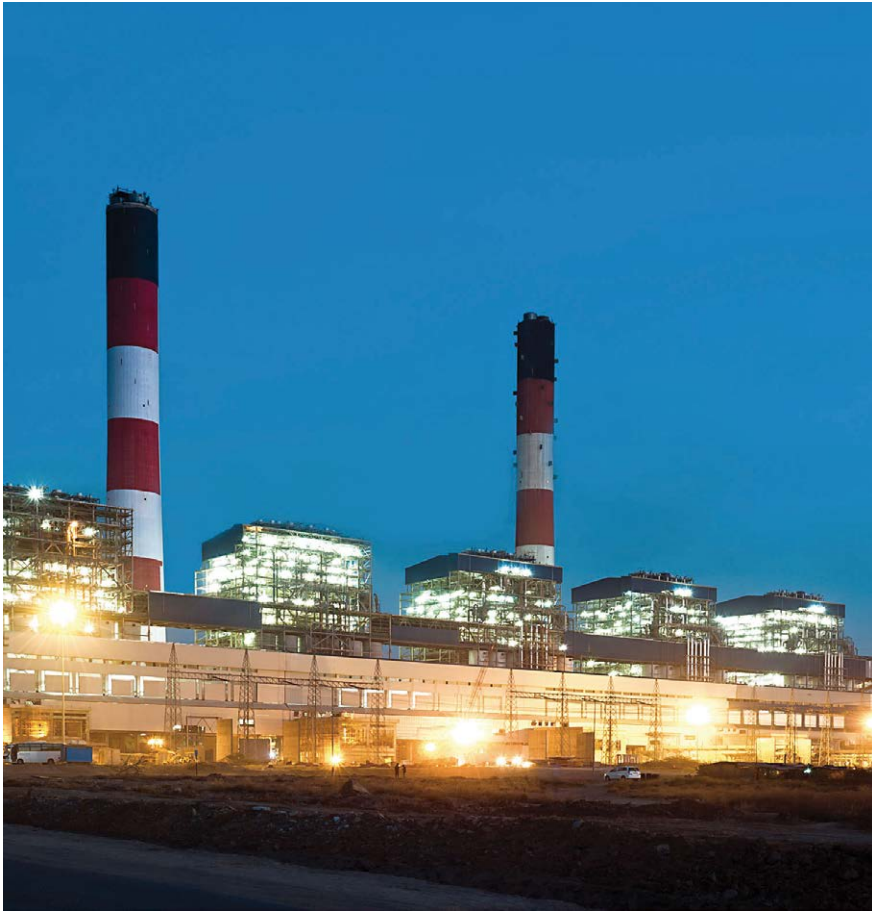


BUILDING YOUR TOMORROW TODAY

2013
Integrated Report of
Doosan Heavy Industries & Construction





About this Report

Overview

2013 Doosan Heavy Industries & Construction's Integrated Report includes content on its value, vision, strategy and corporate social responsibility. This report was also written to provide transparent information on our financial and non-financial performances to our diverse stakeholders.

Reporting Principle

Based our report on the framework of the International Integrated Reporting Council (IIRC) and core initiatives from the Global Reporting Initiative (GRI) G4 guideline.

Reporting Period

The reporting period covers January 1 to December 31 of 2013. Data from the past three fiscal years was provided to analyze trends over time. Moreover, data from the first-half of 2014 was calculated on performance.

Scope and Boundary

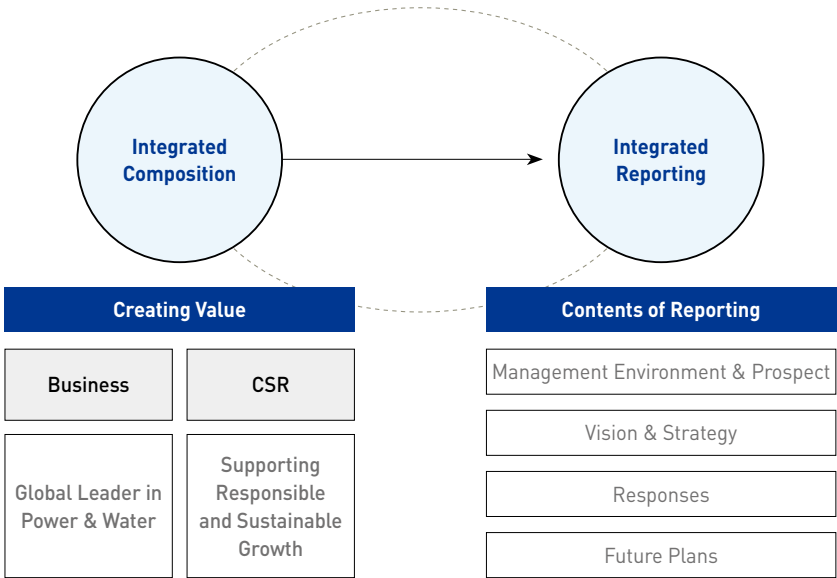
Financial and non-financial performance in this report covers business activities of our head office, subsidiaries and overseas project sites, using boundary identification procedures of GRI G4.

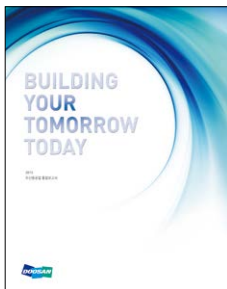
Verification

This report was verified by DNV GL, an independent assurance agency, to ensure its reliability and enhance its quality based on GRI G4 guidelines and AAA 1000 Assurance Standard (AS) 2008. Details regarding assurance results are available on pages 100 and 101.

Additional Information

This report can be downloaded from the homepage of Doosan Heavy Industries & Construction.





2013 Integrated Report of Doosan Heavy Industries & Construction

Doosan Heavy Industries & Construction is committed to enhance corporate value and to create social value in social by developing and capitalizing on technology to better human society and the planet. We will continue to share our financial and non-financial performance and activity for sustainable growth with all of our valued stakeholders through this report.

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CEO Message



Doosan Heavy Industries & Construction helps to supply the Power and Water, essential elements for human society. At the same time, we develop unique technologies and solutions aimed at preserving a clean environment, a fundamental foundation for the health and welfare of future generations. In the process, we hope to contribute to the betterment of humankind and our planet.

Dear stakeholders,

I would like to sincerely thank you all for the support you have shown to our company, Doosan Heavy Industries & Construction.

Our company aims to become a global leader in the power and water business. For more than fifty years, we have helped to ensure that these commodities are available to people around the world. Today we continue to develop unique technologies and solutions to help preserve a clean environment for future generations to enjoy healthy lives. In the process, we are working to raise the value of the Earth.

Global economic activity remained sluggish in 2013, but Doosan Heavy Industries & Construction still managed to win contracts for highly significant projects. These include the Vinh Tan 4 coal-fired thermal power plant in Vietnam, two 1,000MW ultra-supercritical coal-fired thermal power plant units for the Sinboryeong complex in Korea, and a reverse osmosis desalination plant in Chile. We also divided the Power BG (Business Group) into the Boiler BG and Turbine/Generator BG, strengthening the competitiveness of these respective product lines and taking another step toward the “One Global Doosan” structure to fulfill our global leadership ambitions. The New Business & Technology Committee was also established, along with new R&D centers around the world for each BG to help boost their fundamental competitiveness.

In addition, we established the CSR Committee to support the systematic fulfillment of our corporate social responsibilities, and further identified and implemented various CSR initiatives related to areas covered by the five subcommittees (Human Resource, Ethics Management, Shared Growth, EHS, and Community), such as strengthening the human rights policy, expanding CSR programs to the supply chain, and establishing a strong platform for EHS management. Most importantly, we are upholding the global standard of CSR and seeking to become a model corporate citizen by actively participating in global sustainability initiatives of the UN Global Compact (UNGC) and Carbon Disclosure Project (CDP).

We expect the business conditions to remain poor in 2014. However, in preparation for the global economic recovery in 2015, we will focus on bolstering our fundamental competitiveness. In the meantime, we plan to maintain mid and long-term growth momentum by diversifying our business portfolio and securing new growth engines such as ICT (information and communication technology), and expand our business to surpass that of our rivals in and out of Korea to become an undisputed global leader. Moreover, we will continue to pursue business expansion in the constantly growing market of Latin America and the rapidly emerging market of Africa.

Respectable stakeholders,

As our business grows, we seek to closely abide by our people-centric business philosophy. Thus, we aim to continuously help realize a better society and pursue sound growth for our stakeholders. This means developing the competencies of our employees, establishing a work-life balance, ensuring world-class transparency, cultivating EHS capacity, pursuing mutual growth with our suppliers, and performing our role as a responsible corporate citizen by raising the future competitiveness of the local communities. We will also freely disclose our progress in this regard to the stakeholders.

This 2013 Integrated Report covers our business results and outlook, as well as our commitment and efforts in the area of CSR. Doosan Heavy Industries and Construction is doing its best to raise the value of our planet, and we ask for your continuous support in helping us succeed with this noble effort. Thank you.

Geewon Park
Chairman & Chief Executive Officer



Doosan Credo

Our Vision

We aspire to be a Proud Global Doosan - a leading innovator of products and services that improve the quality of life for people and communities around the world.
We will achieve this by living the Doosan Credo. Guided by our Credo, we will drive our second 100 years of growth.

Core Values

Doosan's people are our greatest asset and the key to our future.
They are at the heart of all our achievements.
Our continued and distinguished success will only be possible through developing and cultivating our talent.
Our people possess great capacity, willingness and drive to contribute to the Company.
They are relentless in enhancing their skills and capabilities.
They embrace our Core Values and demonstrate these beliefs and principles in their daily behaviors.

Cultivating people is our highest priority and a shared responsibility.
Attracting and recruiting the right talent, who understand and embrace our values, will be the foundation for developing our people.
We believe people develop and grow through performance at work and we give them the authority and responsibility that best match their capabilities.
Through experience, people develop to their maximum potential.
Fair and immediate feedback and recognition are offered as we believe this is central to self-development.
Our people are given the opportunity to develop their strengths and address areas for improvement. As a result, Doosan people are proud of who they are and respected as business professionals.

Integrity and transparency are fundamental Doosan strengths.
We make profit profit by creating value through fair and transparent activities.
We acknowledge our mistakes and keep our promises.
We never compromise our principles.

Inhwa best expresses who we are and provides us with a unique competitive edge.
We define *Inhwa* as teamwork in the truest sense of the word, grounded upon fairness and camaraderie.
By carefully following these virtues we have created One Doosan; a collective strength built on the contribution of a wide diversity of individuals.
Inhwa means we maximize our organizational strength and potential through true teamwork built on defined, transparent rules of fair play.
Selfish rivalries between individuals or departments have no place at Doosan and discrimination of any kind is not tolerated.
Inhwa means each individual contributes to the success of their colleagues and team, resulting in both excellent team and individual performances.
Inhwa also means we are open; Doosan welcomes proactive ideas and constructive criticism from everyone, regardless of seniority or position.
Our unique practice of *Inhwa* extends beyond the internal organization and embraces the entire Doosan community, from our families to our shareholders, affiliates and partners.

Our customers are the reason Doosan exists.
The true measure of Doosan's success is customers' satisfaction and respect.
Our goal is to always deliver superior value than our competitors.
We achieve this by understanding our customers' needs and meeting or exceeding their expectations.

Embracing world-class technology and innovation is vital to our survival.
Tomorrow drives today at Doosan; we always look to the future instead of the past.
We strive to understand, and stay ahead of, change.
We continuously seek to improve our business model, products, services and methods.
We celebrate and properly reward successful risk-taking, while also respecting valuable attempts that fail.
Doosan applauds the spirit of challenge over complacency.
Our future success will be driven by seeking breakthrough ideas, knowledge, technologies and resources regardless of their origin, either internal or external.

Profit measures our success and drives our growth.
Our profit must exceed our capital cost and be sufficient to fuel our continuous growth and investment.
Our people understand how the work they do contributes to Doosan's profit.
We recognize that long-term success is built by respecting the rights of our suppliers, distributors and partners to earn fair profits.

Creating a socially responsible enterprise is our duty to society.
We see business and society as a close partnership and an opportunity for mutual growth.
Doosan will be proactive in this partnership, contributing the time and resources required for success.
Our goal is to develop and grow alongside society, as a trusted and trustworthy partner.
Wherever we operate, we do so transparently and lawfully.
We aim to contribute to the development of talent in society.
Our community service activities promote both corporate and social development.

We provide clean and safe working environments.
Doosan maintains all our facilities to the highest possible standards.
This is the basis for superior productivity as well as being our responsibility to our people, their families, our customers and shareholders.
Environmental protection is our duty and obligation to every community where Doosan does business.
We know this ultimately results in greater value creation.



The Doosan Way represents our strong beliefs and philosophies to become a ‘Proud Global Doosan’.

Doosan Credo

The Doosan Credo is a set of stipulated principles representing Doosan’s business philosophies and unique way of doing business, which have served as the foundation of our success for the past century. The Doosan Credo contains nine core values that guide our decisions and the way we do business. Through the realization of these values, Doosan accomplishes its ultimate goal. The Doosan Credo consists of Doosan’s ‘Vision’ and ‘Core Values’.

Aspiration

Doosan’s ultimate goal is as the creation of a ‘Proud Global Doosan.’ This means each of our employees and all of our shareholders will benefit from, and be proud of their association with Doosan. In other words, every employee takes great pride in being a member of Doosan and each customer recognizes and appreciates Doosan’s high-quality goods and services. Every shareholder values our fair and high levels of profit.

Core Values

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

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

Traits of Doosan People



Limitless Aspiration



Cultivating People



Inhwa



Open Communication



Tenacity & Drive



Prioritization and Focus

Doosan Group

Continuous Changes and Growth for the Past 118 Years

Doosan has demonstrated the strength of its 118-year history, the longest among Korean companies, and at the same time achieved dynamic and fast change and growth over the years. Doosan took the first step in its legendary history in 1896 when Park Seung-Jik opened Korea’s first modern store in Baeogae, Jongno 4-ga, Seoul. After going through continuous growth, Doosan successfully evolved into a consumer goods company specializing in beer and other beverages. Since then, by completing vertical and horizontal integration centered on the alcoholic beverage business, Doosan posted about a 80% market share during the 1970s and 1980s and has enjoyed an unrivaled leading position in diverse consumer goods sectors of the Korean market.

Successful Transformation into ISB (Infrastructure Support Business)

Doosan was faced with numerous challenges during the mid-90s due to market saturation and cut-throat competition in the domestic market. To overcome these difficulties, Doosan decided to sell its flagship beer division, the OB (Oriental Brewery), and integrate subsidiaries under the judgment that it was necessary to drastically change the business portfolio based on the selection and concentration strategy. Such a pioneering move has enabled Doosan to solidify its position and become even stronger. Since 2000, Doosan has embarked on a massive transformation to become a global company, developing new growth engines and overhauling its business portfolio altogether. Through a series of successful M&As, Doosan has completely transformed itself from a consumer goods company to an ISB (Infrastructure Support Business) provider, specializing in power, water, construction & engineering, heavy machinery & construction equipment, energy, national defense, and industrial facilities.

A Leap Towards the Position as a Global Player

In the 2000s, Doosan made momentous inroads into the world by acquiring Babcock (U.K., 2006), a company that possessed coal-fired boiler technology, and Bobcat (U.S., 2007), a manufacturer of various construction equipment. At that time, the acquisition of Bobcat was the largest M&A deal made by a Korean company. Currently, Doosan takes the first to second place in the seawater desalination and power generation markets worldwide and its 19 products are recognized as world-class Korean products. These achievements have helped Doosan to solidify its dominance in the global market. Doosan has also proven its global leadership in organizational operations. It has hired talents based on merits irrespective of race and nationality and put foreign executives in the positions of top management. As a result, the percentage of foreign employees has reached 50%. In addition, Doosan has established scientific and advanced work processes and systems, which drives the competitiveness in its global businesses.

Doosan’s Growth Engine

Behind the success of Doosan is its unwavering ‘trust in people.’ This was something our founder firmly believed in, who often had said, “Investment in people makes the foundation for business.” This belief is well summed up in our 2G strategy (Growth of People, Growth of Business). The 2G strategy has been the driver of our past success and will guide us through our journey toward prosperity in the global era. At the heart of the 2G strategy is the virtuous circle of ‘growth of people laying the foundation for the growth of the company, and the latter leading back to the former.’ With its trust in employees and continuous investment in human capital, Doosan was able to go through bold restructuring and innovative portfolio transformation successfully.

The Future of Doosan

Doosan hopes to become a “Proud Global Doosan”, backed by our firm belief and trust in people. The “Proud Global Doosan” means becoming a company that every stakeholder is proud of. Our stakeholders include not only employees, but also our customers, shareholders and local communities around us. Our vision is to become a company that everyone involved with can be proud of. To bring better life to mankind and everyone who works for us, Doosan continues to walk forward, always striving to do our best every step of the way.



Doosan’s Vision

Doosan aims to become one of the global top 200 companies by 2020 through the execution of people-centered management, the source of global competitiveness, and setting up a global standard business process.

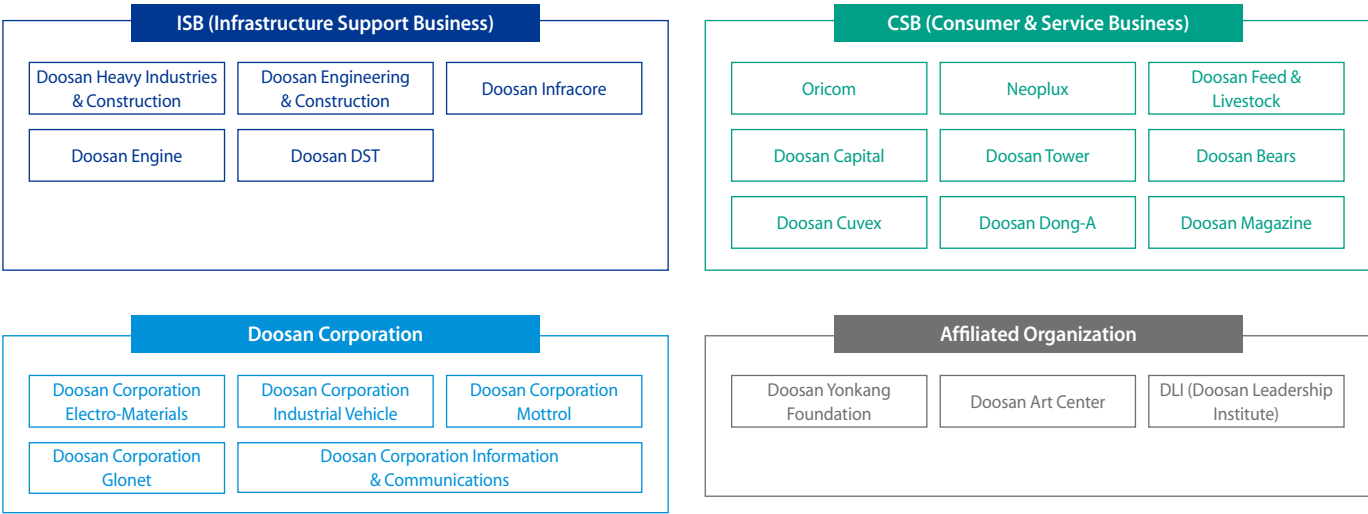
Brand Slogan “Building Your Tomorrow Today”

The brand slogan ‘Building Your Tomorrow Today’ means that Doosan will continue to work hard in many corners of the world around the clock to make contributions to building a better tomorrow and creating better living conditions for mankind, as part of its efforts to achieve its goal of being ‘devoted to human beings’. It also represents the commitment of Doosan to build infrastructure for all human lives through its Infrastructure Support Business (ISB).

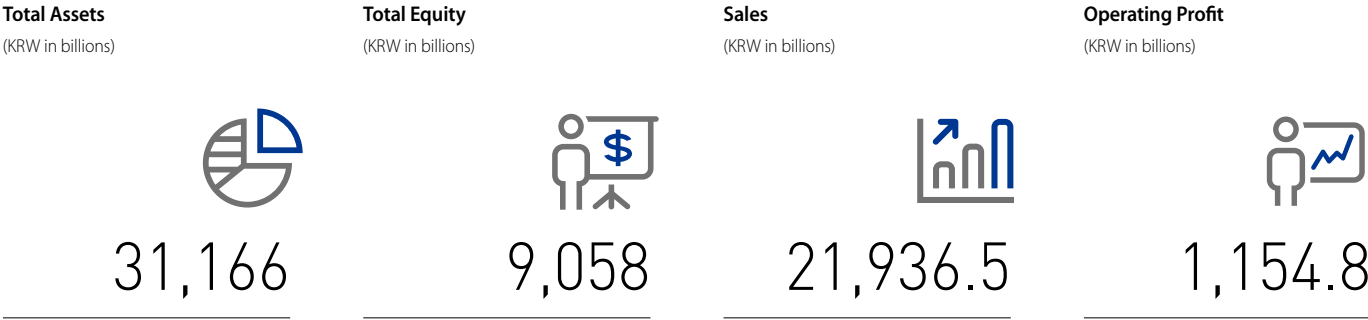


Doosan’s Affiliates

Doosan’s efforts are directed at creating a better foundation for life. Doosan is engaging in diverse areas of business, ranging from infrastructure support businesses such as industrial facilities, machinery, equipment, to consumer goods.



❖ Financial Achievements of Doosan Group in 2013



Overview

Doosan Heavy Industries & Construction not only produces castings & forgings that are basic industrial materials, but also facilities nuclear and thermal power plants and seawater desalination. These products are provided to plant builders both at home and abroad to sustain a better future for mankind.

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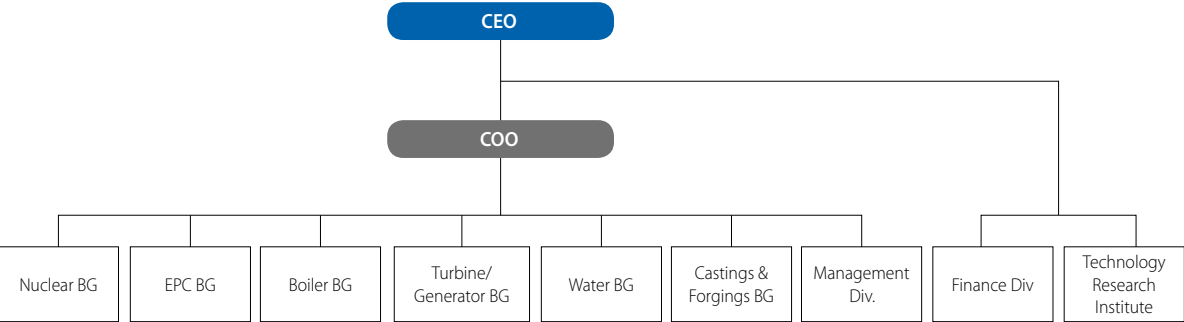
Company Profile

'Technology to Raise Value'

Since its foundation on September 20, 1962, Doosan Heavy Industries & Construction has been working as a specialist in plant equipment for over 50 years by providing facilities for power and water plants to approximately 40 countries worldwide. We are the world's No. 1 company in the seawater desalination industry and striving to become a global leader in the power generation field. Specifically, we have been the biggest supplier of nuclear power plant equipment in the world for the past 20 years and we currently supply equipment for the UAE nuclear power plant project. Furthermore, our acquisition of global power plant equipment manufacturers, such as Babcock of the UK, Skoda Power of the Czech Republic, and Lentjes of Germany have enabled us to secure 3 core technologies related to boilers, turbines, and generators. We also operate global production networks for a Vina manufacturing factory in Vietnam, IMGB in Romania, and DPSI in India. In the eco-friendly green energy business, we obtained the WinDS3000™ certification for a 3MW onshore or offshore wind power system and signed a contract to build a 9MW wind power generation complex in Shinan, Jeollanam-do, South Korea in 2011. Our leadership is further evidenced in developing and commercializing carbon capture and storage technology. Under the vision of 'Global Leader in Power and Water', we will continue to contribute to the delivery of light and water to mankind, and materialize technology that increases value for all.

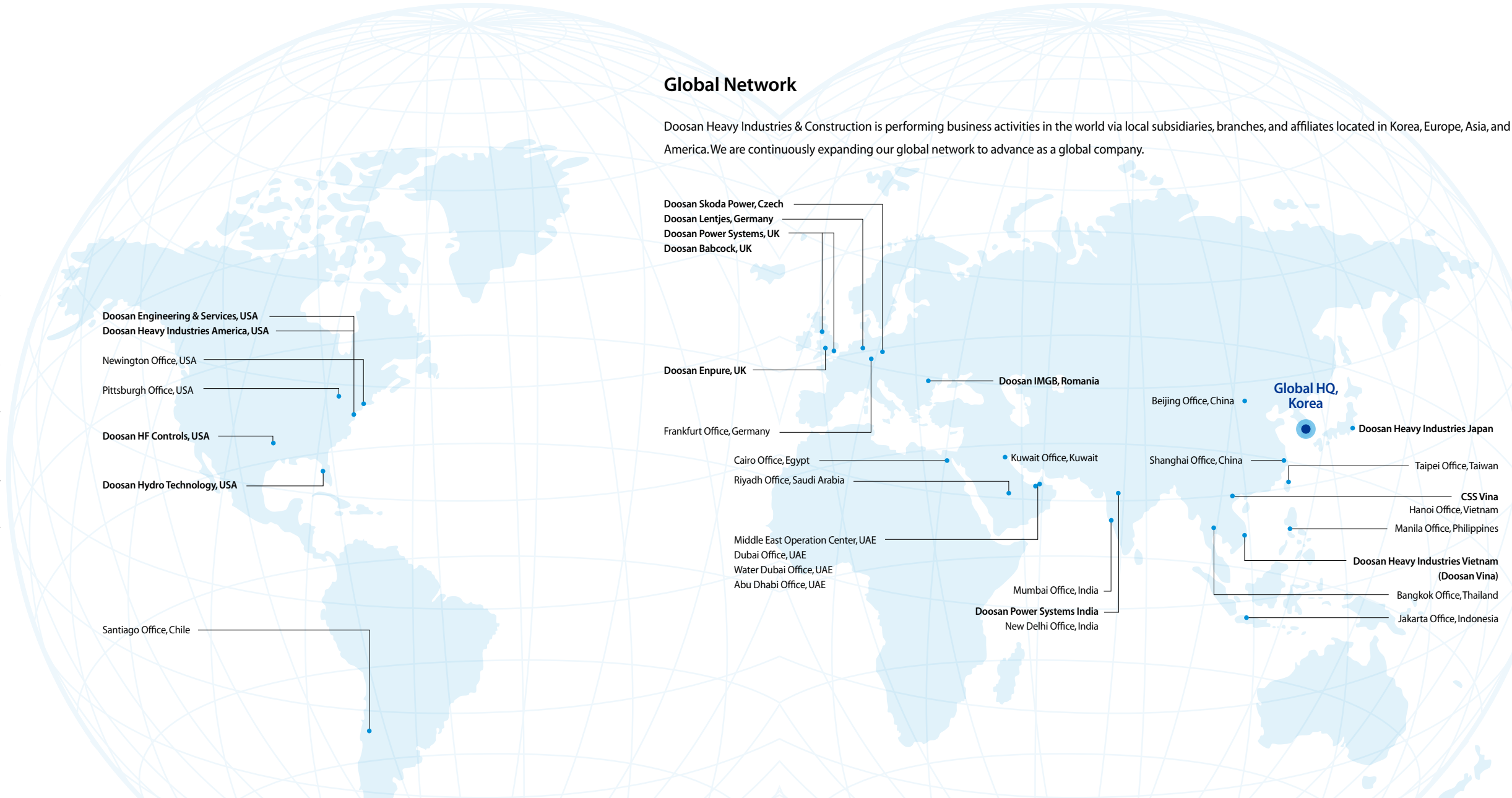
❖ General Information	(As of December 2013, domestic business)
Company Name	Doosan Heavy Industries & Construction
CEO	Geewon Park, Keysun Han
Head Office	22 DoosanVolvo-ro, Seongsan-Gu, Changwon, Gyeongsangnam-do, Korea
Employees	8,703 persons (including executives and advisers)
Credit Rating	A+ (Korea Ratings – June 28, 2013)

❖ Organization Chart



Global Network

Doosan Heavy Industries & Construction is performing business activities in the world via local subsidiaries, branches, and affiliates located in Korea, Europe, Asia, and America. We are continuously expanding our global network to advance as a global company.



Middle East & Africa	
UAE	Dubai Office
	Water Dubai Office
	Abu Dhabi Office
	Middle East Operation Center
Saudi Arabia	Doosan Power Systems Arabia
	Water Riyadh Office
	Riyadh Office
Egypt	Cairo Office
Kuwait	Water Kuwait Office

South America	
Chile	Santiago Office

Europe	
U.K.	Doosan Power
	Doosan Babcock
	Doosan Enpure
Czech Republic	Doosan Skoda
Germany	Doosan Lentjes
	Frankfurt Office
Romania	Doosan IMGB

North America	
U.S.	Doosan Heavy Industries America
	Doosan Hydro Technology
	Doosan Engineering & Services
	Doosan HF Controls
	Pittsburgh Office
	Newington Office

Asia	
Korea	Head Office & Changwon Plant
	Seoul Office
Vietnam	Doosan Vina
	Hanoi Office
	CSS Vina
India	Doosan Power Systems India
	Mumbai office
	New Delhi Office
Taiwan	Taipei Office
China	Shanghai Office
	Beijing Office
Indonesia	Jakarta Office
Japan	Doosan Heavy Industries Japan
Philippines	Manila Office
Thailand	Bangkok Office

Introduction of Business



Power Plants

Coal-fired Power Plant

Doosan Heavy Industries & Construction has been supplying boilers, turbines, and other main facilities to domestic and overseas coal-fired power plants for the past 40 years. We provided generation facilities to domestic coal-fired power plants in Dangjin, Taean, Boryeong, and Hadong. Looking abroad, we have achieved prominent contributions to the Raipur plant (685MWX2) in India and the GHECO-ONE plant (700MWX2) in Thailand, along with the world’s largest, the Mundra plant (800MWX5) in India. In Vietnam, we signed a contract for the Mong Duong 2 (600MWX2) coal-fired power plant, and are currently a partner for localization of a coal-fired power plant with the Vietnamese government. In December of 2013, we received an order for the 1,200 MW level Vietnamese Vinh Tan 4 coal-fired power plant project as well. Moreover, we are now conducting the project of Shin-Boryeong #1 and #2 coal-fired plants, using eco-friendly, highly efficient, self-developed power generators (1,000 MW) with the USC (Ultra Super Critical) method.

Combined Cycle Power Plant

In accordance with growing combined cycle and cogeneration power plant markets, we are expanding the supply of gas and steam turbines. We took over the Czech Republic’s Skoda Power in 2009 to secure the original technology for steam turbines and we are focusing on developing source technologies for gas turbines by capitalizing on in-house technical capabilities. We supplied core power generation facilities to combined cycle power plants in Seoul and Pocheon, and cogeneration power plants in Yangju, Sejong-si, and the Saemangeum regions in Korea. Externally, we conducted large combined cycle power plant projects, such as the Jebel Ali M combined cycle plant in Dubai and the Qurayyah combined cycle power plant in Saudi Arabia.

Nuclear Power Plant

As Korea’s leading nuclear power plant facility maker, Doosan Heavy Industries & Construction has been supplying core facilities, such as nuclear reactors, steam generators, turbines and generators, as well as supplementary equipment for nuclear fuel handling and transportation casks for nuclear fuel. It is one of our main goals to have an integrated production system for nuclear plants, including the entire process of manufacturing equipment, large-scale technology, and a self-supplying ability. Based on these strengths, we won orders to supply core facilities to 6 nuclear power plant projects in the US in 2008. We also became a supplier for the Korean government’s UAE nuclear power plant project. Additionally, our ‘Nuclear Power Excitation System’ with 3 current controllers was selected as a world class Korean product in 2013. We have successfully performed main equipment production and replacement, and expanded our service business.

Green Energy

Doosan Heavy Industries and Construction considers the future ahead and leads in development of new and renewable energy technology and distinguish ourselves in the offshore wind power field. Doosan Heavy Industries & Construction has developed Korea’s first 3MW class offshore wind power system, WinDS3000™ and obtained international certification from a renowned German certification agency, DEWI-OCC, in 2011. This established the foundation for tapping into overseas markets. Our performances in this sector included the 9MW class Shinan wind power complex in Jeollanam-do in 2010, the 30MW class Tamla offshore wind power project, and the 24MW class Yeongheung wind power complex phase 2 in 2012. In 2013, we obtained New Excellent Product certification on our 3MW wind power system from the Korean Agency for Technology and Standards. We believe that our market penetration into Europe, the US, the Middle-East, and Southeast Asia will accelerate in the near future. On top of that, to cope with tightened environmental regulations, we are actively promoting development and commercialization of carbon capture and storage technology.

Water Plant

Doosan Heavy Industries & Construction is the world’s No. 1 business in the seawater desalination business. It boasts three core source technologies -- MSF (Multi-Stage Flash), MED (Multi-Effect Distillation), and RO (Reverse Osmosis) -- for seawater desalination. We offer unrivaled project performances via those technologies. The Farasan project in Saudi Arabia in 1978 paved the way for our entrance into the Middle Eastern market and we participated in seawater desalination projects in Saudi Arabia and the UAE in the 1980s and 1990s. These projects allowed us to independently develop engineering technology for desalination facilities that had been monopolized by companies in the US, Europe and Japan. In 2010, we proved our premier technology and ability in the MSF area by winning an order for the world’s largest, 228MIGD class Ras Al Kair project in Saudi Arabia. In 2011, we reaffirmed No. 1 position in the seawater desalination industry by earning the Yanbu MED project in Saudi Arabia, the world’s largest facility. Since 2012, we have been producing and shipping freshwater vaporizers to Vietnam to secure price competitiveness. In addition, in 2012 our firm laid the foundation for entering the global water market by acquiring the UK’s Enpure, featuring engineering and manufacturing technology for pretreatment facilities. The Escondida seawater desalination plant project in 2013 was a significant landmark in that we won a new project in Central and South America, beyond the Middle East.

Castings & Forgings

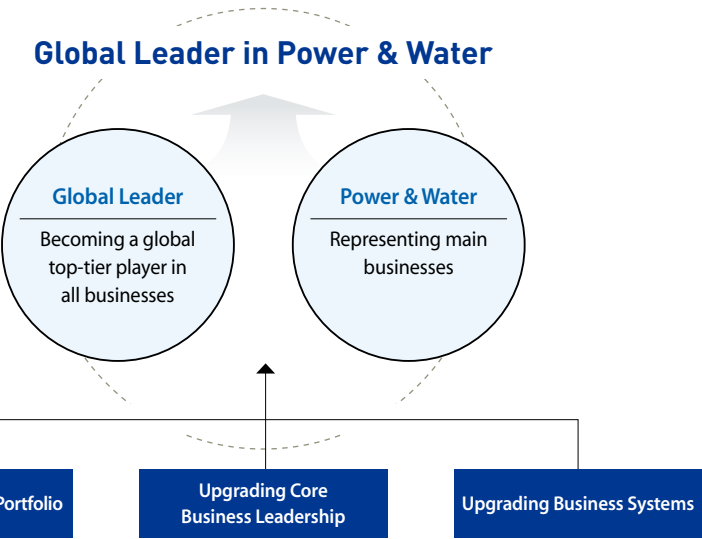
By capitalizing on its world leading facilities and technology, Doosan Heavy Industries & Construction manufactures and supplies components for power generation, including large-sized castings & forgings used for vessels, in steelmaking, and in various industrial facilities. In particular, our superior technology in manufacturing ultra-sized castings & forgings, such as components for nuclear power generators, has been highly acknowledged at power plants around the world. In 2006 we expanded our production capacity by acquiring Romania’s biggest castings & forgings manufacturer, Doosan IMGB. We currently possess 9 world-class Korean products, including crankshafts for ships and low pressure turbine rotor shafts.

Management Strategy

Vision and Strategy

Doosan Heavy Industries & Construction is making a concerted effort to realize its vision of ‘Global Leader in Power & Water’ by executing the ‘Doosan Credo’ based on the ‘Doosan Way’.

Vision ►



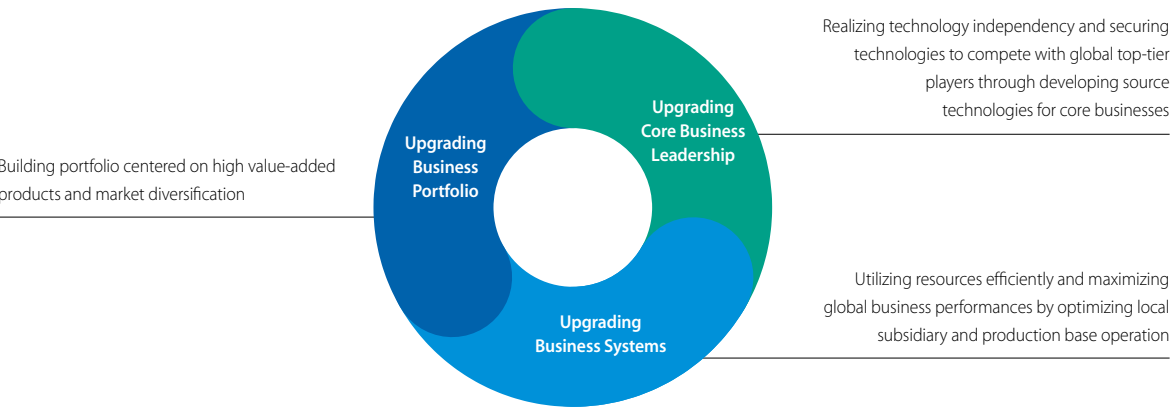
Strategy ►

Global Leader in Power & Water

The vision, ‘Global Leader in Power & Water’, connotes our commitment to evolving into a global leader in the global power and water markets. We aim to continuously lead the global market by ensuring world-class technological power, cost competitiveness, sales revenue and profitability, human resources development, and corporate culture.

Strategies to Achieve the Vision

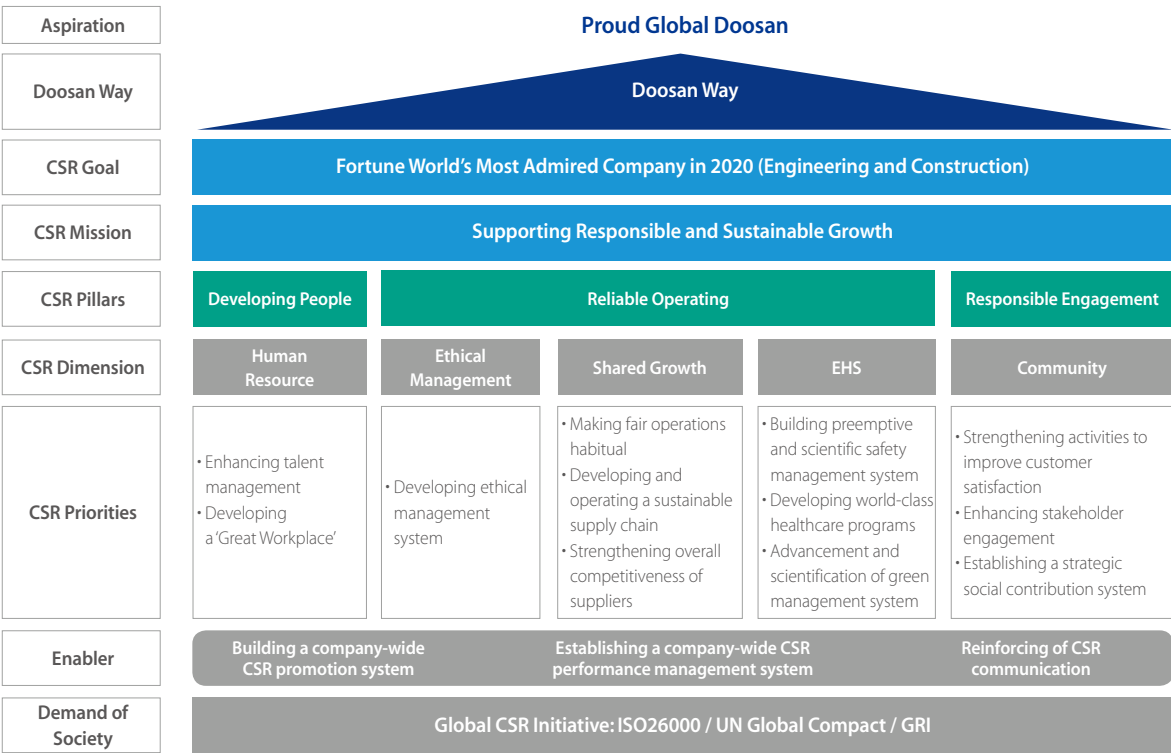
To secure fundamental competitiveness, we are focusing on Business Portfolio, Core Business Leadership, and Business Systems upgrades. As a global company, we are pursuing quantitative and qualitative growth based on cutting-edge technology and excellent quality.



To achieve our vision of ‘Global Leader in Power & Water’, we will dedicate to securing top-tier competitiveness in product and technology and gaining the momentum for growth through diversifying our business portfolio and markets.

Strategy and Framework for CSR

Doosan Heavy Industries & Construction established a new CSR strategy in 2013 to extend its social responsibility as a corporate citizen. It is composed of three factors – Developing People, Reliable Operating, and Responsible Engagement. It serves as a template to guide us in optimum management strategy and solidifies our position as a global company.



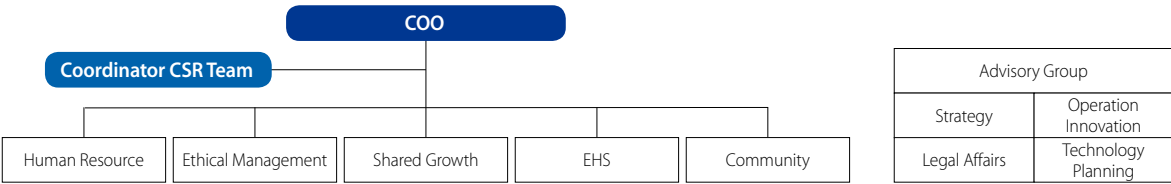
Major CSR Areas

Doosan Heavy Industries & Construction selected human resources, ethical management, shared growth, EHS, and community as corporate promotion areas of CSR. We address these areas with our business strategy. We set principles for major promotion, and publicize their performance, via strategic planning and with specific tasks.

CSR Organization

In April 2013, Doosan Heavy Industries & Construction founded a CSR team and CSR committee to increase efficiency of CSR promotion and create corporate consensus of CSR. The CSR Team is in charge of performing CSR strategy and communication, and operating the CSR committee. The CSR committee regularly inspects outcomes and plans CSR projects.

❖ CSR Committee



Governance

Board of Directors

Doosan Heavy Industries & Construction includes the Board of Directors with 2 executive directors and 4 outside directors to ensure independence and transparency in decision making. It elects a director during the shareholder’s meeting in accordance with relevant laws, articles of incorporation and the BOD regulation. We thoroughly review related laws to enhance the efficiency of the Board of Directors. We heighten the board’s professionalism by electing members with experience in specific areas. The CEO is responsible for chairing the Board of Directors. The Board of Directors also operates the Audit Committee, the Outside Director Recommendation Committee, and the Internal Transaction Committee to make efficient decisions.

❖ Board of Directors

(As of March 2014)

Position	Name	Duty	Remark
Executive Director	Geewon Park	CEO, Chairman, Chairman of the BOD	Unchanged
	Keysun Han	CEO, President	Unchanged
Outside Director	Hyungjoo Kim	Professor of Computer Engineering at Seoul National University	Completed term (March 29, 2014)
	Kyungsoon Song	Representative at Korea Expert Consulting Group	Newly appointed
	Dongmin Cha	Lawyer at Kim & Chang Law Firm	Newly appointed
	Bokhyeon Baik	Associate Professor of Business School at Seoul National University	Newly appointed

❖ Committee under the Board of Directors

(As of April 2014)

Committee	Purpose and Role	Member	Name
Outside Director Recommendation Committee	• Recommend outside director candidates	3 outside directors	Kyungsoon Song, Dongmin Cha, Bokhyeon Baik
Audit Committee	• Audit accounting & finance • Evaluate the operation of the internal accounting management system • Approve the appointment of outside auditors	3 outside directors	Kyungsoon Song, Dongmin Cha, Bokhyeon Baik
Internal Transaction Committee	• Deliberate and approve any internal transactions between subsidiaries worth KRW 5 billion won or more	3 outside directors	Kyungsoon Song, Dongmin Cha, Bokhyeon Baik

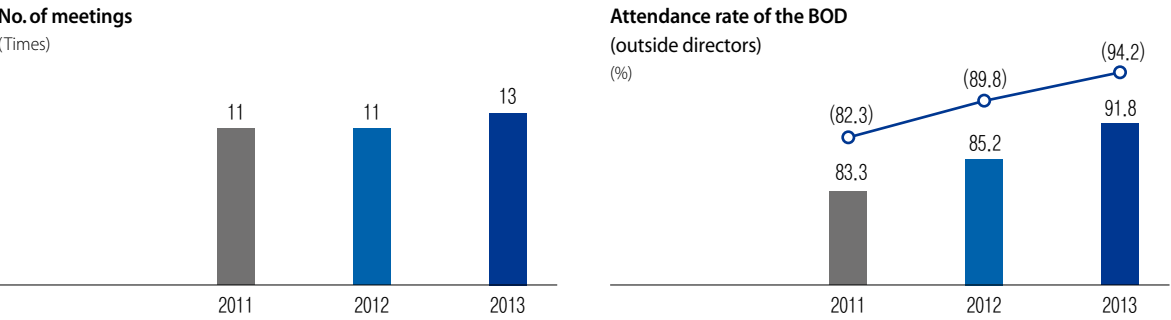
Operation of the Board of Directors

The Board of Directors is the supreme decision making body for company management. The Board of Directors reviews and votes on issues stipulated in the articles of association and entrusted from the shareholders’ meeting, basic management principles, and matters related to business operation. A Board of Directors meeting can be convened within 10 days when more than one third of the members state the purpose, agenda, and desired date. The BOD’s decision is determined by a majority attendance and a majority vote of attended directors, but voting rights of any individual with special stakes in our company are prohibited. The Board of Directors deals with economic, social, and environmental issues comprehensively and the composition and activities of the board are released through our website.

Board of Directors Activities in 2013

In 2013, the Board of Directors of Doosan Heavy Industries & Construction held 13 meetings and addressed 31 major agenda items. The Board of Directors provides the outside directors with explanation on the corporate decisions and shop tours and it also enhances its operational efficiency through preceding presentations on key issues by CFO and director in charge.

❖ Operation of the BOD



Evaluation and Compensation

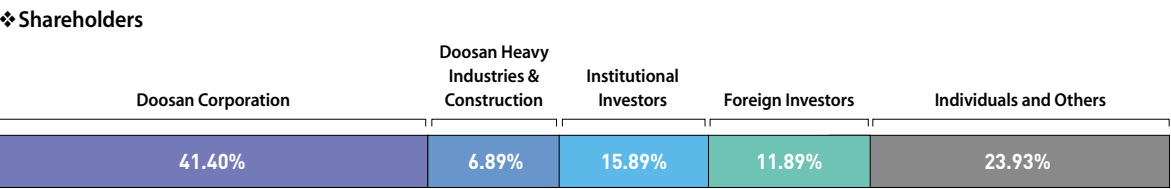
Compensations for both executive and outside directors are determined within the limits approved at the shareholders’ meeting. In 2013, approved compensation limit was KRW 15 billion and a total of KRW 3.4 billion was paid. Compensations for the management are determined by the performance evaluation covering not only financial performances but also the level of achieving strategic targets.

Rating of and Awards for Corporate Governance

In 2013, we received A+ rating at the ‘Governance Structure Rating’ hosted by Korea Corporate Governance Service and grand prize at the ‘ESG Evaluation Award’. Also, in March 2013, we were awarded the grand prize at the ‘9th Transparent Management Award’. These achievements proved our commitment to the BOD-driven transparent management and business ethics.

Shareholder Structure

As of December 31, 2013, Doosan Heavy Industries & Construction issued 106,158,256 shares in the Korea Exchange (KRX). The largest shareholder was Doosan Corporation with 41.40% of the shares, while the National Pension Service held 6.12% ownership. The CEO reports corporate management performance to shareholders during the meeting, and reflects their opinions on operations by reviewing them with the Board of directors.



As of December 31, 2013

Protection of Minority Shareholders

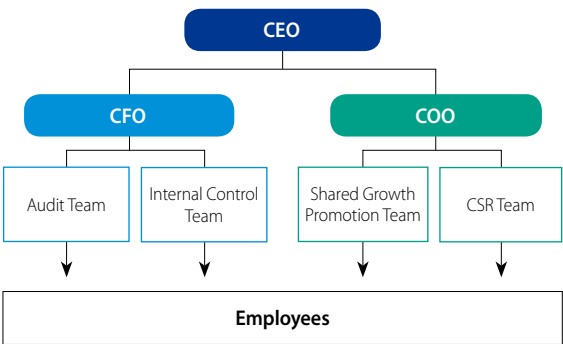
We operate a system to vote in writing to protect the rights of minority shareholders. The company attaches ballot paper for individual items to the general shareholders’ meeting notification so that minority shareholders can express their opinions by letter without having to physically attend the meeting. Shareholders can exercise their voting rights by completing the ballots and sending them back to the company at least one day before the meeting.

Ethical Management

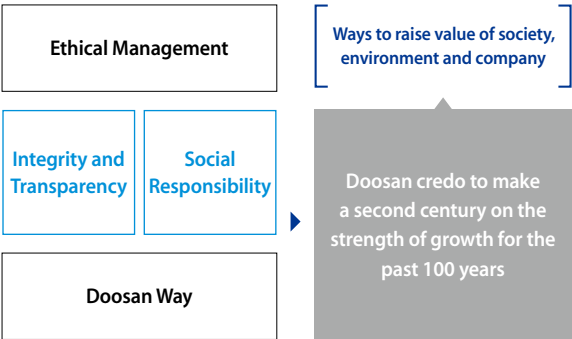
Ethical Management of Doosan Heavy Industries & Construction

Ethical management of Doosan Heavy Industries & Construction is defined as enhancing competitiveness and maximizing economic value by eliminating unethical elements beyond just the simple idea of ‘Growing into an ethical company’. Likewise, we strive to become ‘Proud Global Doosan’ based on ethical management, integrity and transparency.

❖ Organization for Ethical Management



❖ Ethical Management System



Rearranging the Code of Conduct

As needs arise for establishing a global Code of Conduct consistent with the Doosan Way, Doosan Heavy Industries & Construction rearranged its Code of Conduct, instituted in February 2002. In July 2013 the Code of Conduct became based on the Doosan Way. In sum, we will enhance our business competitiveness and perform social duties responsibly, strictly abiding to our Code of Conduct.

❖ Major Contents of the Code of Conduct

Inhwa	Prohibition of discrimination and behavior, rational personal management, open communication, and fair labor conditions
Integrity and transparency	Prohibition of bribery, entertainment, and other illegal benefits, transparent disclosure of financial records, prohibition of conflicts of interest and illegal use of internal information, protection of corporate assets and confidential business information
Fair competition	Pursuit of shared growth with suppliers, prohibition of illegal negotiation and information exchange, and prohibition of abuse of authority
Focus on customers, innovation, and growth	Respect for customer opinions, pursuit of customer satisfaction, provision of accurate information on products and services, continuous growth and innovation
Social responsibility	Social contribution, maintenance of safe work environment for all, eco-friendly growth

Establishing Operational Rules for the Code of Conduct

In line with rearranging the Code of Conduct, we are promoting the establishment of operational rules. We plan to apply higher ethical standards by establishing specific regulations for a whistle-blowing policy, Lessons-Learned White Paper system, bribery prohibition, and fair trade.

❖ Areas of Operation Rules for the Code of Conduct

01 ▶	Operational rules for the whistle-blowing policy	06 ▶	Rules on prohibiting illegal use of internal information
02 ▶	Operational rules for the white paper system	07 ▶	Rules on protecting assets
03 ▶	Rules on forbidding bribery	08 ▶	Rules on healthy corporate culture
04 ▶	Rules on limiting entertainment	09 ▶	Rules on fair trade
05 ▶	Rules on conflict of interest	10 ▶	Rules on internet use

In 2013, we completed the establishment of Lessons-Learned White Paper and whistle-blowing systems. The remaining 8 rules are still covered by the Code of Conduct that had been enforced since 2002. By continuously upgrading and implementing operational rules, we will become a company that everyone can trust to trade, and that is attractive to investors and employees.

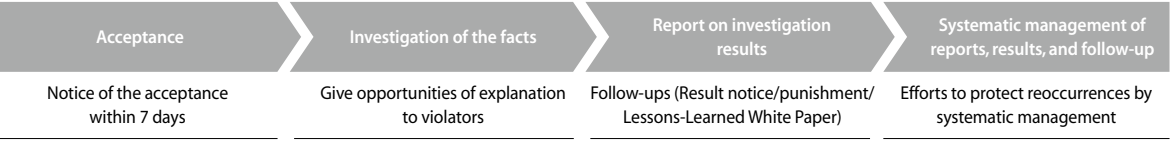
Major Ethical Management Activities

Whistle-blowing Policy I We operate an internal whistle-blowing system to help employees report any violation of the Code of Conduct. In 2013, a total of 22 cases were reported and handled. This procedure played a great role in preemptively preventing risks. Once a violation is confirmed through investigation, violators receive disciplinary action and work procedures are improved to prevent the reoccurrence of similar violations.

❖ Number of Reports by Whistle-blowing

Online	15 cases
Offline	7 cases

❖ Whistle-blowing and Cyber Reporting Process



Lessons-Learned White Paper System I Doosan Heavy Industries & Construction has operated the Lessons-Learned White Paper system since July 2013 with the goal of analyzing basic causes, deducing improvement plans, and sharing results of major issues reported internally and externally, or that occurred during business operations. Basic causes and improvement plans of reported issues are quantified as data and then used to prevent reoccurrence.

Cyber Reporting Center I We operate a cyber reporting center whereby every employee can report violations of the Doosan Way and misconduct. This elevates the awareness of business ethics. The cyber reporting center is served both in Korean and English to ensure easy access for various stakeholders.

❖ Education about Ethical Management in 2013

Entry-level employees	6 times, 408 persons
Education by each BG	13 times, 1,503 persons
Employees of suppliers	8 times, 250 persons

2013 Highlights



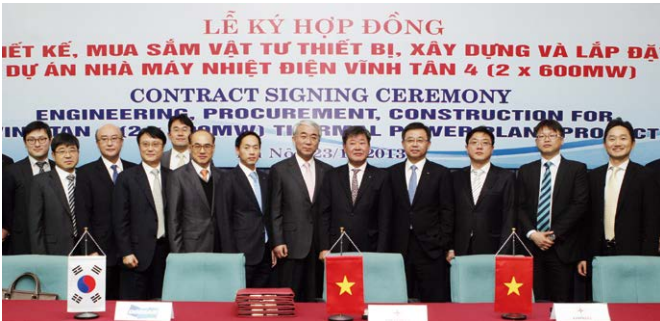
Establish the One Global Leadership System

In April 2013, we carried out a large-scale reorganization to establish the One Global Doosan Leadership system in the boiler, turbine, and generator businesses, strengthen company-wide competitiveness in new orders, and enhance technological power. We first divided Power BG into Boiler BG and Turbine/Generator BG, then integrated Boiler/Service (Babcock) and Turbine (Skoda) businesses into each BG, respectively.



Diversify the Market in the Water Business

In August 2013, Doosan Heavy Industries & Construction signed its first project contract in Central and South America for a seawater desalination plant, thereby proving its competitiveness in technology and winning orders in an area other than the Middle East. Our water technology and market competitiveness also received recognition in 2012, when The National Academy of Engineering of Korea (NAEK) selected the Yanbu MED seawater desalination plant as one of the 'Top 25 Scientific Technologies and Industry Performances of Korea'.



Win a Large Plant Project in Vietnam

In December 2013, Doosan Heavy Industries & Construction won the Vinh Tan 4 project worth KRW 1.6 trillion in Vietnam, despite difficult conditions domestically and overseas. This achievement elevated our position in Asian power plant markets in Vietnam, India, and Thailand.



Target the Domestic Eco-friendly Thermal Power Plant Market

In October 2013, Doosan Heavy Industries & Construction commercialized the engineering technique of Korea's first 1,000 MW USC (Ultra Super Critical) coal-fired power plant by winning an order for boilers and turbine generators for the Shinboryong plant's units 1 and 2, thereby bolstering our position in overseas markets.

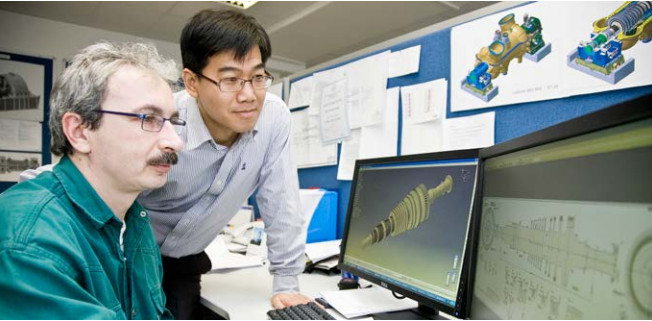


Develop Future Energies to Strengthen Competitiveness

Our 3MW class wind power generation system obtained NEP (New Excellent Product) certification from the Korean Agency for Technology and Standards (KATS). Moreover, we supplied 8 wind power generators, with a total capacity of 24MW, to the 2nd Yeongheung wind power complex in Korea.

Focus on Strengthening Fundamental Competitiveness

Doosan Heavy Industries & Construction established R&D centers for each BG to secure technological competitiveness. Currently, Boiler BG, Turbine & Generator BG, and Water BG operate their own R&D centers in the UK, the Czech Republic, and Dammam of Saudi Arabia, focusing on global competitiveness and developing core technologies.



Build a System to Boost Quality Innovation

In 2013, we established a foundation to enhance quality control and competitiveness across the board by instituting a system to boost innovation. As a result, we reduced crucial quality issues by 70% compared to the previous year by improving employee quality awareness and competency.



Have a Strong Sense of Pride as Doosan People

In March 2013, Doosan Heavy Industries & Construction was awarded the grand prize in the '9th Management Transparency Awards,' hosted by 5 economic organizations. Doosan was recognized for its transparent management system, ethics management and social contributions.



Maintain Future-oriented Labor and Management Relationships

The pursuit of an enjoyable workplace with open communication and future-oriented labor and management relationships provided a sense of pride among Doosan employees. The Autumn Concert at the Changwon plant, the Doosan Family Culture Festival and the Doosan Family Concert provided all employees with opportunities to raise company morale and improve communication. In addition, the company maintains a culture of shared growth and cooperation by supporting a dispute-free environment based on trust and respect between labor and management.



Expand Social Responsibility Management

Doosan Heavy Industries & Construction proved its dedication to its systematic CSR by creating a CSR team and a CSR committee to oversee and adopt CSR governance. In 2013, Doosan received the Korean Prime Minister's 'Shared Growth of Small, Medium-sized, and Large Companies Award' for our contribution to shared growth based on benefit sharing.



2013 Doosan Way



Our story. Our vision.

All employees of the Doosan Group are committed to embracing the Doosan Way, which represents our corporate beliefs and philosophies, to become a 'Proud Global Doosan'. The Doosan Way provides the foundation for accelerating our progress and creating a better future. With the Doosan Way, we aim to help our employees find meaning in their lives, build a people-centered corporation, and promote future-oriented growth.

Highlights of the Doosan Way in 2013

The Doosan Way Workshops

The Doosan Way Workshop, which started in May 2012 for the spread and roll-out of the Doosan Way, came to a close in April, 2013 after being carried out for over eleven months. The workshop was held both at home and abroad, with the participation of more than 20,000 executives and employees. By encouraging discussion and engagement in numerous programs, the workshop has contributed to enhancing employees' understanding and awareness of the Doosan Way, making them realize that the Doosan Way is the most powerful keyword to guide the corporate culture of Doosan.



The WHY Campaign

The 'WHY Campaign' is underway to explain 'Ways to Implement the Doosan Way'. Under the theme of 'Think-Explain-Ask WHY', employees will be able to better comprehend the purpose and key points of their business tasks and properly utilize their capability and time.

❖ 3-step Why

Think WHY	Explain WHY	Ask WHY
The Way to Think and Communicate		
<ul style="list-style-type: none">• Why do we do this task?• What is the key point of this task?• Is this the Doosan Way?	<ul style="list-style-type: none">• The purpose of this task is...• The key point of the task is...• What we expect from this task is...	<ul style="list-style-type: none">• What is the purpose of this task?• Why do you think so?• Could you elaborate please?
Why we need to ask 'Why'?		
The more you think and deliberate over WHY, the more obvious your message becomes.	Upon organizing your thoughts, you have to accurately deliver those thoughts to your counterpart.	Communication is not a one-way street. Explanations without allowing any questions hinder true communication.

The Doosan Way Survey

The Doosan Way Survey for all white collar employees of Doosan was conducted from April 25 to May 10, 2013. The survey was designed to measure the degrees of understanding and implementation of the nine core values, assess the levels of pride as a Doosan person, and evaluate the levels of perceived changes towards the three change models of the Doosan Way. Based on the results, six initiatives to address the core values that received relatively low scores were introduced, and their processes and results were shared through the company's Doosan Way Council. In addition, at the BG or Division level, a total of 30 initiatives were identified through cause analysis. These initiatives were carried out at the discretion of each head of the BG or Division.

The Doosan Way Day

On July 3, 2013, the first Doosan Way Day event was held in the presence of the Chairman and CEO of Doosan Group, Yongmaan Park, other Top Team members and around 80 major executives from each affiliate and BG in order to review the changes and accomplishments over the year since the announcement of the Doosan Way and to discuss future tasks and plans for execution. Moreover, employees who achieved significant results in the technology field were awarded with the 'Doosan Technological Excellence Awards,' while those who successfully demonstrated the Doosan Way in their works were presented with the 'Doosan Way Awards.' Doosan Heavy Industries & Construction received the Innovative Award in recognition of the development of the 'USC Boiler for Power Generation' in the Doosan Technological Excellence Award sector and an additional nine awards in the Doosan Way Award sector for accomplishments such as the 'Development of the World's First Integrated Monitoring & Control System (IMCS) for Thermal Power Plants.'



Embedding the Doosan Way in Work and Behavior

To realize the three change models based on employees' understanding and consensus regarding the Doosan Way values, we strived to embed the Doosan Way in our overall business process and behaviors.

'Doosan Way Agenda': Aligning our work and business process to the Doosan Way values

The Doosan Way Agenda aims to encourage leaders and staff members to carefully check to see if the existing work process satisfies the Doosan Way (9 Values, 6 Traits) and gradually change toward the Doosan Way. In 2013, a pilot program for the Doosan Way Agenda activities was carried out for a total of 11 business units. The progress was shared during the Doosan Way Time hosted by the COO, and exemplary cases were also introduced via the Doosan Way Council.

'Proud You & I': Establishing a genuinely caring corporate culture that helps exhibit the Traits of Doosan People

The aim of the Proud You & I program is to promote a positive corporate culture by encouraging employees to identify and compliment exemplary cases where the Traits of Doosan People were well exhibited. More than 1,000 best practices were found in 2013, and they were shared across the company through various methods.

The Doosan Way Implementation Plan for 2014

In 2014, we have performed the Doosan Way Survey for blue collar employees in order to assess their levels of awareness and implementation of the Doosan Way and are currently establishing improvement measures. Other plans include speeding up efforts for acquiring a strong competitive edge and adopting advanced processes and systems to realize the three change models and continuing with the embedment of the Doosan Way. These activities will help employees better perceive the changes in their work process and individual behaviors.

Expanding the 'Doosan Way Agenda' Activities into Every Organization I We are planning to extend the pilot program for the Doosan Way Agenda activities carried out in 2013 into every executive-led organization in order to boost discussions about the Doosan Credo and encourage employees to create various self-actionable practices.

Expanding the Scope of 'Proud You & I' Program I In 2014, we are planning to expand the scope of the existing Proud You & I program, which had focused on identifying individual best practices only, to the organization level in order to accelerate business cooperation between various organizations.

Establishing Code of Conduct by Function I A code of conduct tailored to the specific work conditions and processes of each function will be established based on the consensus among the organization members with the aim of creating sound and healthy business standards and practices.

Conducting Self-Assessment of the Doosan Way Activities I Every executive-led organization will carry out a self-assessment of the level of the Doosan Way activities and continuously seek improvements through active communication among the organization members.

BUSINESS ANALYSIS

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Doosan Heavy Industries & Construction is committed to providing products and services that improve the quality of life, delivering trust and pride to all stakeholders, and performing business honestly and transparently to become 'Proud Global Doosan'.

Review of Operations



Doosan Heavy Industries & Construction is a global leader in the power and water business. We specialize in power generation engineering and power plant equipment manufacturing, such as nuclear reactors, boilers, turbines, and generators. We do major design and build sea water desalination and water treatment plants.

As for the power business, we possess the capacity to engineer and produce core equipment, such as boilers and turbines. We also provide EPC solutions for plant construction. Furthermore, we have source technology and world-class products by acquiring Babcock in 2006, Skoda Power in 2009, and Lentjes in 2011. These additions help us proactively respond to the various demands of our clients.

In the water business, Doosan Heavy Industries & Construction maintains the No. 1 position in the global seawater desalination market. We have 3 major seawater desalination technologies of MSF (Multiple Stage Flash), MED (Multiple Effect Distillation) and RO (Reverse Osmosis) methods. We have the competence to supply water treatment systems by acquiring Enpure, a water treatment engineering company in the UK, in 2012. Today, we are evolving into a total water solution provider.

Doosan Heavy Industries & Construction enhanced its competitiveness with efforts to secure capability internally and strategically cooperating with top foreign companies. In 2007, we signed a license contract with MHI (Mitsubishi Heavy Industries) of Japan to manufacture and supply large-size gas turbines to combined-cycle power plants in the domestic market. In 2008, we established a joint venture with Burns & Roe, an engineering company of the US, to promote improvement of thermal power plant engineering tools.

Performances in 2013

In 2013, our sales recorded KRW 7.5 trillion due to the delays in many projects including large-scale power plant projects. Nonetheless, we maintained a stable profitability of 6% as a result of our profit-oriented contracts and on-going proactive marketing. Sales in our main business of power generation equipment recorded an operating margin of 8%.

In December 2013 we won a bid for a 1,200 MW class Vinh Tan 4 coal-fired power plant. This came on the heels of the Mong Duong 2 project in Vietnam, solidifying our dominance in the Vietnamese power plant market. Doosan Heavy Industries & Construction gained EVN's (Electricity Vietnam) trust in its power generation equipment and competence in conducting large-scale projects, which led to the private contract without competition. This will give us better opportunity to win future projects in Vietnam.

❖ Major Performances in 2013



In October 2013, we won the contract to construct the first district energy facility in Saemangeum industrial complex. This project includes building a power plant to produce electricity and heat by utilizing eco-friendly CFB (Circulating Fluidized Bed) boilers.



In October 2013, we signed a contract to supply equipment to Shinboryeong Thermal Power Plant. That included boilers, turbines, and generators for a 1,000MW class power generation system, the largest capacity among single power generation in Korea, and desulfurization facilities. In July 2013, a contract was earned to supply 800MW class gas turbines and steam turbines to Seoul Combined-cycle Power Plant.



Our Water BG received 'Innovation Award' and 'Contribution Award' at the Saudi Water & Power Forum 2013, which verified our unrivaled status in the desalination business. In addition, we won new orders for seawater desalination and water treatment plants in Chile, established the foundation for entering new markets beyond the Middle East.

Outlook for 2014

In 2014, intensified competition is expected, due to reduction in infrastructure investment followed by global economic recession, or poor foreign exports due to appreciation of the Korean won and/or depreciation of the Japanese yen. From 2015, however, we expect the global economy to get back on track, and expert emerging countries to achieve around 5% economic growth. Based on these projections, we are making a concerted effort to secure fundamental competitiveness and develop convergence technologies to be prepared for market recovery.

- The installation capacity of the global power generation market is expected to grow from 5,119GW in 2010 to 6,993GW in 2020. All kinds of fuels, except for oil, are expected to experience increased demand.
- The price of gas around the world is predicted to slightly decline due to expanded shale gas production and exports by the US. The price of coal will be stabilized due to decreasing demand. Therefore, it is expected that demand for gas power plants will be generated in OECD nations, where environmental regulations are being tightened, and demand for coal-fired power plants will increase in non-OECD nations.
- As for the seawater desalination market, the Middle-East and North African region will likely represent about 70% of total new orders and the reverse osmosis method will be applied to more seawater desalination projects.
- While anxiety over the safety of nuclear power plants unleashed by the Fukushima incident is gradually declining, the domestic nuclear power plant market will take up about 29% of total energy sources in accordance with the government's 2nd basic energy plan announced at the end of 2013. Starting with the 2,800MW class Shinkori 5 and 6 units, the construction of nuclear power plants will continue in 2014. In the overseas market, Middle Eastern countries such as Saudi Arabia, along with China, and some European countries are planning construction of nuclear power plants.
- In the Castings & Forgings market, demand for mold steel and materials from the polar or deep sea plants are expected to show continuous growth, while demand for power generation, shipbuilding, and industrial facilities are likely to remain sluggish. Therefore, we will focus on developing new products in the mold steel sector and strengthen cost competitiveness of current main products.

Materiality Analysis

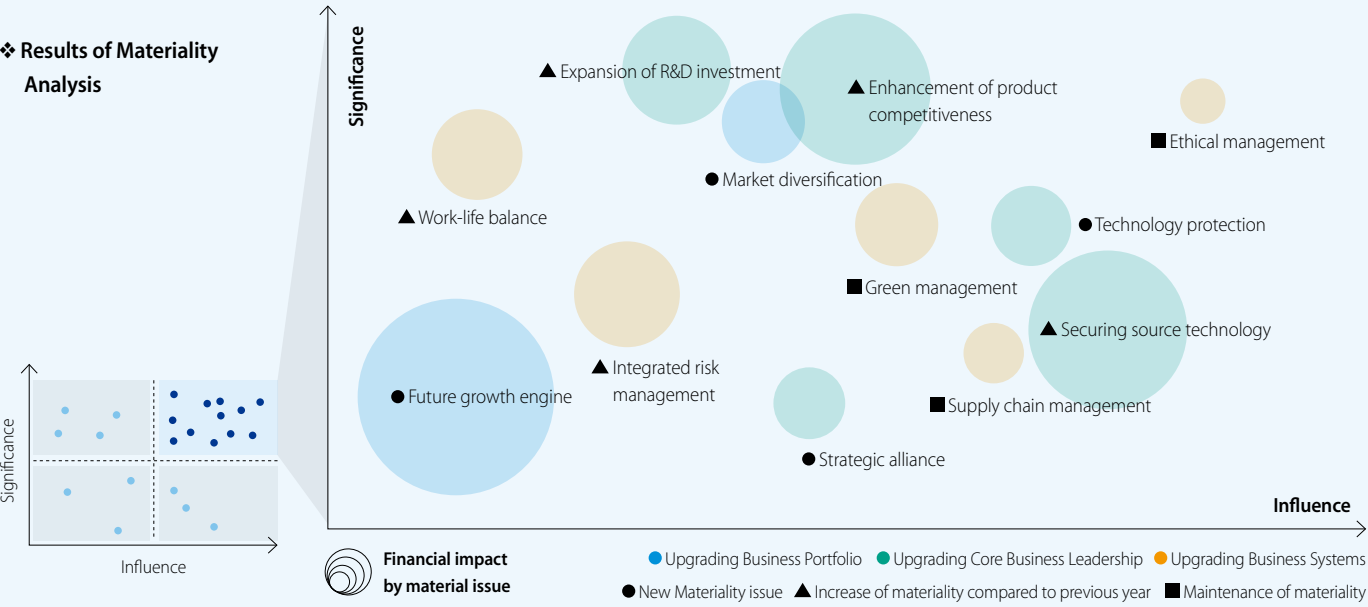
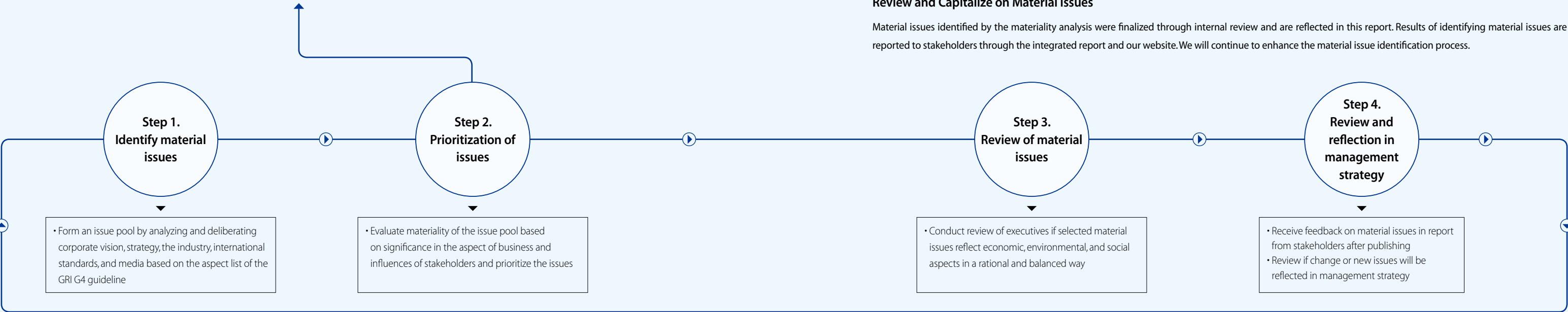
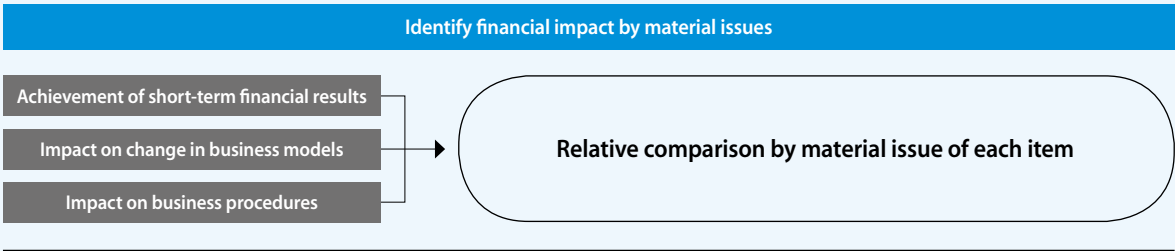
Doosan Heavy Industries & Construction conducts a materiality analysis to identify crucial issues that need to be managed on a short-, mid- and long-term basis. These are reflected in our integrated report. By continuously improving and complementing the materiality analysis, we systematically select and manage major issues.

Materiality Analysis Process

Doosan Heavy Industries & Construction conducted the materiality analysis in compliance with the process recommended by the GRI G4 Guideline. Material issues were identified by considering the significance and influence that could impact on our businesses and stakeholders. We intend to ensure the connectivity between material issues and our management strategy by considering the financial impact. We will continue to communicate with stakeholders after the publication of this report to identify changes in the management environment. In addition, we will craft a process to reflect these issues in our management strategy.

❖ Materiality Analysis and Reporting Content Selection Process

Determine significance to the company		Identify influences of stakeholders	
Short-term aspect	Long-term aspect	Recognition	Expectation
<ul style="list-style-type: none">• Attainability• Relevance to financial results• Level of management interest	<ul style="list-style-type: none">• Connectivity with vision and strategy• Effects on change in management activities	<ul style="list-style-type: none">• Interest in issues• Subordination of issues	<ul style="list-style-type: none">• Demand for response to issues• Demand for disclosing information on issues



Materiality Analysis Results

A total of 12 out of 45 issues that impact our businesses have been identified as material issues. Newly-selected material issues for our sustainable growth were: ‘investment in future growth engines’, ‘market diversification’, ‘technology protection’, and ‘strategic alliance’. The materiality of ‘ethical management’, ‘green management’, and ‘supply chain management’ were similar to those of the previous year. The significance and influence of ‘enhancement of product competitiveness’, ‘expansion of R&D investment’, integrated risk management, ‘securing source technology’, and ‘work-life balance’ issues increased compared to the previous year. Changes in significance compared to the previous year are indicated by marks.

Analysis of Financial Impact






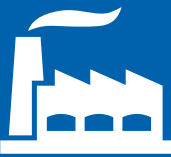


To measure the materiality of the issues, we analyzed the financial impact of the issues separately from the significance and influences impact. We considered the level of short-term financial performance, influence on change in the business model, and impact on business process. As a result, the following issues were confirmed to have high financial impact: investment in future growth engines and securing source technology. To strengthen our business, we will concentrate on managing issues that showed higher financial impact and promote plans to create financial results from CSR issues that showed relatively low financial impact.

Review and Capitalize on Material Issues

Material issues identified by the materiality analysis were finalized through internal review and are reflected in this report. Results of identifying material issues are reported to stakeholders through the integrated report and our website. We will continue to enhance the material issue identification process.

Reporting Content of Material Issues

Through the materiality analysis, we identified three material issues in line with our management strategy: Upgrading Business Portfolio, Upgrading Core Business Leadership, and Upgrading Business Systems. Each section contains disclosure on management approach, relevant activities, and performance. The following chart shows how material issues are reported on this integrated report, and how the company makes efforts to respond to crisis and opportunities in each strategic sector.

 Direction of Management Strategy	 Material Issues	 Reporting Contents	 Background (Crisis & Opportunity)	 Strategic Responses
 Upgrading Business Portfolio	<div>Investment in future growth engines</div> <div>Market diversification</div>	<ul style="list-style-type: none">• Laying the foundation for green energy business<ul style="list-style-type: none">- Wind power- Integrated Gasification Combined Cycle (IGCC)- Carbon Capture & Storage (CCS)• Enhancing competitiveness through ICT convergence<ul style="list-style-type: none">- Offering remote monitoring service• Entering the Brownfield IPP business• Pioneering the Central and South American market• Entering into African market	<ul style="list-style-type: none">• Trend of tightening global environmental regulations with practicality such as the restriction of carbon dioxide emission• Increasing demands for ICT-based software to meet customer needs in the power business• Privatization of power infrastructure and increasing needs for the Brownfield business in the world• Increasing demands for power, desalination, and water treatment facilities in Central and South America• Increasing demands for power plants in emerging markets including Africa	<ul style="list-style-type: none">• Laying the foundation for green energy business to cope with environmental regulations• Preparation of ICT-based technology and its application plans• Optimization of operational efficiency and maximization of asset value by capitalizing on source technologies for boiler and steam turbine and plant engineering capability through the Brownfield business• Expansion of new orders through global sales networks• Focus on receiving new orders based on EPC capability in seawater desalination business• Promotion of entrance into new markets
 Upgrading Core Business Leadership	<div>Expansion of product lineup</div> <div>R&D to develop technology</div> <div>Technology protection</div> <div>Securing source technology</div> <div>Strategic alliance</div>	<ul style="list-style-type: none">• Developing USC.HSC boiler model, securing CFB technology, and developing USC CFB boiler• Expanding turbine lineup• Developing gas turbine technology through national projects• Building global R&D cluster and management system• Enhancing the operation of Global IP• Accelerating open Innovation activities• Conducting national projects and signing technical collaboration	<ul style="list-style-type: none">• Trend of tightening global environmental regulations with practicality such as the restriction of carbon dioxide emission• Market diversification and diversified customer needs by market• Stabilization of gas prices by shale gas production and increasing demands for coal-fired power plants driven by environmental regulations• Improvement of technological power and cost competitiveness of competitors in emerging countries such as China• Increasing demands for intellectual property and possibility of patent dispute• Rise in importance of protecting and preemptively securing technologies• The advent of open innovation by cooperating with external research institutes and universities as a new value creation method• Growing needs to secure advanced technologies against technology protection barriers of global companies	<ul style="list-style-type: none">• Securing high-efficiency and eco-friendly boiler technology and expanding relevant businesses• Establishment of a full lineup of turbines to meet diverse market needs• Seizing opportunities for gas power business through securing OEM capabilities for gas turbines• Expansion of market share by capitalizing on technology and production capacity acquired by M&As and strategic alliances• Enhancement of technological capability based on our COE operation system comprised of the Product COE and Tech COE• Continuous increase in R&D related expenses and workforce• Establishment and operation of the Global R&D Cluster and its management system• Expansion of the IP portfolio and reinforcement of relevant processes and infrastructure• Accelerating open innovation activities through the CTO fund• Participation in national projects and expansion of technological alliances with power plant operators
 Upgrading Business Systems	<div>Supply chain management</div> <div>Green management</div> <div>Integrated risk management</div> <div>Work-life balance</div>	<ul style="list-style-type: none">• Building supply chain management system• Establishing virtuous cycle partnership• Rationalizing energy efficiency• Responding to climate change• Constructing integrated risk management system• Pursuing work-life balance	<ul style="list-style-type: none">• Increasing social interest in relationships with suppliers• Rise in importance of suppliers' competitiveness due to the expansion of global business• Growing needs to meet environmental initiatives (climate change and GHG emissions, etc.)• Requirement for understanding of customer countries' environmental regulations for overseas projects• Requirements of overseas project owners for capability and performance in environmental management• Expanding the scope of contract risk, project risk, and local legal risk in accordance with increasing overseas projects	<ul style="list-style-type: none">• Enhancement of suppliers' competitiveness through providing consultation services and financial aids• Introduction of sustainability management to our supply chain and establishment of support systems for activation• Development and utilization of technologies for GHG reduction to secure competitiveness• Elevation of distinctive competitiveness through developing eco-friendly technologies (CCS and new and renewable energy, etc.)• Minimization of local risk by capitalizing on world-class technologies and fluent construction experiences• Securing competitiveness to conduct local projects by capitalizing on our global design and production networks

STRATEGIC FOCUS

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Doosan Heavy Industries & Construction will continuously pursue upgrading its business portfolio, core business leadership, and upgrading business systems to secure global competitiveness and prepare for the next 100 years as a global player.

Upgrading Business Portfolio



Importance of Business Portfolio Upgrades

Upgrading the business portfolio is not an option but a must for every company today. It is necessary to build a business portfolio to respond to changing market environments and deliver more customer value.

Our Response

Doosan Heavy Industries & Construction demonstrates world-class capability to design and manufacture power plant materials and core equipment such as boilers and turbines. We are striving to promote new businesses and market diversification by focusing on upgrading our business portfolio as our core strategy for competitiveness enhancement.

Performances Achieved and Future Plans for Business Portfolio Upgrades

Classification	Performances in 2013	Plans in 2014
Investing in future growth engines	<ul style="list-style-type: none">• Participated in basic design of the IGCC gasification plant and construction project for 300MW IGCC gasification plant in Taean• Analyzed the Oxyfuel 100MW plant• Signed a MOA for the production of wind power generator• Built a remote monitoring system	<ul style="list-style-type: none">• Developing PCC (Post Combustion Capture) technology to separate and capture CO₂• Building the foundation for adopting innovative ICT and securing relevant core capabilities• Diagnosing the performances of the Brownfield projects in Southeast Asia, India, and South Africa, and promoting acquisition of them
Diversifying the market	<ul style="list-style-type: none">• Expanded and reorganized our Santiago Branch in Chile• Won new orders in the Central and South America region (Escondida in Chile)	<ul style="list-style-type: none">• Solidifying position by winning new orders in the Central and South America region• Setting plans to penetrate into African market

Investing in Future Growth Engines

Laying the Foundation for Green Energy Business

Doosan Heavy Industries & Construction provides a business basis for green energy to correspond to carbon dioxide emission regulations and other government’s environmental enforcements. In 2009, for the first time in Asia, we independently developed 3MW class wind power generator WinDS3000™ and became the first domestic company to obtain international certification for the 3MW wind power generator system. Since then, a number of onshore and offshore wind power plant projects have been carried out in Korea. Furthermore, in 2011, we signed a contract with Korea Western Power for Korea’s first IGCC (Integrated Gasification Combined Cycle) plant with high energy efficiency, eco friendliness, and low carbon emission. This project includes engineering, manufacturing, installation, and commissioning of core equipment and facilities. In 2010, we received national projects for carbon capture and storage (CCS) technologies and completed the development of a greenhouse gas treatment system that utilizes oxy-fuel technology to separate carbon dioxide during combustion. Currently, we are developing post combustion capture (PCC) technology to separate and collect carbon dioxide from exhaust gas through technical alliances with overseas subsidiaries and top-tier companies. As evidenced by these examples, we are scaling up our green energy business to build a foundation for sustainable growth.



WinDS3000™



IGCC Gasification Plant in Taean

ICT, Conversion of New Technologies

We intend to enhance the competitiveness of our main products and deliver differentiated value to customers by applying and fusing information and communication technology (ICT) to our business sectors. The convergence of ICT creates a virtuous circle by transforming engineering, construction and management information of a plant into a large data base, and then utilizing it to improve the product and discover new business. It is a challenge that needs to be overcome for future growth. We have been building a foundation and securing core capability to adapt ICT since 2013, and we will start utilizing it to differentiate our products, strengthen our competitiveness, promote new business, and create added value.

❖ Expected benefits from ICT convergence

Increase of Productivity

- Improving efficiency, operation rate, and flexibility through optimizing the operation of plants

Customer Service Innovation

- Detecting symptoms beforehand
- Reducing the possibility of fatal malfunction

Opportunities for New Business

- Plant related applications
- Remote monitoring service, etc.

▣ Remote Monitoring Service by ICT



We started the ICT-based remote monitoring service (RMS) that allows real-time monitoring of power plant operation data without the limitations of time and space. To expand this service, the RMS Team was newly established in October 2013 and the Remote Monitoring Service Center (RMSC) was built in January 2014. This service contributes to improving the performance of power plants.

❖ Effects of the Remote Monitoring Service

Maximization of Profitability	Creation of Customer Value
<ul style="list-style-type: none">• Increasing availability, performance, and reliability of power plant operators• Enhancing power plant operation technology and sales	<ul style="list-style-type: none">• Reducing maintenance costs• Improving operation ability through technological alliance

The RMS is provided based on a continual operation system for stable operation of power plants. It is systematically operated through real-time observation, a symptom monitoring system, failure prediction and an analysis system.

Entering Brownfield IPP Business

The recent trend of increased privatization of government-owned power plants and business portfolio diversification of IPP (Independent Power Producers) in the global market has created many opportunities for us to enter the Brownfield business and expand our horizons upstream. We can do so by capitalizing on our core competency that specializes in power plant equipment and facilities. We have the ability to upgrade performance and operational efficiency of deteriorated power plants by leveraging our source technologies and engineering expertise to transform them into economic and eco-friendly power plants through optimized operation and maintenance. Therefore, this business will allow us to engage in electricity sales and plant maintenance, which will mitigate the volatility of existing business and promote the service sector. Currently, we are proactively carrying out marketing activities through local business networks in countries where demand for electricity is anticipated to increase in the long run.

Entering New Markets

Efforts to Tap into New Markets

Doosan Heavy Industries & Construction continuously seeks ways to penetrate new markets. We conducts sales and marketing activities by targeting countries through analysis of local policy and market conditions, and then establishing concrete action plans.

Process to Tap into New Markets

Our new market penetration strategy is based on definite principles and systematic analysis. Careful study of the target countries’ market conditions and policies, consultation with local experts, and establishment of specific plans are priorities before sales and marketing activities.



Strategies to Penetrate New Power and Water Markets

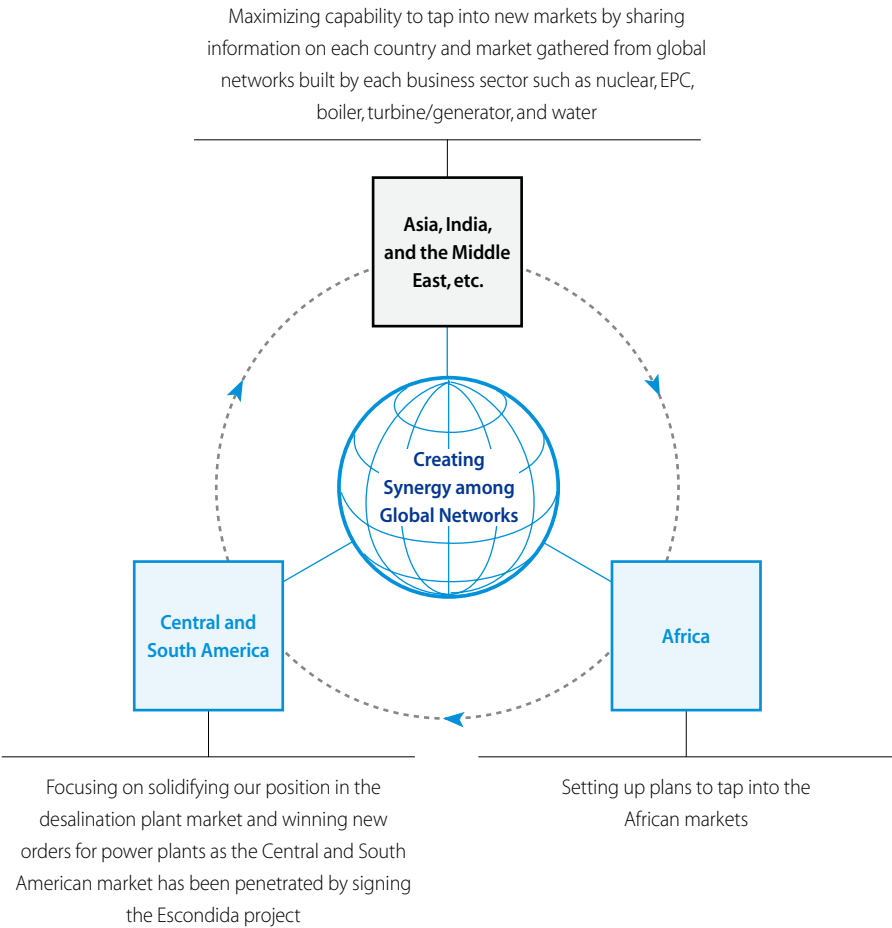
Power | Central and South America are expected to become an attractive and sustainable market for our power business. To solidify our presence in this region, we have reorganized the Santiago Office in Chile for expansion. The office focuses on current local water projects and promotes sales and marketing by dispatching employees to work with local agents. Currently, executives, expats, locals and agents are working at the office to cover the Central and South America region.

Water | In August 2013 we won an order for the Escondida project, worth USD 103 million, to build the largest RO method seawater desalination plant in the Central and South American region. Upon completion, this plant will produce 220,000 tons of fresh water, which can be used by 550,000 people every day. By winning this project bid against top-tier companies from France, Spain, and Israel, we were able to prove that our technological prowess and contract competitiveness are highly recognized in regions beyond the Middle East. We will continue to solidify our position in the Central and South American market, where future orders for seawater desalination plants for industrial use are highly expected.



Developing African Markets

To penetrate the untapped emerging market in Africa, we are proactively studying the market characteristics by country and product type. In addition, we are drawing up measures to increase the chances of winning projects in the African market by utilizing domestic and overseas organizations, and seeking ways to cooperate with other companies to identify additional projects. We are also planning to expand our presence, which is currently centered around the North African region, into the South African area to cover the entire African market.



Strategic Focus

Upgrading Core Business Leadership



Importance of Core Business Leadership Upgrades

Core Business Leadership is our key management tool to secure global top-tier competitiveness in the increasingly aggressive power and water markets.

Our Response

We have strengthened our product lineup to secure global top-tier competitiveness and established global R&D networks. In addition, we are conducting major national projects and concluding technical agreements to maximize synergy in diverse business areas.

Performances Achieved and Future Plans for Core Business Leadership Upgrades

Classification	Performances in 2013	Plans in 2014
Strengthening product lineup for each business	<ul style="list-style-type: none">Developed engineering and manufacturing technologies for 1,000MW class USC (Ultra Super Critical) boilerAnalyzed competitors and market conditions in the coal-fired and combined thermal power plant sectors	<ul style="list-style-type: none">Promoting the development of HSC (Hyper Super Critical) technology and modelDeveloping USC CFB boilerBuilding full lineup of steam turbineSecuring capability for engineering and manufacturing of large gas turbine
COE operation system	<ul style="list-style-type: none">Strengthened collaboration among local subsidiaries by establishing the Global R&D CenterAccelerated new business development and enhanced cooperation among BGs by reforming COE organizations at the Central R&D Institute	<ul style="list-style-type: none">Improving existing products' performances and developing new technologiesExpanding R&D expenditures and workforceCreating synergy through collaboration among global R&D centers
Global R&D operation system	<ul style="list-style-type: none">Unified global R&D systems (use of common tools, sharing of information, and active communication)Enhanced competitiveness in IP portfolio and technology related contracts and negotiation powerStrengthened open innovation activities	<ul style="list-style-type: none">Reinforcing fundamental technological competitiveness through improving R&D qualityStrengthening the patent development system and upgrading technology licensing operation systemExpanding the scope of R&D to include ESS, cyber security, big data, and nano-materials
Conducting national projects and technological alliances	<ul style="list-style-type: none">Won 8 national projects including the development of large gas turbine and commercialization technology for decontamination of steam generatorInvested KRW 34.1 billion in national projects in 2013Enter into technical partnership, technology innovation, and overseas project development contract	<ul style="list-style-type: none">Strengthening cooperative relationship with industry-university-institute to pursue national projectsSigning additional technical alliances to enhance technological capability and systematically managing agreements

Enhancing Product Lineup by Business Sector

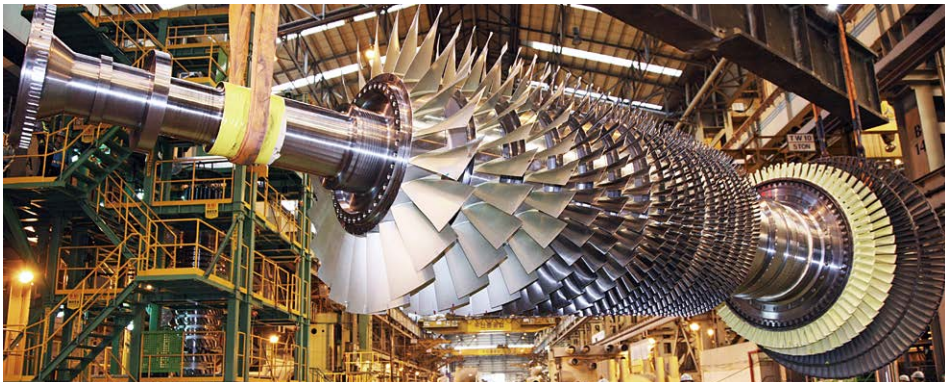
Boilers

To bolster competitiveness in the coal-fired power business sector, Doosan Heavy Industries & Construction secures technologies for high-efficiency and eco-friendly power plants and environmental facilities. As such, we developed engineering and manufacturing technology for a highly-efficient and eco-friendly 1,000MW class USC (Ultra Super Critical) boiler. This product can improve power generation and reduce carbon dioxide emission by increasing pressure and temperature more effectively than the current supercritical coal-fired power plants. Furthermore, the development of HSC (Hyper Super Critical) boiler technology will improve efficiency by 2~3%. We secured source technologies for eco-friendly CFB (Circulating Fluidized Bed) boilers by acquiring Lentjes of Germany, and we intend to develop USC CFB boilers through this technology.



Turbines

Our turbine business also focuses on maximizing competitiveness of product and technology. We are striving to build a full line-up of steam turbines by analyzing competitors and markets needs and constantly cultivating new models to respond to diverse market demands. Meanwhile, to capture business opportunities in the growing gas power plant industry, we plan to proceed with technology development by participating in national projects to secure self-developed gas turbine models.



Center of Excellence

COE Operation

Doosan Heavy Industries & Construction is putting forth every effort to enhance its core business leadership based on the COE (Center of Excellence) system established in September 2012. The COE operation system consists of the Enabling System, Product COE and Tech COE. It contributes to improving competitiveness of existing technology, developing future growth engines, and maximizing the company's technology value.

Enabling System	Product COE	Tech COE
<div>Strengthening the Enabling System<ul style="list-style-type: none">• Building the global IP operation system• Building the global R&D management system• Running the TLB* to strengthen synergy between COEs</div>	<div>Establishing R&D Center by BG<ul style="list-style-type: none">• Boiler BG(Doosan Babcock)• Turbine/Generator BG (Doosan Skoda Power)</div>	<div>Reforming COE Organizations at the Central R&D Institute<ul style="list-style-type: none">• Solidifying fundamental technologies by organizing technology domains that cover all business areas• Enhancing new business development and collaboration systems between BGs</div>

* TLB: Technology Leadership Board

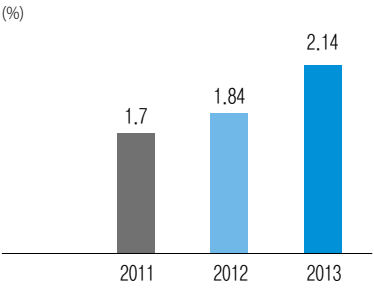
■ The COE of Doosan Heavy Industries & Construction

The COE system in Doosan Heavy Industries & Construction is a method whereby each business group, subsidiary, and R&D institute is responsible for developing products and managing their technology and future business.

Establishing the COE Operation System

In 2013, we established the Global R&D Center with the reorganization of the boiler, turbine and generator BGs to strengthen technological competence. We encouraged cooperation among overseas subsidiaries to secure fundamental competitiveness, and accelerated research on future technologies through the Central R&D Institute. In addition, our institutes, located in 8 major cities in 4 countries (Korea, UK, Czech Republic and Germany), are proactive in developing new technologies.

❖ R&D Investment to Total Sales



❖ Performances in R&D

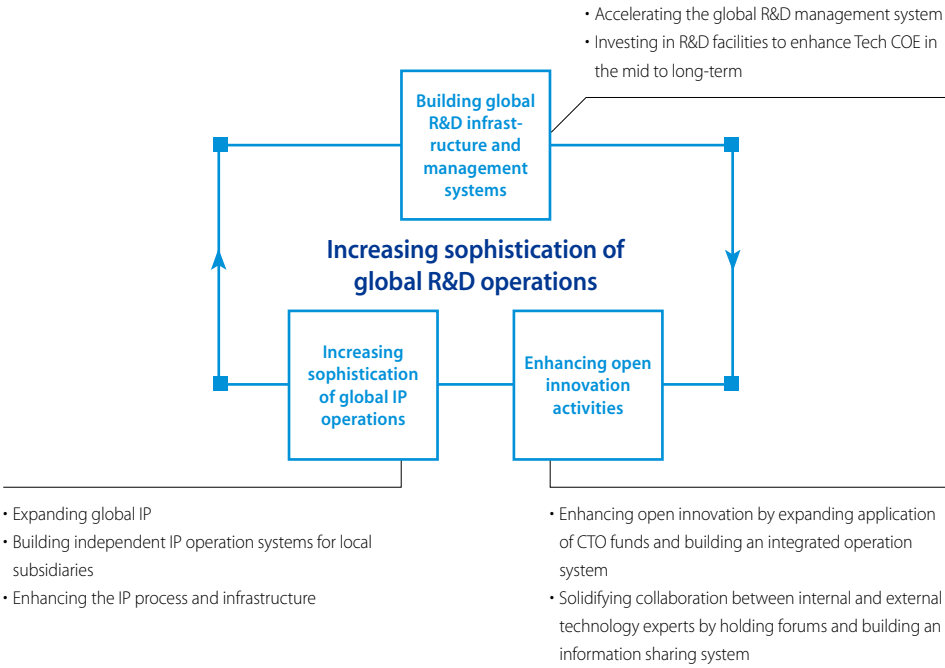
Classification	Unit	2011	2012	2013
R&D expenditure	KRW in billions	144.1	177.3	182.9
R&D investment to total sales	%	1.7	1.84	2.14
No. of R&D Tasks (improvement/new tech. product/ future business)	cases	85 (42/36/7)	119 (57/53/9)	164 (77/68/19)
R&D workforce	persons	596	612	873
No. of source technology developments	cases	8	14	18

Global R&D

Increasing Global R&D Operations

Doosan Heavy Industries & Construction established a mid- and long-term plan to enhance operation of the global R&D systems. This plan consists of building global R&D infrastructure and management systems, enhancing global IP management, and strengthening open innovation activity. This has contributed to increased efficiency in our technology portfolio and synergy in developing technology.

❖ Framework for increasing sophistication of Global R&D



Building Global R&D Infrastructure and Management System

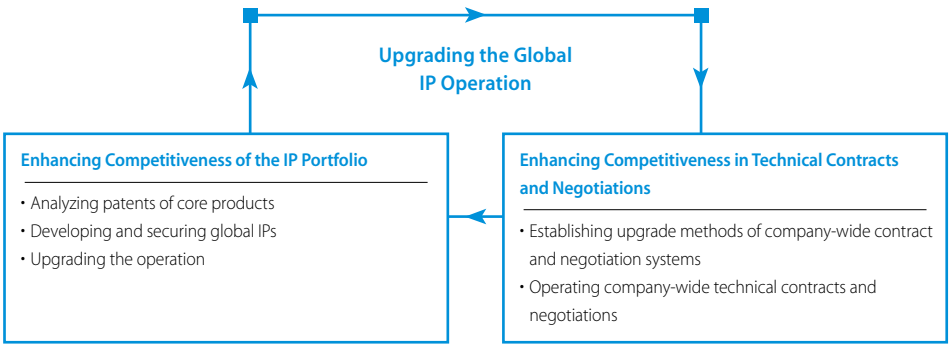
Global R&D Management System | We unified the R&D management system to organically combine the functions of the Global R&D Center. First, we created a sense of unity with the global R&D body by applying common management tools. Second, we efficiently utilized resources by sharing technology development tasks and results with all relevant personnel to prevent overlapping investment. Lastly, we revitalized communication for technology development with overseas subsidiaries by building a communication system in English. We shared the roadmap for product development, and prepared a forum to propose ideas.

Investing in R&D Facilities in the Mid to Long-term | In 2014 we established a 3-year investment plan for the Central R&D Center to upgrade research facilities for developing materials and conducting new large projects (HSC, Large GT). We reviewed 29 research facilities regarding heat treatment, forging, and steel-making, centered on materials. We plan to continuously upgrade our research facility with an investment of KRW 5.6 billion. This investment will be divided into three categories: outside leasing, project equipment, and generally used equipment. These investment plans will allow us to enhance our fundamental competitiveness and increase customer satisfaction by improving the quality of our R&D.

Upgrading Global IP Operation

We are strengthening our IP portfolio by encouraging use of the ‘IP (Intellectual Property) Management’ system. Accordingly, we are operating under Global IP Management. In 2013 we established major R&D targets to enhance the IP portfolio and our competitiveness in technology negotiations.

❖ Strategy for Upgrading the Global IP Operation in 2013



Through the Global IP management system, we identified IP risk response and IP strategic direction for each product. This identification was done by patent analysis on 6 core products and components. The Patent Subcommittee functions to streamline patent creation and R&D-related documentation, enhancing patent quality. We also established the infrastructure framework to secure quality and unified operation of our corporate patents.

❖ Performance in Global IP Management in 2013

Classification	Performance in 2013
Arrangement of staff responsible for IP	<ul style="list-style-type: none">Assignment of IP coordinators to departments such as Development TeamSharing IP issues in the development stage and communication within IP TeamInitiation of new IP activities within the organization
Operation of the Patent Subcommittee	<ul style="list-style-type: none">Capitalizing on IP for R&DDetermining whether to apply for patentsEvaluating and rewarding ideasCollecting and capitalizing on other non-patent job know-how
Establishment of an integrated operation system for Group-based IP	<ul style="list-style-type: none">Forming an integrated database of negotiation histories and written contracts of affiliates and subsidiaries at home and abroadBuilding an integrated patent management and analysis system
Enhancement of competitiveness in technical negotiation	<ul style="list-style-type: none">Establishing License Team to manage negotiation content alongside the Legal Affairs TeamRecruiting human resources for the IP Team

IP Management Plans in 2014

Doosan Heavy Industries & Construction plans to continually improve its IP competitiveness by aggressively promoting the patent development system, and advancement of the technology licensing system. These steps will accelerate the Tech COE process and hopefully lead to the discovery of future technology.

❖ IP Registration/Application in 2013

No. of applications
165 cases
(Domestic: 151/Overseas: 14)

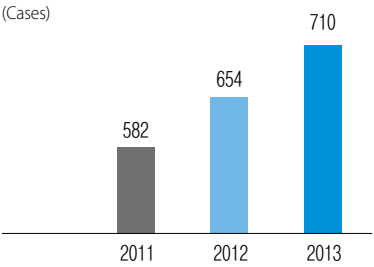
No. of registrations
56 cases
(Domestic: 50/Overseas: 6)

❖ Technology Patents for New Businesses

No. of applications
55 cases
(Domestic: 47/ Overseas: 8)

No. of registrations
20 cases
(Domestic: 16/ Overseas: 4)
* Including fuel cell, wind power, super conductivity, and GT

❖ No. of Accumulated Domestic and Overseas Patents






Enhancing Open Innovation Activities

To energize innovation, Doosan Heavy Industries & Construction annually allocates 5% of R&D expenses as the CTO fund. The firm uses this fund to develop innovative technology, for convergence and integration, and for high level technology sensing. This budget is also used for feasibility studies. The CTO fund also is used to reduce prototype production costs, simplify task selection, and to expand cooperation between domestic and foreign research institutes. In December, we concluded partnerships with overseas universities, including MIT and Stanford, to expand our reach into diverse research areas such as space, aviation and convergence. These partnerships will help us forge new business opportunities and initiate creative R&D activities.

Use of the CTO Fund in 2013

A total of 7 tasks are being implemented for research and technology seeding, including a feasibility study on reducing the time for plant start-up time

Use of the CTO Fund and Achievements

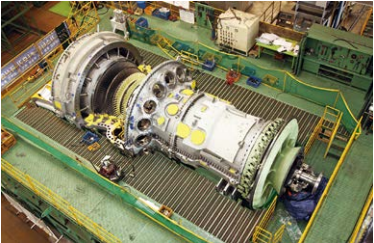
Target	Purpose	Major Achievements
 Overseas research institutes	<ul style="list-style-type: none">Enhancing future technologies, innovation, conversion, upstream technology and securing global network	<ul style="list-style-type: none">Signing contracts with Stanford University, EEAP, MIT ILP (attendance from 2014)
 Domestic research institutes	<ul style="list-style-type: none">Verifying possible commercialization of fledging technologiesStrengthening networking with domestic universities and research institutes and cooperation in recruitment	<ul style="list-style-type: none">Seeding and developing technologies3D computerized flow analysis technology for side-flow turbine, etc.
 In-company	<ul style="list-style-type: none">Activating idea-based task proposals instead of pursuing resultsMitigating risk by preliminary investigation of tasks with high risk potential	<ul style="list-style-type: none">Expanding regular exploration of creative ideas and preceding investigationStrengthening collaboration to develop and conduct future business and share new technologies with each BG

The budget of the CTO fund for Open Innovation activities in 2014 will be approximately KRW 4 billion, an increase of 48% compared to the previous year. It will be used to develop future technologies such as ESS, cyber security, big data, and nano-materials. We also plan to operate Open Innovation activities more efficiently by establishing and simplifying the CTO fund’s task selection procedure.

Conducting National Projects

Status of National Projects

In 2013, Doosan Heavy Industries & Construction obtained 8 new national projects, including development of large gas turbines for power generation and commercialization of steam generator desalination technology. Currently, 16 national projects are ongoing, and this year’s investments amount to KRW 34.1 billion. Through these projects, we contribute to enhancing the technological competitiveness of Korea, and we seize opportunities for entrance into global markets.



Developing High-Efficiency Large Gas Turbine for Power Generation I A national project to develop high-efficiency, large-scale gas turbines for power generation was initiated in July 2013 to reduce dependence on the import of large gas turbines, which are a core piece of equipment for combined thermal power plants. This project created a proprietary model for our export strategy. This task will continue for 60 months and be completed by June 2018, accelerating our large gas turbine business. It also will expand the portfolio of gas turbine models and cultivate a global supply chain led by domestic SMEs.

Developing Commercialization Technology for Decontamination of Steam Generators I To prepare for a new market in the disassembly of nuclear power plants in 2020, we are focused on securing relevant technology in cooperation with nuclear power plant operators, other companies, and research institutes. To become a major player in this new business area, in September 2013 we began a national project to develop commercial technology for the decontamination of steam generators. This task will continue for 40 months with its completion in December 2016. The project will target the post-construction business and advancement into the global nuclear plant disassembly market.

Contracts for Technical Tie-up

Technology Innovation Tie-up I Korea East West Power

On November 5, 2013, we signed an agreement to cooperate on technology innovation with Korea East-West Power. The agreement was made to achieve technological innovation in the power plant industry by combining KEWP’s plant operation experience with our engineering and manufacturing capability. A total of 11 projects were selected for the agreement. These projects include research and development of core technologies for generation, diagnosis of deteriorated equipment and performance improvement, support for emergency repair, and establishment of technical support systems. Also, we plan to form a Technology Council chaired by executives of both companies to ensure the success of this agreement and promote regular technology exchange.



Technical Tie-up for IMCS I Korea Western Power

We signed a technical agreement to operate an integrated monitoring & control system at the Taean power plant, unit 1, with Korea Western Power. This agreement was designed to promote cooperation on operation of the power plant control system, including a remote monitoring service and a real-time emergency recovery system. Through this agreement, we will prepare countermeasures for any emergency and improve our engineering and reliability. This pact will also serve as a springboard for winning new bids in the future.

Upgrading Business Systems



Importance of Business Systems Upgrades

It is essential to build a systematic business systems to deliver value to stakeholders, including customers, investors, suppliers, and local communities. This system should encompass all management aspects, including resource recycling, profit creation, and redistribution of economic value.

Our Response

Doosan Heavy Industries & Construction has secured distinct competitiveness in the industry by building advanced and scientific business systems, through which we provide value to various stakeholders.

Performances Achieved and Future Plans for Business Systems Upgrades

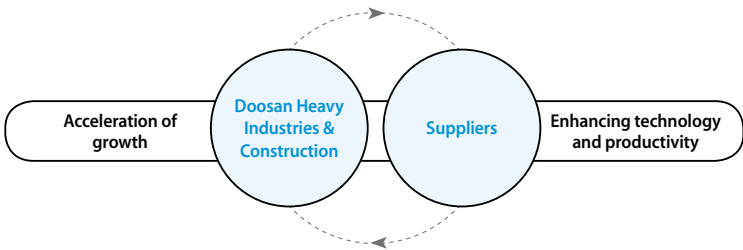
Classification	Performances in 2013	Plans in 2014
Shared growth	<ul style="list-style-type: none">• Operated a group to support suppliers to increase competitiveness• Built SCM (Supply Chain Management) system and evaluation system to enhance supplier competence• Held a conference for shared growth	<ul style="list-style-type: none">• Strengthening competence tailored to each supplier• Enhancing prevention activity to comply with fair transaction and internal transaction rules• Expanding communication with suppliers
Rationalization of energy efficiency	<ul style="list-style-type: none">• Formed a TFT to manage company-wide energy use and GHG emissions• Established a roadmap• Saved KRW 7.89 billion by reducing GHG emissions	<ul style="list-style-type: none">• Verifying energy efficiency improvement performance and identifying additional tasks• Making performance flow charts satisfying the characteristics of each BG or plant
Work-life balance	<ul style="list-style-type: none">• Pursued employee work-life balance through smart office activities (better efficiency and reduced waste)	<ul style="list-style-type: none">• Expanding flexible work practices• Identifying additional tasks to eliminate inefficiency and waste
Risk management	<ul style="list-style-type: none">• Operated our unique risk management programs, such as Quality Gates System, Doosan Document Management System, and Lessons Learned System	<ul style="list-style-type: none">• Preparing construction of an integrated risk management system

Shared Growth System

Building Virtuous Cycle Partnership

The Virtuous Cycle Partnership with suppliers is the motto of our shared growth system. It means that Doosan Heavy Industries & Construction intends to build a system in which all suppliers can be involved in its management activities, such as strengthening technology capability and enhancing business systems that have been conducted within the company.

❖ Structure of Virtuous Cycle Partnership



Major Activities for Shared Growth

Building SCM (Supply Chain Management) System | In response to the market’s interest in corporate social responsibility and the trend of clients to evaluate and monitor SCM, we established SCM to upgrade our business systems.

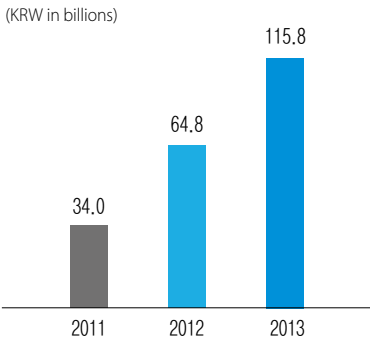
Operating Supplier Evaluation System | We conduct comprehensive evaluations on the capability of internal and external suppliers and subcontractors twice a year. Evaluation criteria include basic business competence and their social and environmental impact in a fair and transparent manner. The results are reflected in the next year’s shared growth plan and are used as data to cultivate and support suppliers.

Operating Shared Growth Fund | Doosan Heavy Industries & Construction provides suppliers with various financial aids by operating a direct support system with no interest, or a joint support system with low interest through the Shared Growth Fund. Since 2011, our subcontract payment schedule has been expanded to 3 times a month and payment is settled within 10 days from issuing of the invoice. Cash payment was also expanded. The improvement of payment conditions helps suppliers solve difficulties in their financial management.

Industrial Innovation Movement 3.0 | We have been contributing KRW 500 million every year to activate the Industrial Innovation Movement 3.0. About 70% of the contribution (KRW 350 million a year) is used to support suppliers and the remaining 30% (KRW 150 million a year) is used to support SMEs other than our suppliers.

Operating a Consortium for HRD Ability Magnified Program | Since 2010, we have operated a consortium for HRD Ability Magnified Program to provide suppliers with essential training. In addition, we set up Korea’s only technology training course for the plant business, which has helped suppliers solve technical problems rapidly and respond to the changing business environment proactively.

❖ Raising Shared Growth Fund





Suppliers’ Competitiveness Enhancement Support Group I Since 2011 Doosan Heavy Industries & Construction has been operating the ‘Suppliers’ Competitiveness Enhancement Support Group,’ consisting of 100 experts. The organization evaluates the business status of each supplier and provides customized support to cultivate long-term strategic partners.

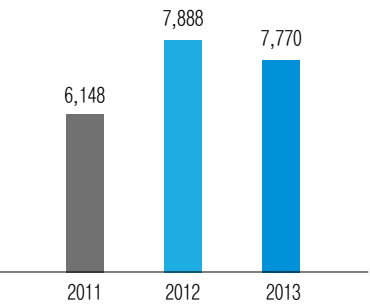
Inauguration of Management Advisory Group I In September 2013, we established the ‘Management Advisory Group,’ consisting of former executives with less than 2 years until retirement. They provide their management expertise to assist our suppliers and strengthen competitiveness. The group supports 5 areas of R&D, engineering quality, production, and business management.

Performance Sharing I Since signing an agreement to execute performance sharing with the Ministry of Knowledge Economy in June 2012, we have strived to honor the agreement. Our efforts for performance sharing have led to winning the Prime Minister’s Prize and our best practices were introduced into case books in 2013.

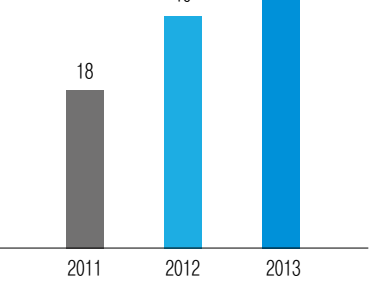
Classification	Promotion Tasks in 2014
Activation	Operating the Performance Sharing Bureau <ul style="list-style-type: none">Managing task gathering and PR activitiesDeveloping best practices and awarding rewards and incentives
	Promoting performance sharing between 1st tier and 2nd tier suppliers <ul style="list-style-type: none">Selecting suppliers and tasks in connection with the Industrial Innovation Move 3.0
	Expanding voluntary participation of suppliers <ul style="list-style-type: none">Activating website for proposing performance sharing tasks
Upgrading	Reflecting the performance sharing results in the MBO for executives and team heads of procurement department
	Promoting performance sharing activities in connection with competitiveness enhancement programs <ul style="list-style-type: none">Selecting suppliers with high probability of identifying tasks

❖ Performance in Operating the Consortium for HRD Ability Magnified Program

No. of people completing the program
(Persons)



No. of courses
(Courses)



Suppliers’ Safety and Health Management I Our company has offered evaluations on safety and health conditions and support for improvements to suppliers who have difficulty managing safety and health due to limited funds or manpower issues. These efforts have contributed to managing safety and health issues throughout the supply chain preemptively.

Process	Suppliers	Safety & Health Coordination Group
Risk assessment	Identifying onsite hazards and conducting risk assessment by each supplier	Providing technical support such as training about risk assessment methods and review of propriety of identifying hazards
Establishment of improvement plans	Preparing improvement plans according to the results of risk assessment	Correcting and supplementing improvement plans set by suppliers
Safety and health improvement	Continuously conducting safety and health improvement plans and reporting performance to steering committee members every month	Monitoring improvement activities and practicing promotion tasks for supporting continuous safety and health improvement
Performance evaluation	Implementing self-evaluation on results and establishing program operation plans to secure EHS management ability for the next year	Selecting promotion tasks for collaboration based on suppliers’ self-evaluation results and building a cooperation system for continuous execution

Joint Overseas Expansion I We are assisting our suppliers increase exports and sales by jointly entering overseas markets. When they participate in the overseas business, we provide support to our suppliers in attaining PQ (Pre-Qualification) from clients and jointly attend major overseas exhibitions.

Strengthening Communication with Suppliers

Doosan Heavy Industries & Construction performs various communication activities with suppliers to create mutual trust and improve business relations. These interactions provide suppliers with opportunities for independent growth and a horizontal partnership with us.

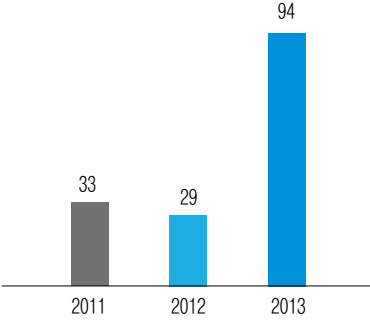
Building Virtuous Cycle Partnership

Shared Growth Conference in 2013 I The Shared Growth Conference was started in 2011 to share our annual business plans and shared growth plans. In 2013, a total of 205 supplier CEOs attended the conference and 56 companies received the excellent partner award.

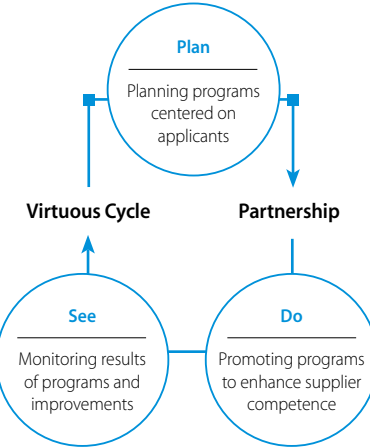
Field Trip Program for Excellent Suppliers I Employees of excellent suppliers are invited to special lectures on quality and field trips to our production sites and power plants. By linking business with the MGF (Machinery Industry Shared Growth Promotion Foundation), we have benchmarked against improved cases of the excellent companies to aid our excellent suppliers with securing viability and competitiveness.

Win-Win Call Center I To receive feedback from suppliers and to resolve any issues, we are operating the Win-Win Call Center and responding to every inquiry within 24 hours in principle. Any kind of inquiry is accepted through the call center, including unfair transactions, shared growth program, support for competitiveness enhancement, financial aid, and any other concerns related to business partnership. In 2013, more than 50 inquiries were made and resolved.

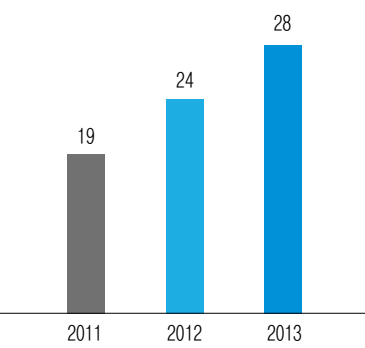
❖ No. of suppliers involved in the field trip program



❖ Supplier communication process



❖ No. of 1st tier suppliers supported for the CP introduction

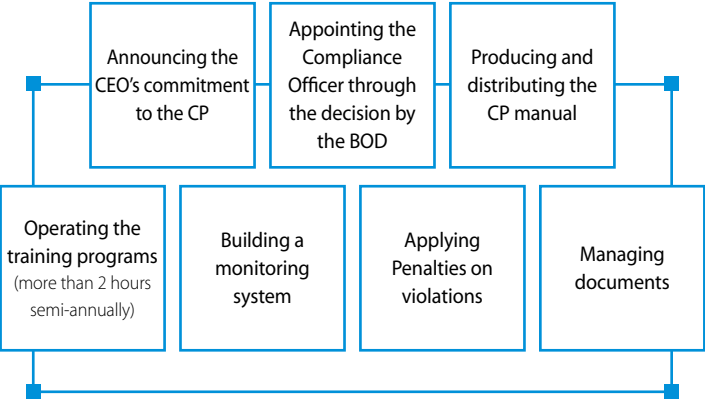


* CP: Compliance Program

Operating the Compliance Program

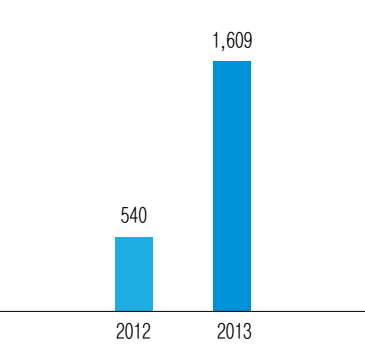
Doosan Heavy Industries & Construction introduced the CP (Compliance Program) in June 2004 to voluntarily execute fair transactions that would comply with relevant laws. Organizations responsible for the CP include the chief compliance officer, the compliance staff of each business group, and the compliance management team (Shared Growth Team). We are committed to implementing the CP in accordance with 7 key factors of the CP.

❖ 7 Key Factors of the CP



Enhancing the Compliance Program

❖ No. of employees trained for the CP
(Persons)



Training about Fair Transactions | Diverse training programs about fair transaction are provided to our employees and suppliers through online and offline channels. The number of participants in these training programs in 2013 increased by 198% compared to the number from the previous year. In December 2013, a special training program was offered to about 2,000 employees working in the department of purchasing, quality assurance, project management, and subcontractor management.

Monitoring Subcontract Transactions | Employees working at subcontract related departments are monitored on compliance with relevant laws every quarter. We are continuously ameliorating our subcontract system to achieve no violations and fully comply with the Subcontract Law. Moreover, to prevent any errors or misconducts from a poor understanding of current laws and our system, our employees engaging in purchasing are provided with regular training and case studies. These activities foster the establishment of a culture of fair transactions and solidify trusting relationships with suppliers.

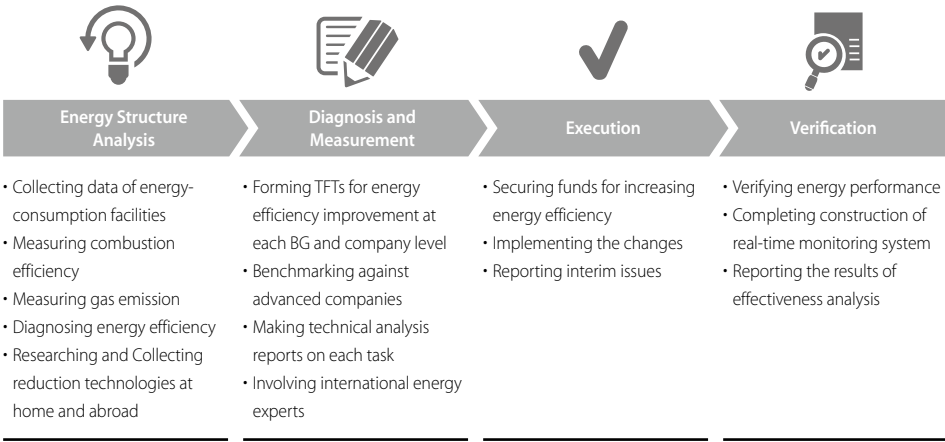


Rationalization of Energy Efficiency

Energy Management

The rationalization of energy efficiency is promoted as an innovative activity created to respond to tighter GHG related regulations and to secure cost competitiveness. Therefore, we shifted the paradigm of use and management energy from a cost reduction campaign to a technical reduction program by introducing special technologies. When introducing new technology, we trained our workers to fully appreciate and understand the fundamental improvements in operating technology. The rationalization of energy efficiency started with company-wide diagnosis of energy consuming facilities. The TFT developed action items centered on 4 pillars: shield loss, waste heat recovery, new technology introduction, and high efficiency application. These improvement measures are reviewed for implementation efficiency. They are promoted in stages and are constructed in a way to allow the verification of the results possible.

❖ Process for Diagnosing Energy-consumption Facilities



❖ Activities and Performance in 2013 (Changwon Plant)

		Classification	Target	Performance
In-house technology	<ul style="list-style-type: none">Cooling water control systemImprovement of ejector coverChange of heat sources	Energy use (TJ)	5,310	5,135
New high-efficiency technology	<ul style="list-style-type: none">TDLS controlOxygen lancingRegenerative burner, etc.	Reduction (KRW in billions)	7.9	8.0

Plans for Rationalization of Energy Efficiency in 2014

To create a greener workplace, Doosan Heavy Industries & Construction introduced an energy management system, installing LED lights in production facilities, adopting new energy technologies, applying high efficient technologies, and enhancing GEMS (Green Energy Management System).

❖Energy Consumption

(TJ)

Classification		2011	2012	2013
Domestic	Changwon Plant	5,862	5,613	5,135
	Construction	-	43	100
Overseas	Subsidiaries	324	429	560
	Construction	278	354	433

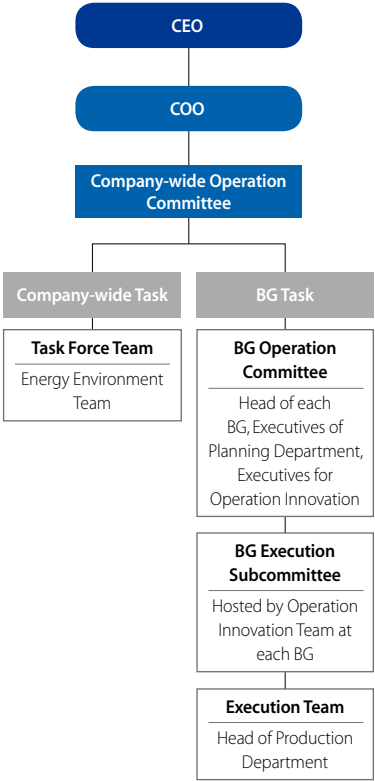
Response to Climate Change

Doosan Heavy Industries & Construction operates a response strategy to climate change based on the rationalization of energy use and control. Our response strategy to climate change, targeting a 7.6% reduction rate (403,000 tCO₂) compared to BAU of 2020, is managed and monitored by a response organization that would react based on each department's energy efficiency.

Responsible Organization

Our organization in charge of climate change response includes the responsible team, a BG operation committee, and an execution team. The organization classifies response tasks and roles with the goal of achieving objective management in GHG and energy. Status reports on BG-level initiatives are made to the BG Operation Committee every month, while company-wide tasks for climate change are reported to the Company-wide Operation Committee.

❖Organization for Response to Climate Change



❖GHG Emissions

(tCO₂)

Classification		2011	2012	2013
Domestic	Changwon Plant	327,690	299,522	274,524
	Construction	-	2,397	5,197
Overseas	Subsidiaries	17,806	23,673	31,295
	Construction	18,677	23,422	27,894

❖Reduction of GHG Emissions (Changwon Plant)

(tCO₂, KRW in hundred millions)

Reduction method	2011		2012		2013	
	Reduced GHG	Amount	Reduced GHG	Amount	Reduced GHG	Amount
Improvement of ratio of heat rays	628	-	109	0.5	4,026	1.1
Improvement of operating methods	1,980	2.1	7,882	15.5	7,501	34
Introduction of high-efficiency facilities	2,205	4	33	0.1	6,230	43
Optimization of combustion	1,143	4	344	1.3	211	1.1
Total	5,956	10.4	8,368	16.9	17,968	80

Growth through Work-Life Balance

Smart Office

The Smart Office activities have been underway since 2011 to increase productivity and reduce cost and waste in daily operations. Those objectives are promoted in several areas, including work process improvement, policies and HR management, and working environment and infrastructure enhancement. The Smart Office activities greatly contribute to refining our company's business systems.

	Phase 1	Phase 2	Phase 3	
	Building an Execution System	Visualizing Performances by Task Improvement	Securing Competitiveness in QCD	
	2011 (Introduction)	2012 (Introduction)	2013 (Settlement)	After 2014 (Fruition)
Expectation	• Understanding the purpose and direction of the Smart Office	• Promoting positive awareness through successful experiences	• Establishing voluntary participation • Increasing satisfaction by further adopting best practices	• Standardizing Smart Office activities to secure competitiveness in QCD
Major activities	• Identifying 3 major inefficient areas by diagnosing major functions and crafting improvement plans • Establishing the Smart Office promotion system	• Expanding the methodology to promote the Smart Office throughout the company • Developing and sharing best practices	• Increasing work efficiency through further adopting best practices	• Developing and implementing improved tasks to achieve the goal of competitiveness in QCD

The Smart Office activities have successfully taken root in all business groups and departments for 3 years and are highly recognized for their contribution to the betterment of our company's business systems.

Plans for the Smart Office in 2014

We intend to expand the Smart Office activities to daily practices in order to secure competitiveness in QCD (Quality, Cost, and Delivery). Detailed action plans include eliminating inefficiency and wasteful elements in work processes, defining clearly the responsibility and authority of each position and organization, and expanding opportunities for the employees to cooperate and communicate.



Risk Management

Risk Management Principles

There are internal and external risk factors that affect management activities. Doosan Heavy Industries & Construction is regularly monitoring such risks and strengthening prevention activities to reduce uncertainties in its management activities.

Scope of Risk Management

Considering the characteristics of power, water, castings & forgings, and construction business, we are managing risks in the areas of projects, finance, and non-finance.

❖ Scope of Our Risk Management

Project Risk Management

Projecting risks and minimizing their impact when risks occur by defining risk types based on project life cycles

Financial Risk Management

Creating stable and sustainable operating performance under any market risk, credit risk, and liquidity risk

Non-financial Risk Management

Regularly inspecting risk factors in CSR, such as market change, strategic direction check, shared growth, and EHS

Risk Management System

To increase efficiency in risk management, risk control procedure is carried out at the company level, while individual risk management is implemented by special organizations.

Project Risk Management

- Operating risk management regulations, such as project management regulation, risk management policy, and QG (Quality Gate) and internal process
- Preemptively coping with risk in all value chains, including design, purchasing, and procurement headed by controller and PRM (Project Risk Management) bodies
- Operating the LL (Lessons Learned) system to prevent recurrence of similar risk

Financial Risk Management

- Regularly inspecting financial risk through the report on internal and external financial indices by each financial management division

Non-financial Risk Management

- Regularly examine risk factors in CSR such as market change, strategic direction, shared growth, and EHS

❖ Types of Project Risk

Location Risk	Systematically analyzing clients' nation's political, social, and environmental risks as well as physical risks, such as geographical features and infrastructure
Financial Risk	Inspecting risks related to contract guarantee conditions and clients' credit
Contract & Negotiation Risk	Examining risks related to the delay of product schedule and clients' excessive requirements on quality
Planning Risk	Reviewing cost risks from increasing raw material prices and mistakes in design, and schedule risk from shortage of time for design related issues and project suspensions
Execution Risk	Scrutinizing risk in project execution, such as lack of cooperation between clients and contractors, occupational incidents, insufficient maintenance ability, and other related developments

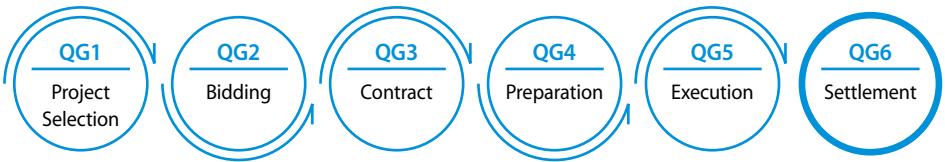
❖ Major Meetings for Risk Management



Risk Management Methods

Quality Gates System | Our risk management system, QG, is a internal process that is utilized to provide check points for the 6 processes of the project, thereby increasing efficiency of risk management correlated to the ERP and electronic authorization system.

❖ Quality Gates Process



Doosan Document Management System | We operate the DDMS (Doosan Document Management System) to allow project managers to register any risk, share it with relevant organizations, and promote preemptive and organizational response to the risk.

Lessons Learned System | The Lessons Learned System functions to prevent recurrence of risks. This system helps to circulate internal and external knowledge, new knowledge, and activities of each BG and department, which contributes to effectively managing any potential risks.

PERFORMANCE REVIEW

Talent Management	62	Social Contribution	80
Green Management	70	Customer Satisfaction	84
Safety and Health	74	Special Story	87

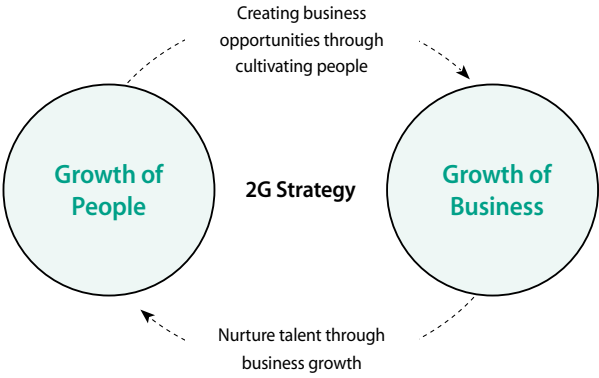


Doosan Heavy Industries & Construction maintains the world’s best technology to fulfill its responsibilities to the people, business, and society, and to continuously improve its corporate value; furthermore, it contributes to a safer and cleaner world to live together with local communities.

Talent Management

In order to grow into a global leader, Doosan Heavy Industries & Construction is practicing the 2G strategy for the mutual growth of its people and business under the motto, 'People Are the Future'.

❖ 2G Strategies



We are making efforts to forge a corporate culture that promotes a work-life balance by employing the 2G strategy to realize the growth of business through the growth of people and vice versa.

Employees

Employment Status

As of 2013, our number of employees reached 8,703. Among them, 7,310 were regular employees and 1,393 were irregular (part-time) employees. Among regular employees, white collar positions numbered 5,065 while 2,245 had technical jobs.

Turnover Rate

The turnover rate in 2013 stood at 0.9%, a decrease of 0.2% from 1.1% in 2012. The decrease in turnover rate was attributable to our efforts to increase

employee satisfaction, such as providing competitive market-level salaries, top-level compensation, and benefits present in the industry.

Female Employees

The number of female employees was 515 as of 2013. The number of our female employees is less than males due to our business characteristics; however, we expanded the female proportion to further increase the diversity in our company. Currently, we provide female workers with 90-day legal vacations before and after pregnancy, followed by KRW 100,000 as a congratulatory gift, and a year of maternity leave. Additionally, we built break rooms for pregnant employees along with areas for nursing.

Recruiting Talent

Recruitment

We believe that recruiting new talent is a crucial aspect of cultivating people; therefore, we hire competent new or experienced employees through a stringent screening process. The recruiting procedure includes necessary documentation, an aptitude test, and two-step interviews with fair evaluation regardless of participants' university, age, gender, or race.



Efforts to Hire Talented People

CEO's Presentation | Every year, the CEO visits college campuses and makes presentations about the company during recruitment season. The CEO delivers the vision of the corporation as a manager and provides the vision of a plant engineer to students.

Internship Program | We operate internship programs, through which approximately 90% of the interns eventually join our firm as full-time employees. This figure is much higher than the 60% to 70% ratio of other firms. Our interns experience real work situations, participate in projects, and enhance problem-solving through a systematic 4-week intern program.

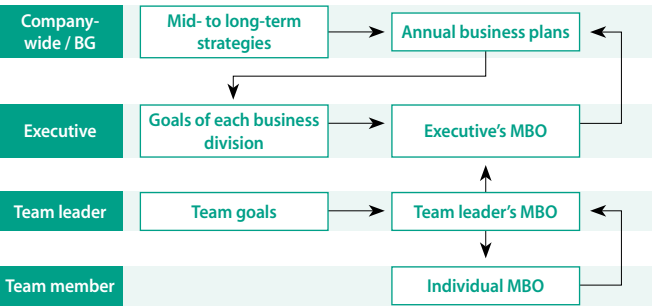
Nurturing Specialists | In June, 2013, Doosan Heavy Industries & Construction signed an agreement with South Gyeongsang Province to hire more graduates from the region. The company contributes to local job creation by networking with the industry, the academy, and the local government for college level employment. In addition, we opened the Doosan Class to nurture talented students from Meister School, Sudo Electric Technical High School, Busan Automotive High School, Changwon Machine Technical High School, and other specialized high schools. The Doosan Class provides technical and practical education. In February 2013, a total of 34 graduates of the Doosan Class received entry-level education on the role of Doosan employees.

Performance Evaluation

Performance Evaluation System

Doosan Heavy Industries & Construction uses the MBO, a performance evaluation system for all employees. The system sets goals, checks on progress at the halfway point, and includes a year-end assessment concerning financial and strategic goals.

❖ Our Performance Management System



At each step, offline one-on-one meetings between an evaluator and an evaluatee are conducted. These meetings include a mid-year review. At yearend, a calibration meeting between the evaluator and his or her senior manager is held to prevent score-based sequencing. Then, a feedback meeting is held for mutual consultation on the findings, and compensation is given based on the performance of each evaluatee.

Competence Evaluation

All employees are evaluated with a balanced formula based on job performance and competency in Doosan Way. This evaluation enables the firm to provide feedback to workers on their individual strengths and discuss what employees need to do for advancement. Based on evaluation results, a development plan is outlined in connection with individual CDP (Career Development Program) and aspirations through one-on-one meetings with mentors. We inspect the execution of these plans every quarter and assess overall achievements at the final evaluation. In our "People Session", we discuss job relocation and promotion based on fair and transparent results.

❖ Domestic Employment Status

(Persons)

Classification	2011	2012	2013
Total employees	8,252	8,715	8,703
Regular employees	6,792	7,270	7,310
Regular office employees	4,537	5,009	5,065
Regular technical employees	2,255	2,261	2,245
Irregular employees	1,460	1,445	1,393

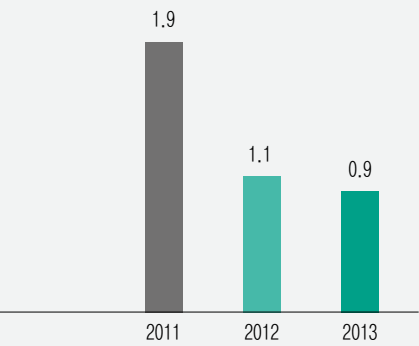
❖ Employees Who Are Social Minorities

(Persons)

Classification	2011	2012	2013
Female	538	554	515
Disabled people	206	199	193
National veterans	185	191	188

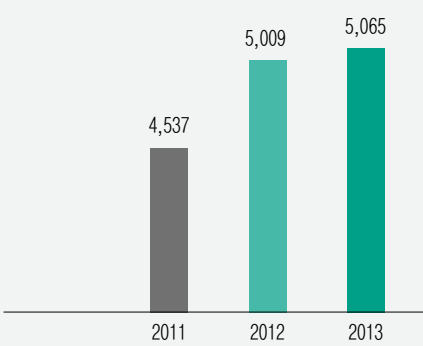
❖ Turnover Rate

(%)



❖ Number of Evaluatees for Performance (As of employees)

(Person)



Respect for Employee Rights

Honoring Global Initiatives for Human Rights

Doosan Heavy Industries & Construction adheres to the Labor Standards Act, International Labor Organization (ILO) policies, the principles of the UN Global Compact (UNGC), and prohibits forced labor and child labor. Additionally, we prohibit any discrimination based on age and gender in recruitment, promotions, wages, and welfare to create a stable working environment. We are planning to build and sustain an integrated company. We will launch company-wide management measures in three sectors – human rights, prohibition of discrimination, and treatment of employee grievances. We have also further expanded the scope of sexual harassment prevention education into gender equality and human rights.

Welfare Benefits

Our employee benefit programs help foster a favorable work environment to ensure work-life balance.

Support for Work-life balance	<ul style="list-style-type: none">• Support for backpacking (Europe / Americas)• 2-week summer vacation and 1-week year-end vacation• Fitness Center
Residential and Financial Support	<ul style="list-style-type: none">• Financial support for housing and life necessities• Consultation service for real estate• Financial support for moving to another workplace
Childcare Support	<ul style="list-style-type: none">• Support for childcare facilities• School expenses for employees’ middle school, high school, and college students
Medical Support	<ul style="list-style-type: none">• Support for operation expenses• Benefits through Chung-ang University Hospital• Medical services through diverse partner hospitals
Family DOO Program	<ul style="list-style-type: none">• Support for employees working at overseas project sites• Invitations to employees’ families to overseas sites where employees work• Family DOO Volunteer Corps

Extension of Retirement Age

Starting in 2014, we increased the retirement age to 60, even before implementation of Korean law amending the retirement age of 60. The retirement age of white collar employees will be extended to 60 from the current 56. In addition, the company will introduce a wage peak system to lessen its wage burden by dividing those subject to the extension of the retirement age into two groups.

Retiree Support System

Retirement Pension Plan I In December 2012, we introduced the retirement pension plan to bolster employee stability after retirement. The plan’s operating budget is KRW 305.1 billion and participants numbered 6,836 in 2013. We introduced both the Defined Benefit Plan and the Defined Contribution Plan and we are abiding by the legal obligatory accumulation ratio. After retirement, employees can receive lump sums or pensions.

Support for Employees Facing Retirement I Doosan Heavy Industries & Construction is planning to introduce support programs for retirees. These programs will provide assistance to prospective retirees through counseling and education on change management. Other support programs include consultation service for reemployment, or startups, and recommendation to other companies.

❖ Maternity Leave

Classification	2011	2012	2013
Number of employees that took maternity leave	18	24	34
Percentage of employees who returned to work after leave (%)	100	100	100
Percentage of employees who were still employed over 12 months after return (%)	73.3	44.4	83.3

❖ Retirement Pension Plan

Classification	2013
Total amount of retirement pension plan (KRW in billions)	305.1
Number of subscribers	6,836

* As of employees who worked more than a year

Co-prosperity between Labor and Management

Vision of Labor-Management Relations

Doosan Heavy Industries & Construction is working toward a future-oriented, labor-management relations based on mutual benefits and cooperation to achieve sustainable performance. Both labor and management should make efforts to procure work-life balance and build a constructive relations. This is our goal as a global company that maintains trust in good faith.

Pursuing Harmony between Labor and Management

Our labor and management exchange frank opinions for effective communication. Doosan Heavy Industries & Construction's union had 2,196 members as of December 2013. The Labor and the management discuss issues and develop solutions for labor rights issues through consultative bodies. In 2013, the company and the labor union made arrangements on wages, working conditions, EHS, tuition support, rewards for longtime employees, employee grievances, and the health of employees through collective bargaining and the Labor-Management Council. In particular, we transferred the HSRG (HRSG) business to Doosan E&C in April 2013 with the purpose of long-term development. At the time, forthright consultation between labor and management ensured no changes in transferred employees' wages, benefits, and working conditions.

Collective Bargaining

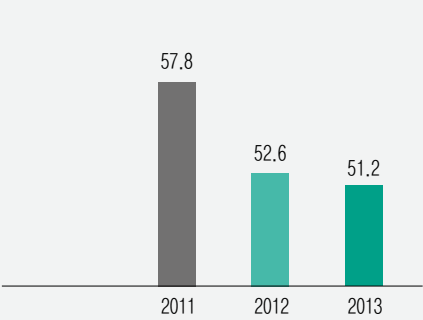
Our labor and management strive to find a compromise based on mutual benefits and growth through collective bargaining. On August 27, 2013, the company and labor union successfully concluded another collective negotiations with no disputes, a feat that has been maintained for eight consecutive years. In the future, we will continue to make efforts to improve the working conditions and enrich our employees' quality of life based on trust between the labor and the management.

Labor-Management Council

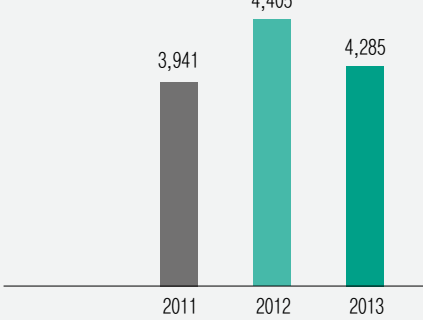
The Labor-Management Council holds regular meetings quarterly and ad hoc meetings to discuss diverse agendas, such as key issues at production sites, improvement of working conditions, resolution of employee grievances, and welfare of employees . Agendas are first discussed at working-level meetings and then brought up to council meetings. The Labor-Management Council is tasked with promoting the interests of both management and labor through cooperation and understanding. In 2013, the Labor-Management Council discussed and improved ten agendas with participation by the labor members and management. The preliminary working-level meetings discussed and handled about 100 items.

❖ Labor-Management Relationship

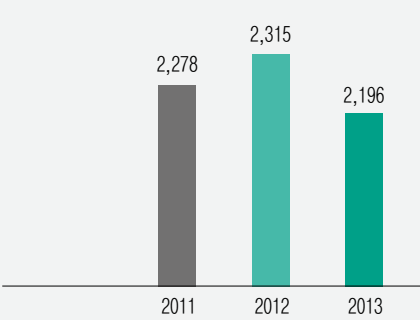
Percentage of unionized workforce (%)



No. of employees covered by the labor union (Persons)



No. of employees joining the labor union (Persons)



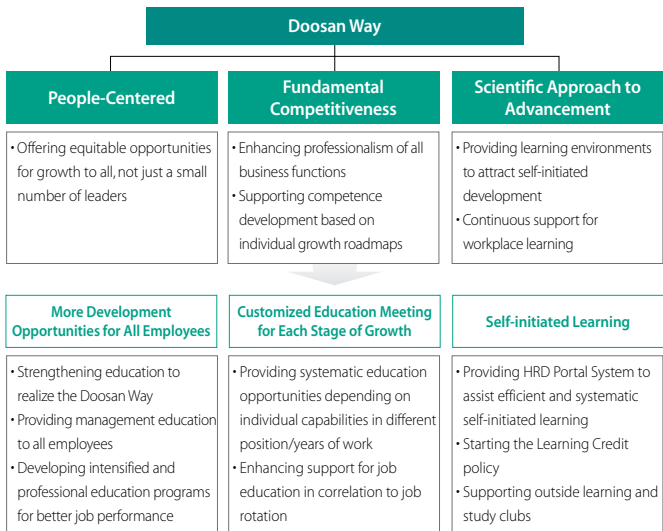
Cultivating Talents

Direction of Cultivating Talents

Doosan Heavy Industries & Construction believes that people are the most valuable asset for its growth and development. Since the beginning of the Doosan Way in 2012, we have realized ‘people’ oriented value in overall corporation and reconstructed HR programs reflecting core values of Doosan Credo. Through these systematic programs, our employees grow into leaders and experts.

HR Development System

To further enhance our employee's talent, we offer equal opportunities for people-centered education and professional development. Our education and development system is a structured, customized training based on personal growth roadmap that strive to generate a balanced workplace learning through the culture of self-initiated learning that Doosan Heavy Industries & Construction embodies and endorses.

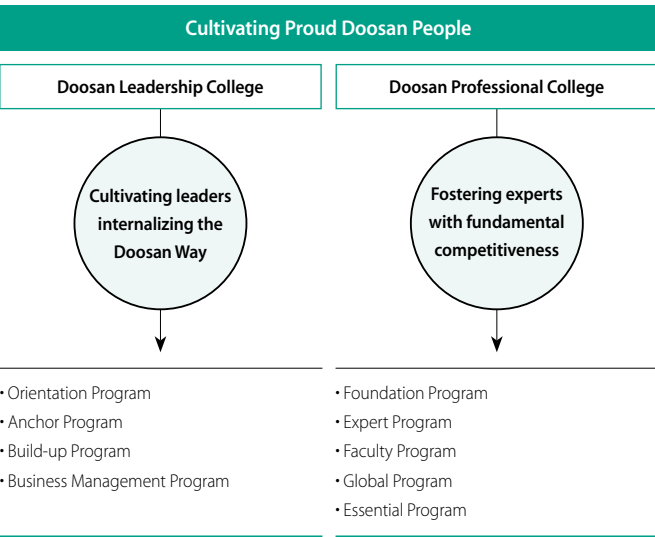


Building an Advanced and Scientific HR Development Infrastructure

Establishment of e-Library | This system allows all employees in domestic and overseas to access electronic books through smartphones, tablet PCs, and other mobile equipments. It provides them with self-improvement opportunities, thereby encouraging the embodiment of self-initiated learning culture. As of 2013, the e-Library contained 9,300 books of 2,700 different types, as well as monthly purchases of approximately 50 new books.

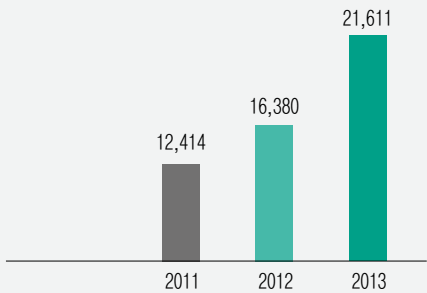
Introducing Paperless Education (Using Tablet PC) | We introduced a paperless education system to build a smart learning environment in which textbooks and learning materials are distributed and shared through tablet PCs. In 2013 we purchased about 200 tablet PCs which are currently being utilized at Seoul Learning Center and Changwon Learning Center.

❖ Education System

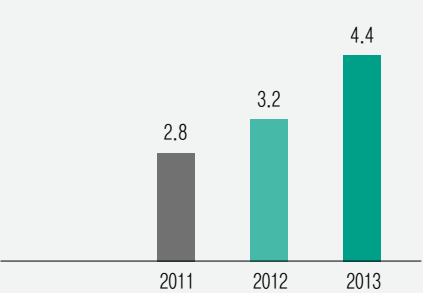


❖ Education for Office Employees

Number of participants
(Persons)






Number of education courses per person
(Programs)



BIG School (Business Intelligence Group School) | The BIG School is an expert fostering program aimed to cultivate managerial employees ranging from managers to general managers with managing mindset and business acumen. We composed the faculty with Korea's best professors and commissioned overall courses to outside institutions specializing in business management education. The BIG school provides differentiated courses for each stage of growth. In 2013, 700 managers completed the BIG School I course, and 437 of deputy general managers and general managers finished the BIG School II course. In 2014, we plan to expand the program to potentially 1,388 employees.

❖ BIG School Education System

	Target	Objective	Expected Effect
 BIG School III Solution Provider	Team Leader	• Developing strategic thinking through case studies and action learning	Strategic decision-making in line with company-wide strategies
 BIG School II Application Performer	Senior Manager ~ General Manager	• Integrating business functions • Enhancing competence for the application of theories	Performance management through understanding business processes
 BIG School I Knowledge Manager	Manager	• Acquiring knowledge of basic business functions	Activation of communication through understanding of business systems

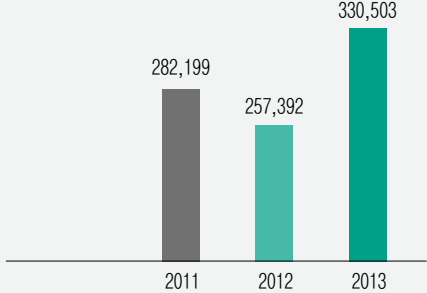
STEPS (Strategic Thinking Enhancement through Problem Solving) | The STEPS program provides training to enhance the ability of strategic thinking, a requirement of the Doosan People's concept. The program offers a 7 STEPS theories for logical problem-solving, and also functions as Doosan People's universal language by applying them on actual business cases. The program further contains differentiated courses that correlate with varying needs for problem solving competency of each growth stage, ranging from the level of new employees to executives. A total of 2,793 employees, or 57% of all office workers, had completed the program through 2013. The percentage will be increased to 75% in 2014.

❖ STEPS Education System

Course	Target	Objective
STEPS Executive	Executive	Enhancing strategic mindset as a business leader
STEPS Advanced	Recommendation by BG (Assistant Manager to Head of Department)	Strengthening problem-solving ability through solving field business issues
STEPS	Manager ~ General Manager	Reinforcing strategic thinking to solve field issues
STEPS Junior	Assistant Manager	Securing competence to solve field issues in accordance with instruction of managers
Problem Solving	New Employee (Doosan Heavy Industries & Construction)	Developing basic competence to solve problems through case studies
STEPS New Joiner	New Employee (Doosan Group)	Understanding of the basic concept of 7 STEPS

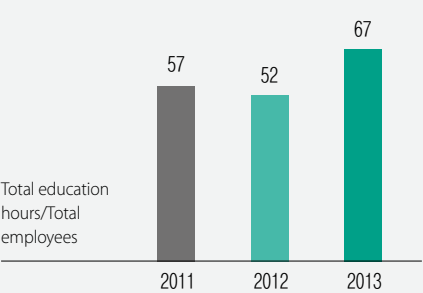
❖ Education Hours for Office Employees

Total education hours
(Hours)



* As of 4,908 office employees, excluding entry-level education

Education hours per person
(Hours)



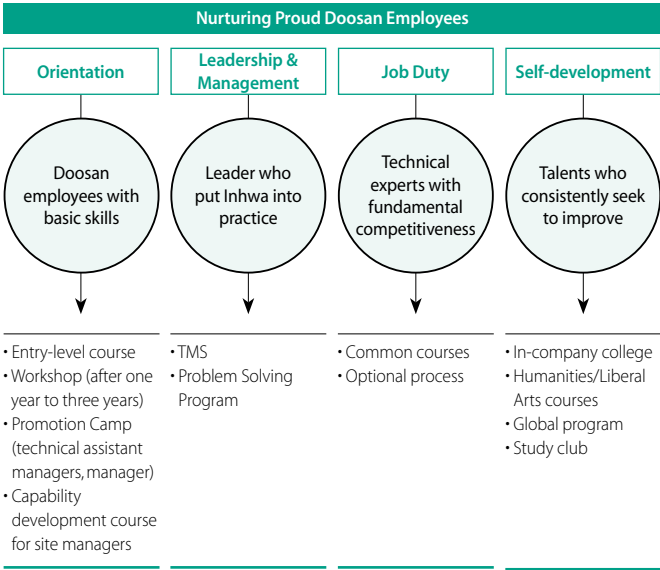
Total education hours/Total employees

Cultivating Technical Employees

Direction of Cultivating Technical Employees

The principle of HR development at Doosan Heavy Industries & Construction is to add Doosan Way and Credo on the basis of securing fundamental competitiveness and advanced and scientific tasks. In October 2011, we created a work environment to satisfy the desire for advancement and maximize competency of technical employees by offering job titles changes and growth path as well as providing a new vision for career development. In addition to providing the opportunities for career advancement, we have created a Two Track program(On-site Management Track and technical specialist track) to assist the employees pursue their new opportunities. Therefore, we provide a new growth path of Two Track (On-site management track and technical specialist track) instead of simply offering an opportunity.

❖ Technical Job Education System



Green Management

Doosan Heavy Industries & Construction is acutely aware of the seriousness of limited resources on Earth. Therefore, we focus on using natural resources as efficiently as possible and reusing and recycling them as well. Pollutants generated from our business activities are collected to the maximum extent and are treated and processed through hazardous waste management facilities. We also pay special attention to the preservation of the ecosystem around our worksites. In this way, with a roadmap for green management, the company endeavor to effectively pursue these multilateral efforts.

❖ Green Management Strategies



Green Culture

- Building green management strategy system
- Enhancing green management organization
 - Establishing green management promotion organization and council
 - Expanding green management professions
- Developing employee education programs
- Developing and promoting employee participation programs



Green Value

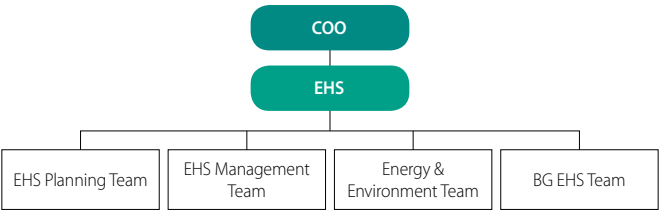
- Defining green products and businesses and reinforcing their management
- Reducing and managing environmental pollutant emissions
- Building response systems to combat climate change and GHG emissions
- Introducing environmental accounting system
- Expanding IT system



Green Communication

- Expanding the publication of sustainability (environmental) report (CSR)
- Building stakeholder's communication channels and response processes to better respond to request of information (DJSI, ESG)
- Expanding global initiative activities
- Developing green social contribution programs
- Introducing green purchasing system

❖ Green Management Organization



Efficient Use and Reuse of Resources

Reuse of Raw Materials

Iron is the most widely used material in heavy industry. Doosan Heavy Industries & Construction seeks to find ways to recycle iron instead of using it only once. As a result, we plan to gradually increase the recycling rate of recovered iron that amounted to 42.1% as of 2013.

Reuse of Water Resources

Water resources are an important element for the global environment as well as for our businesses. Therefore, we save 25,200 tons of water use per year by recycling slag coolants to protect water resources, and also save 180 tons annually by reusing retained rain water for cleaning and landscaping.

Energy Efficiency

Doosan Heavy Industries & Construction optimized its combustion efficiency via using energy shielding for heating and heat treatment furnaces, high-temperature heat recovery, and fuel efficiency automatic control. We saved 478TJ of energy through utilizing a compressed air pressure control, high-efficiency pumps, standby power cut-off systems, and high-voltage inverter technologies. In 2014, we set the target of 5,035TJ in total reduction which is 100TJ lower than that of last year.

Environmental data in this report reflects about 80% of our overall operation from Changwon plant and both domestic and overseas projects.

❖ Use of Water

(Tons)				
Classification		2011	2012	2013
Domestic	Public water	1,470,000	1,400,000	1,550,000
	Underground water	3,748	2,910	3,442
Overseas	Public water	110,000	190,000	250,000

❖ Use of Raw Materials

(Tons)				
Classification		2011	2012	2013
Raw materials		266,016	237,298	140,975
Recycled steel		102,852	93,301	82,876
Steel		233,671	218,185	196,892

* Based on steel plant

❖ Discharged Waste

(Tons)				
Classification		2011	2012	2013
Domestic	Changwon Plant	75,190	68,176	66,025
	Construction Projects	32,909	22,834	62,368
Overseas	Subsidiaries	1,479	2,285	2,103
	Construction Projects	44,612	68,322	74,672

Managing Environmental Pollutants

Reduction of Water Pollution

We built a monitoring system for wastewater sources from the production process to minimize the discharge and the impact of water contaminants. We are also promoting a plan to exclude brine water, a type of water generated from water purification facilities used for hydraulic testing of nuclear power plants, from wastewater by conducting component analysis. With such efforts, we expect to reduce KRW 7 million in treatment cost annually. In 2013, the testing results of 17 water pollutants such as COD, SS, and N-H, showed the amount of water pollutants to be 20% or less than what the legal standard requires.

Waste Recycling

Ultimately, we achieved recycling rate of 77.7% (recycled amount: 51,341 tons/ total emission: 66,025 tons) and saved KRW 1.87 million in a year for processing. In 2014, Doosan Heavy Industries & Construction plans to achieve recycling amount of 52,800 tons or more and a minimum recycling rate of 80% by continuously discovering new recyclable items.

Prevention of Soil Contamination

To comply with the Soil Environment Conservation Law in Korea, we carry out daily and annual environmental inspections. We annually inspect new or closing facilities on soil contamination and conduct thorough inspection and purification of any contaminated soil in accordance with the legal and internal regulations. As a result of soil inspection, the amount of TPH and BTEX in 2013 was 30% or less than the legal standard.

Reduction of Air Pollution

We internally set stricter criteria (40% of legal standard) for air pollution than what is required by the legal standard. The results of self-tests on air pollution showed that air pollution is meeting the EHS guideline of the Doosan Group and the allowed emission standard. Additionally, we are conducting maintenance and repair on 4 dust collectors with insufficient capacity after inspecting 25 of those that are aged 15 years or longer. Our steelmaking factory's electric furnace, and casting factory's molding sand treatment facility, and rust removers are also controlled at a lower emission level than the allowed emission standard by 30%.

Efforts to Reduce Fine Dust I Doosan Heavy Industries & Construction planned 10 investment projects to reduce fine dust and successfully invested KRW 400 million for environmental improvement of junkyards. In 2014, we are scheduled to invest KRW 18.5 billion on the remaining 9 projects and also aim to further invest a total of KRW 25 billion by the end of 2015.

Response to Climate Change

Reduction of GHG Emissions

We set a goal of reducing 4.6% GHG emissions (approximately 403,000 tCO₂) business as usual (BAU) by 2020 to cope with climate change. We reduced 17,968 tCO₂ GHG emissions in 2013 by repairing heating furnaces and heat treatment furnaces and improving their operation, along with introducing high-efficiency equipment. Our reduction target for 2014 is 10,000 tCO₂.

❖ Waste Recycling

(Tons)				
Classification		2011	2012	2013
Domestic	Changwon Plant	58,858	52,802	51,342
	Construction Projects	-	-	-
Overseas	Subsidiaries	451	477	512
	Construction Projects	27,803	35,957	37,482

* Criteria: Allbaro system of Korea Environment Corporation for Domestic data

❖ Wastewater

(Tons)				
Classification		2011	2012	2013
Wastewater		276,145	202,598	128,027
Wastewater Recycling		12,000	8,760	25,380

* Criteria: Changwon plant

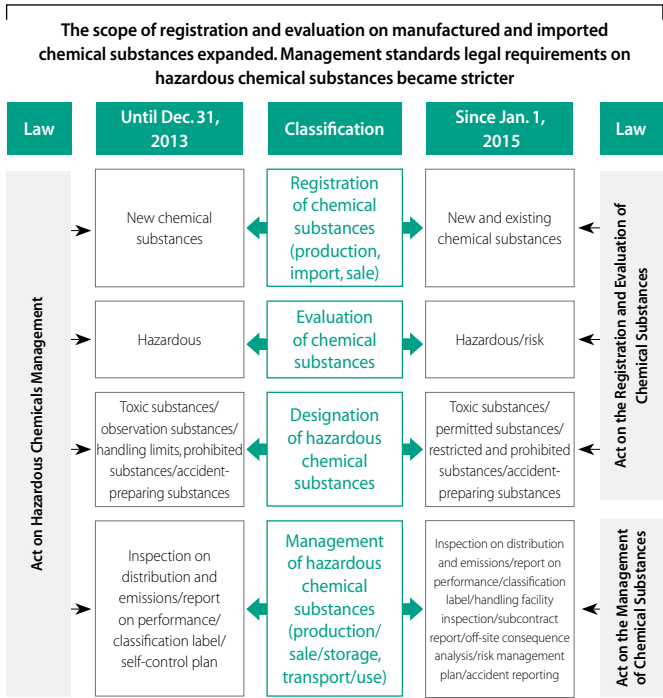
❖ Concentrations Rate of Pollutant Emission

Compared to legal standards (%)				
Classification		2011	2012	2013
Domestic	Dust	20	21	20
	COD	13	17	16
	SS	2	3	3
Overseas	Dust	44	37	38
	COD	47	25	16
	SS	9	16	4

Managing Hazardous Chemical Substances

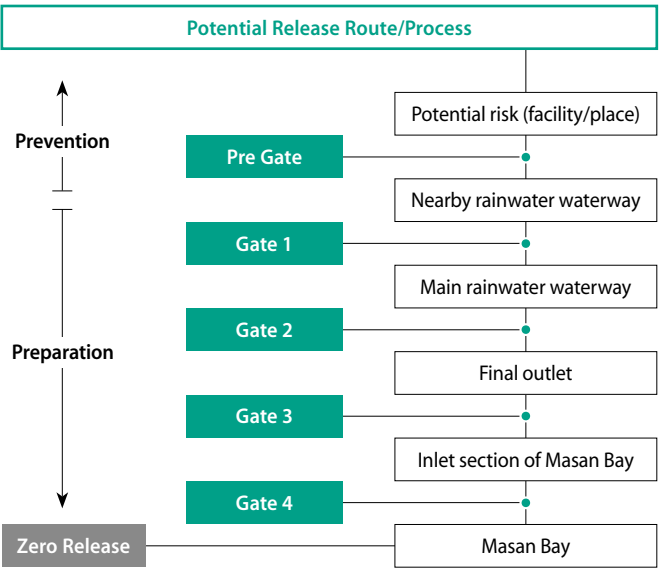
Enhancing Hazardous Chemical Substances Management System

Doosan Heavy Industries & Construction is aware that business operation that creates hazardous influence to our environment violates social responsibility. Accordingly, we manage any potential hazardous chemicals to conduct our social duty. Each BG strives to voluntarily investigate hazardous chemical substances to strictly prevent any spills or accidents. Furthermore, we plan to implement a comprehensive response to the ‘Act on the Registration and Evaluation of Chemical Substances’ and ‘Act on the Management of Chemical Substances’ which will be enforced in 2015.



Reinforcing Spill Accident Prevention System

In preparation for marine pollution accidents, we installed 6 emergency floodgates in our Changwon plant. We installed emulsifying sprayer in major rainwater pathways, triple oil fences, waste collector, and emulsifying sprayer in the final rainwater outlet to provide multiple-layers of protection. We are devising a way to block the whole rainwater way and collect in the event of a leak of hazardous substances.

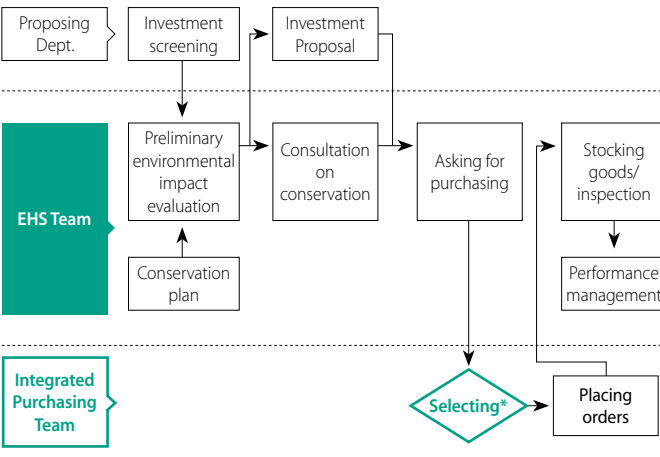


Green Purchasing

Expansion of Green Purchasing

Doosan Heavy Industries & Construction constructed the green purchasing guideline and process to practice green management and fulfill social responsibility in 2011. We are increasing purchase of eco-friendly products after concluding a voluntary agreement with the government. In 2013, our green purchasing amounted to approximately KRW 2.1 billion.

❖ Green Purchase Process



* Eco-friendly products purchased by Doosan Heavy Industries & Construction: Eco-friendly Label Product, Excellent Recycling Label Product, Energy Saving Label Product, Reduced Harmful Substances Product, and Reduced Wastes Product.

Ecosystem Protection Activities

Preservation of Ranunculus Kazusensis

In 2013, Doosan Heavy Industries & Construction discovered ranunculus kazusensis, an endangered wild plant, during the highway construction project in Incheon. We immediately stopped construction and transplanted 600 seeds of ranunculus kazusensis to Cheonripo Arboretum. As a follow-up action, we began monitoring the habitat for the next two years. Moreover, our project sites in Gyeongsangbuk-do and Gangwon-do are regularly monitoring the marine environment of phyllospadix, zostera marina communities, and the seagrasses (Phyllospadix and Zostera marina) that grow wild in the nearby community.

Conservation of Wetland at Masan Bay

Since 2008, Doosan Heavy Industries & Construction has conducted purification of Bongam mud flat at Masan Bay for wetland protection as a part of Environment Day. Our employees remove sprigs and weeds at rainwater dewatering outlets. In 2013, we became a member of the Maritime Rescue & Salvage Association of Korea, and contributed to preserving marine environment along with Gyeongsangnam-do Office, Changwon City Hall, Seongsan-gu Office, Kyungnam University, and other local private organizations. Additionally, about 200 employees collected about 30 tons of wastes from nonpoint pollution source in 2013.



❖ Expenses for Environmental Protection

(KRW in millions)

Classification	2011	2012	2013
Entrusted waste treatment	1,304	1,159	1,033
Waste analysis	4	4	3
Other expenses	9	5	2
Entrusted waste recycling	399	285	291
Profits from waste disposal	1,264	1,186	993

❖ Green Purchases

(KRW in millions)

Classification	2011	2012	2013
Total Purchasing	32,336	31,009	27,800
Purchasing of eco-friendly products	1,394	1,703	2,129

* There were differences between 2012 data and 2013 data due to tightened criteria for eco-friendly products.

❖ Environmental Volunteers

Classification	2011	2012	2013
Number of environmental volunteers (persons)	324	219	190
Environmental volunteer service (hours)	1,219	722	813
Expenses for outside nature conservation (KRW in thousands)	6,000	7,000	7,440

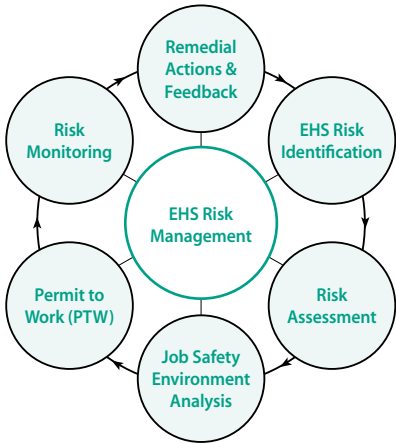
Safety and Health

Doosan Heavy Industries & Construction believes that employees' safety management is the first step towards CSR. All employees understand the importance of people-centered EHS activities. We transformed the EHS System into a people-centered operation system that provides repeated education and training, improving field-oriented safety and health procedures. Therefore, all employees fully understand and voluntarily implement it.

❖ Safety and Health Management Strategies

Securing Global Top Tier Level in EHS Competitiveness through Establishing Global EHS Mindset/System		
<u>Securing People-centered EHS Operation</u>	<u>Securing EHS System Foundation</u>	<u>Securing EHS Response System, and Basic Competitiveness</u>
<div>• Developing EHS training programs</div> <div>• Fostering global EHS staff</div> <div>• Building EHS Training Center</div> <div>• Providing Personal health care</div> <div>• Promoting health improvement activities</div>	<div>• Building global EHS web tools</div> <div>• Building management system to reduce EHS risks</div> <div>• Adapting and promoting EHS management system</div> <div>• Engaging in Preemptive risk management</div>	<div>• Building EHS performance Management and job processes</div> <div>• Setting preemptive EHS management plans</div> <div>• Introducing Safety Leadership Program</div> <div>• Reflecting and managing needs of stakeholders</div> <div>• Responding Preemptively to clients' requirements</div>

❖ EHS Risk Management Process



❖ Training to Enhance EHS Mind

Classification	No. of participants	Remark
Less than 3 years of service	156	5th
20 to 30 years of service	102	4th
Total	258	9th

Safety and Health Management Activities

Reinforcing Safety Management at Worksites

Doosan Heavy Industries & Construction pursues to intensify safety education and management for employees' self-improvement on unsafe behavior and to achieve the 2013 target accident rate of 0.14. As a result, we first fortified employees' EHS mindset through continuous safety education, such as EMS mindset improvement training. Then, we sought to prevent accidents related to equipment failure or usage by performing diligent inspection and maintaining quality assurance on Harmful and Dangerous Machines and Tools. Lastly, we recorded an innovative result of accident rate, 0.06 (50% lower than actual target) by conducting on-site patrol including executives' MSLT, publishing on-site council safety guide, and observing workers' unsafe behavior.

EHS Mindset Training for Improving Unsafe Behavior

Our safety education program, known as EHS programs, includes Gimhae Experiencing Course for new employees' mindset and Regular Safety & Health Course for field and office workers. After conducting and reviewing the analysis on accidents that occurred in the last 5 years, we were able to discover that most of the accidents transpired among employees who worked either less than 3 years or between 20 to 30 years, stemming primarily from unsafe behaviors. Consequently, we provided EHS Mindset Education to 258 employees within the highest at-risk group in order to prevent future accidents and to secure EHS Mindset among the employees. After the EHS Mindset Education, the accident rate of these at-risk workers decreased, illustrating the effectiveness of our safety training program. Furthermore, we conducted employees' regular safety education once a month for a total of 87,228 hours. Meanwhile, we provided specialized education for workers of heavy materials and drivers of excavators 12 times a year. Moreover, we shared safety guidelines and actual accident cases with 487 of high risk workers to emphasize the importance of adhering to the safety guidelines and adopting EHS Mindset.

❖ Safety and Health Training for Overseas Construction Projects

Classification	2011	2012	2013
Number of personnel who completed basic training (persons)	14,755	35,599	31,999
Number of personnel who completed special training* (persons)	2,261	15,835	26,003
Total number of personnel who completed Safety training (persons)	17,016	51,434	58,002
Hours of Basic training (hours)	33,255	73,696	63,998
Hours of Special training (hours)	3,392	21,165	31,979
Total Hours of Safety training (hours)	36,647	94,861	95,977

* Special training: Training to prevent accidents in work on scaffolds, machine and tool safety, work at high, confined space Entry and hot work.

Work Equipment Hazard Control to Reduce Risk

Our manufacturing division, Changwon Factory, contains a total of 690 dangerous equipment including cranes. Consequently, we have performed meticulous and lawful inspections twice a year in order to prevent safety accidents and secure the adequacy of the equipments. The legal standard enforces 2 adequate inspections after the first safety assurance; however, Doosan Heavy Industries & Construction performs additional safety inspections twice a year, thereby immensely decreasing accidents resulting from dangerous equipment. In April 2012, our Changwon Factory became the first company in Changwon to be selected as the outstanding workplace for voluntary inspection and received a recognition plate from Korea Occupational Safety & Health Agency.

Workplace Inspection for Vulnerable Periods

Our accident analysis indicated that high risk incidents occur frequently during the vulnerable time period(night and holiday) for high-risk works. As such,we established safety operations, Permit to Work and high-risk operational director's initiative process to minimize the frequency of these accidents. In addition, the EHS inspections were implemented 46 times during vacation seasons, holiday seasons, nighttime, and typhoon seasons.

Improve Workplace-Customized Written Safety Procedures

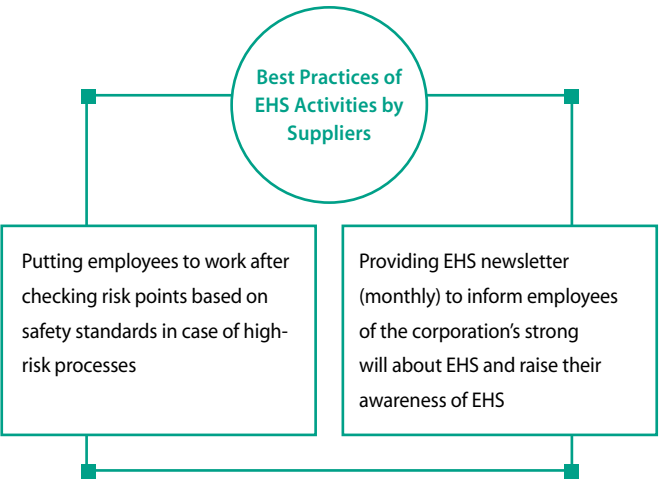
Doosan Heavy Industries & Construction amended the written safety procedures to reflect voices of on-site workers so that any field worker can easily understand and adapt the procedures into daily operation. To further assist with our employees in understanding the safety procedures, we combined a total of 37 documents detailing inspection and management procedure for tools into 30 documents, creating a more concise manual for the employees.

❖ Regular Safety and Health Training for Manufacturing Business in 2013

Classification	Participants	Training Hours
Technical workers	2,390	57,360
Non-technical workers	2,489	29,868
Total	4,879	87,228

Supporting EHS Activities of Suppliers

To bolster the EHS activities of 47 suppliers in the manufacturing division, Doosan Heavy Industries & Construction conducts evaluation on their EHS activities twice a year by providing them with EHS management plan. In the first half of the year, each BG's EHS team advised the suppliers on EHS details, while in the second half, the team performed field evaluation on appropriateness and implementation status of internal BG specific plans. Especially in 2013, we strived to continuously enhance EHS activities of our suppliers by confirming workers' awareness on EHS activities through interviews with field workers and by reflecting them on the evaluation results.



❖ Voluntary Equipment Inspection Program

(Cases)

Classification	2011	2012	2013	Remark
Inspection Performed	578	673	690	Twice a year (first and second half)
Improved Actions	172	163	148	
Disqualification	0	0	0	

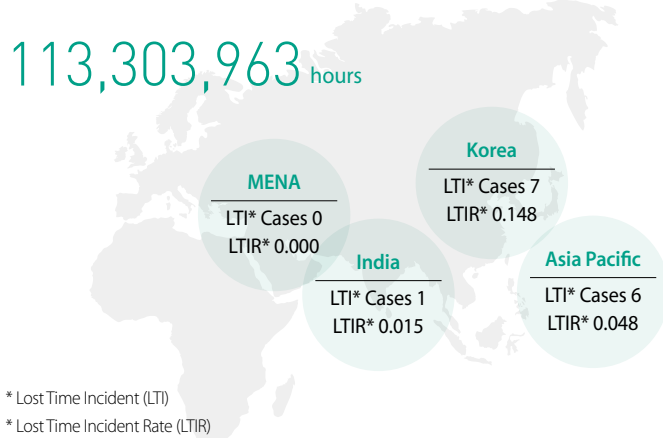
Best Practices in Safety Culture

We were recognized for our world-class standards in the areas of environment, safety, and health when hosted by our client at the Mong Duong 2 Project in Vietnam. Accordingly, we were rewarded with a 2013 Golden Hard Hat for Best Safety Culture Project from the project owner, AES. The award served as recognition of our contribution to the environment, safety, and health.

World's Top Class in Zero Accident Workplace

In 2013, our Rabigh project in Saudi Arabia recorded 20 million hours of zero accident. This is a significant achievement that resulted from collaboration of our employees and multinational workers. The zero accident hours accumulated to 40 million as of 2014 and is recorded as officially the longest for Doosan Heavy Industries & Construction. This remarkable performance is one of many evidence of our world class competitiveness and corporate values centered on people.

❖ Total of exposed working hours on construction projects and incident rate by region



Assessment of Self-discovering Risk

Risk assessment is an approved risk management method to discover and eliminate hazards by quantitatively evaluating them and establishing and executing improvement plan. In order to increase our risk assessment's usage in field, we introduced 4M (Man, Machine, Media, Management) for worker's convenience, prevented omitted process through systematic classification, and supported updating and managing results in EHS web-based tool for ease of use, thereby enabling risk assessment's improvement, management, and supplement continuously.

In order for a successful settlement to take place, we support and sustain the effort of executing risk analysis and establishing a system and we also track the progress every two weeks through Task Force (T/F) Team. Also, we provide 4 courses of education to 259 supervisors who lead the field practice of all factories. Then, the directors who completed the courses educate their workers, thereby conducting and utilizing 4M risk assessment on most, if not all, operations at our sites.

Supporting Supplier's Risk Assessment

As a part of its Safety and Health Cooperative Program, Doosan Heavy Industries & Construction provided 52 suppliers with risk assessment training. Then, we held 2013 Presentation of Risk Assessment Best Practices in order to identify the best practices and to invigorate risk assessment. In September 2013, we granted certificates to 16 suppliers including Shingwang Mold in appreciation of shared growth and promotion of Safety and Health Cooperative Program with Doosan Heavy Industries & Construction.

Managing Risk from the Bidding Stage

Doosan Heavy Industries & Construction conducts its unique EHS system on each process before, during, and after the project. We plan to intensify our system and upgrade core management factors to global EHS level through PDCA Cycle and regular monitoring.

Setting EHS Policy and Golden Safety Rules

EHS Policy, which represents CEO's EHS philosophy to the public, is the basis for all EHS activities. Following the announcement of Doosan Group's EHS Policy, Doosan Heavy Industries & Construction also announced its newly revised EHS Policy in 2013.

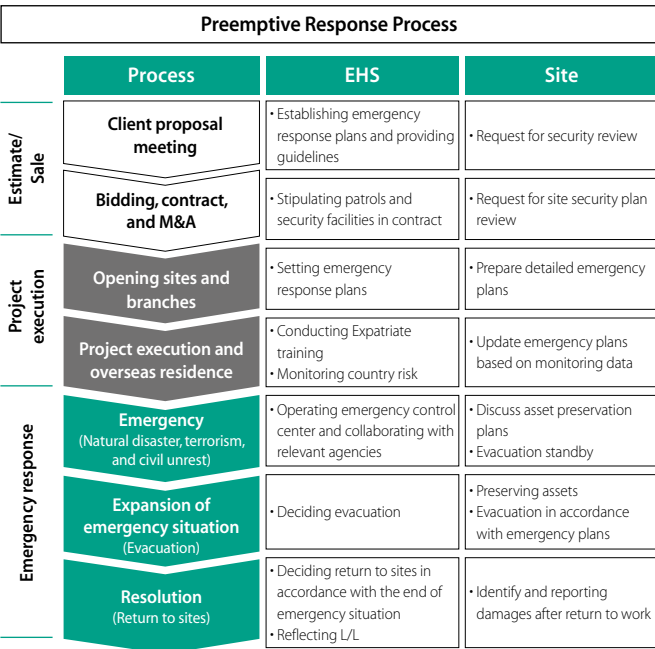
We enacted and publicized Golden Safety Rules, which is the most fundamental safety rule, in order to prevent any incidents.



Ensuring Security of Overseas Employees

Security issues threatening employees of both Doosan Heavy Industries & Construction and its suppliers are constantly happening on various regions in the world. Therefore, we have been applying security plan on the overseas project from the start and also operate evacuation plan in all construction sites and branches overseas in case of emergency.

❖ Integrated Security Management Process



We monitor emergency situations, such as terrorism, abduction, and natural disasters everyday and regularly communicate with relevant project sites to proactively respond to any emergency.

❖ Number of Incidents

Classification	2011	2012	2013
Number of incidents	16	18	14

* Based on Changwon plant, domestic and overseas projects, and suppliers

❖ Incident Rate

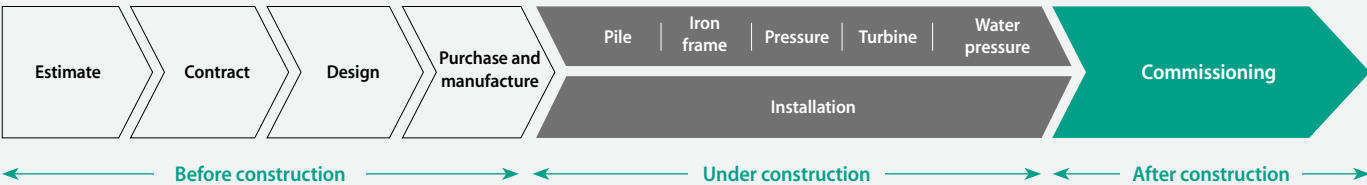
Classification	2011	2012	2013
Changwon plant	0.17	0.20	0.06
Domestic construction sites	0.09	0.19	0.22
Overseas construction sites	0.01	0.01	0.01
Suppliers	0.14	0.06	0.13

❖ Zero Accident Hours of Construction Projects in 2013

Project Site	Zero Accident Hours
Rabigh PP2, Saudi Arabia	20,042,069
Ras Al Khair, Saudi Arabia	16,023,378
Noibai-Laocai Expressway, Vietnam	7,508,390
Yongin Administration Town, Korea	2,820,000
Main facilities for Singori Nuclear Power Plants (#3 and #4), Korea	2,730,000
Residential and commercial complex in Heungin-dong, Korea	1,000,000

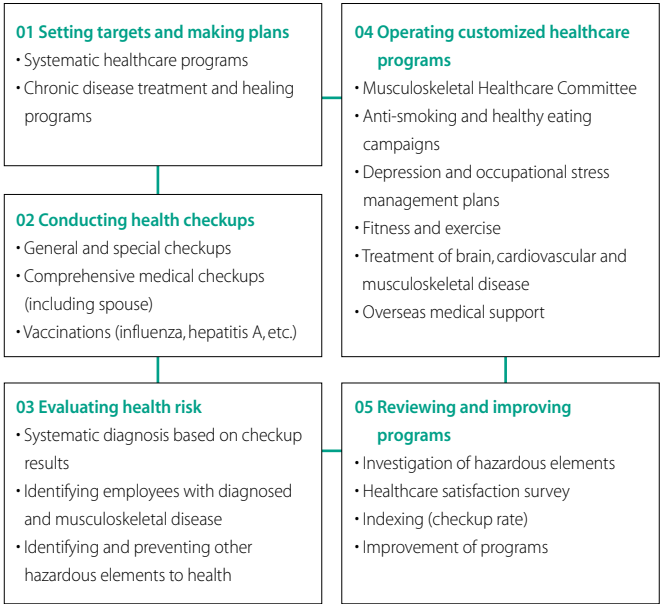
❖ Risk Analysis by Phase

① Requirements for EHS at bidding	⑤ Budget for EHS	⑨ EHS training for workers	⑬ Self-assessment and audit	⑰ Follow-up evaluation of suppliers
② Doosan EHS standards	⑥ Pre-inspection on suppliers	⑩ High-risk work management	⑭ Incentive and penalty	⑱ Lessons learned
③ EHS management plan	⑦ EHS organization and workforce management	⑪ Work permit	⑮ Performance review and report	⑲ Project evaluation
④ Understanding of clients and local laws	⑧ Training for EHS technicians	⑫ Site inspection and monitoring	⑯ Support on high-risk sites	



Doosan Heavy Industries & Construction operates self-care support and management systems for employees. We provide care programs for chronic diseases, such as neuro and cardiovascular disease and musculoskeletal disease through clinics. In addition, we not only created sports welfare centers (gym, swimming pool, etc.) and hiking trails for health promotion in daily life, but also conduct health inspections on employees.

❖ Health Management



Health Care Program

Operating In-house Clinic Center

Our in-house clinic consists of 2 medical specialists, 3 nurses, 2 physical therapists, and 1 exercise therapist to prevent, cure, and promote health conditions of employees, suppliers' employees, and outside clients. We divided sections into doctor's office, pharmacy, recovery room, physiotherapy room, and health promotion center in order to treat personnel with chronic diseases and evaluate muscular ability and flexibility of rehabilitants of industrial accidents. Moreover, our specialists provide education on preventing neuro and cardiovascular disease by visiting each business group.

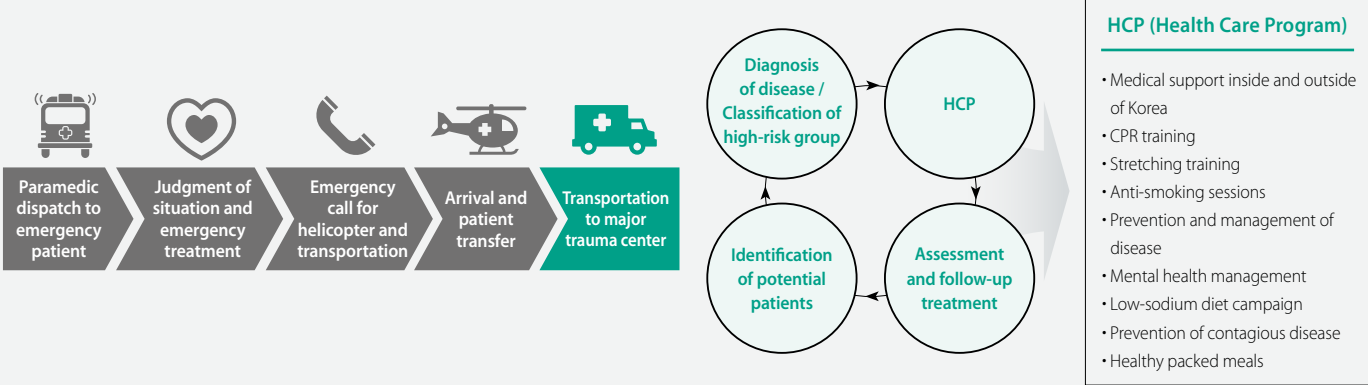
Establishing First Aid System

Doosan Heavy Industries & Construction constructed an emergency system for professional first aid during the golden time (30 minutes) and for patient transportation to university hospitals. Since 2009, we also have conducted regular first aid (CPR: cardiopulmonary resuscitation) trainings to all the employees of our corporation and suppliers.

Operating Health Promotion Center

We operate health promotion center and support surgery expense, comprehensive medical test, and free vaccination in order to manage and treat employees' illness, along with 10% reduction target of neuro and cardiovascular disease among our employees. Also, we systematically run Health Care Program (HCP) to prevent and manage other common diseases.

❖ First Aid Process



Health Care for Overseas Employees

Management of Overseas Employees

Doosan Heavy Industries & Construction strives to provide healthcare for overseas employees in various ways. Therefore, we categorized circumstances into 'before departure', 'during the stay,' and 'emergency outbreak' to systematically manage them.

Facility Management

When opening a new overseas branch, Doosan Heavy Industries & Construction installs a new medical clinic in accordance with the site health review by specialized institution and commissions a professional catering service to provide meals to overseas employees. We not only control hygienic conditions with specialized company, but also conduct water inspections.

Supports for Overseas Worksites

In 2013, we sent medical teams to project sites in Raipur, India, the Ain Sokhna project in Egypt, and the Mong Duong 2 and Noibai-Laocai production sites in Vietnam for the employees' health care. In addition, we regularly inspect hygiene status of cafeterias and lodging facilities at overseas sites.

Hygiene Management

Management of Hygiene at Cafeteria

Doosan Heavy Industries & Construction commissions professional hygiene companies for hygiene inspection (legal documentation, cafeteria personnel, kitchens, etc.) to strictly manage cafeterias, thereby preventing food poisoning or related issues.

Operation of Integrated Pest Control System

We self-inspected and analyzed the colonization of hazardous animals and insects based on the result of pest control in 2012. In Changwon factory, we created integrated pest control system and installed insect light traps not only to exterminate harmful insects around the facility, but also to prevent contagious diseases.

Health Promotion for Supplier's Employees

To enhance employees' health of suppliers, we encourage them to participate in the health promotion program. In 2013, we provided healthcare services of U-healthcare system to the personnel with medical conditions.

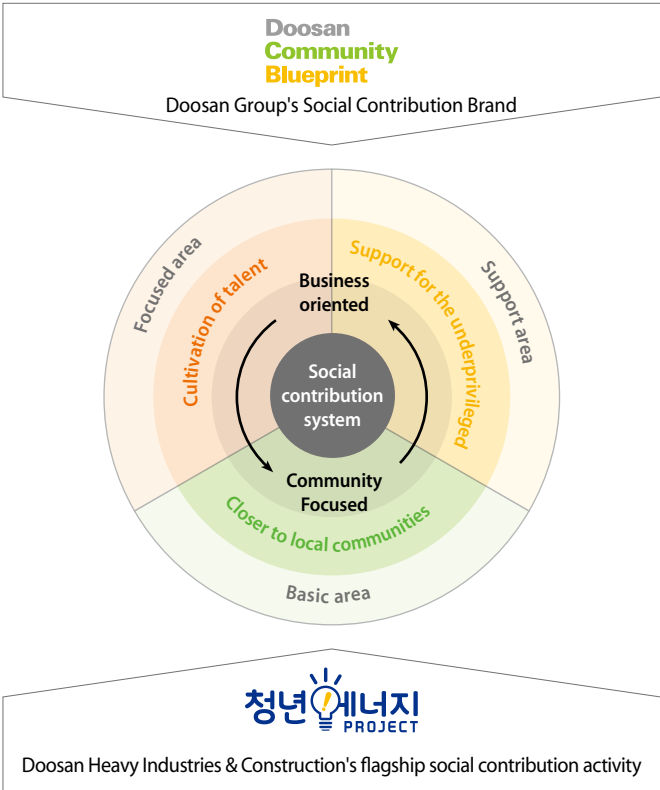
U-Health service for employees	Employees can measure their conditions with an in-body analyzer, blood pressure meter, and blood sugar tester, and then send the results for overall health management.
Service methods	Phone consultation service (exercise and nutrition), SMS, e-mail (healthcare encouragement, health information), blood test (metabolic syndromes), and use of U-health equipment



Social Contribution

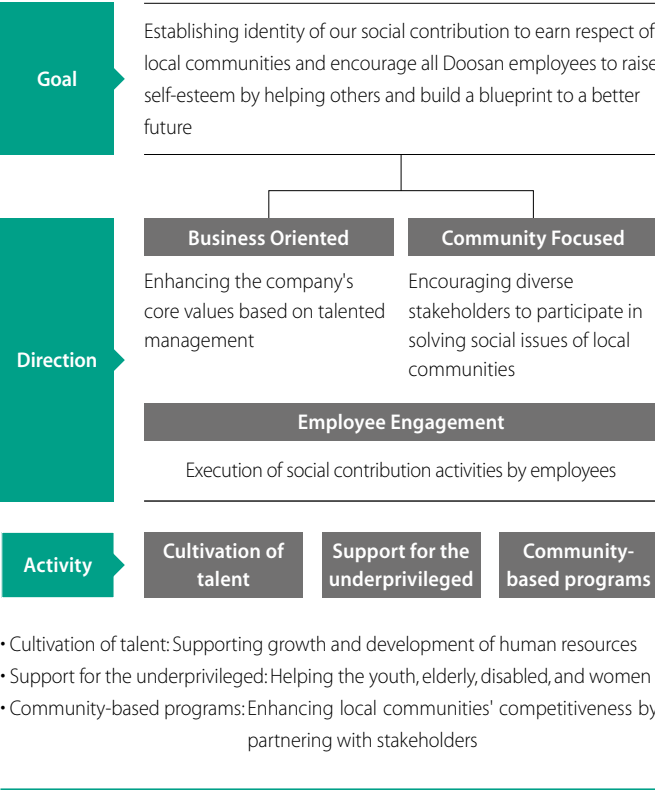
In 2013, Doosan Heavy Industries & Construction established a strategic system of its social contribution based on the mission of each community and corporate value enhancement. Accordingly, we also operate 'Cultivating Talents,' 'Supporting Neglected Class,' and 'Close Relation to Locals' programs in accordance with 3 corporate principles of 'Business Oriented,' 'Community Focused,' and 'Employee Engagement'.

❖ Social Contribution Strategy



Direction of Our Social Contribution Activities

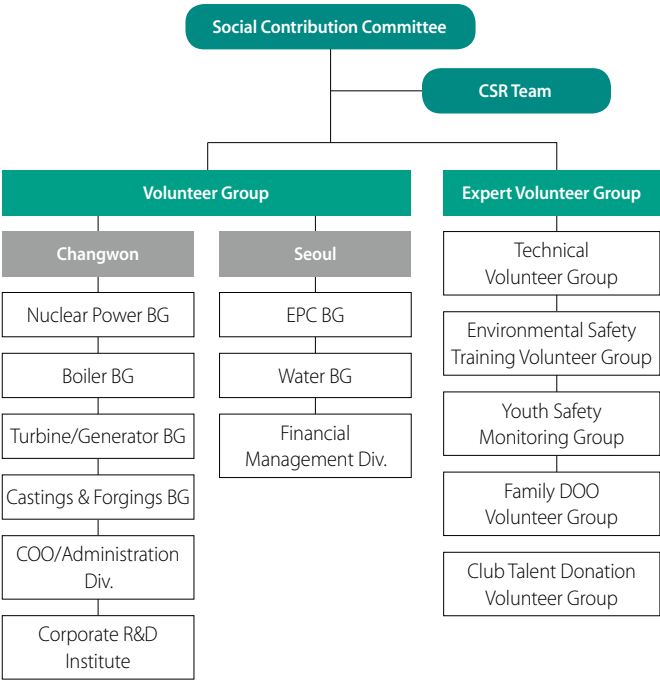
To help local communities enhance their competitiveness and increase corporate value, Doosan Heavy Industries & Construction encourages its employees to volunteer in programs to find fundamental solutions to social issues. We are also proactive in supporting the underprivileged and implementing community-based voluntary services.



Volunteer Group

As of December 2013, 91% of Doosan Heavy Industries & Construction employees were members of company volunteer groups. These groups have been carrying out regular volunteer services in Changwon and Seoul to help the underprivileged. To fulfill our social responsibility as a corporate citizen, we promote employee involvement in volunteer services by offering various incentives, including remuneration, grants, and awards.

❖ Volunteer Group Organization



Boosting Social Contribution

Weekday Volunteer Services

The volunteer group at the Seoul office has implemented volunteer services even on weekdays. The volunteer group at the head office in Changwon plans to conduct weekday volunteer service among technical employees. This will help all employees participate regardless of the corporate hierarchy.

Incentives for Activating Volunteer Services

Incentives are provided to encourage employees to take part in volunteer services. Those include a mileage system, volunteer service recognition, awards to individuals and groups, and plaques. Recruitment of new volunteers is also encouraged.

Domestic Social Contribution Activities

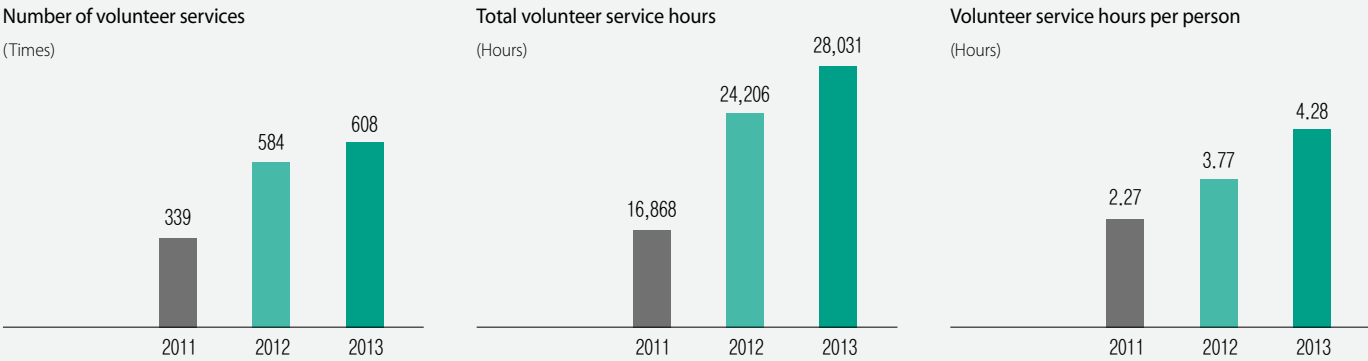
Human Resources Development

We set up a sisterhood with Changwon Science High School, and we operate the Doosan Class to cultivate talented students in 2 meister high school, one specialized vocational high school and 4 technical colleges. We host a Job Film Festival to help the youth decide on their career paths. These activities uphold our corporate philosophy of human resource development and social contribution.

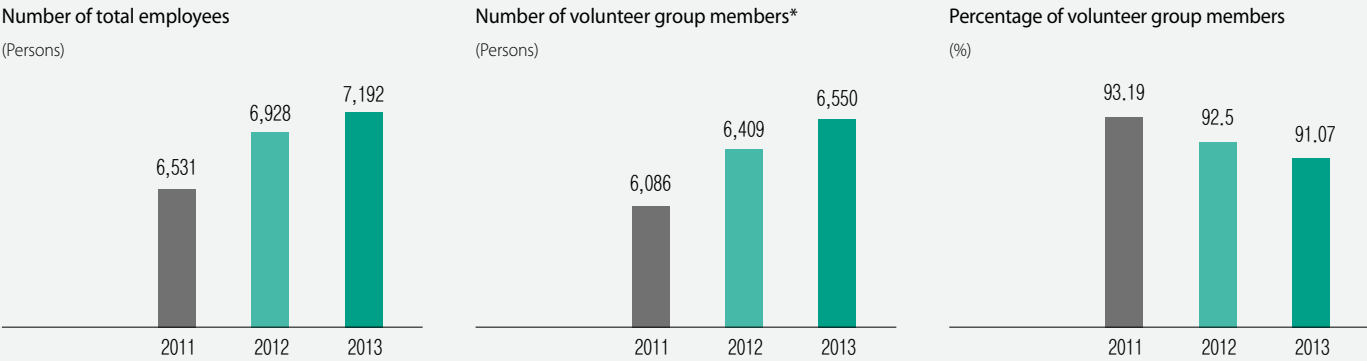
Support for the Neglected Class

We provide financial aid to 77 child welfare facilities to aid them with operating childcare programs. In addition, our employees participate in diverse programs to promote development of more than 1,300 children and teenagers every month.

❖ Performance in Volunteer Service



❖ Status of Volunteer Group



* Number of volunteer group members: The number of employees able to participate in volunteer services, except for employees working abroad.

Community-based Programs

We carry out activities to support rural farming villages, such as buying their agricultural products. We invite them to our company through sisterhood ties with 7 farming villages in the Gyeongnam region, including Misan village in Haman. Other activities include the Doosan Family Culture Festival and the Doosan Family Concert, with active participation of local suppliers. We also are involved with child welfare centers and multicultural families.

Global Social Contribution

Medical Support in Vietnam

In July 2013, Doosan Vina, a local subsidiary in Vietnam, and Chung-Ang University Hospital, carried out joint medical volunteer services. Throughout 2013, some 2,500 underprivileged people in Quang Nam Province and Quang Ngai Province received health exams and treatments. Surgeries were performed on 12 children with cleft lips and 2 children with cardio disease. Since 2009 when we started voluntary medical service, more than 8,000 Vietnamese received treatment and 74 children underwent surgery for cleft lips and palates for no charge.

Talent Donation to Vietnamese National Archery Team

Doosan Heavy Industries & Construction and Doosan Vina signed an agreement with the Shooting Federation of Vietnam in November 2013. Since then, we have provided Vietnam's national archery team with shooting instruction, tool maintenance know-how, and skill building programs.

Beyond Summer Camp

We, along with Chung-Ang University, co-hosted the Beyond Summer Camp for Vietnamese college students and high school teenagers. A total of 40 students participated in programs at this camp. The camp included lectures,

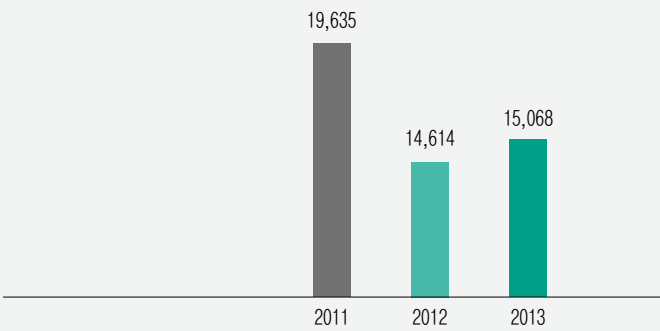
photo opportunities, fashion viewings, a chance to watch Korean professional baseball games, a Nanta performance, K-pop dance performance, and trips to water parks and the Haeundae region.

❖ Major Social Contribution Activities

Human resources development
<div><div><div>• Sisterhood ties with Changwon Science High School</div><div>• Doosan academic-industrial collaboration training program for vocational high school and college students.</div><div>• Job Film Festival to help adolescents plan their future</div></div><div><div>• Doosan Science Day</div><div>• Donation of school uniforms</div><div>• Donation of school textbooks</div><div>• Scholarships and educational grants</div><div>• Vocational training for job seekers</div></div></div>
Support for the socially marginalized
<div><div><div>• Donations to 77 children's welfare facilities</div><div>• Cultural theme programs for children in community care centers</div><div>• Dream-high (Kum-Kum-Dda) orchestra</div><div>• 'Dasarang Dream' program with the Korea Red Cross</div><div>• Kimchi sharing Event</div></div><div><div>• Clean residences of underprivileged</div><div>• Watching baseball games and operating youth soccer clubs</div><div>• Charitable programs connecting 15 social welfare facilities</div></div></div>
Community-based Programs
<div><div><div>• Doosan family cultural festival/concerts</div><div>• Renewal of the Changwon Science Museum</div><div>• One-company, Seven-villages sisterhood ties</div></div><div><div>• Clean water initiatives at Masan Bay</div><div>• Campaign to protect youth from hazardous environments</div><div>• Blood donation campaign</div></div></div>
Global social contribution
<div><div><div>• Medical support in Vietnam</div><div>• Support for Vietnam Q-Health program</div></div><div><div>• Talent donation to Vietnamese National Archery Team</div><div>• School Day event in India</div></div></div>


❖ Social contribution expenses

(KRW in millions)



Our Flagship Social Contribution

The Youth Energy Project is our flagship social contribution. It provides youth with customized charity programs meeting their needs. It is based on our corporate philosophy that is centered on people.

	
Primary school students	<div><div>• Support for culture, experience, emotional health, and independence centered on local children's welfare centers</div><div>• Educational grants for low-income families</div><div>• Donation of school textbooks</div><div>• Dream-high(Kumkum-Dda) orchestra</div></div>
Middle school students	<div><div>• Job Film Festival to help adolescents plan their future</div><div>• Scholarships for students from low income families</div><div>• Educational grants for low-income families</div><div>• Donation of school textbooks</div><div>• Donation of school uniforms</div></div>
High school students	<div><div>• Support programs for science high schools</div><div>• Operation of 'Doosan Class' in meister/vocational high schools</div><div>• Scholarships to students from low income families</div></div>
University students	<div><div>• Academic-Industrial collaboration (Doosan Class in vocational colleges)</div><div>• Technology study contest and visits to advanced foreign countries</div></div>
The Youth	<div><div>• Vocational training and employment support for job seekers</div></div>

Cultural Theme Programs for Local Childcare Centers

We provide 7 cultural theme programs to about 1,300 children at 58 community childcare centers in Changwon. These programs feature history, ecology, society & science, city tour, traditional play & arts, handcrafts, and nature. The programs help marginalized children develop socially and encourage team work and emotional growth.

❖ Cultural Theme Program: Outdoor Activities on Saturday

History	Building knowledge and social skills by visiting historical sites
Ecology	Learning to have an open mind and developing self-reliance by exploring nature
Society & Science	Experiencing and studying society and science to develop ability and knowledge
Changwon City Tour	Understanding nature, ecology, culture, and arts in local areas
Traditional Play & Arts	Building artistic ability via traditional art activities
Handcrafts	Developing creativity, aptitude, and interest through artistic activities
Experiencing Nature	Displaying creativity by exploring natural objects



Customer Satisfaction

To fulfill customer satisfaction, Doosan Heavy Industries & Construction reflects systematic management strategies driven by the Doosan way in its business practice. We offer our clients with 'superior value' than the competitors to build lasting relationships. We believe customer satisfaction is essential to compete in a fierce marketplace and evolve into a leader in every business sector.

Customer Satisfaction Initiatives

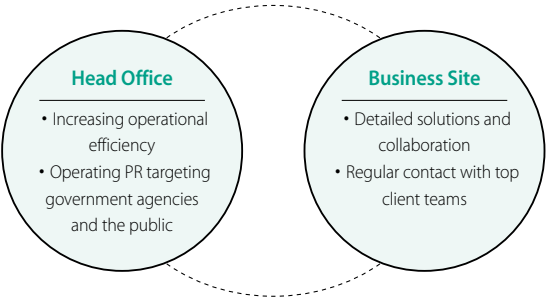
Strengthening NPS Assessment and Evaluation

We upgraded our Net Promoter Score (NPS) measure in the DCSI (Doosan Customer Satisfaction Index) to add efficacy to our assessment data. The DCSI is an assessment program designed to showcase outcome-based data on supply and operation of our new facilities. We draw action plans by maintaining our evaluation's continuity and consistency and connect them to our after marketing.

Enhancing Customer Approach

We established a unique networking system that integrates the characteristics of our customers' headquarters, their operation sites, and the function of each department to further meet our customers' needs.

❖ Customer Satisfaction Network



Resolving Imbalance of Information

We are committed to sharing information on our technologies and operation methods with our customers in order to solve the imbalance of information and build a relationship with them. To this end, we have unified channels to listen to their voices and jointly held regular seminars and workshops.

Promoting Operational Risk Prevention Mechanism

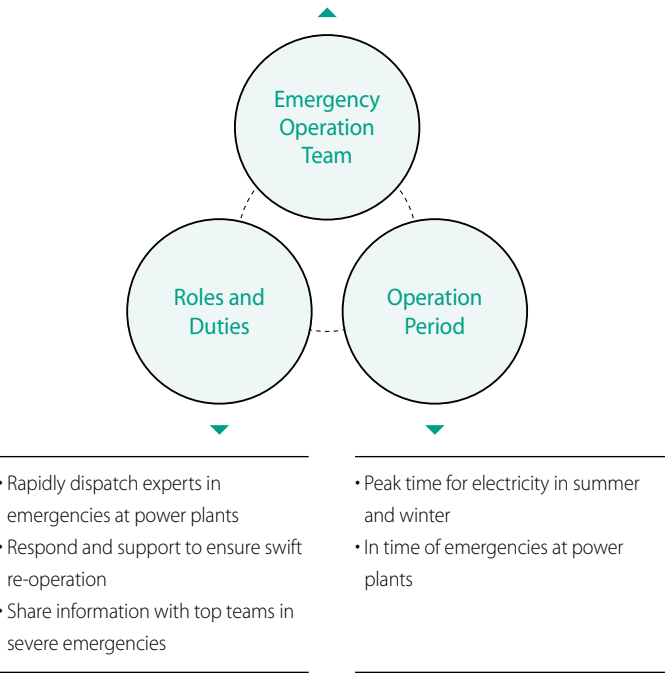
To prevent incidents from deteriorated power generation facilities, we preemptively diagnose customer facilities. These activities allow customers to have ready response in emergency situations.

Partnerships for Smart Saving Technology

We built a cooperative and co-existing partnership with power generation firms by expanding agreements on technical and operational support. We also attract their engagement in our R&D of service business including efficiency improvement and capacity expansion of power facilities and in national projects.

❖ Services to Increase Customer Satisfaction

- Entrust CS executives under the CEO with comprehensive matters
- Streamline customer contact channels centered on customer support
- Operate exclusive management by each power company with round-the-clock emergency response



We dispatch emergency teams to power plants during peak seasons of electricity use in summer and winter months, or in other emergency situations to normalize operation of power plants as soon as possible. This contributes to a stable supply of electricity that meets customer needs.

Technology Support Center for Power Companies

Feedback on customer requirements regarding technical or general matters is reviewed and applied swiftly to ensure reliability and to uphold our corporate image.

Expanding Customer Satisfaction Survey

Along with the general customer satisfaction survey done every 3 years, we perform customer interviews. We regularly analyze customer needs, thereby satisfying customer satisfaction.

Achievements in Customer Satisfaction

Deducing Subjects Reflecting Customer Requirements

We analyzed VOCs of customers through a survey and interviews in 2013. Most customers responded very positively to our rapid support system. This emphasized the necessity of transparently selecting and managing suppliers, and securing fundamental competitiveness in engineering and technology. Furthermore, to cope with customers needing after service, the company is implementing 14 improvement plans.

Activating After Marketing Activities

In 2013, there was an accident at the 3rd power plant in Dangjin. It was caused by vibration and an inflow of saline water that resulted in damage. We investigated the problem and found the cause. Since then, we have laid a foundation for aftermarket service linked to warranty and maintenance work.

❖ Number of Processing Days to Client Inquiry

(Days)

Classification	2012	2013
Number of processing days	12.9	12.0

❖ Target for year 2014

Number of processing days: 7 days

❖ Customer Satisfaction

(%)

Classification	2007	2010	2013
Customer satisfaction level	63.4	78.5	77.1

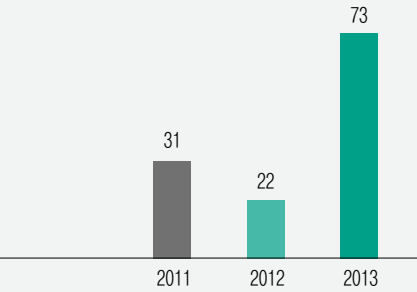
❖ Technical Support to Customers

(Cases)

Classification	2011	2012	2013
Rapid after services to sites	12	72	658
Urgent technical advice	126	107	181
Technical advice	10	16	67
Management visits to sites	8	62	75

❖ Distributing and Sharing Information

Visits for technical advices and seminars for training
(Cases)

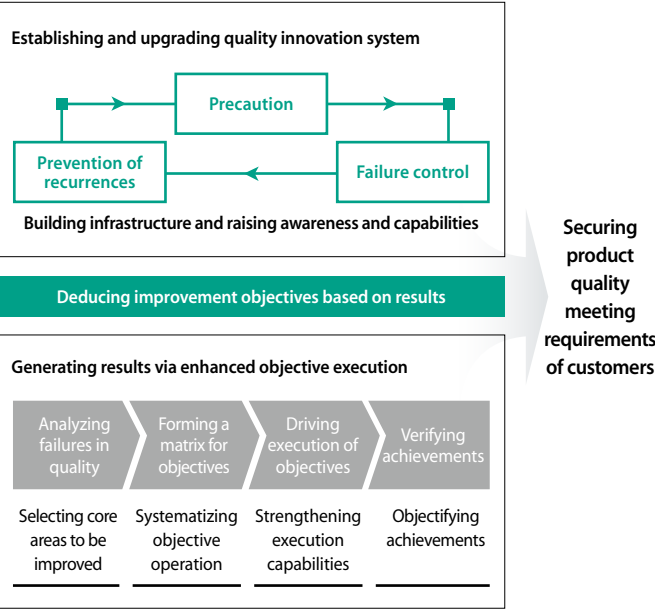


Quality Management for Customer Satisfaction

Approach to Quality Innovation

Under the quality principle of “providing world-class quality to create customer value” Doosan Heavy Industries & Construction focuses on quality innovation and differentiated management. Our quality innovation is promoted company-wide through diagnosis and by improvement plans. Quality management plays a pivotal role for internalizing quality innovation, and is integral to the entirety of our business operations. Consequently, we ensure high quality products and service to our customers.

❖ Approach to Quality Innovation



Settling Quality Innovation

Our efforts to internalize quality innovation are on-going and vital to our firm. We identify quality issues and improvement plans, upgrade products and enhance operating performance, thereby earning customer satisfaction.

Elevating Quality Innovation Capabilities

Building a System to Manage Failures in Quality | Doosan Heavy Industries & Construction expanded costs recognition and management system in quality failure to prevent confusion derived from lack of consensus and awareness in quality failure, and further created target cost of quality failure. We also established a management system in order to quickly respond to quality failure.

Precautions and Prevention of Quality Problems | We upgraded our Q-series to activate better communication between front-end and back-end organizations. The goal is to accelerate internalization of precaution and prevention systems. In addition, we extended our quality control mechanisms to our suppliers.

Focusing on Tasks to Fundamentally Eliminate Quality Problems

Quality issues identified in 2012 have been generally resolved, while voluntary improvement activities by each business group have not been satisfactory. Thus, we continue to analyze quality issues of each business group, deduce improvement tasks, and apply them to real projects. We are also focusing on implementing RCA tasks for quality improvement and cultivating leaders to fundamentally eliminate quality problems.

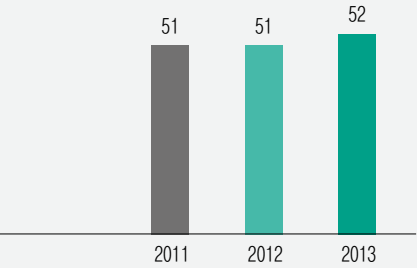
Raising Awareness and Competence

We initiated the Quality Academy to enhance employee understanding and awareness of quality. The Quality Academy provides all employees with training to increase their awareness of quality through competence enhancement programs.

❖ Obtaining Quality Certifications

Certification	Types	Units
KEPIC (Korea Electric Power Industry Code)	Manufacturing: MN, SN, EN Construction: MN, SN, EN, MH	7
ASME (The American Society of Mechanical Engineers) Nuclear	N, NPT, NS, N3, NA, Site NA, Site NPT	7
ASME Non-Nuclear	U, U2, S, A, PP, H, R	7
ISO (International Organization for Standardization)	9001, 3834-2, 14001	3
PED (Pressure Equipment Directive)	H-Module, H1- Module	2
Others	OHSAS, Shipping Registers etc	26
Total		52

❖ Number of quality certificates



Performance and Plan for Social Responsibility

Special Story

Doosan Heavy Industries & Construction launched the CSR Team to better serve the mission of corporate social responsibility and to form a consensus on CSR company-wide. Moreover, we established a systematic CSR framework and have strengthened communication with stakeholders. The CSR Committee also plays a leading role in promoting social responsibility.

Performance in 2013

Our commitment to CSR realized meaningful achievements.

Doosan Heavy Industries & Construction was awarded the grand prize for “Best Corporate Governance Service in 2013” on June 21, 2013 by Korea Corporate Governance Service. This award was in recognition of excellence in 3 categories: green management, social responsibility management, and corporate governance. In July 2013, we published “Doosan Heavy Industries & Construction 2012 Integrated Report” containing our company’s core values, vision, and activities and performances in CSR. We were also rewarded for progress in our disclosure level from the CDP, a global initiative in climate change, and enrolled on the list of “2013 Korea CSR 30.” We will make concerted efforts to blaze new trails in these categories.



Plans for 2014

One of our goals for 2014 is to establish and execute global CSR strategies. By capitalizing on our global networks, consisting of local branches and subsidiaries in over 30 countries, we are committed to fulfilling our role as a global corporate citizen and promulgate the CSR. On top of that, we will encourage overseas local subsidiaries to prepare the foundations for CSR promotion, and outline and implement detailed CSR tasks.

Joining UN Global Compact

Doosan Heavy Industries & Construction became a member of the UN Global Compact, a major global initiative in corporate social responsibility. The company complies with 10 principles of the UN Global Compact on human rights, labor, environment, and anti-corruption, earning respect as a firm of integrity.



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.

Human Rights	1. We support and respect internationally declared human rights. 2. We do not engage in infringement of human rights.
Labor	3. We acknowledge rights to freedom of association and collective bargaining. 4. We abolish all forced labor. 5. We abolish child labor. 6. We abolish discrimination.

Environment	7. We support preventative approaches to environmental issues. 8. We take the lead in assuming larger environmental responsibility. 9. We support environmentally-friendly technology.
Anticorruption	10. We strive to eradicate corruption including unjust enrichment and bribes.

Global Operations and Global CSR Activities

Special Story

Securing Dominant Position in the Vietnam Power Plant Market

Doosan Heavy Industries & Construction contributed to the economic development of Vietnam by operating a local subsidiary, Doosan Vina since 1995. In addition, the company fulfills its social responsibilities through various CSR activities.

Agreement on Localizing Facilities for Thermal Power Plants in Vietnam

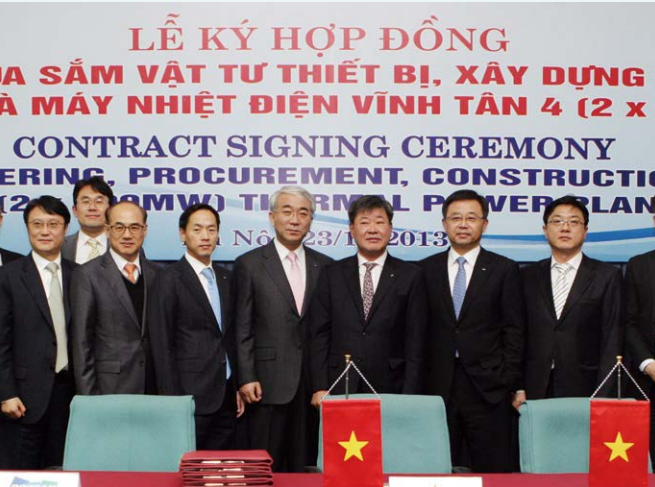
We formed a consortium with LILAMA, a local construction company, in December 2010. The consortium signed contracts to jointly construct 4 power plants with 600MW capacity, including Quynh Lap I and Long Phu II coal-fired power plants, and to promote localization of facilities for thermal power plants in Vietnam. Doosan Heavy Industries & Construction will engage in engineering and manufacturing of major facilities, such as boilers, turbines, generators, and auxiliaries. These projects will greatly contribute to helping Vietnamese firms secure technologies, and assist the nation to increase local jobs.

Mong Duong 2 Project

Doosan Heavy Industries & Construction won the US\$1.6 billion Mong Duong 2 Project, Vietnam's first BOT (Built-Operate-Transfer) based IPP (Independent Power Plant) project. This project calls for construction of power plants in Quang Ninh Province , 160 kilometers northeast of Hanoi. Work is expected to continue until 2015.

Vinh Tan 4 Coal-Fired Power Plant Project

In the process of engineering the Mong Duong 2 Project, we have faithfully carried out CSR activities, such as environmental protection, safety management, and social contributions for local communities. As a result, in 2013 we were able to win another project in Vietnam, the 1,200MW (600MWx2) class Vinh Tan 4 coal-fired power plant project worth of KRW 1.6 trillion. It is anticipated that these projects will enable us to secure a strong position in the Vietnamese power plant market, estimated to be valued at about KRW 40 trillion won (35GW) by 2017.



Observance of the Equator Principle and CSR Activities in Vietnam

Throughout our engineering for the Mong Duong 2 Project in Vietnam, in accordance with the Equator Principle, Doosan Heavy Industries & Construction has been in thorough compliance with the Performance Standards on Environment and Social Sustainability, and the Environmental, Health & Safety Guidelines of the IFC.

Golden Hard Hat

We are sustaining a zero accident record, surpassing six million man hours, at the site of the Mong Duong 2 Project. This is attributable to the systematic operation of the EHS management system, and thorough project management, under the goal of keeping the site safe and clean. As a result, we were awarded the “Golden Hard Hat” from AES in April 2014. The “Golden Hard Hat” was a prize awarded to sites with excellent EHS performance among 127 sites where AES was operating. The honor acknowledged the excellence of our safety management system, and recognized our conscientious employees.

Medical Support

Our company carried out medical support for 288 employees, including suppliers and clients, at the Mong Duong 2 Project. Accordingly, our medical staff attended to employees who suffered from influenza, fatigue and stress. Moreover, they took preventive measures against epidemics and inspected hygiene conditions in the main facilities, including the cafeteria.

Impeccable Environmental Management

In accordance with the Equator Principle, we have strictly managed sites so that no serious issues were noted during quarterly lender audits and regular audits by the HQ of AES. In addition, there were no problems in our environmental management during inspection by the Environmental Police and the Environmental Agency.

Receiving Praise from the Client

Doosan Heavy Industries & Construction was honored with a letter of appreciation from the CEO of Tata Power in April 2013 for completing the world's largest 4,000MW class coal-fired Mundra power plant in India. Anil Sardana, CEO of Tata Power, acknowledged us with the letter. It noted our monumental achievement in technology and project management. The historic project resulted in India's first ultra-mega power plant project completed ahead of schedule. Moreover, Doosan Power Systems India (DPSI) won the bids to build two boilers (800MWx2) for the Lara power plant in Chhattisgarh and 3 boilers for the Kudgi power plant in Karnataka NTPC, a national power company in India. These projects are valued at KRW 600 billion and will be completed in 2016. Furthermore, DPSI set up a sisterhood relationship with an elementary school near the Gurgaon region where the worksite is located, and held a “School Day” and “Wish Tree” events to improve the educational environment. DPSI also awarded scholarships to students of low-income families.



Social Contribution

We have contributed to improving local communities in the Campa region of Quang Ninh Province, site of the Mong Duong project, by conducting diverse events for social contribution. These included upgrading the Cam Hai Road, repairing Duong High School, and donating educational equipments, including computers, to Cam Hai Elementary School.



FINANCIAL STATEMENT

To ensure future growth and profitability, Doosan Heavy Industries & Construction has focused on core businesses, which contributes to laying the foundation for stable and long-term growth and maximizing the value of shareholders and the company.

Financial Statement

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Independent Auditors’ Report

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Management’s assessment on internal control over financial reporting

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Doosan Heavy Industries & Construction is Korea’s representative power plant equipment maker and operates facilities to produce and supply materials, parts, and complete products. Our major products encompass boilers, turbines, generators, nuclear reactors, steam generators, material handling equipments, environmental facilities, and castings & forgings which are core devices of thermal and nuclear power plants, and evaporators, brine heaters, and deaerators which are necessary for water treatment plants. We not only have large-sized production facilities in Changwon, Korea, but also operate the global production network. We are supplied with boilers and water related products from Doosan Vina, our local subsidiary in Vietnam, boilers from DPSI, turbines from Doosan Skoda Power, boilers and nuclear power related products and services from Doosan Babcock.

Summarized Consolidated Operating Performance in 2013

Our sales in 2013 can be broken up into 77.8% from power generation, 9.2% from water division, 4.3% from castings & forgings, 6.9% from construction, and remaining 1.8% from other sectors. Major products of the power generation include boilers, turbines, generators, nuclear reactors, steam generators, material handling equipments, and environmental facilities. Those of the water division are evaporators, brine heaters, and deaerators. The Castings & Forgings division produces castings, forgings, mold & tool steel, work roll, and crank shaft, while the construction BG engages in civil engineering and architecture works.

❖ Sales Breakdown in 2013

(KRW in millions)

Doosan Heavy Industries & Construction	Power	6,599,256
	Water	781,660
	Castings & Forgings	362,514
	Construction	582,211
	Others (Industrial)	159,624
		8,485,265
Subsidiaries*		10,722,909
Total		19,208,174

* Sales of Doosan Infracore, Doosan Engine, and Doosan E&C

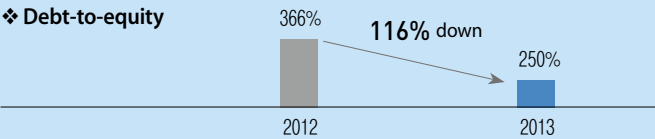
Summarized Consolidated Operating Performance in 2013

Our consolidated sales in 2013 slightly decreased compared to the previous year, while operating profit and operating margin were improved thanks to consistent efforts for enhancing profitability.

Improvement of Financial Structure

Consolidated debt-to-equity ratio decreased from 366% in 2012 to 250% in 2013, which was attributable to our intensive efforts to improve financial soundness such as disposal of our treasury shares, issue of GDR by Doosan Infracore, and issue of RCPS by Doosan E&C.

❖ Debt-to-equity



Summarized Consolidated Financial Position

Total borrowings in 2013 decreased KRW 1.1 trillion compared to the previous year, while total equity increased KRW 1.9 trillion. In addition, operating profit sharply increased from the previous year backed by profit-oriented management activities.

(KRW in billions)

Classification	2013	2012	Change
Total borrowings	11,405.3	12,505.7	(1,100.4)
Total equity	7,911.8	5,986.5	1,925.3
Operating profit	958.1	586.2	371.9

Consolidated Statements of Financial Position

As at December 31, 2013, 2012 and January 1, 2012

Doosan Heavy Industries & Construction Co., Ltd. and its subsidiaries

(Korean won in units)

Item	December 31, 2013	December 31, 2012 (Restated)	January 1, 2012 Audited (Restated)
Assets			
Current assets			
Cash and cash equivalents	942,761,662,374	1,827,151,710,134	2,236,884,348,297
Short-term financial instruments	777,857,734,507	506,615,552,152	336,998,884,570
Short-term investments in securities	11,917,827,393	737,414,980	7,074,438,425
Trade receivables	2,776,055,294,417	3,031,553,045,628	4,025,733,759,925
Due from customers for contract work	2,341,388,036,045	1,940,352,326,496	1,846,644,598,257
Other receivables	399,665,688,714	341,450,741,211	436,925,806,213
Prepayments	570,231,903,673	794,144,278,612	938,397,342,196
Prepaid expenses	119,671,338,313	146,652,903,966	149,815,892,876
Short-term loans	617,545,492,572	837,731,019,204	890,756,421,898
Derivative financial assets	123,034,100,744	354,728,817,195	150,695,931,255
Firm commitment assets	22,095,293,873	107,997,479,515	199,289,045,544
Inventories	2,205,794,006,937	2,457,347,033,791	2,545,982,958,449
Other current assets	243,191,832,090	255,871,786,785	256,751,545,464
Non-current assets classified as held-for-sale	23,012,326,807	25,216,657,188	15,145,196,447
Total current assets	11,174,222,538,459	12,627,550,766,857	14,037,096,169,816
Non-current assets			
Long-term financial instruments	87,452,362,744	75,285,948,214	63,453,791,690
Long-term investments in securities	200,132,851,400	290,193,237,660	313,177,869,390
Share of investments in associates and joint ventures	312,921,350,015	292,433,512,472	407,054,421,526
Long-term loans	519,007,967,286	48,274,213,572	138,224,181,227
Property, plant and equipment	7,231,823,590,854	6,155,696,699,059	6,028,148,062,334
Intangible assets	6,924,583,095,371	6,874,439,247,325	7,105,837,660,791
Investment property	69,939,577,561	107,949,380,800	142,344,401,947
Derivative financial assets	119,236,994,110	199,116,083,882	139,560,193,434
Firm commitment assets	31,003,113,369	79,903,845,589	201,263,899,245
Guarantee deposits	245,391,277,932	238,632,413,669	163,568,179,238
Deferred tax assets	752,356,463,180	873,122,345,096	287,349,966,046
Other non-current assets	57,408,932,470	51,688,708,522	88,089,677,543
Total non-current assets	16,551,257,576,292	15,286,735,635,860	15,078,072,304,411
Total assets	27,725,480,114,751	27,914,286,402,717	29,115,168,474,227
Liabilities and equity			
Current liabilities:			
Trade payables	2,285,172,690,453	2,224,232,748,347	2,506,445,822,227
Short-term borrowings	2,401,143,971,677	2,999,325,344,770	2,890,614,628,847
Asset-backed loan	270,000,000,000	176,000,000,000	186,805,000,000
Other payables	630,132,663,407	763,759,191,711	914,305,824,349
Advanced receipts	429,706,500,550	556,114,414,351	937,889,604,089
Due to customers for contract work	1,658,024,496,845	2,083,288,925,907	2,325,826,441,539

As at December 31, 2013, 2012 and January 1, 2012

Doosan Heavy Industries & Construction Co., Ltd. and its subsidiaries

(Korean won in units)

Item	December 31, 2013	December 31, 2012 (Restated)	January 1, 2012 Audited (Restated)
Withholdings	68,062,469,620	113,889,650,876	99,310,186,568
Accrued expenses	510,816,836,799	586,014,813,354	1,123,816,884,389
Income tax payable	186,279,450,215	65,703,887,865	208,057,800,352
Current portion of long-term debt	1,535,151,584,309	2,018,642,000,291	2,384,016,013,086
Derivative financial liabilities	119,688,709,263	268,445,755,314	279,465,119,047
Firm commitment liabilities	190,652,648,109	236,352,740,530	53,788,980,741
Other provisions	147,587,636,606	145,335,178,277	195,138,604,682
Other current liabilities	139,854,086,690	81,254,130,000	204,422,856,834
Total current liabilities	10,572,273,744,543	12,318,358,781,593	14,309,903,766,750
Non-current liabilities:			
Debentures	2,887,157,633,453	3,100,748,522,158	3,236,475,018,162
Long-term borrowings	4,287,909,733,652	4,044,460,065,199	3,236,367,632,947
Long-term asset-backed loan	–	130,800,000,000	175,000,000,000
Long-term other payables	47,405,256,022	61,118,730,424	52,978,525,994
Employee benefits liabilities	930,390,792,822	1,141,540,892,075	1,073,098,227,961
Deposits received	255,307,344,867	252,132,774,869	211,932,719,767
Derivative financial liabilities	86,766,639,332	171,685,644,785	273,896,531,113
Firm commitment liabilities	76,128,783,708	163,628,819,304	60,605,942,188
Deferred tax liabilities	173,871,721,051	64,013,819,102	267,720,928,817
Other provisions	270,763,381,188	271,489,891,568	244,026,575,856
Other non-current liabilities	225,710,882,548	207,848,578,442	210,445,301,206
Total non-current liabilities	9,241,412,168,643	9,609,467,737,926	9,042,547,404,011
Total liabilities	19,813,685,913,186	21,927,826,519,519	23,352,451,170,761
Equity:			
Issued capital	530,791,280,000	529,281,335,000	529,217,335,000
Capital surplus	1,521,655,341,205	1,388,235,128,479	1,394,724,657,318
Other components of equity	(13,188,236,134)	(130,898,969,345)	(140,842,944,397)
Accumulated other comprehensive income (loss)	324,556,819,190	(275,358,393,813)	(106,006,247,525)
Retained earnings	2,362,821,296,186	2,307,483,981,169	2,341,744,698,969
Equity attributable to equity holders of the parent	4,726,636,500,447	3,818,743,081,490	4,018,837,499,365
Hybrid equity instruments	508,259,603,649	508,259,603,649	–
Other non-controlling interests	2,676,898,097,469	1,659,457,198,059	1,743,879,804,101
Non-controlling interests	3,185,157,701,118	2,167,716,801,708	1,743,879,804,101
Total equity	7,911,794,201,565	5,986,459,883,198	5,762,717,303,466
Total liabilities and equity	27,725,480,114,751	27,914,286,402,717	29,115,168,474,227

Consolidated statements of profit or loss

Years ended December 31, 2013 and 2012

Doosan Heavy Industries & Construction Co., Ltd. and its subsidiaries

(Korean won in units)

Item	2013	2012
Revenue	19,208,173,507,456	21,274,062,812,939
Cost of sales	16,021,590,971,115	17,787,819,506,967
Gross profit	3,186,582,536,341	3,486,243,305,972
Selling and administrative expenses	2,228,510,805,119	2,900,091,789,400
Operating profit	958,071,731,222	586,151,516,572
Finance income	1,056,743,438,486	1,345,876,981,803
Finance costs	1,770,132,965,167	2,096,948,090,856
Other non-operating income	144,397,423,635	129,647,790,218
Other non-operating expense	271,371,858,594	388,739,909,559
Share of loss in associates and joint ventures	(47,619,865,974)	(81,033,575,314)
Profit for the year before tax	70,087,903,608	(505,045,287,136)
Income tax expense (benefit)	51,425,077,676	(602,520,873,742)
Profit for the year	18,662,825,932	97,475,586,606
Attributable to:		
Equity holders of the parent	69,223,510,612	42,572,800,059
Non-controlling interests	(50,560,684,680)	54,902,786,547
	18,662,825,932	97,475,586,606
Earnings per share:		
- Basic, profit for the period attributable to ordinary equity holders of the parent	772	478
- Diluted, profit for the period attributable to ordinary equity holders of the parent	772	478

Consolidated statements of comprehensive income or loss

Years ended December 31, 2013 and 2012

Doosan Heavy Industries & Construction Co., Ltd. and its subsidiaries

(Korean won in units)

Item	2013	2012
Profit for the year	18,662,825,932	97,475,586,606
Other comprehensive income		
Items that will not be reclassified to profit or loss in subsequent periods:		
Remeasurement of the net defined benefit liabilities	141,473,301,425	(10,006,389,197)
Net gain on revaluation of land	870,857,424,644	–
	1,012,330,726,069	(10,006,389,197)
Items that may be reclassified to profit or loss in subsequent periods:		
Net change in unrealized fair value of available-for-sale financial assets	(19,947,267,764)	(31,369,015,869)
Effective portion of changes in fair value of cash flow hedges	(50,657,406,284)	24,854,834,228
Equity adjustments in equity method	(3,131,825,306)	(3,016,950,623)
Net gain (loss) on translation of foreign operations	(92,830,378,812)	(277,057,002,013)
	(166,566,878,166)	(286,588,134,277)
Total comprehensive income (loss), net of tax	864,426,673,835	(199,118,936,868)
Attributable to:		
Equity holders of the parent	728,097,030,565	(136,839,642,588)
Non-controlling interests	136,329,643,270	(62,279,294,280)
	864,426,673,835	(199,118,936,868)

Consolidated statements of changes in equity

Years ended December 31, 2013 and 2012

Doosan Heavy Industries & Construction Co., Ltd. and its subsidiaries							
(Korean won in units)							
Item	Issued capital	Capital surplus	Other components of equity	Accumulated other comprehensive income (loss)	Retained earnings	Non-controlling interest	Total equity
As at January 1, 2012 (As stated)	529,217,335,000	883,636,599,252	(197,869,705,823)	2,321,193,932	3,553,289,725,308	26,332,871,815	4,796,928,019,484
Changes in accounting policies	-	511,088,058,066	57,026,761,426	(108,327,441,457)	(1,211,545,026,339)	1,717,546,932,286	965,789,283,982
As at January 1, 2012 (Restated)	529,217,335,000	1,394,724,657,318	(140,842,944,397)	(106,006,247,525)	2,341,744,698,969	1,743,879,804,101	5,762,717,303,466
Profit for the year	-	-	-	-	42,572,800,059	54,902,786,547	97,475,586,606
Remeasurement of the net defined benefit liability, net of tax	-	-	-	-	(10,060,296,359)	53,907,162	(10,006,389,197)
Net change in fair value of available-for-sale financial assets	-	-	-	(30,526,891,363)	-	(842,124,506)	(31,369,015,869)
Effective portion of change in fair value of cash flow hedges	-	-	-	(25,517,456,062)	-	50,372,290,290	24,854,834,228
Equity adjustments in equity method investments	-	-	-	(2,416,210,760)	-	(600,739,863)	(3,016,950,623)
Net loss on translation of foreign operations	-	-	-	(110,891,588,103)	-	(166,165,413,910)	(277,057,002,013)
Total comprehensive income	-	-	-	(169,352,146,288)	32,512,503,700	(62,279,294,280)	(199,118,936,868)
Dividends	-	-	-	-	(66,773,221,500)	(101,023,939)	(66,874,245,439)
Stock option exercised	64,000,000	1,562,517,420	2,193,164,502	-	-	-	3,819,681,922
Changes in share of subsidiaries	-	-	(12,874,058,540)	-	-	(13,087,890,301)	(25,961,948,841)
Conversion of preferred stock	-	-	20,802,910,754	-	-	(31,377,902,976)	(10,574,992,222)
Issueance of hybrid equity instruments	-	-	-	-	-	508,259,603,649	508,259,603,649
Others	-	(8,052,046,259)	(178,041,664)	-	-	22,423,505,454	14,193,417,531
At December 31, 2012	529,281,335,000	1,388,235,128,479	(130,898,969,345)	(275,358,393,813)	2,307,483,981,169	2,167,716,801,708	5,986,459,883,198
As at January 1, 2013	529,281,335,000	1,388,235,128,479	(130,898,969,345)	(275,358,393,813)	2,307,483,981,169	2,167,716,801,708	5,986,459,883,198
Profit for the year	-	-	-	-	69,223,510,612	(50,560,684,680)	18,662,825,932
Remeasurement of the net defined benefit liabilities, net of tax	-	-	-	-	58,821,074,484	82,652,226,941	141,473,301,425
Net change in fair value of available-for-sale financial assets	-	-	-	(16,948,721,673)	-	(2,998,546,091)	(19,947,267,764)
Effective portion of changes in fair value of cash flow hedges	-	-	-	(39,443,253,772)	-	(11,214,152,512)	(50,657,406,284)
Equity adjustments in equity method investments – debit	-	-	-	(2,759,877,145)	-	(371,948,161)	(3,131,825,306)
Net gain on translation of foreign operations	-	-	-	(75,377,416,616)	-	(17,452,962,196)	(92,830,378,812)
Net gain on revaluation of land	-	-	-	734,444,482,209	137,232,466	136,275,709,969	870,857,424,644
Total comprehensive income	-	-	-	599,915,213,003	128,181,817,562	136,329,643,270	864,426,673,835

Years ended December 31, 2013 and 2012

Doosan Heavy Industries & Construction and its subsidiaries							
(Korean won in units)							
Item	Issued capital	Capital surplus	Other components of equity	Accumulated other comprehensive income (loss)	Retained earnings	Non-controlling interest	Total equity
Dividends	-	-	-	-	(66,782,821,500)	-	(66,782,821,500)
Disposal of treasury shares	-	138,453,881,054	117,261,964,907	-	-	-	255,715,845,961
Increase of paid-in capital	1,503,445,000	11,110,458,550	-	-	-	-	12,613,903,550
Stock option exercised	6,500,000	1,680,183,612	2,373,021,858	-	-	-	4,059,705,470
Capital increase by issuing new shares of subsidiaries	-	(15,873,883,811)	(893,975,027)	-	-	900,683,691,982	883,915,833,144
Acquisition of treasury shares by subsidiaries	-	(430,635,167)	-	-	-	(11,337,366,949)	(11,768,002,116)
Dividends from hybrid equity instruments	-	-	-	-	(6,061,681,045)	(7,477,714,955)	(13,539,396,000)
Others	-	(1,519,791,512)	(1,030,278,527)	-	-	(757,353,938)	(3,307,423,977)
At December 31, 2013	530,791,280,000	1,521,655,341,205	(13,188,236,134)	324,556,819,190	2,362,821,296,186	3,185,157,701,118	7,911,794,201,565

Consolidated statements of cash flows

Years ended December 31, 2013 and 2012

Doosan Heavy Industries & Construction Co., Ltd. and its subsidiaries		
(Korean won in units)		
Item	2013	2012
Operating activities:		
Cash generated from operating activities:		
Profit for the year	18,662,825,932	97,475,586,606
Adjustments	1,777,624,103,190	1,835,842,591,112
Working capital adjustments	(924,436,130,462)	(858,986,178,316)
Interest received	65,650,972,160	85,375,600,491
Interest paid	(700,940,713,445)	(1,215,366,405,655)
Dividends received	5,624,266,779	6,455,014,353
Income taxes paid	(91,747,497,840)	(278,022,274,592)
Net cash flows provided by (used in) operating activities	150,437,826,314	(327,226,066,001)
Investing activities:		
Proceeds from disposal of short-term financial instruments	139,897,985,814	72,576,472,947
Proceeds from disposal of short-term investments in securities	47,109,274,754	4,151,170,000
Collection of short-term loans	119,408,535,287	318,523,712,594
Proceeds from disposal of long-term financial instruments	9,611,466,277	2,524,467,359
Proceeds from disposal of long-term investment in securities	93,255,887,013	8,669,434,807
Collection of long-term loans	27,494,654,224	1,496,624,257
Proceeds from disposal of property, plant and equipment	109,620,267,563	110,572,135,345
Proceeds from disposal of intangible assets	4,424,797,402	4,766,666,227
Proceeds from disposal of investment property	56,475,398,106	1,518,996,937
Proceeds from disposal of non-current assets classified as held-for-sale	4,872,000,000	12,500,000,000
Changes in scope of consolidated subsidiaries	4,687,791,850	–
Acquisition of short-term financial instruments	(426,032,782,232)	(242,935,163,970)
Acquisition of short-term investments in securities	(39,282,339,734)	–
Increase in short-term loans	(389,349,882,306)	(333,653,422,966)
Acquisition of long-term financial instruments	(22,234,079,904)	(17,444,235,809)
Acquisition of long-term financial investment	(28,438,447,392)	(67,555,363,527)
Increase in long-term loans	(22,196,476,852)	(1,364,792,000)
Acquisition of investments in associates and joint ventures	(72,999,741,669)	(13,272,284,877)
Acquisition of property, plant and equipment	(401,455,378,897)	(697,165,619,586)
Acquisition of intangible assets	(262,340,746,210)	(255,380,170,910)
Acquisition of investment property	(911,530,557)	–
Net cash flow used in investing activities	(1,048,383,347,463)	(1,091,471,373,172)

Doosan Heavy Industries & Construction and its subsidiaries		
(Korean won in units)		
Item	2013	2012
Financing activities:		
Net increase in short-term borrowings	–	152,061,921,672
Proceeds from current portion of long-term debt	117,000,000,000	–
Proceeds from asset backed loans	620,000,000,000	330,000,000,016
Issuance of debentures	1,155,801,483,500	1,580,757,793,885
Proceeds from long-term borrowings	1,330,355,765,610	1,478,984,400,000
Proceeds from disposal of treasury shares	299,918,800,070	–
Capital increase by issuing new shares of subsidiaries	883,915,833,144	530,535,202,054
Stock option exercised	43,160,000	2,133,180,000
Net decrease in short-term borrowings	(17,005,645,675)	–
Repayment of current portion of long-term debt	(2,336,435,388,570)	(2,428,799,578,047)
Repayment of assets backed loans	(656,800,000,000)	(388,559,277,489)
Repayment of debentures	(310,174,143,523)	(167,447,660,442)
Repayment of long-term borrowing	(982,493,058,161)	(10,840,288,898)
Dividends paid	(66,782,821,500)	(66,773,221,500)
Dividends paid to holders of hybrid equity instruments	(17,862,000,000)	(101,023,939)
Acquisition of additional shares in subsidiaries	(3,699,999,990)	–
Acquisition of treasury shares by subsidiaries	(11,768,002,116)	–
Net cash flows provided by financing activities	4,013,982,789	1,011,951,447,312
Other net increase (decrease) in cash and cash equivalents:		
Net foreign exchange difference	9,541,490,600	(2,986,646,302)
Net decrease in cash and cash equivalents	(884,390,047,760)	(409,732,638,163)
Cash and cash equivalents as at January 1	1,827,151,710,134	2,236,884,348,297
Cash and cash equivalents as at December 31	942,761,662,374	1,827,151,710,134

Independent auditors’ report



Independent auditors’ report

To the Board of Directors and Stockholders
Doosan Heavy Industries & Construction Co., Ltd.

March 20, 2014

We have audited the accompanying consolidated financial statements of Doosan Heavy Industries & Construction Co., Ltd. (the Company) and its subsidiaries (collectively, the Group), which comprise the consolidated statements of financial position as at December 31, 2013, and the consolidated statements of profit or loss, statements of comprehensive income, statements of changes in equity and statements of cash flows for the year then ended. These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on these financial statements based on our audit. We did not audit the consolidated financial statements of Doosan Infracore Co., Ltd. and other subsidiaries, which reflect total assets constituting 66.29% (before elimination of intercompany transactions) of the total consolidated assets as at December 31, 2013 and total revenues constituting 66.41% (before elimination of intercompany transactions) of the total consolidated sales for the year then ended. These financial statements were audited by other auditors whose reports were furnished to us, and our opinion, insofar as it relates to the amounts included for Doosan Infracore Co., Ltd. and other subsidiaries is based solely on the reports of the other auditors. Moreover, the consolidated statement of financial position as at December 31, 2012 and January 1, 2012, and the related consolidated statement of profit or loss, statement of comprehensive income, statement of changes in equity and statement of cash flows for the year ended December 31, 2012, presented for comparative purposes, were audited by KPMG Samjong Accounting Corporation, whose audit report dated July 26, 2013 expressed an unqualified opinion thereon.

We conducted our audit in accordance with auditing standards generally accepted in the Republic of Korea. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, based on our audit and the reports of other auditors, the financial statements referred to above present fairly in all material respects, the financial position of Doosan Heavy Industries & Construction Co., Ltd. and its subsidiaries as at December 31, 2013, and the results of its financial performance and cash flows for the year then ended in accordance with Korean International Financial Reporting Standards (KIFRS).

Without qualifying our opinion, the Group has restated the prior year consolidated financial statements presented for comparative purpose by applying the newly issued KIFRS 1110 as explained in Note 2. The accompanying consolidated statements of financial position as at December 31, 2012 and January 1, 2012, and the consolidated statements of profit or loss, statement of comprehensive income, statements of changes in equity and statement of cash flows for the year ended December 31, 2012 presented for comparative purpose are different from the audit report dated March 6, 2013 audited by KPMG Samjong Accounting Corporation.

As mentioned in the preceding paragraph, we have conducted our audit in accordance with auditing standards generally accepted in the Republic of Korea which may vary among countries. In addition, the procedures and practices utilized in the Republic of Korea to audit such financial statements may differ from those generally accepted and applied in other countries. Accordingly, this report and the accompanying consolidated financial statements are for use by those who are knowledgeable about Korean auditing standards and their application in practice.

This audit report is effective as at March 20, 2014, the independent auditors’ report date. Accordingly, certain material subsequent events or circumstances may have occurred during the period from the auditors’ report date to the time this report is used. Such events and circumstances could significantly affect the accompanying consolidated financial statements and may result in modification to this report.

Seungwha Gweon,
EY Han Young

Management’s assessment on internal control over financial reporting



Management’s assessment on internal control over financial reporting

The Board of Directors and Internal auditor (Audit Committee) of
Doosan Heavy Industries & Construction Co., Ltd.

February 13, 2014

I, as the internal control over financial reporting officer (“ICFR Officer”) of Doosan Heavy Industries & Construction Co., Ltd. (“the Company”), assessed the status of the design and operations of the Company’s internal control over financial reporting (“ICFR”) for the year ended December 31, 2013.

The Company’s management including the ICFR Officer is responsible for the design and operations of its ICFR. I, as the ICFR Officer, assessed whether the ICFR has been effectively designed and has operated to prevent and detect any error or fraud which may cause any misstatement of the financial statements, for the purpose of establishing the reliability of financial reporting and the preparation of financial statements for external financial reporting purposes. I, as the ICFR Officer, applied the ICFR standards for the assessment of design and operations of the ICFR.

Based on the assessment of the operations of the ICFR, the Company’s ICFR has been effectively designed and has operated as of December 31, 2013, in all material respects, in accordance with the ICFR standard.

Myungho Jang,
Internal Control over Financial Reporting Officer

Geewon Park,
Chief Executive Officer or Chairman

Independent Assurance Report

Introduction

DNV GL Business Assurance Korea Ltd. (hereinafter “DNV GL”) is commissioned to carry out the assurance engagement of the 2013 Integrated Report (hereinafter “the Report”) of Doosan Heavy Industries & Construction Co., Ltd. (hereinafter “DHIC”). This engagement focused on the information provided in the Report and the underlying management and reporting processes. DHIC is responsible for the collection, analysis, aggregation and presentation of all information within the Report. DNV GL’s responsibility in performing the work follows terms of reference and scope of work agreed. The assurance engagement is based on the assumption that the data and information provided to us is complete, sufficient and authentic. DHIC’s stakeholders are the intended recipients of the assurance statement.

Scope of Assurance

This Assurance Engagement covered data from the calendar year 2013. The scope of DNV GL’s Assurance Engagement includes only for operations under control in Korea the review and assessment of followings:

- Evaluation of the reporting principles for defining the integrated report content and the quality as expressed in Global Reporting Initiative (GRI) Sustainability Reporting Guidelines G4
- Evaluation of adherence to Accountability principles provided in AA1000 Accountability Principles Standard (APS) 2008 with a moderate level of assurance and Type 1 as stated in AA1000 Assurance Standard (AS) 2008
- Verification of disclosures to check the Report is prepared ‘In accordance’ with the GRI Guidelines G4 (Core option)
(Aggregated level of data that refers to the period between January and December 2013)

Verification Methodology

The Assurance Engagement was planned and carried out in accordance with the DNV GL Verification Protocol for Sustainability Reporting (VeriSustain™ V.4.1) and AA1000AS(2008). As part of the verification, we 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. In accordance with the Protocol, the Report was evaluated with regard to the following criteria: DNV GL has examined and reviewed documents, data and other information made available by DHIC. We acquired the information and technical data from the certified management systems. We performed sample-based audits of;

- The process for determining the materiality of the contents to be included in the Report
- The process for generating, gathering and managing the quantitative and qualitative data included in the Report
- The accuracy of data verified
- Visit to DHIC Head office in Changwon, Korea

Statement of Competence and Independence

DNV GL is a leading provider of sustainability services, including the verification of sustainability reports. Our environmental and social assurance specialists operate in over 100 countries. DNV GL was not involved in the preparation of any statements or data included in the Report except for this Assurance Statement. DNV GL maintains complete impartiality toward stakeholders interviewed during the verification process.

Conclusion

In DNV GL’s opinion, and based on the scope of this Assurance Engagement, the Report provides a reliable and fair representation of DHIC’s sustainability strategy, policy, practices and performance in 2013 Further conclusions and observations on the Adherence to the principles of Inclusivity, Materiality and Responsiveness, as set forth in the AA1000APS(2008) are made below;

Inclusivity

DHIC has identified 6 main stakeholder groups as Customers, Employees, Shareholders and Investors, Suppliers, and Local community, Government. DHIC has derived expectations and interests of the stakeholder groups from a survey responded by the employees who are in relation with the respective stakeholder groups. The Report addresses the issues in respond to the interests and expectations which stakeholders have in DHIC. In our view, the level at which the Report adheres to the principle of Inclusivity is ‘Acceptable’.

Materiality

DHIC has formed a sustainability issue pool by analyzing international sustainability standards, media news, issues addressed by industry peer group and internal documents. The issue pool is the basis of screening relevant issues. DHIC has mapped out the significance and influence of issues and prioritized sustainability issues that are most material. The output of the process clearly brings out material issues. In our view, the level at which the Report adheres to the principle of Materiality is ‘Good’.

Responsiveness

Stakeholders’ views, interests and expectations are considered in the preparation of the Report and in the formulation of sustainability management strategy. DHIC has stated CSR strategy and sustainability governance in the Report. The material issues are provided in the report, which improves the responsiveness. In our view, the level at which the Report adheres to the principle of Responsiveness is ‘Good’.

Opportunities for Improvement

The following is an excerpt from the observations and opportunities reported to DHIC’s management. However, these do not affect our conclusions on the Report and are provided to encourage continual improvement;

- Enhancing the engagement with external stakeholders to identify their expectations and interests over DHIC
- Establishing a process to improve the quality of data and information which are integrated into the Report

Limitation

The engagement excluded the sustainability management, performance and reporting practices of DHIC’s suppliers, contractors and any third-parties mentioned in the Report. DNV GL did not interview external stakeholders as part of this Assurance Engagement. Any financial information from DHIC’s annual report and company reporting on operations in 2013 or other sources are not included in the scope of the Assurance. Economic performances based on the financial data were cross-checked with internal documents and the audited financial statements. The aggregation and calculation process for building economic performances is reviewed and tested by the verification team. The baseline data for Environmental and Social performance are not verified, while the aggregated data 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.

GRI G4 Index

CATEGORY : General Standard Disclosures

Indicator	Description	Page	Reporting Status	External Assurance
Strategy and Analysis				
G4-1	CEO Message	6,7	●	100-101
G4-2	Key impacts, risks, and opportunities	34,35	●	100-101
Organizational Profile				
G4-3	Name of the organization	14	●	100-101
G4-4	Primary brands, products, and services	16,17	●	100-101
G4-5	Location of the organization's headquarters	14	●	100-101
G4-6	Number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report	14,15	●	100-101
G4-7	Nature of ownership and legal form	14,21	●	100-101
G4-8	Target markets (including geographic breakdown, sectors served, and types of customers and beneficiaries)	14~17	●	100-101
G4-9	Scale of the organization	14	●	100-101
G4-10	Total number of employees by employment contract, region, and gender	62	●	100-101
G4-11	Percentage of total employees covered by collective bargaining agreements	65	●	100-101
G4-12	Organization's supply chain	51,52	●	100-101
G4-13	Significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain ¹⁾	-	●	100-101
G4-14	Organization's precautionary approach or principle	58,59	●	100-101
G4-15	External principles or initiatives that the company complies with ²⁾	-	●	100-101
G4-16	Memberships of associations (such as industry associations) and national or international advocacy organizations ³⁾	-	●	100-101
Identified Material Aspects and Boundaries				
G4-17	Organization's consolidated financial statements or equivalent documents	14,15	●	100-101
G4-18	process for defining the report content and the Aspect Boundaries	32,33	●	100-101
G4-19	material Aspects identified in the process for defining report content	33	●	100-101
G4-20	Aspect Boundary within the organization	About this Report	●	100-101
G4-21	Aspect Boundary outside the organization	About this Report	●	100-101
G4-22	effect of any restatements of information provided in previous reports, and the reasons for such restatements	About this Report	●	100-101
G4-23	significant changes from previous reporting periods in the Scope and Aspect Boundaries	About this Report	●	100-101
Report Profile				
G4-28	Reporting period	About this Report	●	100-101
G4-29	Date of most recent previous report	About this Report	●	100-101
G4-30	Reporting cycle	About this Report	●	100-101
G4-31	Contact point for questions regarding the report or its contents	About this Report	●	100-101
G4-32	The 'in accordance' option the organization has chosen	102~104	●	100-101
G4-33	Organization's policy and current practice with regard to seeking external assurance for the report	100,101	●	100-101
Governance				
G4-34	Governance structure of the organization, including committees of the highest governance body	20,21	●	100-101
G4-38	Composition of the highest governance body and its committees	20	●	100-101
G4-51	Remuneration policies for the highest governance body and senior executives	21	●	100-101
Ethics and Integrity				
G4-56	Organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics	8,9,10,22	●	100-101
G4-57	Internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity	23	●	100-101
G4-58	Internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity	23	●	100-101

1) No significant change was witnessed during the reporting period
2) UNGC(UN Global Compact), CDP(Carbon Disclosure Project)
3) Join 60 organizations including the Federation of Korean Industries

Specific Standard Disclosures

Classification	Indicator	Description	Page	Reporting Status	External Assurance
Economic	Economic Performance				
	EC1	Direct economic value generated and distributed	90~97	●	100-101
	EC2	Financial implications and other risks and opportunities for the organization's activities due to Climate Change	34,35	●	100-101
	EC3	Coverage of the Organization's defined benefit plan obligations	64	●	100-101
	EC7	Development and impact of infrastructure investments and services supported	80~83	●	100-101
Environmental	Materials				
	EN1	Materials used by weight or volume	70	●	100-101
	EN2	Percentage of materials used that are recycled input materials	70	●	100-101
	Energy				
	EN3	Energy consumption within the organization	55	●	100-101
	EN6	Reduction of energy consumption	52	●	100-101
	EN7	Reductions in energy requirements of products and services	56	●	100-101
	Water				
	EN8	Total water withdrawal by source	70	●	100-101
	Biodiversity				
	EN11	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	73	●	100-101
	EN12	Significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	73	●	100-101
	Emissions				
	EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	56,71	●	100-101
	EN19	Reduction of greenhouse gas (GHG) emissions	56	●	100-101
	EN21	NOx, SOx, and other significant air emissions	71	●	100-101
	Effluents and Waste				
	EN22	Total water discharge by quality and destination	71	●	100-101
	EN23	Total weight of waste by type and disposal method	71	●	100-101
	EN24	Total number and volume of significant spills	71	●	100-101
	EN26	Identity, size, protected status, and biodiversity value of water bodies related habitats significantly affected by the organization's discharge of water and runoff	73	●	100-101
	Products and Services				
	EN27	Extent of impact mitigation of environmental impacts of products and services	39	●	100-101
	Overall				
	EN31	Total environmental protection expenditures and investments by type	72,73	●	100-101
Labor Practices and Decent Work	Employment				
	LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	63	●	100-101
	LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations or operation	64	●	100-101
	LA3	Return to work and retention rates after parental leave, by gender	64	●	100-101
	Occupational Health and Safety				
	LA5	Safety committees that help monitor and advise on occupational health and safety programs	65	●	100-101
	LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	76	●	100-101
	LA7	Workers with high incidence or high risk of diseases related to their occupation	76	●	100-101
	LA8	Health and safety topics covered in formal agreements with trade unions	65	●	100-101

Specific Standard Disclosures

Classification	Indicator	Description	Page	Reporting Status	External Assurance
	Training and Education				
	LA9	Average hours of training per year per employee by employee category	66~69	●	100-101
	LA10	Programs for skill management and lifelong learning that support the continued employability of employees	64	●	100-101
	LA11	Percentage of employees receiving regular performance and career development reviews	63	●	100-101
	Diversity and Equal Opportunity				
	LA12	Composition of governance bodies and breakdown of employees	20,62	●	100-101
Human Right	Investment				
	HR2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations	23	●	100-101
	Child Labor				
	HR5	Operations and suppliers identified as having significant risk for incidents of child labor ¹⁾	-	●	100-101
	Forced od Compulsory Labor				
	HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor ²⁾	-	●	100-101
Society	Local Communities				
	SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	73,81,82,83	●	100-101
	Anti-corruption				
	SO4	Communication and training on anti-corruption policies and procedures	23	●	100-101
	SO5	Confirmed incidents of corruption and actions taken ³⁾	-	●	100-101
	Compliance				
	SO8	Monetary value of significant fines ⁴⁾	-	●	100-101
	Supplier Assessment for Impacts on Society				
	SO10	Significant actual and potential negative impacts on society in the supply chain and actions taken	51	●	100-101
	Product and Service Labeling				
Product Responsibility	PR5	Results of surveys measuring customer satisfaction	84	●	100-101
	Customer Privacy				
	PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	84	●	100-101

1) There is no worksite or supply chain with high possibility of child labor.

2) There is no worksite or supply chain with high possibility of forced labor.

3) There were 9 disciplinary actions (4 warnings or reprimands, 1 suspension, and 4 resignations) in 2013.

4) We were imposed a penalty (KRW 2,794 million) on restriction on business activities as a holding company with regard to the Fair Trade Act from the Fair Trade Commission. However, we filed an appeal on the penalty with the Seoul High Court.Please refer to page 222 of our business report for details.



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