•	70
EMPLOYMENT	G4-LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	•	72, 73
	G4-LA3	Parental leave	•	73
	DMA	Generic Disclosures on Management Approach	•	48
	G4-LA5	Workers representation in formal joint management–worker health and safety committees	•	82
OCCUPATIONAL HEALTH	G4-LA6	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	•	82
AND SAFETY	G4-LA7	Workers with high incidence or high risk of diseases related to their occupation	•	50, 51
	G4-LA8	Health and safety topics covered in formal agreements with trade unions	•	82
	DMA	Generic Disclosures on Management Approach	•	44
	G4-LA9	Average hours of training per year per employee	•	46, 71
TRAINING AND EDUCATION	G4-LA10	Programs for upgrading employee skills and transition assistance programs	•	73
	G4-LA11	Percentage of employees receiving regular performance and career development reviews	•	72
LABOR PRACTICES	DMA	Generic Disclosures on Management Approach	•	18, 74
GRIEVANCE MECHANISMS	G4-LA16	The management approach and its components	•	19, 74, 75
SOCIETY				
	DMA	Generic Disclosures on Management Approach	•	56, 60
LOCAL COMMUNITIES	G4-SO1	Operations with local community engagement, impact assessments, and development programs	•	58, 59
EO C (E COMMONTES	G4-SO2	Operations with significant actual and potential negative impacts on local communities	•	61-63
ANTI-COMPETITIVE	DMA	Generic Disclosures on Management Approach	•	19, 20
BEHAVIOR	G4-S07	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	•	No related cases
PRODUCT RESPONSIBIL	.ITY			
	DMA	Generic Disclosures on Management Approach	•	40
CUSTOMER HEALTH AND	G4-PR1	Assessment of the health and safety impacts of product and service categories	•	41
SAFETY	G4-PR2	Incidents of non-compliance concerning the health and safety impacts of products and services	•	No related cases
	DMA	Generic Disclosures on Management Approach	•	40
MARKETING	G4-PR6	Activities, brands, products, and services	•	No related cases
COMMUNICATIONS -	G4-PR7	Incidents of non-compliance concerning marketing communications		No related cases

# **UN Global Compact**

Hyundai Elevator adheres to the 10 principles of the UN Global Compact in the four major areas of human rights, labor, environment and anticorruption. We intend to carry out our social responsibility as a sustainable global leader by strengthening our sustainability management in compliance with international standards.



This is our Communication on Progress in implementing the principles of the United Nations Global Compact and supporting broader UN goals.

We welcome feedback on its contents.

Category	Principle	Key Activities	Page
Human Rights	Businesses should support and respect the protection of internationally proclaimed human rights; and	Respect of HR principles and human rights Recruitment People development (training on ethics and prevention of sexual harassment)	69 70 71
	make sure that they are not complicit in human rights abuses.	Fair evaluation and compensation of performance Corporate culture and employee communication	72 74
	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	Communication-based labor-management relationship Labor-management relationship of mutual growth	74 75
Labour	the elimination of all forms of forced and compulsory labor; the effective abolition of child labor; and	Respect of HR principles and human rights	69
	the elimination of discrimination in respect of employment and occupation.	Respect of HR principles and human rights Recruitment Fair evaluation and compensation of performance	69 70 72
	Businesses should support a precautionary approach to environmental challenges;	Risk management Approaches and principles to reduce environmental impact	22 60, 79
Environment	undertake initiatives to promote greater environmental responsibility; and	Water resources management Waste management Air pollutant management Improvement of energy efficiency during production	61 62, 81 62, 80 63, 82
	encourage the development and diffusion of environmentally friendly technologies.	Environmental and Safe R&D - Hybrid acceleration/transmission system and synchronous traction machines using new materials	39
Anti- corruption	Businesses should work against corruption in all its forms, including extortion and bribery.	Ethical management Fair trade Voluntary compliance Propagation of a mutual growth culture	18 19 21

# **Contributing Departments**

#### Sustainability Management (SM) Promotion Secretariat

General Manager Kee Seob Kwon, Manager Chan-Ho Cho, and Assistant Manager Jin Kyoung Lee of the Public Relations Department

#### **Sustainability TFT**

Classification	Department	Name	Position
Korea Elevator Business Unit	Korea Sales Dept. No. 4	Yong Tae Kwon	Deputy Manager
Overseas Business Unit	Southeast Asia Sales Department	Jae Gook Sung	Manager
Service Business Division	Service Planning Department	Dong Hoon Cho	Deputy Manager
	Production Technology Innovation Department	Gye Soo Kim	Deputy Manager
Manufacturing Division	Production Department	Min Soo Yook	General Manager
	rioduction Department	Yong Chul Jin	Assistant Manager
	Safety & Environment Department	Cheon Ho Lee	Deputy Manager
Quality And Safety Division	Quality Assurance Department	Hong Keun Lee	Senior Researcher
	Quality Assurance Department	Hyung Jin Choi	Manager
CTO R&D Management Department		Dal Hyun Song	Chief Researcher
	HR Department	Young Hwa Son	Manager
CHO	HR Development Department	Nak Hwan Choi	Manager
	Social Contribution Team	Jin A Hyun	Assistant Manager
	Sales Management Department	Young Soo Kim	General Manager
	Finance Department	Hyun Jun Jang	Manager
CFO	Management Planning Department	Byung Ki Jung	Manager
	Legal Support Department	Jin Sung Bae	Deputy Manager
	Legal Support Department	Min Hyun Bang	Deputy Manager
CSO	Strategy Planning Department	Si Yong Jung	General Manager
Distribution Equipment Business Representative	Distribution Equipment Sales Department	Jin Ho Jung	Deputy Manager
Representative of Ethical	Ethical Management Department	Ju Hyun Kim	Deputy Manager
Management	Compliance Team	Tae Hui Yeo	Manager

#### For more information

#### Public Relations Department, Hyundai Elevator

Phone 02-3670-0717
Fax 02-3672-0660
E-mail hecsr@hdel.co.kr

Website www.hyundaielevator.co.kr

Address 194, Yulgok-ro, Jongno-gu, Seoul, Korea

2091, Gyeongchung-daero, Bulbal-eup, Icheon-si, Gyeonggi-do, Korea

# **A HYUNDAI ELEVATOR**



