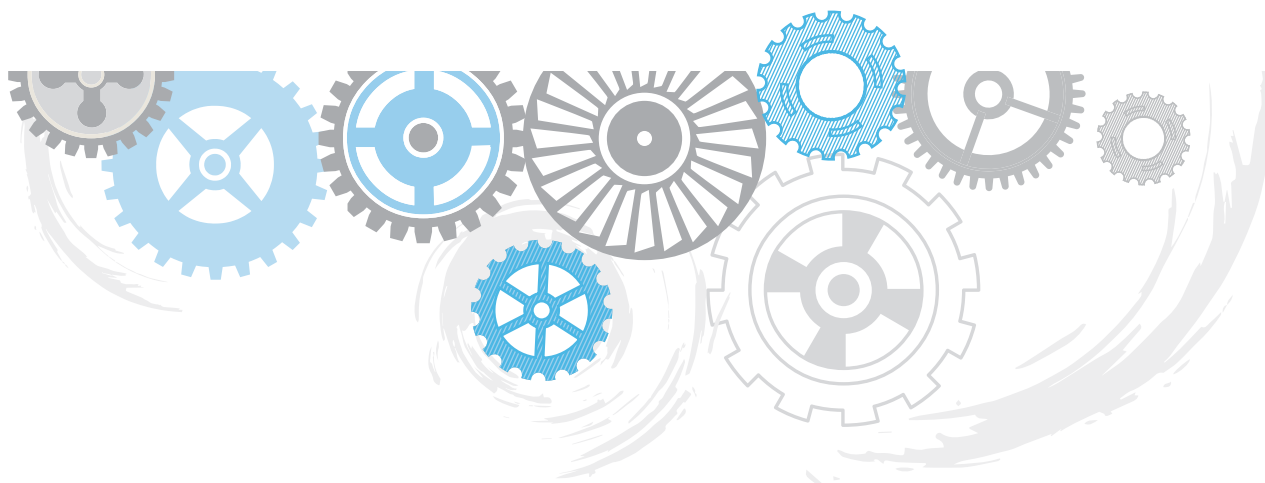




Building your tomorrow today
2015 Doosan Engine CSR Report



About This Report

Overview

This is the third CSR report by Doosan Engine. This report contains the overall CSR(Corporate Social Responsibility) initiatives undertaken by the company. By issuing this report we intends to disclose the accomplishments of CSR management and to reflect the voices of stakeholders .

Reporting Standards

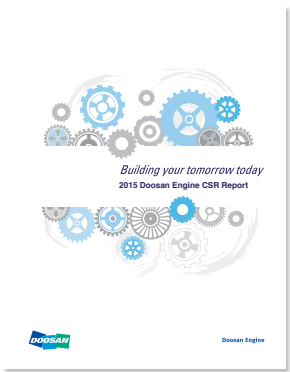
This report is in accordance with the ‘Core Option’of GRI(Global Reporting Initiative) G4 guidelines, and referred to ISO 26000, the international standard of social responsibility, and to <IR> Framework of International Integrated Reporting Council.

Scope and Period

This report contains information about our CSR initiatives and its accomplishments from January 1 to December 31, 2015. We have also included quantitative indexes of major initiatives of past three years. The report mainly covers operations in Korea on the performance of local operations including our headquarters.

Assurance

This report was verified by an independent third-party assurance provider to ensure its credibility and to improve quality. The details of the independent assurance statement is set forth in the Appendix.



The cover symbol represents Doosan Engine's value chain in the form of a cogwheel mechanism in the areas of productivity, transparency, and future orientation.

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Contents

Introduction

- 02 About This Report
- 03 Contents
- 04 Doosan Aspiration & Core Values
- 06 Message to Stakeholders
- 08 Company Profile

Governance

- 10 Governance
- 12 Ethics & Integrity
- 14 Risk Management

Strategy

- 16 CSR Strategy & Management
- 18 Stakeholder Engagement
- 20 Materiality Assessment

Our Value Chain

- 24 Sustainable Value Creation



26 I. People & Technology: People-oriented Technology

- 27 Human Resources Development and Growth Support
- 30 Development of Technologies that Create Value



32 II. Supply Chain Management: Management of a Mutually Beneficial Supply Chain

- 33 Fair Trade
- 35 Shared Growth with Suppliers



38 III. Production: Production Based on the Respect for Human Rights and Environment

- 39 Respect for Human Rights
- 42 Health and Safety Management
- 46 Green Management



50 IV. Service: Service for Improving Customer Value

- 51 Quality Management
- 54 Customer Satisfaction Management



56 V. Corporate Community Involvement: Creating Shared Values with Society

- 57 Community Involvement and Development

Appendix

- 62 Facts & Figures: Economy, Environment and Society
- 64 Independent Assurance Statement
- 65 GRI Content Index

Doosan Aspiration & Core Values



The Doosan Credo: Doosan's Aspiration and Core Values

The Doosan Credo is a set of principles that represent Doosan's philosophies and our unique way of doing business. These principles have been the foundation of Doosan's success for the past century. The Doosan Credo is integral to every aspect of our business and people, clearly guiding our decisions and the way we do business. Through the realization of these values, Doosan accomplishes its ultimate goal. The Credo consists of Doosan's "Aspiration" and "Core Values".

Aspiration

Doosan's ultimate goal is the creation of a 'Proud Global Doosan'.

In our vision, each of our employees and all of our stakeholders will benefit from and be proud of their association with Doosan.

Every employee takes great pride in being a member of Doosan. 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.

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 of the Doosan Credo are as follows:

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

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 talents, 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 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 our 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.

theDoosanWay

Our story. Our vision.

Message to Stakeholders



Dear Honorable Stakeholders,

I heartily appreciate your concern and support toward Doosan Engine. I am greatly delighted to publish the third CSR report that covers CSR initiatives and its accomplishments.

Last year marked another year of managerial struggles due to the long-term delay in recovery of global shipbuilding market and world economy. Despite the tough situation, Doosan Engine has strengthened corporate ability and continued the management for customer satisfaction, resulting in increased orders and solid foundation for enhancing our competitiveness.

Difficulties in shipbuilding industry are expected to continue this year as well. Nevertheless, we will enhance the competitive edge of our engine business through consistently upgraded production and performance, optimized cost structure, and customer-oriented marketing. SCR business is expected to firmly form its market, extending superior skill competitiveness and solidifying its marketing base. Power generation business and component business will function as another axis of management performance and contribute to upgrading business competitive edge.

Besides, Doosan Engine concentrates on corporate social responsibility. Last year, as a means of strategic response to various issues regarding sustainability, we have set CSR-focused tasks and gradually implemented specific plans, thereby securing a sustainable operational foundation. Most of all, we have focused on managing the risks in human right for ensuring employees' human right, raising energy efficiency in workplace, and building CSR management system in the supply chain.

Doosan Engine will continue to communicate with all our stakeholders through regular publication of CSR reports. We will comply with the ten UNGC principles and direct all our resources to achieving mutual prosperity with all the stakeholders. One in every four ships sailing the oceans of the world has already been propelled by a product of Doosan Engine. We will not allow ourselves to settle for the present but try even harder to become the supplier of the Number One Engine in the World by constantly pursuing change and innovation. Your steadfast support and attention will be greatly anticipated.

Thank you.

Kim Dongchul
President & CEO
Dongchul Kim

Company Profile

One quarter of all the ships currently in operation are equipped with engines made by Doosan Engine. As a global leader, we will continue to deliver top-tier engines through innovation so we can realize the vision of building the ‘No. 1 Engine in the World’. We will also take initiatives to develop eco-friendly technologies as a respected global leading company.

Company Summary

Doosan Engine has established itself as a diesel engine maker by building and managing low and medium speed diesel engines, as well as by producing diesel power plants and selling and servicing engine parts. Doosan Engine has achieved a cumulative total production of 90million Brake Horse Power(BHP) worth of engine in the shortest period of time. Plus, Doosan Engine has produced the world’s first next generation electronically-controlled large marine engine and the largest marine engine, commercializing a dual-fuel low speed marine engine. Consequently, Doosan Engine has set a number of technological milestones in the industry.

| | | | | | |
|-------------------------|---|----------------|---|-------|-------------------|
| Company Name | Doosan Engine Co., Ltd. | | | | |
| Established | Dec 30, 1999 | CEO | Kim Dong-chul | | |
| Major Areas of Business | Marine engines, diesel/gas power plants, engine parts and ship equipment, nuclear emergency generators | | | | |
| Business Locations | Head Office: 18, 21 beon-gil, Gongdan-ro, Seongsan-gu, Changwon, Gyeongsangnam-do, Korea Seoul Office: 726, Eonju-ro, Gangnam-gu, Seoul, Korea Domestic Offices: Geoje-si, Gyeongsangnam-do, Korea(Daewoo Site, Samsung Site) Overseas Branches: China, Germany, Singapore | | | | |
| Total Capital | KRW 1,406 Billion | Equity Capital | KRW 574.7 Billion | Sales | KRW 693.6 Billion |
| No. of Employees | 832(Dec 31, 2015) | Credit Rating | A-(NICE), BBB+(Korea Investors Service) | | |
| Overseas Subsidiaries | Doosan Marine Industry (Dalian) Ltd.(frame box, bedplate and other engine parts manufacturer) | | | | |

Major Areas of Business

Marine Engines(Low/Medium Speed)

Doosan Engine boasts extensive experience as a top-tier manufacturer of marine diesel engines in the global market, and our integrated service system extends from designing and production to sales and after market services. These valuable assets enable the company to meet increasingly diversified customer demand and provide engines that comply with ever-stricter environmental regulations.

Diesel/Gas Power Plants

Doosan Engine completed a turnkey project for a 40MW low-speed diesel power plant on the southern part of Jeju Island in 1990. In 1995, company also took on another EPC project of an 80MW low-speed diesel power plant in Guam. Since then, the company has won series of orders for gas, low and medium-speed engine-based diesel power plants in Papua New Guinea, India, Greece, Eritrea, Indonesia and other parts of the globe that are in need of electricity.

Engine Parts

Doosan Engine supplies a wide range of essential engine parts. Based on the 3B(Best Speed, Best Quality, Best Price) principle, we deliver customer value through a global network to ensure that our engines run at the optimum condition.

Environmental Technology

Doosan Engine applied its proprietary technology to develop a new DeNOx system. It is an eco-friendly system designed to help customers meet a wide range of marine and industrial regulations on nitrogen oxide emissions by converting nitrogen oxides in the engine exhaust gases into harmless pure water and nitrogen.



Governance

Doosan Engine strives to maximize corporate and shareholder value by practicing responsible and transparent management endorsed by the board of directors. The board of directors is a decision-making body that acts primarily through management of the company, representing the interests of investors. The members of the board also monitor and resolve current major management issues with the shared goal of achieving the long term growth of the business. Stakeholder's value and their expectations always come first during decision process which is discloses through company IR activities and their management method.

Board of Directors(BOD)

As of March 2016, Doosan Engine’s board of directors consists of 3 inside directors and 4 outside directors. The members of the board are appointed at the general meeting of shareholders in accordance with related laws and articles of incorporation, and outside directors account for more than half of the total number of members to ensure independence of the board.

Before being appointed by the general meeting of shareholders, ‘Outside Director Candidate Recommendation Committee’ implements a screening process for all candidates to ensure they don’t have special ties with the company. The committee makes sure that they have an adequate level of expertise in their respective fields such as economy, society, and environment for the sake of professionalism and independence.

The board of directors has the Audit Committee, Internal Transaction Committee, and Outside Director Candidate Recommendation Committee to make effective decisions. These committees consist of outside directors to ensure their professionalism and independence.

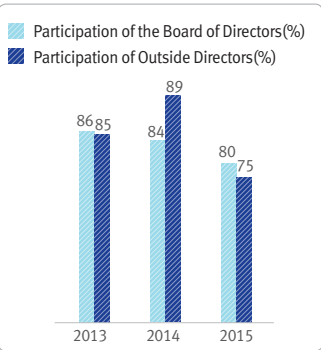
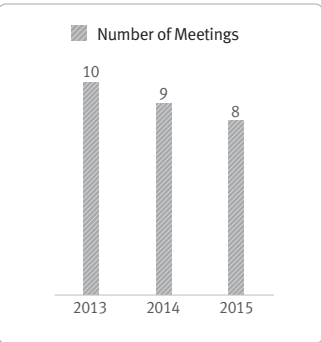
Members of the Board (as of Mar 31, 2016)

| Category | Name | Career Experience | Role | Appointed On |
|-------------------|---------------|---|--|--------------|
| Inside Directors | Kim Dong-chul | CEO of Doosan Engine | | Mar 27, 2015 |
| | Kim Il-do | CFO of Doosan Engine | | Mar 27, 2015 |
| | Cho Yong-jun | Managing Director of Doosan Engine Management Support | | Mar 27, 2015 |
| Outside Directors | Kang Sung-won | President of KICPA | Chairman of the Audit Committee, Member of the Internal Transaction Committee | Mar 25, 2016 |
| | Chung Jae-ho | Professor at Incheon National University Department of Economics | Chairman of the Internal Transaction Committee, Member of the Outside Director Candidate Recommendation Committee | Mar 25, 2016 |
| | Song Hou-keun | Professor at Seoul National University Department of Sociology | Chairman of the Outside Director Candidate Recommendation Committee | Mar 28, 2014 |
| | Hong Dong-pyo | Adviser at Lee & Ko Law Firm | Member of the Audit Committee, Member of the Outside Director Candidate Recommendation Committee, Member of the Internal Transaction Committee | Mar 25, 2016 |

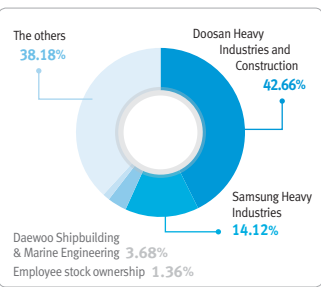
Committees Under the Board

| Committee | Members | Main Functions |
|---|---------------------|---|
| Outside Director Candidate Recommendation Committee | 3 Outside Directors | Recommend outside director candidates Audit of financial and accounting records |
| Audit Committee | 3 Outside Directors | Evaluate the management of internal accounting system Appoint and approve outside auditors |
| Internal transaction Committee | 3 Outside Directors | Audit and approve transactions between affiliated companies |

Performance of the BOD



Ownership Structure (as of Dec 31, 2015)



Activities of the Board of Directors

The board of directors is concerned with major management issues arises from surrounding on the economy, society and environment. Also, it makes decisions on issues regulated by laws and articles of incorporation, issues delegated to the board by the general meetings of shareholders’, as well as major issues on the basic management and operation of the company. The CEO assumes the additional position of the chairman of the board of directors and is entrusted with overall business management to form a quick decision-making system. The board resolves major issues and reflects stakeholders’ opinions gathered from the general shareholders’ meeting and IR activities in making decisions, and oversees directors’ management activities.

Every board member should attend and be present at board meeting. Particularly through video or voice messaging system is allowed. Every directors may not put themselves in a position of where there is a conflict of interest between the company and him. In 2015, the board of directors deliberated and resolved a total of 22 major issues including the appointment of CEO and approval of transaction with major shareholders, while getting reports on quarterly management performances and other topics.

Major Activities of the Board

| | Meeting Date | Agenda | No. of Outside Directors Presented (of Total No.) |
|---|--------------|--|---|
| 1 | Feb 5, 2015 | 4 cases including the approval of the 16 th financial statements and operations report | 4(6) |
| 2 | Feb 27, 2015 | 3 cases including the calling of the 16 th General Shareholders Meeting and approval of its agenda | 6(6) |
| 3 | Mar 30, 2015 | 3 cases including the appointment of CEO | 5(6) |
| 4 | Apr 27, 2015 | 2 cases including the approval of transaction with a major shareholder(Samsung Heavy Industries) | 3(6) |
| 5 | Jun 26, 2015 | 3 cases including the closing the deal to construct a set of accommodations at DLI(Doosan Leadership Institute) in Chuncheon | 4(5) |
| 6 | Jul 24, 2015 | 3 cases including the appointment of a fair trading compliance manager | 4(5) |
| 7 | Nov 2, 2015 | The third quarter report on management performance in 2015 | 4(5) |
| 8 | Dec 18, 2015 | 4 cases including the approval of transaction with Doosan Heavy Industries & Construction | 3(5) |

Evaluation and Compensation

The board of directors and each committee evaluate their own annual activities including their participation. Inside and outside directors are paid within the limit approved at the general meeting of shareholders. To ensure the independence of outside directors, they do not get paid extra for their performance measurement and only receive a base salary and allowances for domestic and overseas business trips.

Ownership Structure and Communication

Doosan Heavy Industries & Construction, the largest shareholder of the company, owns 42.66%(29,650,000 shares) of the shares as of December 31, 2015. Doosan Engine holds the general shareholders’ meeting on a yearly basis and actively integrates the shareholders’ opinions into the decision-making process and management. Plus, Doosan Engine is proactively communicating with shareholders by officially announcing primary facts of management on its website and DART of the FSS.

Ethics & Integrity

At Doosan Engine, employees are engaging in multilateral campaigns for compliance and ethical management as strongly supported by the CEO. All the employees also abide by the Code of Conduct, which was made based on core values of Doosan Way. The company has also implemented a number of compliance programs such as internal control system, cyber internal reporting system, and legal compliance control system for managing relevant risks in a proactive and systematic manner.

Code of Conduct

Doosan Engine has established and implemented Code of Conduct and detailed regulations based on the core value of the ‘Doosan Way’ to seek fair and transparent corporate operation and to internalize CSR(Corporate Social Responsibility) management. We also encourage the third parties including subcontractors to comply with our Code of Conduct and make every effort to spread the ethical culture. Entire employees are required to take ethical education program every year. They also hand in the form of written pledge to abide by our Code of Conduct.

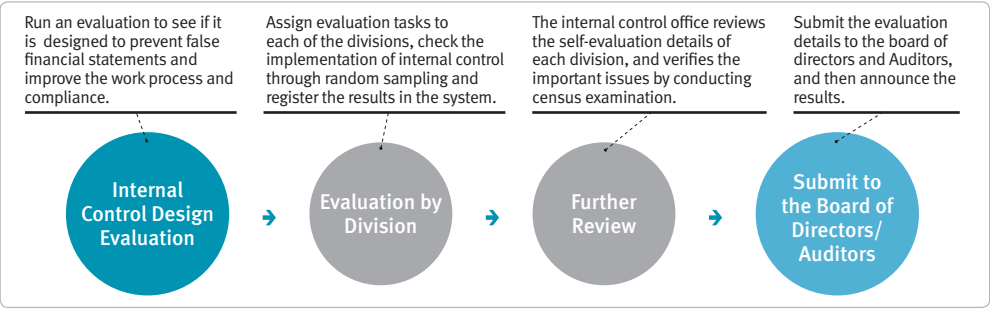
Compliance System

Internal Control System

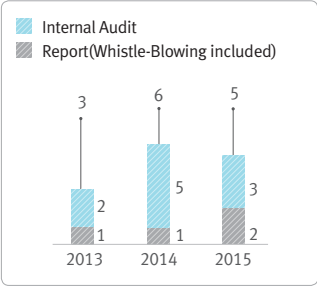
Doosan Engine has developed and implemented an internal control program to ensure the reliability and transparency of accounting data in addition to the protection of its assets. The internal control system enables us to select controlled items throughout the process so they can be checked and evaluated by ourselves. The items have fulfilled the internal accounting management system as a legal requirement. Furthermore, they have been set and regularly upgraded in consideration of various risky factors.

The internal control evaluation is conducted on a quarterly basis through the DICAS(Doosan Internal Control Assessment System). After each business division performs self-assessment, the results are checked by the internal control division. Then, the results are reported to CFO, CEO, the board of directors, and audit committee. Finally, the reports are made available to the public.

Internal Control System



Audit Performance



Internal Audit, Whistle-blower, and White Paper System

Doosan Engine employs an internal audit system as a follow-up review system, along with an internal control system for a preliminary review. It reviews the compliance of its Code of Conduct and illegal activities through management consulting audit and unscheduled audit based upon reports from inside and outside the company. When necessary, disciplinary actions are taken as an effort to firmly establish a compliance and ethical management.

Meanwhile, we have accepted whistle-blower’s reports through cyber internal report center in our website and internal report box and other means. Employees and the third parties are allowed to freely report another employee’s misdeed anonymously or not. The whistle-blower’s identity and the report content are thoroughly secured as confidential information.

The ‘white paper’ system refers to a program that requires us to record and compile analyses on fundamental reasons of main issues and alternatives to those problems in order to prevent the recurrence of similar incidents. The recorded and compiled data can be shared and used in educational or promotional activities. As an effect of this program, employees acknowledge their mistakes and come up with improvement measures by themselves to prevent themselves from repeating the same mistakes without any punishments or sanctions.

Legal Compliance System

The legal compliance program is an important part of the compliance system along with the internal control system. The program is used to manage legal risks through self-evaluation in a systematic and proactive manner. The result of the assessment is reported to the board of directors. Doosan Engine has introduced this system since 2012 and taken systematic actions to reduce the risk of legal violation.

Status of Criminal and Administrative Sanctions

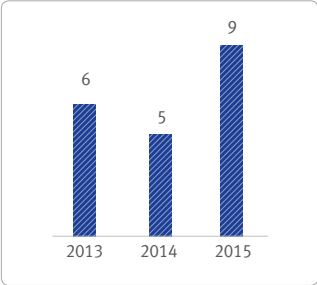
| Evaluation Items | 2013 | 2014 | 2015 |
|--|------|------|------|
| Total Amount of Major Fines(KRW million) | 300* | - | - |
| Number of Non-Monetary Penalties | - | - | - |
| Number of Dispute Resoultion Cases | - | - | - |

* A criminal case in violation of the Act on Unfair Competition Prevention and Trade Secret(lawsuit filed in 2011 and a fine of KRW 3 million paid in 2013)

Education of Compliance and Ethics Management System

Doosan Engine offers annual compliance and ethics management programs to all the employees in addition to individual-law-related training on fair trade and subcontract transaction, protection of privacy and trade secret. Team managers and senior management also write an Interest-Based Relationship Description and submit it every year. This system is designed to help employees better understand compliance and ethics management. It also encourages their full participation. The CEO regularly sends letters to the employees and its suppliers as an effort to firmly establish the compliance and ethics management as a corporate culture.

Code of Conduct Education



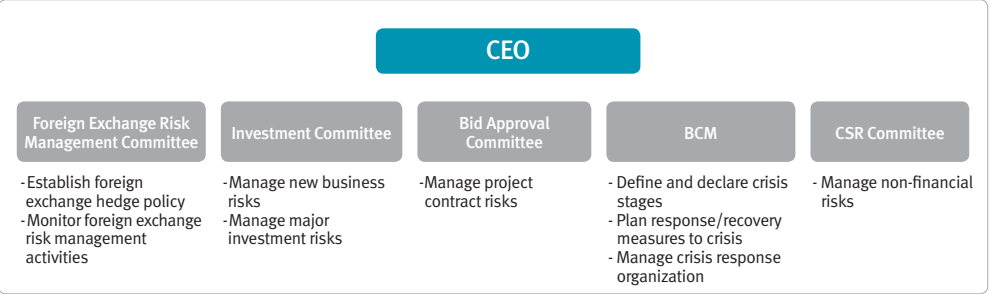
Risk Management

Doosan Engine is establishing risk management processes for every business area in order to identify risks and ensure efficient risk management system in accordance with ongoing changes in the business environment both inside and outside the company. We have promoted level of risk management by setting up BCM(Business Continuity Management) system to sustain our core competence and assets.

Risk Management System

Major risks that need to be mitigated corporate wide are managed by the corresponding Risk Management Committee. The risk management process involves identifying risks in monitoring internal and external management environment, making decisions to reduce or avoid risks, executing upon the decision, and conducting follow-up measures such as providing preventive manuals and education.

Risk Management Committee



Risk Management Process



Financial Risk Prevention & Management

Doosan Engine has improved its financial structure and asset management system in order to ensure safe and sustainable management performance from various financial risks including market, credit, and liquidity risks. We have initiatives in financial risk identification, evaluation, response, and follow-up management periodically, and such activities are systematically controlled and managed in accordance with the Internal Control System and Financial Management Manual.

Foreign Exchange Risks

Doosan Engine is very much affected by exchange rate fluctuations because of great exposure to overseas sales. Since the KIKO(Knock-In, Knock-Out) crisis of 2008, the company organized a foreign exchange risk management committee, established a foreign exchange hedge policy, and strengthened management and monitoring activities. Our fundamental strategy to manage foreign exchange risk is to prohibit speculative derivative transactions and to reduce influence of changing exchange rates on profitability by hedging exchange risks on foreign currencies acquired through import and export.

Interest Rate Risks

The purpose of managing interest rate risks is to reduce uncertainty caused by interest rate changes and minimize financial costs. We manage interest rate risks by regularly monitoring the interest rate changes in Korea and other countries while minimizing external borrowing and improving the structure of short and long-term loans.

Credit Risks

Doosan Engine only deals with clients with a certain level of credit rating to manage credit risks that can occur in common transactions. We regularly evaluate the clients and contractors' financial status and credit ratings for credit risk management, and set different credit limits for different clients and contractors.

Liquidity Risks

Doosan Engine predicts receipts and disbursements in sales, investment, and financial activities based on a regular receipt and disbursement plan in order to manage the maturity structure of debt and assets. Through such activities, we identify and maintain the required size of the liquidity, and manage any possible liquidity risks.

Non-Financial Risk Management

Doosan Engine has policies, organizations, systems, and programs in full operation to reduce non-financial risks in accordance with the CSR vision and strategy map for each of the major areas, such as human rights, labor, environment, fair trade, consumer, and local community.

| Category | Areas of Risk Management |
|----------------|--|
| Human Resource | Respect for human rights, non-discrimination, labor law compliance, privacy protection, etc. |
| EHS | Environmental issues, work environment safety, and disaster/emergency management |
| Supplier | Supply chain risk management, fair trade, anti-corruption |
| Customer | Customer health and safety, customer information protection, customer complaints |
| Community | Deal with local community issues, community involvement and development |

Project Risk Management

Doosan Engine employs the Quality Gate program, in which managerial process are defined at different stages of a project such as contract, planning, execution, and accounting. Through the program, we assess and analyze the risks and make decisions, thereby controlling risks at all stages of the project. In the bidding procedure, the Bid Approval Committee evaluates on overall risks including foreign laws and makes decisions to manage the risks in advance and ensure profitability.



Establishment of Infrastructure for responding to contingencies including disasters

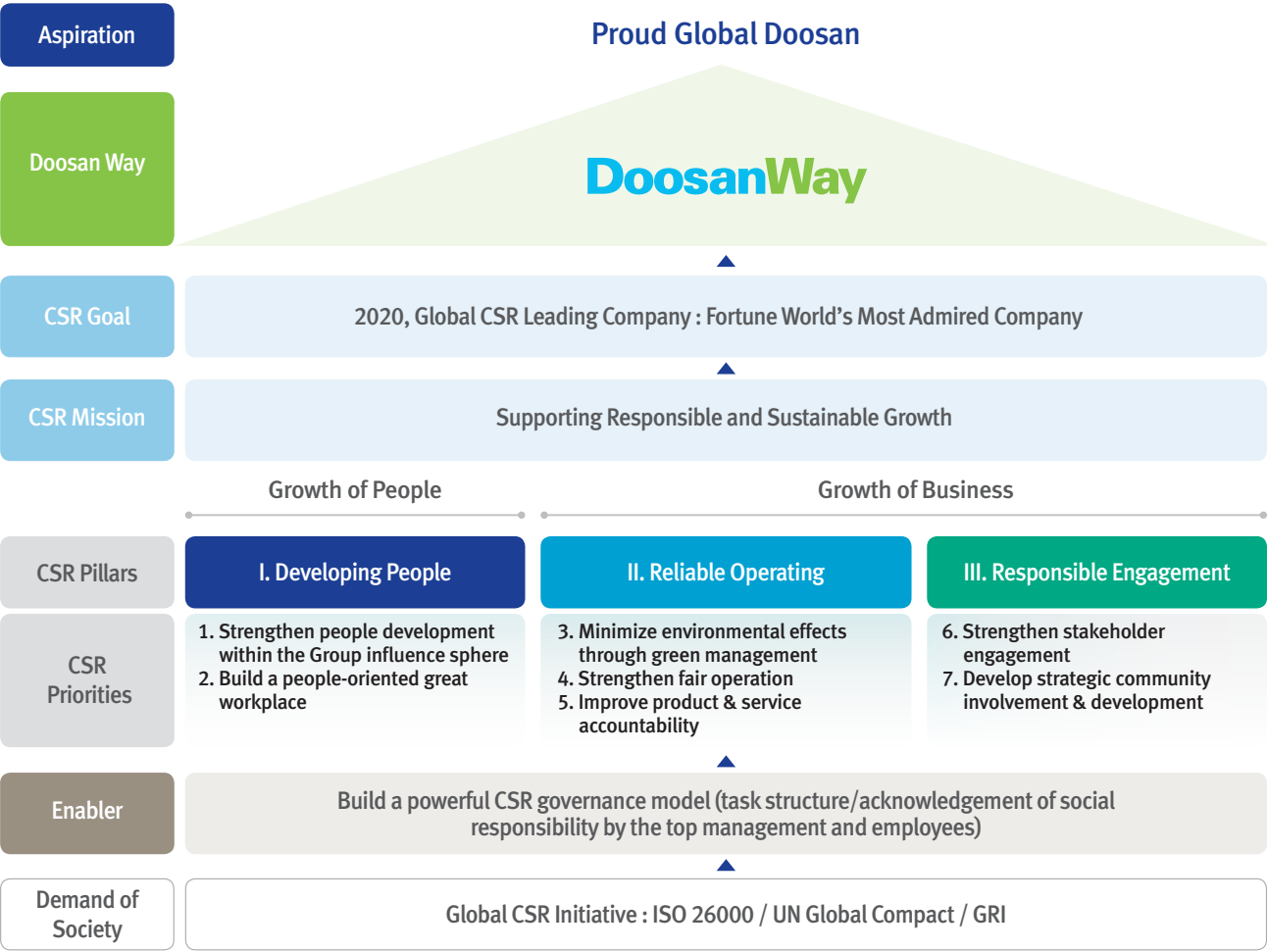
Doosan Engine has operated the system against emergencies to maintain the corporate value by preserving its core capability and assets even under unpredictable extreme risks. Doosan Engine has set BCM(Business Continuity Management) system to manage the maintenance of its business in any contingencies. Doosan Engine has also conducted annual simulation training to enhance and develop the capability to react to any emergencies.

CSR Strategy & Management

The structure of Doosan’s Corporate Social Responsibility(CSR) strategy is composed of the goal ‘2020, Global CSR Leading Company’, mission ‘Supporting Responsible and Sustainable Growth’, three CSR strategic directions, and seven CSR priorities, which are all aimed at realizing the vision: ‘Proud Global Doosan’.

The structure of Doosan’s CSR strategy is particularly significant in that stakeholders took active part in identifying core issues of CSR and strategies were developed based on these issues. In addition, Doosan’s identity and CSR priorities are highlighted in the structure. Doosan Engine developed CSR promotion activities for each of the business areas based on its CSR strategy map, with which to minimize risks related to main issues and promote activities aimed at improving its competitiveness.

Structure of CSR Strategy

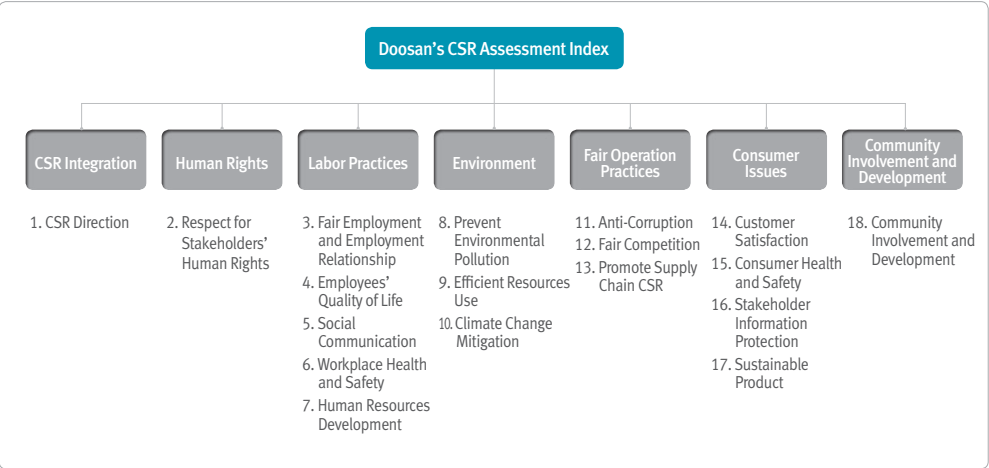


CSR Assessment Tool

Doosan Engine has continuously monitored and improved CSR status and capability utilizing Doosan CSR Assessment Tool. The assessment indicator consists of seven sectors and eighteen indexes based on the core subject in ISO 26000.

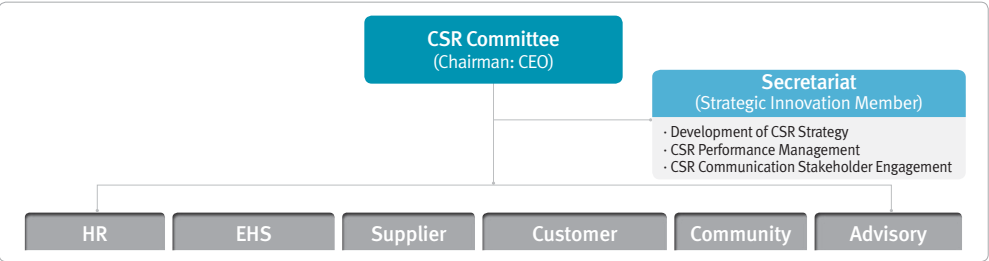
As a result of this assessment in 2015, it turned out that the concerted enhancement between CSR strategy and enterprise management strategy was mandatory. Plus, it was shown that exterior stakeholders and overseas offices had to strengthen preventive measures for any human right risks. Lastly, it proved that Doosan Engine was required to set the long-term strategy for responding to climate change in an enterprise dimension.

According to the assessment result, Doosan Engine has drawn the task to forward CSR considering the ripple effect of the risk and the urgency in response to the risk. The vice president have participated in the task as a champion, who organized independent TF team to do the task systematically. CSR tasks have been implemented not temporarily but consistently according to a long-term plan. It has led to higher corporate sustainability.



CSR Committee

Doosan Engine has organized the CSR Committee with the CEO being the chairman in order to meet the demands of various stakeholders both from domestic and international and fulfill the social responsibilities discussed in the ‘Doosan Way’. Doosan Engine held both the former and the latter half CSR committee meetings in March and December 2015. At the former meeting, the committee presented and shared the plan for CSR-focused tasks and encouraged its members to fully conduct the task. At the latter meeting, it presented on the completion of CSR task process result and checked the task process status. It also admitted the plan to publish 2015 CSR report. Next, Doosan Engine CSR committee will monitor economic, environmental, and social topics periodically and operate the program inviting stakeholders to activate the activities for minimizing CSR-related risks and heighten its corporate competitive edge.



Stakeholder Engagement

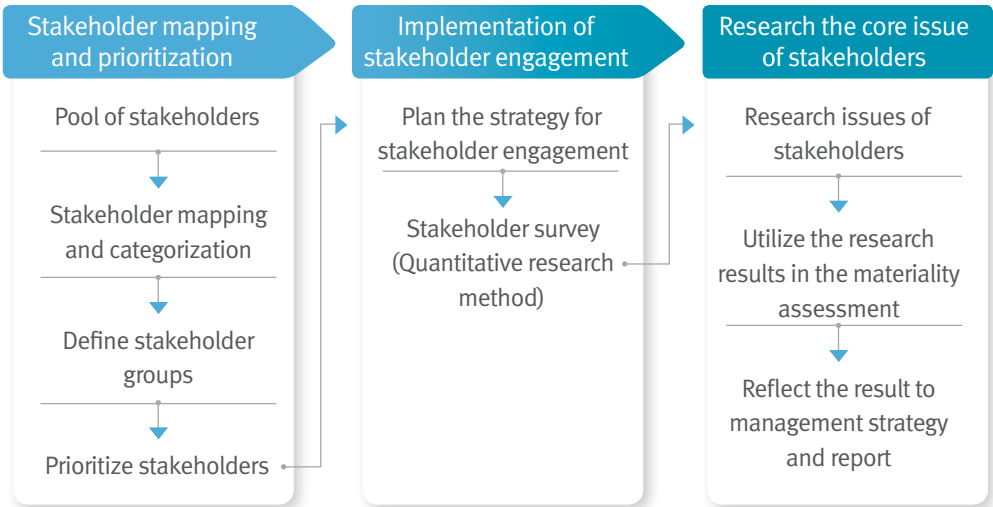
Identification Process of Key Stakeholders

Stakeholder Identification

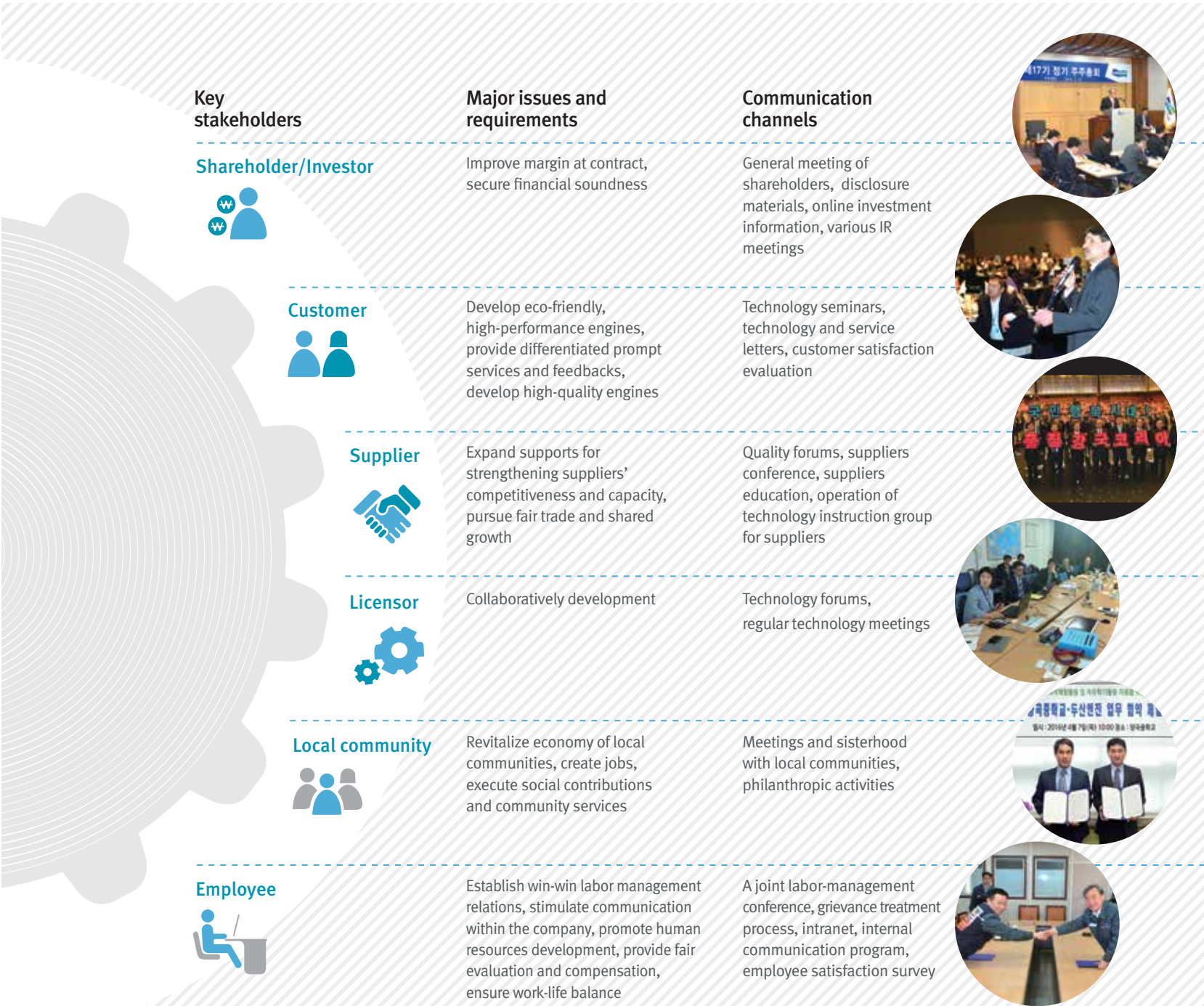
Doosan Engine defines those individuals or organizations that affect or are affected by our business activities as stakeholders. We categorize our stakeholders as shareholder/investor, customer, supplier, licensor and local community, according to stakeholder identification standard of ISO 26000. Our corporate sustainability is raised by reflecting the various opinions of each group on our business activities.

Stakeholder Engagement

Doosan Engine operates several communication channels for each stakeholder, there by promoting stakeholder engagement. We are working to settle a sustainable management with stakeholders, where stakeholders participate in business activities both directly and indirectly through communication with Doosan Engine, while Doosan Engine grasps and effectively responds to major interests and expectations of stakeholders. The results of such communication are reflected on our business activities and are shared through our CSR reports and company website.



Doosan Engine’s Key Stakeholders



Materiality Assessment

Doosan Engine has selected the material issues of CSR to be considered for its management activities in accordance with the method of conducting an evaluation of their significance as per GRI G4 and ISO 26000. The table of contents and the information to be reported were organized by focusing on the selected material issues. They have also been used as the basis for establishing the mid-to-long term sustainability strategy.

Process

CSR material issues were drawn by 3 steps of process based on the principles of ‘Sustainability Context’, ‘Materiality’, ‘Completeness’, and ‘Stakeholder Inclusiveness’

Step 1. Identification

We identified CSR-related issues around Doosan Engine through the domestic and foreign benchmarking, analysis of CSR-related global initiative, CSR assessment, interviews with stakeholders.

Step 2. Prioritization

① Stakeholder identification and engagement

We identified key stakeholders for the engagement process and collected key stakeholders’ opinions on CSR of Doosan Engine through interviews and surveys. (Survey period: Jan 7 ~ Jan 29, 2016)

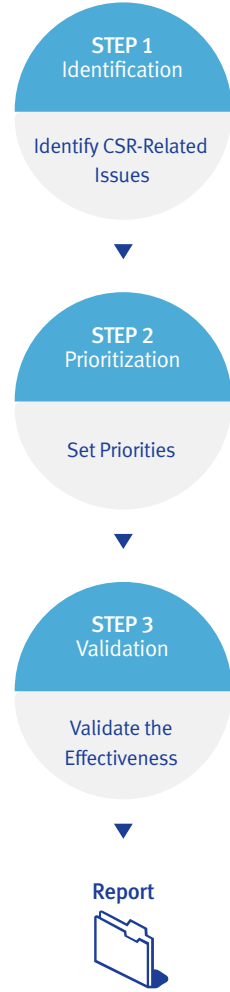
| Category | Key Stakeholders | No. of participants |
|-----------------------|------------------------------|---------------------|
| Internal Stakeholders | Employees(Officers/Managers) | 32 |
| | Employees(Team member) | 102 |
| | Subtotal | 134 |
| External Stakeholders | Shareholder/Investor | 8 |
| | Customer | 17 |
| | Supplier | 24 |
| | Licensor | 4 |
| | Local community | 13 |
| Subtotal | | 66 |
| Total | | 200 |

② Setting the priority of issues

We have set the priority of issues in light of the stakeholders’ concerns and impact on the organization.

Step 3. Validation

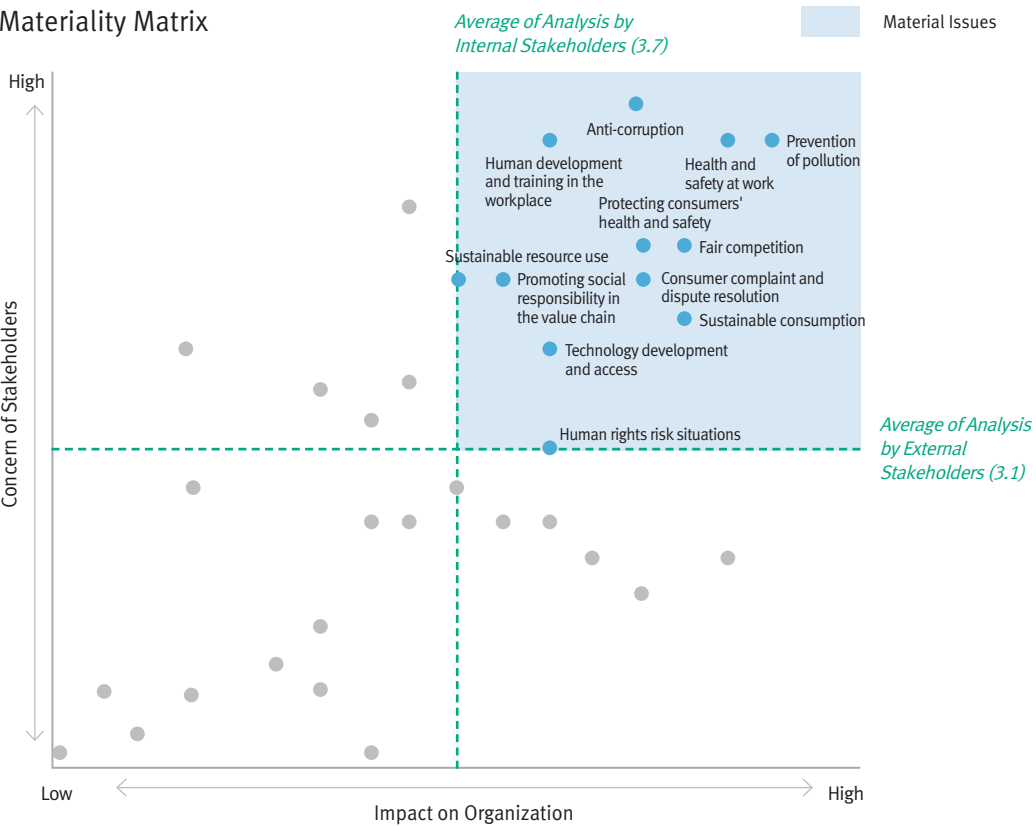
The finalized 12 issues were reviewed through a task force discussion and reported to the management to validate they are significant to Doosan Engine.



Results

A total of 12 material issues such as prevention of pollution, health and safety at work, anti-corruption, human development and training in the workplace, and fair competition were selected. They were reflected in CSR strategy and the process of deciding the priority of the contents in CSR report.

Materiality Matrix








CSR Material Issues and Reporting Page

| No | CSR Material Issues | ISO 26000 Core Subject | Page |
|------|--|---------------------------------------|------------------|
| 1st | Prevention of pollution | Environment | 46 ~ 49 |
| 2nd | Health and safety at work | Human Rights and Labor | 42 ~ 45 |
| 3rd | Anti-corruption | Fair Operating | 12 ~ 15 |
| 4th | Human development and training in the workplace | Human Rights and Labor | 27 ~ 29 |
| 5th | Fair competition | Fair Operating | 33 ~ 34 |
| 6th | Protecting consumers' health and safety | Product and Customer | 51 ~ 55 |
| 7th | Consumer complaint and dispute resolution | Product and Customer | 54 ~ 55 |
| 8th | Sustainable consumption | Product and Customer | 30 ~ 31 |
| 9th | Technology development and access | Community Involvement and Development | 30 ~ 31, 57 ~ 60 |
| 10th | Promoting social responsibility in the value chain | Fair Operating | 33 ~ 37 |
| 11th | Sustainable resource use | Environment | 30 ~ 31, 46 ~ 49 |
| 12th | Human rights risk situations | Human Rights and Labor | 39 ~ 41 |







Our Value Chain

Doosan Engine has advanced in tandem with the diesel engine industry. Our product quality is second to none, and we lead the industry in the development of the next-generation electronically-controlled marine diesels.

Doosan Engine strives to build the 'No. 1 Engine in the World' as a global leader in the 21 century through change and innovation.

-  **People & Technology**
People - oriented Technology
-  **Supply Chain Management**
Management of a Mutually Beneficial Supply Chain
-  **Production**
Production Based on the Respect for Human Rights and Environment
-  **Service**
Service for Improving Customer Value
-  **Corporate Community Involvement**
Creating Shared Values with Society

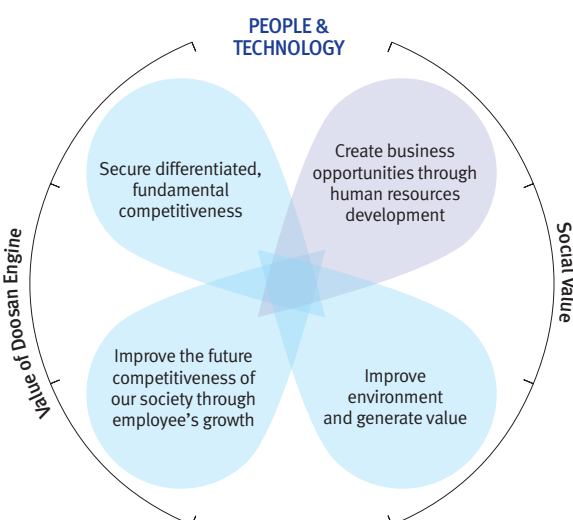
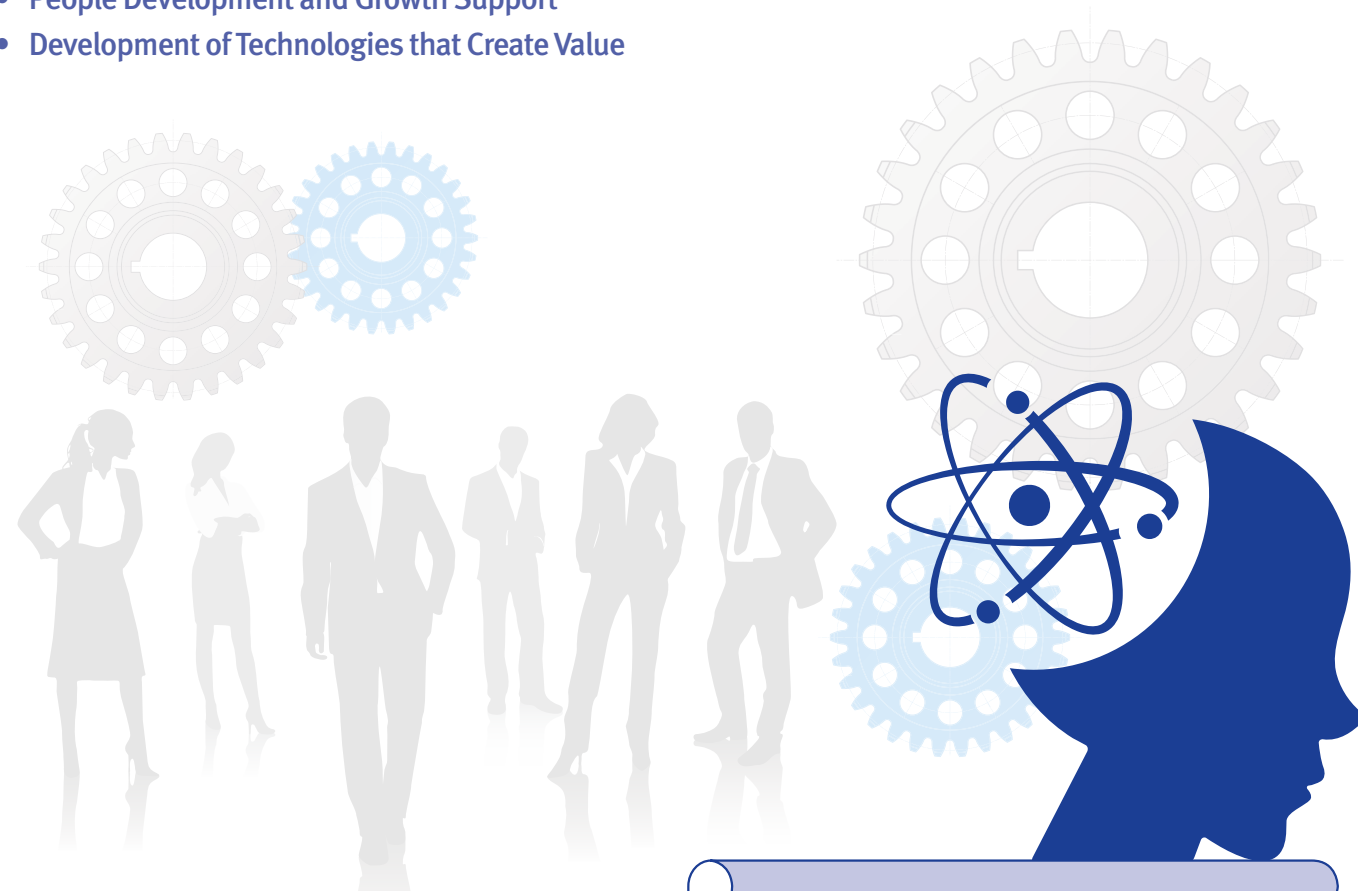
Sustainable Value Creation

| Value Chain | Strategic System of CSR | Strategic Subject of CSR | Context | 2015 Commitment | 2015 Progress | 2016 Commitment |
|---|---|--|---|---|---|---|
|  CSR Governance Governance | Enhancement of Stakeholder Engagement | Operation and promotion of stakeholder engagement | · The trust of various stakeholders in Doosan Engine's competitiveness is important | · Interview with the focus group in stakeholders and research on their basic needs | · Definition of stakeholder and deduction of main issues through survey | · Maintenance and monitoring of communication channel engaging stakeholders |
| | Establishment of CSR governance | Establishment of the CSR Committee's implementation system and performance management system | · It became important to reflect CSR on important management-related decisions as there are now higher social expectations for CSR | · Excavation and implementation of CSR main tasks | · Excavation and execution of CSR tasks · Establishment of the system for managing human right risks · Establishment of the system for managing energy efficiency · Establishment of the system for managing CSR in the supply chains · Establishment of the system for the security of stakeholders' information | · Consistent execution of CSR tasks · Organizing the system for managing human right risks · Organizing the system for managing energy efficiency · Organizing the system for managing CSR in supply chain |
| | Reinforcement of fair operation | Continuous implementation of ethics management | · Increased demand for transparent and ethical corporate management | · Internalization through CoC cyber education for every employee · Implementation of additional CoC cluster education for specific divisions requiring ethical management such as procurement team, sales team, and etc · Activation of internal report · Introduction of various report channels as the last content of CoC education | · CoC cyber and workshop training for the employees · Compliance and ethics training for the staff required to take the course by their divisions · Guidance or notice of internal report channels · Notice about Code of Conduct on traditional holidays to the employees in subcontractors · Notice about Code of Conduct in family events to the staff in charge | · Spread of compliance and ethics management · Companywide CoC education for the employees · Strengthening self-directed education by the hosting division · Maintenance of compliance and ethics management |
|  People & Technology People-oriented Technology | Enhancement of human resources development | Human resources development and growth support | · People, particularly those with professional skills and expertise, are becoming a more important competitive factor for businesses | · Connection between Learning Credit and Pumasi training · Spread of the scope up to technicians and Diversification of its functions · Development of ERP system in HR sector · Review of the way to foster technicians · Effort to foster master or renowned mechanics additionally | · Upgrade and differentiation of inter-division Pumasi training · Propulsion of HRIS by stage : opening Core HRMS and designing HR solution · Fostering human assets through the lecture using employees' talent donation · Fostering production academy and study group for technicians | · Establishment of Functional Competency for every function · Consistent upgrade and spread of Pumasi training and study clubs · Operation of the program fostering technicians : Implementation of the professional course for each position · Operation of Leadership Change program |
| | | Development of technology generating value | · Necessity to develop differentiated eco-friendly technology and secure original competitive edge | · Development of eco-friendly high-efficiency engine · Development of eco-friendly high-efficiency vessel equipment | · Supply and commercialization of electronically controlled duel fuel engine · Performance improvement and durability securement of eco-friendly high-efficiency vessel equipment · Securement of SCR design and performance capability | · Stabilization of design quality · Item sophistication through securement of SCR skill competitive edge · Securement of original competitive edge through next-generation SCR development |
|  Supply Chain Management Management of a Mutually Beneficial Supply Chain | Reinforcement of fair operation | Strengthen suppliers' competitiveness | · Outstanding suppliers have direct effects on Doosan Engine's competitiveness, and win-win growth and fair trade are demanded by the society at large | · Consistent activities for fair transactions and facilitation of CSR in the supply chains | · Establishment of CSR management system in supply chain CSR · Enactment and proclamation of CSR Guideline for suppliers · Setting the system for assessing the CSR in suppliers · Presentation on suppliers' CSR compliance and practice | · Organizing the system for managing CSR in the supply chain · Simulated assessment by survey and level analysis of CSR in suppliers · Development of the program supporting CSR in suppliers · Organizing the monitoring system supporting CSR in suppliers · Preparation to operate the program supporting CSR in suppliers |
|  Production Production Based on the Respect for Human Rights and Environment | Establishment of Great Workplace with focus on human respect | Create a culture where employees' rights are respected | · Better employee welfare and more employee rights lead to employee loyalty, which in turn will play an integral part in improving workplace performance at Doosan Engine | · Establishment of the system for managing the risk in human rights · Research and management of the in-company risk in human rights · Review of the introduction of outplacement for retirement age personnel | · Setting the system for managing the risk in human rights · Interview with in-company employees and research on the current status of the risk in human rights · Review and announcement of human rights rules and channels and its promotion · Implementation of in-company education on human rights | · Organizing the system for managing human right risks · Interview with in-company subcontractors to be aware of current status of human right risks · Checking the current status of in-company human right risks and communication channels · Enhancing in-company human right education and monitoring |
| | | Advancement of health and safety system | · The health and safety of employees are the most fundamental factors Doosan Engine as a manufacturer | | · Preemptive management of EHS Risk · Enhancement of the ability to respond to any crises through companywide BCM drill | · Strengthening the prior management on the area invulnerable to big fire · Strengthening safety practice ability through emotional safety management |
| | Minimization of environmental effect through green management | Advancement of environment management system | · Many environmental regulations(IMO Tier II, III, etc.) related to the shipbuilding industry are becoming ever more strict, and complying with such regulations is now a prerequisite for shipowners in buying an engine | · Establishment of toxic chemical management system · Response to Emissions Trading system · Planning the process of green purchase · Continual monitoring on eco-related laws | · Establishment of the system for managing climate change such like enacting the procedure in managing greenhouse gas · Preemptive response through establishment of the chemical inventory according to Chemicals Control Law enforcement | · Observance of the program for conducting Emissions Trading system · Planning to monitor greenhouse gas and proving the specifications · Submission of Emissions Trading case and its quota |
| | | Improvement of energy efficiency system | | · Reduction by 1% of the entire energy expense · Establishment of the system for making energy management efficient · Development of the document on the procedure of energy usage management and the manual | · Establishment of the system for managing climate change such like enacting the procedure in managing greenhouse gas · Preemptive response through establishment of the chemical inventory according to Chemicals Control Law enforcement | · Establishment of the system for managing workplace energy · Companywide integrated energy management · Conducting energy reduction · Energy diagnosis · Choice of the solution for reducing energy and planning for long-term improvement |
|  Service Service for Improving Customer Value | Enhancement of responsibility towards products and services | Development of emotional services and suppliers' self-quality control system | · Improving the quality of service and products became evermore important as customer demands for better products increase | · Effort to upgrade service capability and establish systems for new business · Review and analysis on the advance prevention against Poison Pill · Enhancement of the capability of SCR service · Continual implementation of emotional service | · Sophistication of the quality system in power generation · Securement the quality capability in marine plant equipment business · Enhancement of the ability to design SCR and service | · Improvement of clients' satisfaction on service quality · Management of rapidity in defect-management and of the rate of taking measures · Advance visitation to clients · Daily management on the rate of reply to clients' emails · Embarkation and check to prevent any defects · Fostering the labor force proficient in after-sales service |
|  Corporate Community Involvement Creating Shared Values with Society | Strategic community involvement and development | Further promote social contribution activities, particularly for the local community | · Supporting local community development will add to Doosan Engine's growth potential and reputation | · Consistent operation and spread of Doosan Day of Community Service | · Operation of Doosan Day of Community Service day | · Operation of Doosan Day of Community Service day · Development and operation of the program supporting in-community creative experiential learning and free semester system |

I. People & Technology

People - oriented Technology

- People Development and Growth Support
- Development of Technologies that Create Value



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.

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.

- Excerpt from Doosan Credo -

People Development and Growth Support



Doosan Engine believes that ‘people’ generate business growth. The 2G strategy is a positive reinforcement of the ‘Growth of People’ leading ‘Growth of Business’ and vice versa.



Context



Progress

With the belief that Doosan’s people are our greatest asset and the key to our future, the company supports the growth of every employee. Doosan Engine is making headway in improving the future competitiveness of both the company and society through fair and advanced recruitment for securing right talent, systematic human resources development system and program, and employees’ growth through fair assessment and rewards.

Staff and Employees

Doosan Engine has a total of 832 employees as of the end of 2015. There are 806 male workers and 26 female workers, whose positions consist of 386 office workers and 446 production and technical workers. As for female employment, they account for 3% of the total number of employees. We are creating a pleasant work environment with balance between work and life. Doosan Engine evaluates and rewards all employees on equal criteria, and prohibits any discrimination by gender, religion, race, age, and educational background. During recruiting process, applicants are not allowed to submit personal information such as personal details of their families or school grades, but focuses on their individual capabilities for equal and fair job opportunity.

Fair & Advanced Recruitment

‘Attracting and recruiting the right talent, who understand and embrace our values, will be the foundation for developing our people.’ Based on Doosan Credo, the company accepts online job applications through its website to make sure that every applicant are given equal opportunity. The company applies an advanced recruiting process, such as Doosan Bio-data Survey, DCAT, first job interview and second job interview. In particular, top management participates in the final job interview.

Human Resources Development

According to the ‘Doosan Credo’, ‘Cultivating people is prior to any other investments and it is our shared responsibility.’ One of Doosan Engine’s main goals is cultivating global leaders familiarized with the Doosan Way and experts taking initiatives in sharpening original competitive edge and innovation. These goals(DCM: Doosan Competency Model) are classified as leadership competency and functional competency. To achieve these goals, the company has established a development plan based on improving self-directed ability as well as training programs. Training program is comprised of “Leadership College” and “Professional College”.

Leadership College

Insight Program aims to help all Doosan employees cultivate leadership skill and Doosan Credo. It has expanded from executives and team leaders to part leaders. Moreover, the company has invited celebrities and experts in leadership and innovation field to provide employees with regular courses. We have implemented lectures through talent donation, where in-company experts can exhibit their expertise.

The company also offers Biz Chinese and Intensive language courses in order to promote global competitiveness prior to entering new markets and strengthening our global business. The company supports overseas professional training and backpack trips to help employees engender global mindset.

For production employee, we have consistently conducted leadership education for efficient workplace management and leadership development every year.

Professional College

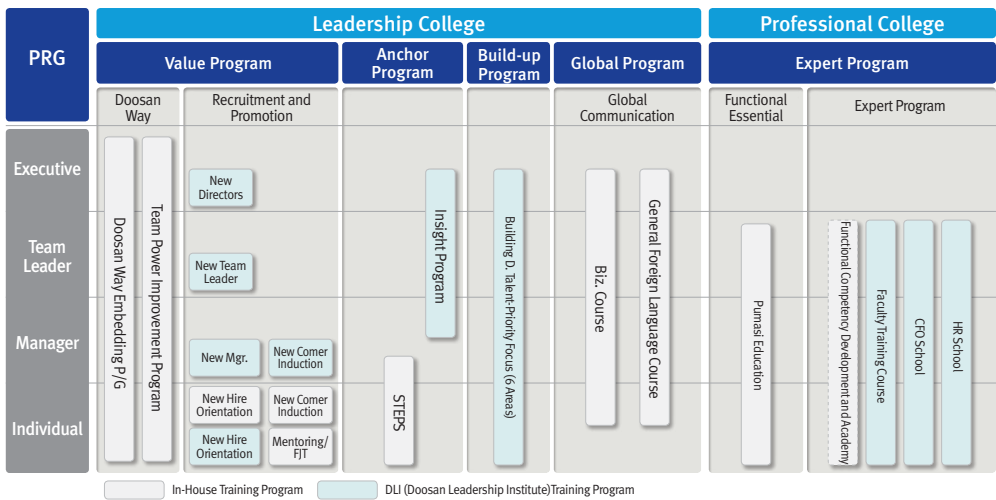
Doosan Engine is developing functional competency system reflecting professional and global expertise in each section for securing original competitive edge and fostering global-level experts.



In R&D and design technology, we established the FC system in 2014 and have fostered internal experts to take the lead in enhancement and innovation of fundamental technological competitiveness. We plan to complete the FC system for all functions including production, procurement, sales, quality, and planning/support in 2016. As a result of the development in functional expertise, one of our R&D staffs was registered in Marquis Who's Who in the world 2015(one of the world's top three biographical dictionaries) for excellent research on materials such as casting and composites. For production and technical staffs, we have conducted the education program for professional development in process, assembly, trial drive and EHS sector.

Individual Development Plan

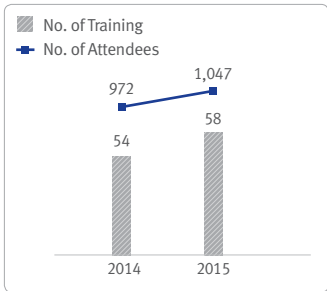
Doosan has its own development plan which includes customized individual development activities aimed at identifying and meeting development needs through interactive discussions between the assessor and the assessed. In the past, leaders usually initiated development. This has changed to voluntary personal development with the person taking full responsibility of the action, and the team leader continuing to provide support in team members' personal development activities. When creating a development plan, it is easier to identify root cause of development and provide examples of various development activities. In particular, DP evaluation(competency growth) is reflected in annual salary increase rate to better motivate people to develop themselves.



Faculty(Instructor) Training Program

Doosan Engine has identified in-house experts in each respective area and prepared them to teach others in their teams as a part of its expertise training program, such as 'Pumasi Training'. These experts can learn how to program their classes and give lectures with the support of the company.

Pumasi Training



Pumasi(knowledge-sharing) Training

The Pumasi Training is designed to help employees better understand and learn expertise in various fields from fellow employees. This is one of Doosan Engine's unique training programs through which employees are informed of important knowledge and know-how of work competence. Once the FC system is established for each function in the near future, this training will be incorporated and integrated into other existing academic classes of each business division in order to form a more structured training system. In 2015, 58 Pumasi training sessions were held in 11 different functional areas, and 1047 employees participated in the program.

OTRT(Our Trust & Respect Time) Meeting

To discover and encourage those employees who positively influence others leading by example in workplace, Doosan Engine has led monthly OTRT luncheon meetings with the CEO.



Fair Evaluation and Reward

Doosan Engine maintains objective and fair assessment and compensation system based on the traits required by the model of Doosan People. Doosan Engine conducts DCM assessment(competency: How to achieve) and MBO assessment(performance: What to achieve) for office workers. Our annual salary and reward system is supposed to be commensurate with competency and performance. Instead of lining up employees by their grades, the company has conducted individual development for personnel evaluation and reward system since 2013. In regards to production and technical staffs, we have altered the evaluation system(evaluation elements, weight of evaluation items, and so on) to establish reasonable grounds for fair compensation through objective evaluation. The alteration was applied to the evaluation in 2014 to heighten objectivity. In 2015, the system was improved towards reinforcing the verification system of evaluation results.

Global Mobility Support Program(GMS)

Global Mobility Support Program(GMS) was introduced to assure the stable life of expatriate staffs working abroad. Doosan Engine set up a compensation system in which our employees all over the world can work under the same condition. By providing living expenses considering the price level and living environment of the particular country, we assure the expatriate employee of the same standard of living despite different circumstances. For early settlement, we also look for houses, provide information on children's education, and provide education on different cultures and foreign language.

HRIS(Human Resources Information System)

We have integrated HRIS scattered all around the world into one system, maximizing the availability of HRI and enabling career management to be systematic and work-based. Particularly, for effective labor operation, global integration and operation of HR system have become available by consolidating performance management, CDP, reward, education, and so on.

Next Step



Doosan Engine intends to support various training courses and programs to enable human asset to have leadership and professional skill. Especially, for the cultivation of professional ability, office workers will complete the establishment of FC system throughout every field. Technical staff is planning to focus on TFT organization for training, which will operate various work-related professional education programs. We will also operate comprehensive global HR system and develop more structural HR management system based on HRIS.



Development of Technologies that Create Value

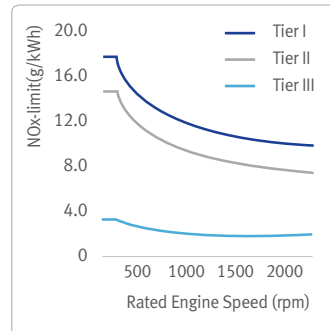


To lead the global market over the next 100 years, Doosan Engine, as a global corporation, trains technicians and strives to improve the maritime environment and develop environmentally friendly technology.



Context

IMO NOx Regulations



Progress

Development of eco-friendly high efficiency engine

Eco-friendly high efficiency engine(MDT-G, WinGD-X Engine)

This environmentally friendly engine has an increased piston stroke within the engine cylinder to increase fuel efficiency by up to 7% and reduce gas emissions by 7%. It is designed to satisfy the Tier II Environmental Regulations of the IMO. Doosan Engine and partner engineering companies have developed high output marine engines with higher fuel efficiency and less noxious gas emissions. With these environmentally friendly engines that can satisfy the needs of its clients who place great importance on being environmentally friendly, Doosan Engine is playing a leading role in the market for environmentally friendly engines.

Electronically Controlled Dual-Fuel Engine(ME-GI, DF Engine)

Doosan Engine provided US marine with a marine engine for middle or low speed and a gas supply system using both LNG and heavy crude oil for the first time in the world February 2013. As a result, dual fuel engine controlled by electronic system became widely available. Besides, Doosan Engine has been recognized as its technical ability globally and has expanded its client base. Electronically controlled dual fuel engines primarily use clean, environmentally friendly LNG as primary fuel instead of diesel oil, which is used only as auxiliary fuel. These next-generation environmentally friendly engines will significantly reduce not only ship operation cost, but also carbon dioxide, nitrogen oxide, and sulfur oxide emissions.



SCR(Selective Catalytic Reduction)

Environment

Taking effect from 2016, the IMO's Tier III Regulation will require NOx emissions from marine engines to be reduced by 80% compared to the existing Tier I Regulation, in order to prevent atmospheric pollution. Doosan Engine, a top tier engine maker with advanced engineering, analysis and applied control technology, has completed the development and successfully commercialized of the marine SCR's since 2011. The SCR is an environmental system that converts NOx(NO and NO2) in emissions into harmless N2 and H2O by using catalyst.

Technology

In the past, SCR was installed in close proximity to engine in order to keep temp of high exhaust fume(over 300) where SCR shows for desired performance this installation requirement takes up. To overcome this technical limitaion of SCR, Doosan Engine has been focusing on the development of a new SCR system while also developing a low temperature catalyst with the cooperation of Korea institutes of S&Tech. In addition, we conducted a real scale test, using are of our engines which is the final real life test of SCR in the industry to have the performance and technology of the catalyst and SCR system verified, and in June 2013, we became the world's first company to receive a certification from the GL classification for satisfying the IMO Tier III Regulation.

Doosan Engine's new SCR, commercialized under the brand name of 'DeINOx' demonstrates many advantages over other competing tech: excellent performance with low temp exhaust, easy to install, less capacity requirement hence efficient use of engine room space. This will also add more versatility to designing a ship.

Service

Doosan Engine has developed exclusive skills and secured original competitive edge, thereby successfully obtaining the order of LP(Low Pressure) SCR and itemizing DeINOx. Doosan Engine will provide a differentiated total solution by providing the package of engine and SCR as well as technical services to clients based on years of expertise in the engine industry and global network. We will also continue to create environmentally friendly future value.

Improved R&D Capabilities

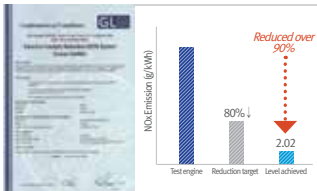
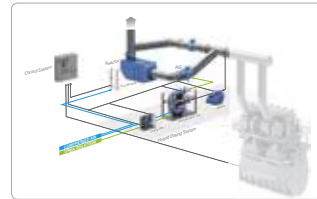
R&D Organization Expansion and Technology Network Enforcement

Doosan Engine continues to increase the number of R&D staff and diversify R&D network in order to explore new business opportunities and maximize R&D synergy.

Our Changwon R&D Center conducts tasks including high-quality engine and mechatronics technology development, engine tests and engine business support, injection/response interpretation, catalyst development, eco-friendly technology, products development, and industrialization support. The R&D Center has built a global technology network in cooperation with the R&D centers of Doosan Group's subsidiaries and industry-academia partnership research institutes. By making effective use of this great research infrastructure, the R&D Center develops marine engines, environmentally friendly technology, and cutting-edge ICT(Information & Communication Technology).

In an effort to enhance the value of offshore and shipbuilding industry by developing cutting-edge engines and eco-friendly ship equipment, Doosan Engine was the first in the world to successfully produce the electronically controlled engine(ME-GI) that utilizes both LNG and oil fuel in 2014. We plan to lead the world by developing technologies that create eco-friendly and potential values, while guiding the world in terms of a global technology trend. Doosan Engine will increase its lineup of SCR products to include catalysts that can be applied in stationary engines in addition to low/medium-speed engines based on the Doosan's low temperature SCR technology in the area of marine engine. We will continue to develop new products such as SCR packages and high performance catalysts. With this new lineup, we plan to maximize our corporate value and play a leading role in improving the environment.

SCR System



GL COC Certification

*COC(Confirmation of Compliance)

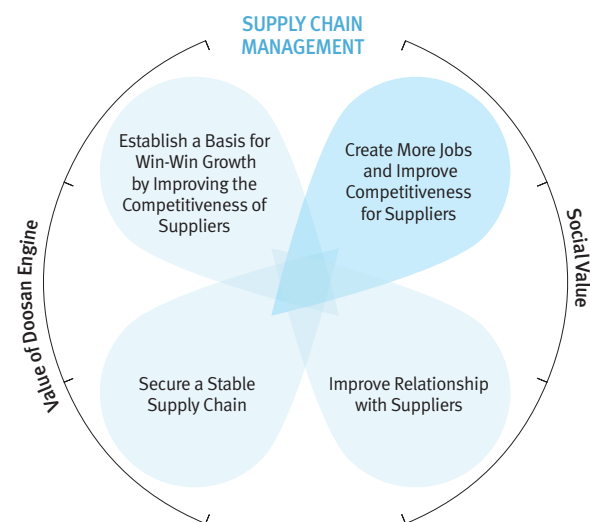


Next Step

II. Supply Chain Management

Management of a Mutually Beneficial Supply Chain

- Fair Trade
- Shared Growth with Suppliers



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

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.

We recognize that long-term success is built by respecting the rights of our suppliers, distributors and partners to earn fair profits.

- Excerpt from Doosan Credo -

Fair Trade



In 2004, Doosan Engine established "Compliance Program" in order to secure fair and transparent transaction with its suppliers and to fixate compliance and ethic management within the company. Doosan Engine has renewed "Code of Conduct", including various corporate rules for practicing fair trade, to obligate all the employees to comply with the "Code of Conduct".

Context

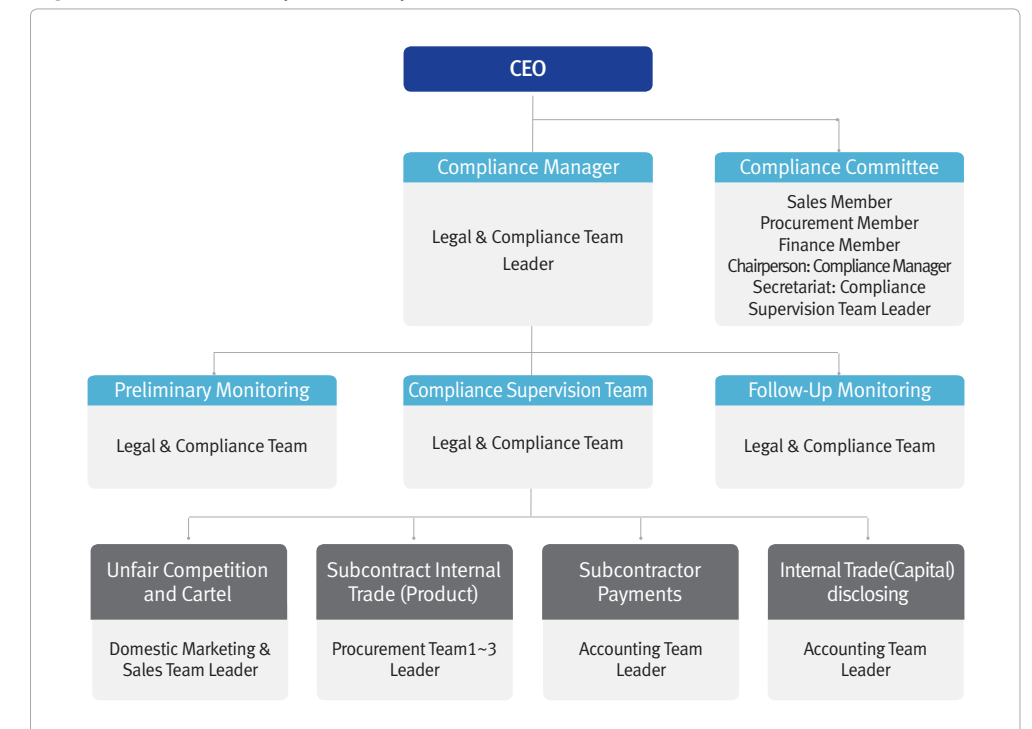
Doosan Engine has made various efforts for coexistence and cooperation through fair subcontract transactions with its suppliers. Their competitive edge is considered the foundation of Doosan Engine's, so Doosan Engine has set and employs "Compliance Program" to maintain equivalent cooperative relationship between Doosan Engine and its suppliers. Legal & Compliance Team, the division in charge, has unfolded diversified efforts to settle down fair transactions as a corporate culture through monitoring and training preceding and following each transaction.

Progress

Operating a Compliance Group

Doosan Engine has operated a compliance group under the direct supervision of the CEO in order to practice fair trade compliance program efficiently. The compliance group summons compliance committee either regularly or not to share fair-trade-related issues and prevent any dangers in fair trade from taking place with a thorough control.

Organization & Role of Compliance Group





Fair Selection and Evaluation of All of the Suppliers

Doosan Engine aims to develop transparent and fair transaction with suppliers by means of internal rules related to selection of and business continuation with suppliers. Our staff is strictly required to comply with this rule. We provide equal opportunities to all suppliers through a collaboration system called COVAN(Cooperative Value Added Network), and also accept on and offline feedback from suppliers to reflect their opinions and problems.

Setting up of Four Guidelines for Fair Trade

Doosan Engine has 4 Guidelines as part of its company internal regulations to promote trade with suppliers. The first is the ‘Guideline on Contract Signing’. The second is the ‘Guideline on the Organization and Operation of Internal Audit Committee for Subcontracts’. The third is the ‘Guideline on Selecting and Trading with Suppliers’. The fourth is the ‘Guideline on Issuing and Preservation of Documents’.

Compliance Program

Doosan Engine has established and implemented a compliance program to ensure fair-trade-related law and regulations. We have arranged relevant provisions and specific procedures and implemented fair trade training programs. We also check whether our staff complies with the regulation and all transactions are made within fair-trade regime. Furthermore, Compliance Guidebook that Doosan Engine published to suppliers has also help widen their understanding of fair trading. As a result of these efforts, we have not recorded any incident of violation of fair trade and subcontracts law for 12 consecutive years.

Introduction of Special Contract for CSR Practice

Doosan Engine is committed to CSR in supply chain, and promotes fair trade and corporate ethics through a "Special contract" with all suppliers. The contract demands of suppliers such duties as respect for their staff's human right, compliance with labor-related laws, safety warranty, and environment conservation. Plus, it prescribes compliance, ethics, and fair trade duty of Doosan Engine.



Next Step

Fair competition and transparent transaction are the cornerstone of trading which enhances bilateral competitive edges between Doosan Engine and its suppliers. They also ensure sustainable management. We will exceed the level of passive response to the relevant law. We will establish them in our corporate culture by strengthening various awareness-raising programs including staff training and supplier training support.



Shared Growth with Suppliers



Doosan Engine’s motto in shared growth is creating a ‘positive cycle of partnership’ to ensure shared growth with suppliers, and we offer a wide range of programs on strengthening suppliers competitiveness. This is part of our endeavor to ensure fundamental competitiveness for both Doosan Engine and our suppliers and to realize sustainable growth.



Context

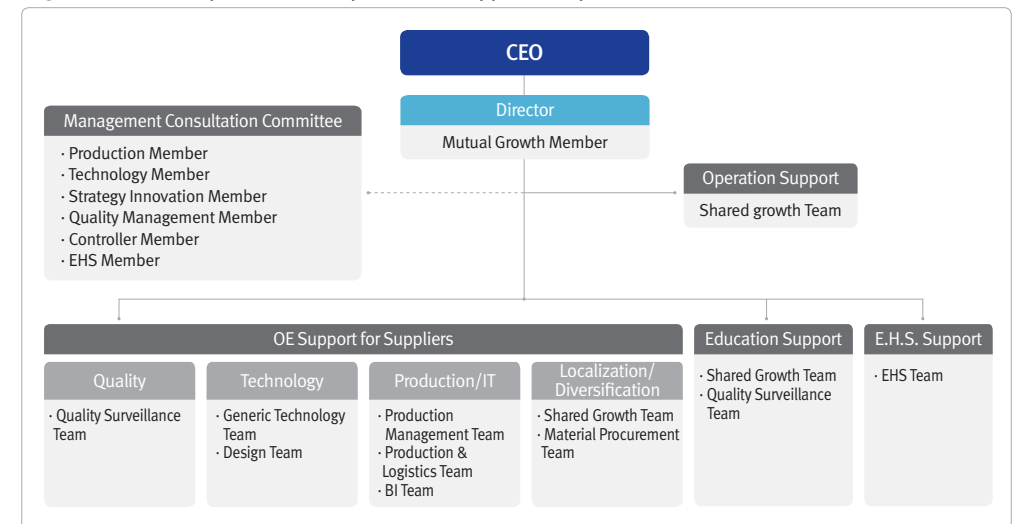


Progress

The purpose of creating a ‘virtuous cycle of partnership’ is to include all of our suppliers in our own technology/quality/management and business systems so as to turn them into a unitary system. The aim is to improve the competitiveness of the supply system instead of being limited to a mere purchasing agreement/subcontract. We seek to build a stronger partnership with the suppliers by sharing profits.

Doosan Engine developed a support program for shared growth in order to create a ‘virtuous cycle of partnership’ and sign a ‘shared growth agreement’ with suppliers every year. We have the Shared Growth Team, which carries out competitiveness improvement activities with suppliers under the supervision of the Competitiveness Improvement Support Group.

Organization of Competitiveness Improvement Support Group



Competitiveness Improvement Support

OE(Operational Excellence) Activities for Suppliers

As part of its OE activities, Doosan Engine provides solutions to suppliers in the field of quality, technology, production, IT, and factory innovation. We also contribute to our suppliers’ revenue increase through collaboration on their localization projects.



Suppliers' Parts Localization Project under Advance Purchase Agreement

Doosan Engine has participated in the new product development under the condition for purchase that was promoted by the Small & Medium Business Administration from 2005 to 2015, and helped suppliers receive government grants that amounted to a total of KRW 2,415 million for 14 projects. As a result, Doosan Engine has contributed to the suppliers' competitiveness.

| Category | Before 2012 | 2013 | 2014 | 2015 |
|--|-------------|------|------|------|
| New Product Development under the Condition for Purchase(Item) | 11 | 1 | 1 | 1 |
| Government Grants(KRW million) | 1,727 | 248 | 220 | 220 |

Vendor Quality Guidance Team

Doosan Engine has a vendor quality guidance team dedicated to improving the quality of its suppliers. The team offers single PPM(parts per million) instruction activity every year. As of the end of 2015, a total of 166 items from 72 companies received the Single PPM(parts per million) Certification from the government.

| Category | 2013 | 2014 | 2015 |
|---|------|------|------|
| No. of Single PPM Quality Instruction Companies | 87 | 75 | 72 |
| No. of Single PPM Certified Items | 161 | 170 | 166 |

Health and Safety Evaluation and Education for Suppliers

Doosan Engine has supported its inhouse contractors and outside suppliers with their health and safety programs since 2012. We received 'A' grade in 2012/2013 from the Ministry of Employment and Labor in Changwon. In 2015, Doosan Engine conducted a risk assessment of 40 suppliers, installed safety rails, and hosted a total of 173 safety sessions. In these sessions, safe crane operation training was offered; safety regulations at each of the sites were attached; the safety of lifting tools was accurately assessed; plan forms for safety-related work plans were provided; instructions were given on how to create safety plan forms; special safety instructions were provided.

Training for Suppliers' Employees

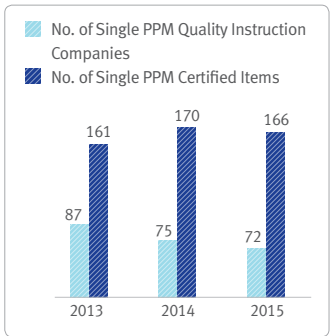
Doosan Engine has offered externally consigned training in conjunction with MDT Diesel School and independent ability improvement training. In 2015, a total of 67 employees from 31 suppliers took 40 hours of external training on understanding low-speed diesel engine system and two other subjects. Doosan Engine has offered 40 hours of training courses of its own designing to a total of 246 employees from 123 suppliers. The courses include quality innovation, production management, and facility maintenance.

Financial Support

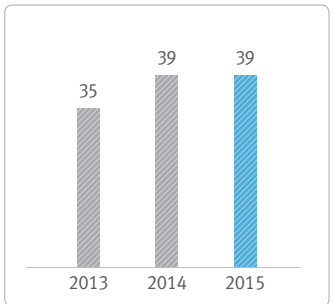
Shared Growth Fund

To provide suppliers with direct and indirect financial support, Doosan Engine raised a fund of KRW 39 billion with a financial institution to provide suppliers with a loan at lower interest rate.

| Category | 2013 | 2014 | 2015 |
|---------------------------------------|----------------|-----------------|----------------|
| Amount of Shared Growth Fund | KRW 35 billion | KRW 39 billion | KRW 39 billion |
| Loans from Shared Growth Fund | KRW 20 billion | KRW 21.2billion | KRW 22 billion |
| Recipients of Shared Growth Fund Loan | 18 Companies | 19 Companies | 21 Companies |



Amount of Shared Growth Fund
(Unit: KRW billion)



Improvement of Payment Terms

Doosan Engine paid 75 high performing suppliers in cash(30%~100% of monthly payment) in 2015, and helped them improve their cash flow by changing the monthly payment for goods received term from twice to three times since 2012. Doosan Engine also donated KRW 100 million to the Small & Medium Business Support Foundation, provided management consulting for its suppliers, supported them with raw material purchasing and offered raw material cost-linked utility rate system.

Improved Communication with Suppliers

Doosan Engine has been offering consulting services to suppliers to help them solve their business issues. Various conferences, forums and workshops with suppliers also serve as an excellent communication opportunities and has the CEO visit the suppliers in order to communicate more effectively with them and promote mutual understanding and trust.

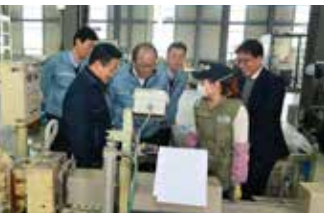
| Category | 2013 | 2014 | 2015 |
|----------------------------|--------------|--------------|--------------|
| CEO Visits | 12 Companies | 16 Companies | 19 Companies |
| Conferences with Suppliers | 13 Times | 9 Times | 6 Times |

Hosting Shared Growth Day

Doosan Engine hosted a Shared Growth Workshop in November 2015 and invited 106 sales managers from 97 suppliers to explain business environment of shipbuilding market and the measures company has taken to address it. We also shared the latest trend of engine technology and introduced our suppliers to CSR compliance and its main points to follow. Consequently, we have set the ground for mutual understanding and communication.

Shared Growth Quality Forum

Doosan Engine hosts a quality forum for its suppliers to boost their quality awareness. The quality forum held in May 2015 was attended by the CEO, directors, and team leaders of Doosan Engine and representatives of 100 suppliers. Doosan Engine announced quality policies, shared related issues, and had a discussion on cooperation.



Next Step

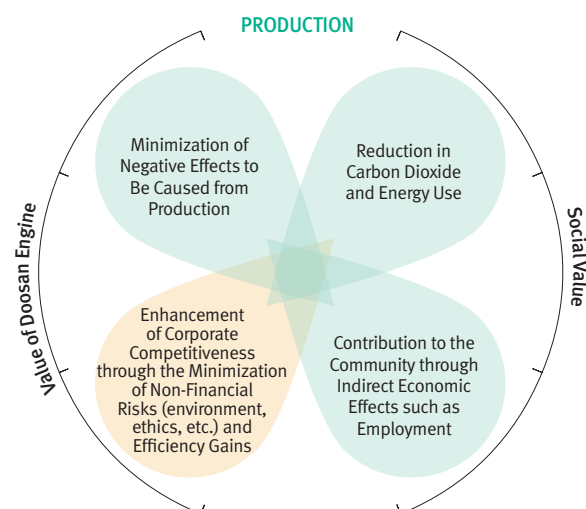
Due to the recent change in paradigm, the concept of global competitiveness has changed from competition between individual companies and systems to competition between supply chains including the suppliers. Doosan Engine plans to actively cope with this shift and continue to develop and support a number of shared growth programs that meet the needs of suppliers.

In 2016, Doosan Engine plans to promote a total of 28 activities with three strategic objectives: competitiveness improvement support, communication enhancement, and shared growth task management. In order to promise support and implementation for shared growth programs, Doosan Engine has signed shared growth agreements with 107 suppliers. We will run competitiveness support team to create corporate ecology where we can grow along with our suppliers. In an effort to strengthen the CSR management system of suppliers, Doosan Engine will develop and operate simulated CSR evaluation & support program.

III. Production

Production Based on the Respect for Human Rights and Environment

- Respect for Human Rights
- Health and Safety Management
- Green Management



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.

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.

- Excerpt from Doosan Credo -

Respect for Human Rights



Employees are important stakeholders and they are the one who leads business. We are well aware that employees are the backbone of our business growth. Thus law and regulations regarding human rights and work conditions are strictly followed, and various efforts are made to improve internal system that relates to employees' right.



Context

It is absolutely vital to identify the effect of corporate operation on staff's human right and prevent its negative effect. We think that we should heighten our staff's work satisfaction and endeavor to improve the quality of their lives as well as to meet the requirement of legal and international labor standard in terms of respect for individual life. We develop our core competence by managing various environments based on the talent management philosophy of 'People are the Future' and the basic concept of 'The development of people leads to that of business'.



Progress

Respect for Human Rights

Doosan Engine provides stable work environment to employees through its recruitment, employment, and retention policies. The company complies with law and regulations concerning human rights and work conditions in every work type and for all individuals. It also prohibits child labor and forced labor in all workplaces in accordance with the Labor Standards Act and the policies of the International Labor Organization(ILO).

Doosan Engine does not discriminate against its employees on the basis of gender, religion, race, age, education, and other reasons. We strongly encourage female staff to take maternity leave before and after childbirth and to take parental leave for preventing their career breaks. Under Equal Employment Opportunity and Work-Family Balance Assistance Act, Doosan Engine gives all the employees sexual harassment awareness trainings. We also have a grievance treatment system in an effort to respect various rights of the employees.

Human Rights Education

We believe continuous education on human rights, couple with the understanding one of Doosan Way values, Inhwa, will help prevent in-company human rights violation cases. The education consists of three contents: establishment of the concept on human rights, program for respecting human rights in company, and sharing related cases. The education is intended for all employees and broken down into 17 parts.

Respect for Human Rights and Non-discrimination Report Process





Communication Enhancement

Doosan Engine encourages employees to establish their own short-term, mid-term, and long-term career development plans individually; to communicate this plan regularly with their line managers. Job assignment is done based on employees' career development plan and their capabilities to fulfill the tasks. Periodic rotation of jobs also helps improve employees' skillset and serve as an opportunities to achieve their career goals. In addition, we have conducted 'Why campaign' that encourages staff to communicate with their managers for efficient work performance prior to doing their jobs. This helps employees to get used to bilateral communication culture.

Doosan Engine is operating a grievance handling system to investigate and deal with employees' complaints in order to improve employees' morale and job satisfaction. Doosan Engine continue to improve its grievance handling process up to employees' satisfaction with consideration of evolving social responsibility and employees' expectation. There were 10 cases in 2015 made known through grievance handling process, all of which were settled successfully.

Cooperation between trade union and Management

Doosan Engine holds scheduled union-management council meeting quarterly and unscheduled meetings when there is an urgent issues regarding employees' health and safety, general welfare, grievance report, or work condition improvement. We make an effort to promote the common interests of both labor and management through unreserved discussions on matters brought before the council.

In addition to the union-management council, the occupational health and safety committee, grievance committee, joint union-management safety inspections, musculoskeletal hazards investigations, and others are in place for cooperative communication. Informal gatherings between union and management have also been encouraged to facilitate mutually acceptable resolution.

Occupational Health and Safety Committee

The occupational health and safety committee consists of equal numbers of members from employees and the management, and is organized to consider or resolve important matters concerning occupational health and safety. The committee represents approximately 75% of employees except for team leaders and officers and deliberates on and operates the whole union-management EHS through a regular meeting, extraordinary meeting, working-level meeting, and the like once or more per quarter.

| Classification | Meeting Cycle | Composition of Committee |
|-----------------------|-----------------------|--|
| Regular Meeting | Once or more /quarter | · Labor side: employee representative Honorary occupational safety supervisor(head of occupational safety and health department), nine workers or less designated by the employee representative · Employer side: business representative(safety and health officer) Safety and health manager, nine department heads or less designated by the business representative |
| Unscheduled meeting | When necessary | Same as above |
| Working-level meeting | Once or more /month | · Labor side: honorary occupational safety supervisor, and two members of the occupational safety and health committee or less. · Employer side: EHS team leader, safety manager, health manager |

Welfare & Benefits

Work & Life Balance

Doosan Engine takes staff's quality of life seriously and makes great deal of endeavors to advance it. There are two seasonal vocation during a year: two-week vacation in summer and one-week in winter. We also support programs for the work & life balance through the designation of every Wednesday as 'Family Day'. In addition, various employment benefits are provided to employees such as home loan support system, company housing, medical support, child educational expense allowances and the opening of the day care center in Changwon supporting couples where both parents work.



Next Step

Status of Major Welfare & Benefits

| Support Programs | Contents of Support |
|----------------------------|---|
| Leisure Support | Summer vacation, winter vacation, refreshment vacation, condominium support, etc. |
| Housing Assistance | Provision of dormitories for unmarried persons, provision of company housing for the non-homeowners, assistance of home loans, etc. |
| Childcare Support | Operation of day-care facilities, education expenses allowances, etc. |
| Vehicle Support | Operation of commuter buses, vehicle support for an occasion for celebration and condolence |
| Total Mutual Aid Services | Support for the mutual aid support service system, leave for celebration and condolence, support for expenses for gifts of celebration and condolence |
| Medical and Health Support | Surgery support, support for comprehensive health examination, taking out of group accident insurance and savings insurance, operation of medical office and physical therapy management, influenza vaccination, operation of the primary care physician system, etc. |
| Other Supports | Long-service awards, provision of uniforms, provision of gifts for traditional festive days and anniversary, athletic meets for each department, Doosan family festival, camp support for officers' and employees' children, support for birthday and wedding anniversary gifts, etc. |

Club and Leisure Activities

Doosan Engine has helped employees organize and operate internal clubs to support employees' hobbies and leisure activities. By the end of 2015, there were a total of 19 clubs with various interests including sports, potted plants, photograph and music. More than 60% of the employees have joined at least one club.

Employee Retirement Benefit Plans, and Support for Retirees

Doosan Engine adopts DB(Defined Benefit) type retirement pension to ensure stable retirement payment. In addition, we assist employees in improving competency and confidence to achieve strategic goals in changing work environment. Particularly, we assist employees in preparing for life after their retirement by taking their age and length of service into consideration sufficiently and giving them retirement allowances commensurate with these two factors.

In order to prevent any infringement of human rights, Doosan Engine plans to establish a culture of respect for human rights, implement management program, and devise risk management system for human rights issues within the company. We have set up and implemented a channel for human rights to foster employees' accusation and to clarify the response process. We also plan to supplement this system frequently whenever human right issues occur. Furthermore, we plan to develop and implement education program targeting all our employees to heighten their mindset and knowledge on human rights to the global standard.

Health and Safety Management



Doosan Engine values its effort to make a safer and healthier workplace for employees. It not only complies with health and safety regulations at home and abroad but also applies internal standards that are more stringent than regulatory requirements. Furthermore, the company does its utmost to expand the scope of health and safety management to suppliers and the community to make it an accident-free and pollution-free workplace.



Context

Health and safety are the basics of all production activities, and workers are entitled to work in a safe, comfortable environment. Doosan Engine is well aware that the health and safety of workers are essential elements of the company's sustainable development, and considers the safety of workers a top priority in all production activities. In addition, we are examining how to operate in the most safe manner by identifying and taking measures against risk factors in advance through systematic safety evaluations, hazard investigations, and other methods, from design to production to investment.



Progress

Health and Safety Management Policy

Doosan Engine has established and is abiding by the EHS management policy to realize workers' health and safety, and internal and external stakeholders' satisfaction in all business activities, based on the management philosophy of human dignity.

EHS Management Policy

Doosan Engine is a world-class manufacture and supplies of diesel engines for ships and power generation. As such it has established an Environment, Health and Safety management policy. All employees are required to follow this policy for all aspects of work. The policy is based on the management philosophy of human dignity and a comfortable environment being maintained for all, and comprises:

1. Place a top priority on prevention of accidents related to environment, health, safety and create a safe, comfortable working environment.
2. Operate the emotional safety management and make preemptive safety culture take root.
3. Improve the health care system to maintain and promote the health of workers.
4. Establish the greenhouse gas management system to continuously strive to reduce greenhouse gases.
5. Build integrated safety management with suppliers to establish an autonomous safety management system.
6. Set goals for environment, health safety and ensure improvement in implementation.
7. Comply with international conventions and domestic laws and regulations concerning environment, health safety.

President and CEO of Doosan Engine
Dongchul Kim

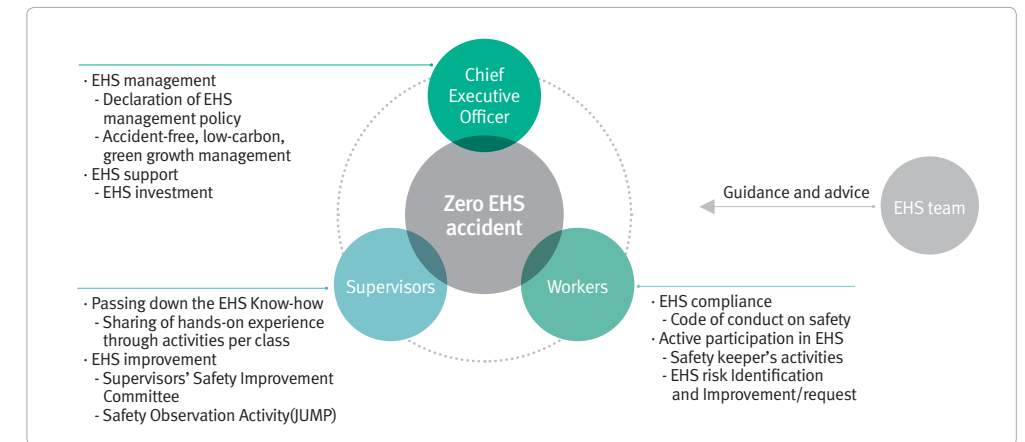
Kim Dong chul



Organizations and Systems for Health and Safety Management

Doosan Engine is operating the health and safety management system under OHSAS18001 and KOSHA18001 to create a healthier and safer work environment. The occupational health and safety committee consisting of eight members(half from union and the other half from management) discusses details of environmental improvement, accident prevention, health diagnosis and education, etc., and each employee sets and practices his/her own safety goal to reduce the event rate.

Hierarchical role in EHS



Safety Supervision

Doosan Engine fosters employees' awareness of safety by formulating code of conduct on safety for each work process, processing equipment, and transporting equipment and promotes employees to be reminded of this code of conduct before the start of a given job as TBM(Tool Box Meeting) materials. We are carrying out cautionary EHS activities by each position and department to prevent accidents on the shop.

Safety keeper's activities

Safety keeper's activities are the initiatives in which all workers participate to enhance the effectiveness of the safety management on the floor to prevent accidents. In this regard, a worker is designated as a safety keeper for one week to monitor potentials for unsafe acts and conditions voluntarily. This contributes greatly to not only maintaining the safety of workplace but also raising the bar of responsibility for the safety on the shop floor in a manner that leads workers to continuously participate in such safety activities.

Doosan Way Field Practice Committee

The supervisors' safety improvement committee, composed of managers on the shop floor, identifies risk factors on site every month, takes corrective measures, provides training in line with those measures, and acts as belt and braces in prevention of accidents.

Real-time inspections and measures by safety managers dedicated to each section of the shop floor

Safety managers dedicated to each section for the shop floor identify unsafe acts and conditions in real time and register the results in a computer system after taking immediate rectifying measures. The rectified results are analysed comprehensively for feedback, reflected in the "EHS evaluation" to induce voluntary participation.



Green Management



Doosan Engine is committed to green management as the social, ethical responsibility of corporations. We are making efforts to minimize the environmental impact that occurs in the entire process of corporate management from development to assembly, transport, and disposal of products. We desire to become an eco-friendly company by fostering environmental awareness through green management activities.



Context

With worldwide concerns over climate change and energy issues, it is imperative that corporate management paradigm continuously change to preemptively in response to environmental issues, such as strengthening of various environmental regulations. We are engaged in multi-faceted efforts to minimize possible environmental risks: participate in climate change policies at home and abroad, develop an eco-friendly engine, and set company-wide energy-saving activities as strategic tasks.

Besides, in order to respond to Chemicals Control Act and Act on the Registration and Evaluation of Chemical Substances which have come into effect since 2015, we have completed the inventory for chemicals used by the entire company. We have positively reviewed the introduction of IT system to secure transparency in the course of purchase, storage, and disposal of chemicals.



Progress

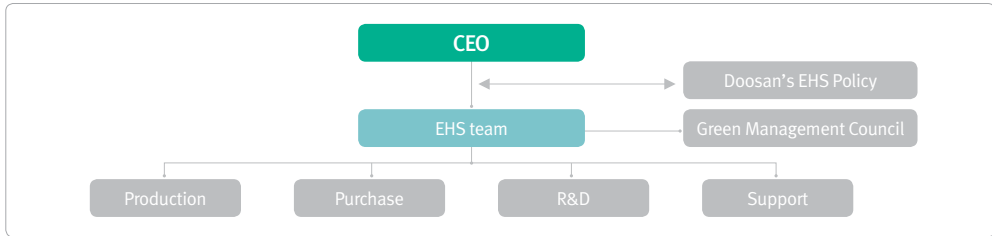
Green Management Policy and Strategy

With increasing demand for disclosure of environmental information and environmental management system standardization, we operate organized systems under the green management policy, and adopt gradual green management strategies to establish an external evaluation system which will begin with building an infrastructure under relevant regulations.

Green Management System

Doosan Engine's Changwon establishment formulates environmental management plans each year for systematic Green management to review the environmental impact on business and push to continuous monitoring and improvement activities. We have been maintaining the Green management system to international standards through regular follow-up and recertification examination since the acquisition of ISO 14001, the standard for the environmental management system issued by the International Organization for Standardization in 2007. We are doing our utmost to be an eco-friendly company through continuous improvements.

Green Management Promotion Organization



Energy Management

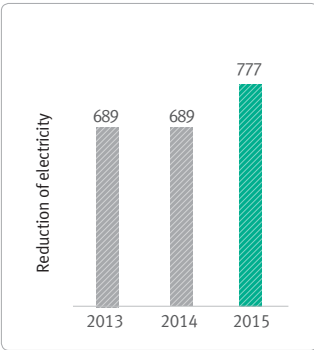
Doosan Engine is managing its total energy consumption in a systematic manner. A detail report on total energy consumption of the company is published every year and shared to the authorities concerned by actively participating in various activities to minimize energy consumption of each types of energy. We study, analyze, and gradually improve technologies and systems to establish efficient facilities.

Energy and Raw Material Consumption

| Classification | Unit | 2013 | 2014 | 2015 |
|----------------|----------------------|--------|--------|--------|
| Electricity | MWh | 31,500 | 36,302 | 30,451 |
| B-A | kℓ | 5,096 | 7,010 | 4,308 |
| LNG | 1,000 m ³ | 488 | 606 | 369 |
| Gasoline | kℓ | 71 | 70 | 70 |
| Diesel | kℓ | 60 | 135 | 227 |
| Kerosene | kℓ | 84 | 74 | 71 |

Energy Reduction

(unit: MWh)



Energy-Saving Activities

There are various activities carried out in Doosan Engine to save energy. In line with the effort to habituate saving energy across the company, we turn off lighting in all factories and offices at lunch time, and night shifts check substations to turn off any unnecessary light or electric heater. In addition, we have minimized the use of energy by implementing automatic control system conditioning for ventilation and air that remotely operates every single equipment when energy demand is high.

Management of greenhouse gas emissions

Doosan Engine calculated the sources and quantities of emissions in the Changwon establishment by building a greenhouse gas inventory in accordance with international standards, such as IPCC, WRI, and ISO14064. We continue to make efforts to manage the increase or decrease in emissions of direct greenhouse gases(Scope 1) and indirect greenhouse gases(Scope 2).

Test run is the largest source of greenhouse gas emission, and Doosan Engine selected its reduction as an innovative task to continuously improve on, and has produced high-efficiency, low fuel, and environmentally friendly engines. Also, all employees participate in greenhouse reduction campaign through the introduction of central cooling and heating control systems, use of high-efficiency lighting, and company-wide power-saving campaigns.

GHG emissions

(unit: 1,000 tCO₂)



GHG reduction

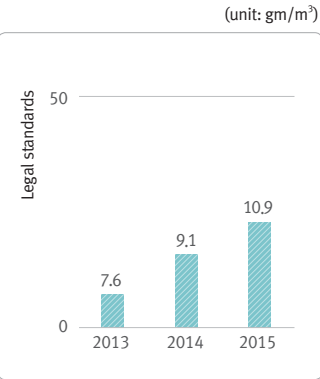
(unit: tCO₂)

| Classification | 2013 | 2014 | 2015 |
|--|-------|------|------|
| Process improvement | 1,160 | 526 | - |
| Replacement with high-efficiency equipment | 343 | 79 | 362 |
| Total | 1,503 | 605 | 362 |

Disclosure of information on climate change

Doosan Engine is providing investors and external stakeholders with information on its response to climate change and undertaking public greenhouse emissions and reduction activities by participating in CDP(Carbon Disclosure Project). We are striving to position ourselves as an excellent carbon management company by continuously managing and improving such efforts as corporate governance structure, risk and opportunity factors, greenhouse gas emissions accounting, and communication, all of which are related to response to climate change issues.

Dust emission concentration



Environmental pollutants emission management

Air pollutants

Doosan Engine has established an internal environmental standards that restrict dust emission, a major pollutant, under 30% of the legal limit, and strictly abides by the internal standards. Emission control and prevention devices are closely monitored and improved by the departments that are in charge of operation and management of those system. Critical devices are closely checked with wearing parts being replaced on a regular basis.

Doosan Engine is concentrating on the independent management of air pollutants caused in the course of production. Besides, Doosan Engine is striving to reduce air pollutants thoroughly through item-related skill development. Doosan Engine has successfully completed the development of SCR(Selective Catalytic Reduction), a nitrogen oxide reduction equipment that soon will be a mandatory add-on item to the main engine of commercial sea vessels with a view to reducing further emission of such pollutants. This way, Doosan Engine takes the initiative in protecting the environment of the earth.

Water pollutants

Doosan Engine hires a specialized water treatment company to deal with waste water produced at minimum level compared to the industry standard. We have established a thorough management system to prevent leakages from the wastewater storage tank to the outside. We also set up an automatic shut-off and alarm system at the very end of the outlet to prevent the leakage of oil and water pollutants to neighboring seashores. Doosan Engine abides by related wastewater regulations.

| Quantity of entrusted wastewater disposal (unit: ton) | | | |
|---|------|------|------|
| Classification | 2013 | 2014 | 2015 |
| Waste processed | 40 | 54 | 47 |

Soil Pollution and Oil Spill Prevention System

Doosan Engine dedicates a department to inspect and improve the oil tank(B-A) used for test run of engines. Land pollution and leakage test is done in accordance with relevant regulatory requirements. In addition, we have installed oil surveillance sensors and CCTVs in the main storage areas to prevent oil spills, and prepared procedures for unexpected incidents, and emergency drill for quick response to such events.

Resources Recycling and Management

Doosan Engine understands the importance of limited resources and continuously seeks various resource management methods, such as by-product management and waste recycling.

By-products and Waste Management

Scrap metal, processing chips, and copper scraps are separated and recycled or sold. Factory waste is classified into general waste or designated waste, and they are treated in accordance with the requirements of Waste Control Act. In addition, we minimize waste incineration and landfill rate. We are actively participating in the waste-recycling policy by collecting refinable waste oil and sorting waste wood(used for parts packaging) to recycling.

| Status of By-product sale (unit: ton, KRW 100 million) | | | | | | |
|--|--------------------|-----------------|--------------------|-----------------|--------------------|-----------------|
| Classification | 2013 | | 2014 | | 2015 | |
| | Amount of disposal | Amount of money | Amount of disposal | Amount of money | Amount of disposal | Amount of money |
| Scrap metal machined chips | 2,300 | 8.6 | 2,720 | 9.6 | 2,174 | 2.5 |
| Copper scrap | 10 | 0.4 | 4 | 0.2 | 3 | 0.17 |
| Total | 2,310 | 9 | 2,724 | 9.8 | 2,177 | 2.67 |

* The amount of money is fluid according to unit cost of purchase from steel manufacturer

Communication with Stakeholders

Doosan Engine works closely with external stakeholders, especially with those companies adjacent to it and NGOs in order to solve the issues of exhaust gas(sooty smoke) and noise from test run of engines in a mutually agreeable manner. We have established a tight network with stakeholders and are constantly implementing various activities(community service, environmental cleanup, etc.) to maintain the communication and trust. These efforts are highly appreciated by many of the stakeholders, and there has been no official complaint registered over the year.

Response to Environmental Statutes

Doosan Engine responds to environmental law and regulations by applying strict EHS internal management standards and guidelines. Since 2000, there has been no incident recognized where environmental statutes were violated or the company was penalized for compromising relevant regulatory requirements.

Next Step

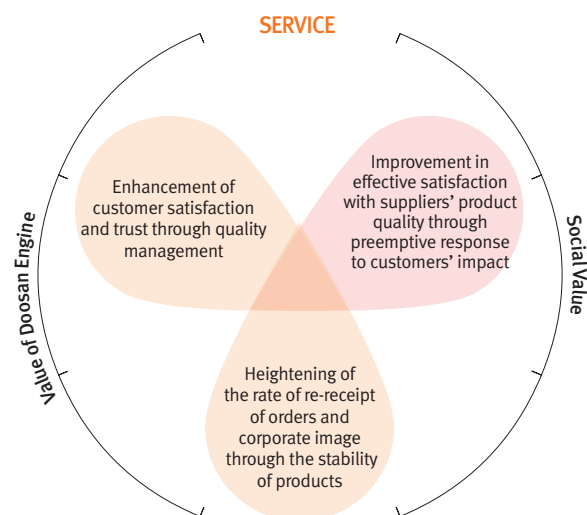
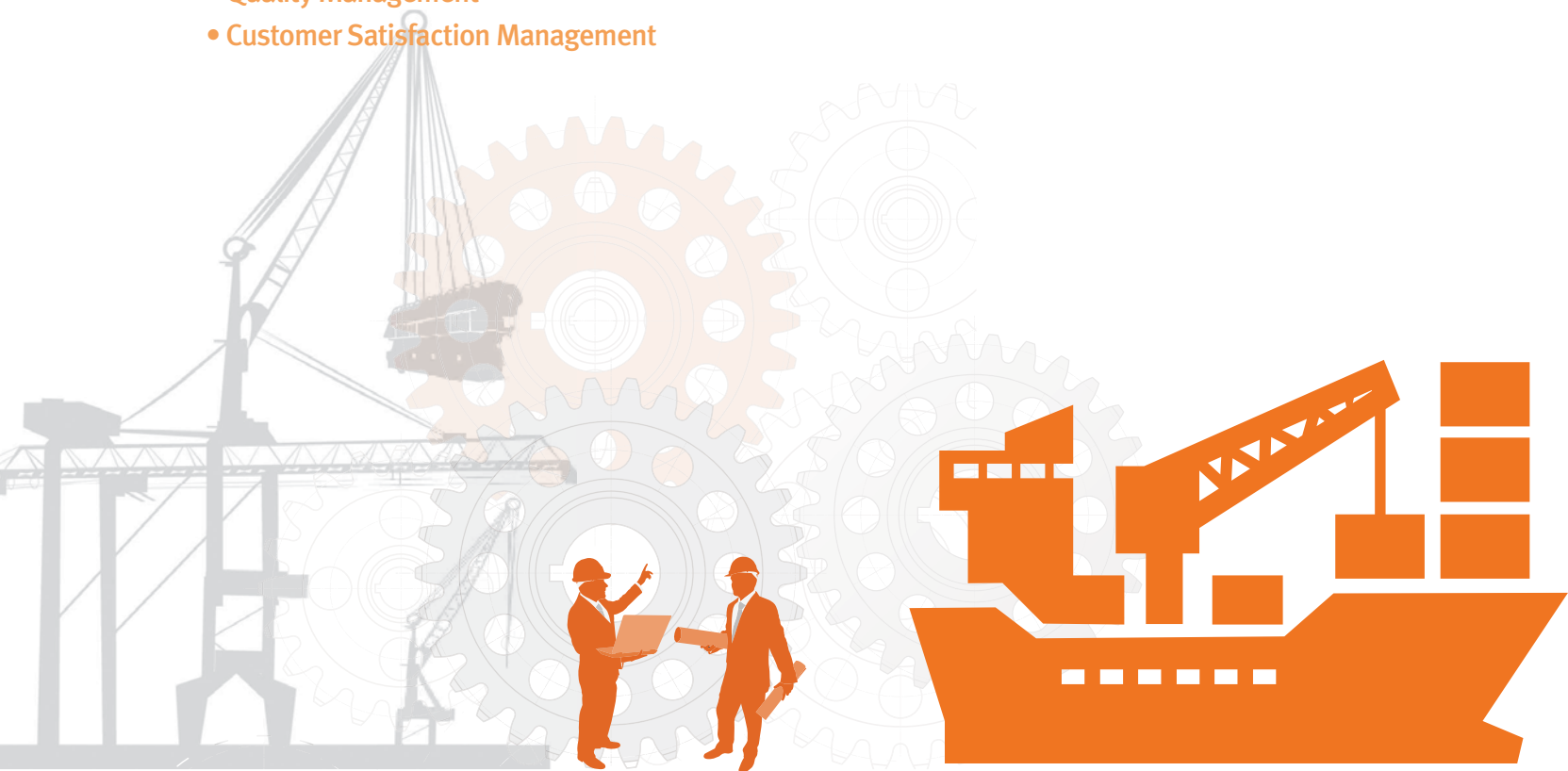
Doosan Engine plans to continuously manufacture eco-friendly engines that enable reduction of exhaust gas emissions, and high fuel efficiency and make EHS strategies and results public. In addition, the company intends to respond in advance to environmental issues from new projects and reduce greenhouse gas through increasing the efficiency of test run fuels and power consumption, in line with production of gas engines using cleaner fuels(LNG) and high performing environment materials for air pollution reduction.

In addition, Doosan Engine examined business impacts of expansion of carbon market with company being a part of Emission Trading Scheme, and is establishing related manuals, procedures, and guidelines to vitalize emission trading.

IV. Service:

Service for Improving Customer Value

- Quality Management
- Customer Satisfaction Management



Our customers are the reason Doosan exists.

The true measure of Doosan's success is our 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.

- Excerpt from Doosan Credo -

Quality Management



Quality is the reputation and pride of Doosan Engine. There is no compromise in our quality management practice all across the life cycle of our product and service in order to achieve top of the market customer satisfaction. In addition, we never cease to contribute to customer's value by providing detail and accurate information on product quality.

Context

Continuous quality improvement of our product and service is critical to cope with ever growing customers' expectation on us. Current quality assurance system is underlined by one of our core policies that company ensures customer satisfaction in product and services that we provide from engineering to manufacturing, installation and aftermarket service. The quality assurance system consists of quality assurance plans, procedures, and guidelines. Doosan Engine has acquired and maintained various certificates from international certification institutions through implementation of the quality system. It has been rated as fully meeting the global standards by customers and regulatory authorities.

Progress



Quality Policy

The quality policy emphasized by Doosan Engine is being implemented on the 'creation of customer value based on trust in the quality'. 3Zero* and single PPM quality innovation activities are good example where Doosan Engine fulfills customer value with pride in quality delivered.

Quality Management System

Doosan Engine does not stop at meeting quality requirement of certifying entities, but it builds strong reputation and pride through ceaseless maintenance and improvement of quality system.

Quality Certification

We are certified on ISO9001 to ensure customers' trust in our products and maintained the quality management system certification for the production and supply of the products. We also obtained a qualification for emergency diesel generators for nuclear power plant through certification of KEPIC-MN & EN. Doosan Engine has acquired API Q1 Certificate and established the foundation of offshore equipment business.



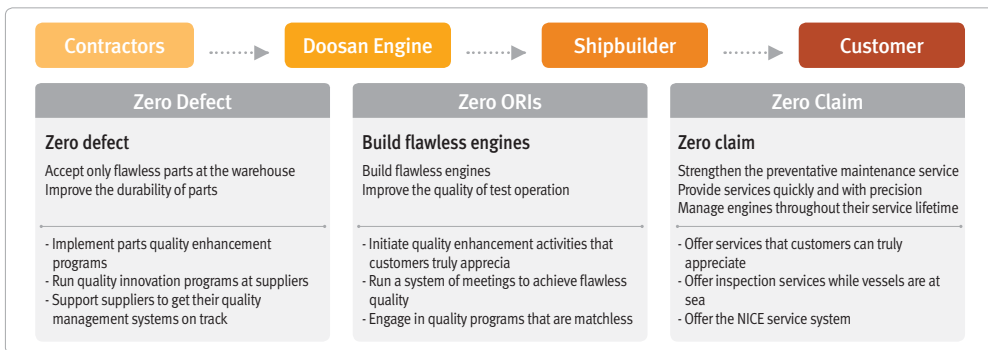
| | ISO9001 : 2000 | KEPIC-MN | KEPIC-EN |
|------------------------|---|--|---|
| Cert No. | 0601-2000-AQ-KOR-RvA | MN-243 | EN-177 |
| Certification by | Det Norske Veritas(DNV) | Korea Electric Association(KEA) | Korea Electric Association(KEA) |
| Scope of Certification | Design, Manufacture and Associated Services of Diesel Engine for Use in the Shipbuilding Industries, Co-Generation Plant and Diesel Power Plant | On-site Manufacture, Factory Assembly, and Relevant Services for Nuclear Piping Subassembly of Grade 3 | Production of Nuclear Class 1E Diesel Generators, and Factory Assembly and Installation of Relevant Equipment |



3 Zero⁺ Quality Innovation

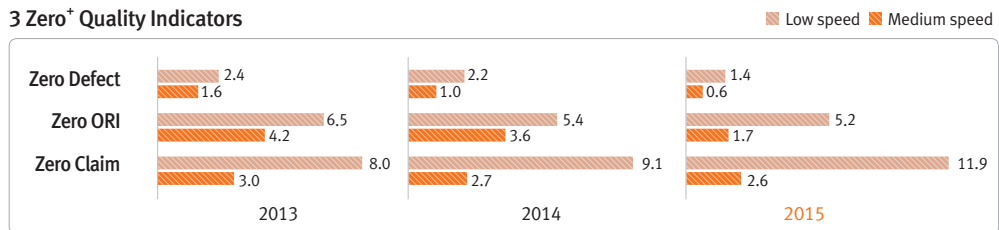
Doosan Engine's quality policy is focused on creating customer value based on the customers' trust in its quality. To this end, the company's '3 Zero'(Zero Defect, Zero ORI, and Zero Claim) quality innovation initiative has turned its diesel engine quality and services into global standards. This in-house initiative became the starting point for building engines that are unrivalled in the industry.

System for 3 Zero⁺ Quality Innovation



- Zero Defect: Securing trust in parts and in the quality of suppliers parts
- Zero ORI(Owner Request Item): Securing perfect quality without ORI in the process of engine assembly/trial run
- Zero Claim: Decrease in claims by customers due to trust and confidence in engines

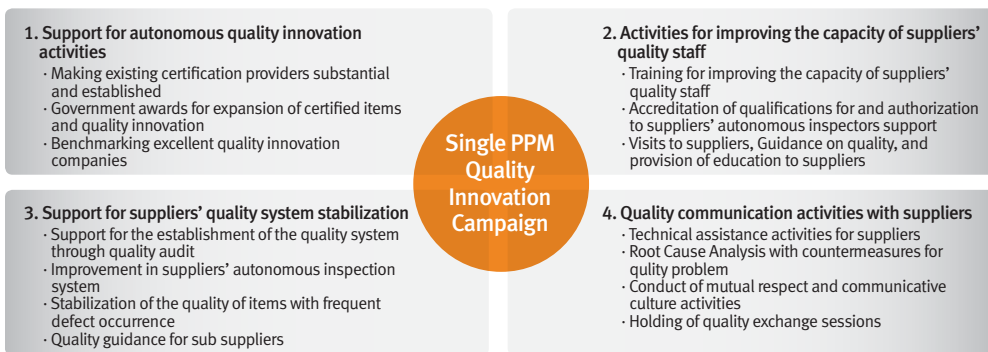
3 Zero⁺ Quality Indicators



※ Zero Defect means the number of defects arising from parts warehoused by suppliers; Zero ORI means the number of customers' comments arising in the process of assembly/trial run; and Zero Claim means the number of claims received after the delivery of products to customers.

Single PPM Quality Innovation

The Single PPM Quality Innovation is the world's unique system that the government certifies the quality of products and the zero-defect quality production activities with the aim of establishing zero-defect rate. The government awards the 'Single PPM Quality Certificate' to suppliers that manage to achieve the single PPM level at which defective products of 1,000,000 products should be reduced to a single digit number and are concurrently accepted.



Government awards for quality innovation

Doosan Engine has been actively assisted those suppliers and person of merit with strong single PPM implementation to be recognized by the government. Since 2008 companies we promoted have been highly awarded for seven consecutive years.

| Year | Award winner(suppliers) |
|------|---|
| 2013 | Prime Minister's Award to Kyung Sin ETM Co., Ltd. |
| 2014 | Presidential Award to Younghae Engineering Co., Ltd. |
| 2015 | Presidential Award to Kum Oh Machinery & Electric Co., Ltd. |



Next Step

To maximize customers' satisfaction with the quality engines, parts, and services, we have been improving customers satisfaction and making the results known to public. We improve customer satisfaction by increasing the quality of engine parts through support for building vendors' self-management quality system, and by making qualitative service improvements and establishing trust relationship with customers through provision of differentiated customer-friendly sensibility services.



Context



Progress

Customer Satisfaction Management



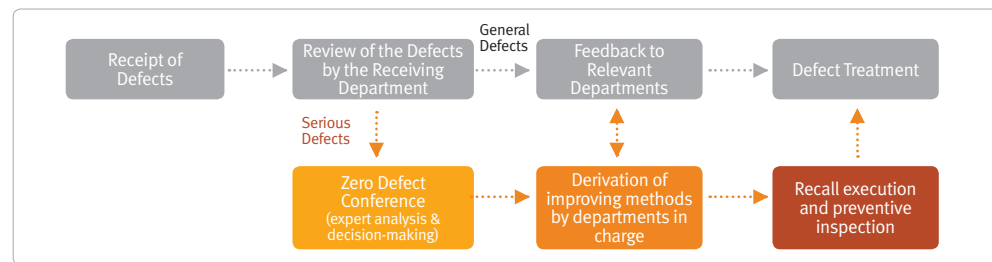
Doosan Engine provides differentiated customer services through long standing intimate and interactive business relationship. We will not cease to improve the quality of products and services for customer satisfaction.

Customers are the main reason a company exists and the driving force of a corporate sustainable management. Thus, it is extremely crucial to deliver more value them, to meet their customer satisfaction, and to maintain close relationship with customers through diligent communication. Doosan Way serves as a great platform on which our customer satisfaction strategy is structured and evolves. We listen to the voice of customers all the time through various channels. Their feedback is highly appreciated and reflected in product and service we provide up to customers' expectation.

Product Reliability

Doosan Engine has established the process to deal with defects and to respond to the Product Liability Act to minimize customers' dissatisfaction. As a result, we employ a system for the occurrence of problems and complaints by all stages such as design, sales, operation, and maintenance of products, and continuously improve the stability and reliability of the products.

Process for Caring and Responding to Defects



C/S quickness and customer service offer

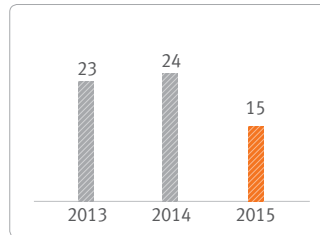
Doosan Engine provides 24 hours Anycall Service to our valuable customers in order to give a seamless satisfaction in operation, maintenance, and technical support. We provide periodic feedback with necessary information related to operation, maintenance & new technologies for products, and services through NICE Service System(Internet & Mobile Website).

Protection of Customer Information

The company has set up and operated 'Doosan Information Security Policy' in order to prevent any damage in remotely possible case of leakage of information on customers. 'Doosan Information Security Policy' aims at protecting the Company's information assets from various internal and external threats and maintains its competitiveness, and regards customer information most important. All employees are subject to education to protect information belonging to the company and customers, and we also carry out security checks every month. As a result of these activities, no complaint was been received concerning violations of customer privacy and losses of customer data last year.

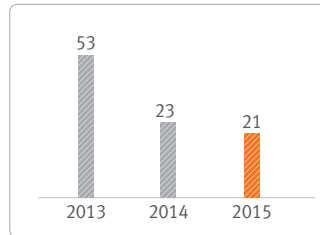


Number of voluntary recalls



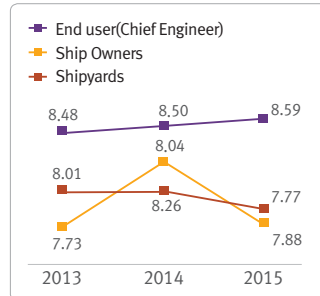
- Recall items
 - Repeted claim items
 - Modified design items
 - Improved quality items

Number of preventive inspections



- Preventive Service
 - Maiden Voyage Inspection
 - Sailing Inspection
 - Routine/General Inspection

Customer Satisfaction Survey



Preemptive Defects Prevention

Doosan Engine conducts voluntary recalls for nonconforming products in order to continue quality management and develop trust relationship with customers. In addition, we prevent potential defects in advance by preventive services, and improve customers' satisfaction through preemptive defects prevention.

Information about products and services offered

The engine instruction manual given when an engine is delivered consists of a total of five volumes, and contains detailed disassembly/assembly procedures, features and measures of normal/abnormal state in operation, essential spare and tool list, etc, all of which are required to operate and maintain the engine. In addition, we provide information on the latest technology trends regularly and consult convenience of customers by supplying caution plate for safety operation and maintenance of main components in customer's desired language.

Improvement of Service Quality by Customer Satisfaction Survey

Doosan Engine regularly carries out customer satisfaction survey of services in order to provide differentiated customer-friendly services. Doosan Engine creates a list of customer demands that require long-term management, and continues to develop and improve the list.

Customer survey results

Doosan Engine visits customers throughout the years considering their characteristics and gets their real satisfaction and needs through open communication, and carries out a survey periodically at least once a year. We analyze various information and customers' needs collected through such communication and surveys, and then identify current level and execute improvement measures. Also, we continue to improve the ability for products, services, and defects caring.

Following VOC(Voice of Customer) through the customer survey, we reflected their needs in establishment of quick claim treatment system & e-mail response monitoring system, operation of technical support organizations, and enhancement of customer caring & visit activities and executed them immediately. In particular, we are getting customers' complaint with valuable VOC through ABC(Advanced patrol service Before Complaint) activities in advance and offering the settlement & feedback for their needs immediately for improvement of customer's satisfaction and strengthening of products & service ability.

Provision of Hands-On Support and Customized Services for Shipyards through Local Site Office

Doosan Engine has established a total of 7 sites in key locations and shipyards in Korea and overseas(2 in Korea and 5 in foreign countries-as of the end of 2015). Resident professional staff provides customized services to customers by promptly identified technical support for customer's requests and problems during installation of the engine on ship or offshore and trial after engine delivery to shipyard. We also train to improve of technical & work skill which were required from shipyard in order to prevent & settle the problem preemptively, and these efforts are significantly improving the customers' real-feel satisfaction.



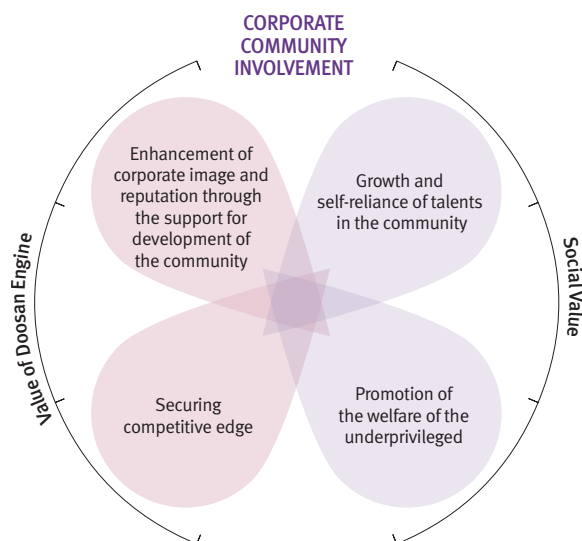
Next Step

The needs of customers with respect to quality and service of engines are constantly increasing. We strive for active response to any complaint or opinion from customers, and to this end, we visit customers regularly and listen to their voice on the spot, while analyzing and responding to the opinions collected through the VOC channel. We will also play an active role in the stabilization of the quality of products and customer satisfaction.

V. Corporate Community Involvement

Creating Shared Values with Society

- Community Involvement and Development



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.

- Excerpt from Doosan Credo -

Community Involvement and Development



Community involvement and development activities are the process of creating better social value. Doosan Engine will continue its social contributions to support the development of local communities and strengthen its growth potential.

Context

Progress

Community grants companies the right to run business within the boundary. Unless the community accepts a company as a part of it, the company can hardly expect any success. Companies can contribute to the community development and raise the corporate value by participating and developing the community. Doosan Engine intends to strengthen the value of both the organization and the society concurrently through active community participation and development.

Doosan Engine's Social Contribution System

Vision and Mission



Strategic Directions

- Securing the reputation for social contributions based on activation of employees' voluntary participation
- Strengthening social contribution activities of the community through the activation of social volunteer corps

Activity Principles

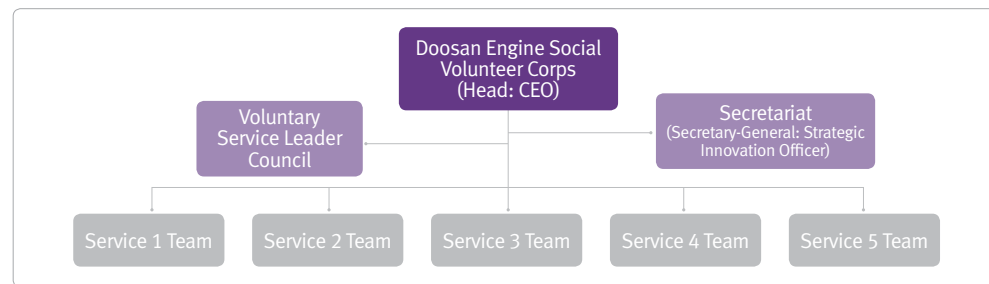
- Develop and run social contribution programs that reflect the characteristics of a profession.
- Manage effect substantive changes on the part of beneficiaries through constant performance.
- Guarantee employees paid service hours to ensure their voluntary participation.
- Execute the Matching Grant fund with respect to the donations by employees.
- Make an effort to create the culture for employees to voluntarily participate in social contribution activities.



Doosan Engine's Social Contribution Organizations

Doosan Engine's Social Volunteer Corps Organizations

Doosan Engine's Social Volunteer Corps headed by the CEO assigns all employees to any of five service teams and makes them render shared services to the community. The company runs the voluntary service leader council which consists of service leaders selected by each voluntary service team. Through this council, we not only collect the opinions of employees about social voluntary service activities and presents their directions, but do transparent, efficient voluntary service activities through the review and consultation of social voluntary service fund operations.



Doosan Engine's Major Social Contribution Activities

Doosan Engine Social Volunteer Corps encourages all employees around the globe to join the campaign of one-day, one-spirit volunteer work for those in need. The worldwide volunteer service demonstrates Doosan's citizenship with 100-year history among global corporations. Besides, it has paved the way to heighten the pride of Doosan with incomparable historical responsibility

Worldwide 'Doosan Day of Community Service' takes place twice a year with a festival that brings the local community and companies together. 'Doosan Day of Community Service' is the day when Doosan employees find something to be done for each local community and devote themselves to the service wherever Doosan runs its businesses.



Volunteer workers participated in various community service activities for local communities on Doosan Day of Community Service.



Next Step

We aim to perform the mission to raise the community's potential competitive edge and our corporate value through strategic social contribution. We will continue to discover and implement social contribution program for the mission. We are also planning to promote the service history and activities of social volunteer corps and to increase the number of attendees. Plus, we will continue to strengthen social contribution activities which create both corporate and social value simultaneously through strategic social contribution connected to our corporate core competency.



Community Service Activities of Doosan Engine



1 Formation of a Village Wall Gallery

Employees of Doosan Engine have visited Daechang-dong, a low-income residential area, in Hapcho-gu of Masan. They have drawn paintings on the wall so as to make the wall like a gallery and to liven up the residential environment.

2 Making Handmade Furniture

Employees of Doosan Engine have handmade five different types of furniture using engine-making skill by hand. Among them, desks and chairs have been donated to facilities for childcare while closets and living furniture have been sent to low-income families.



4 Clean House

Our employees have visited the houses of the physically challenged people who have trouble cleaning and organizing to help improve the residential condition by cleaning their houses, pasting wallpapers, and working on electricity.

5 Chuseok(Korean Thanksgiving Day) Love Songpyeon(a kind of Korean traditional rice cake) and Mandu(Korean traditional dumpling)

Children in six local childcare centers affiliated with Doosan Engine and its volunteers have invited the elderly in nearby senior citizen centers for celebrating Chuseok. They have made Songpyeon and Mandu as an activity for creative experience. Plus, they have shared the chance to learn about traditional food and filial piety.

3 Making Hands-on First-aid Kits

The employees unavailable to join outdoor volunteer activities due to physical conditions have made first-aid kits with their families or coworkers and have sent them to the elderly living alone.





8 Babpeo of Love

Babpeo Volunteer Team, consisting of employees of Seoul office, has visited three soup kitchens in Seoul to help distribute food, wash dishes, and donate fruit for sharing love and compassion.



6 Harvesting Sunflowers for Helping the Farmers in Need

We have helped understaffed farms with sunflower harvest, which culminates in fall.

7 Decorating Eco-forest at Bongam Mud Flat

Employees have changed the fluorescent tubes and repainted the wooden walkway, bulletin board, and benches for the convenience of visitor to Bongam Mud Flat Eco-Learning Center. The employees helped grow an eco-forest by removing noxious plants and cleaning up the surroundings.



9 Environmental Cleanup Activity in Mountain Daeheuk

The volunteers in DMI(Doosan Marine Industry), an overseas subsidiary, have cleaned up garbage thrown in Mountain Daeheuk near the company for contributing to its local community.

11 Assistance for Cheongwang School

Doosan Engine entered into MOU contract with Changwon Cheongwang School and has conducted various activities to support the students' independence. Doosan Engine has operated a sports class every month which helps students strengthen their bodies and spirits and cultivate their emotions. Besides, Doosan Engine has collaborated with the school operation and actively interacted with the school.

10 Activities of the Volunteer Service Club, 'Small Love'

Employees created 'Small Love' voluntarily after the founding day of the company in two millenniums. They have visited nearby senior care centers and strived to render a heartfelt service to them every month.

12 Sharing Love by Blood Donation

Doosan Engine set 'Heart Day' of love when employees donate their blood altogether.

Employees practice sharing by blood donation. Those who take part in the day donate their own blood donor cards to other colleagues or their families urgently required to receive a transfusion. This way they have practiced double genuine sharing.



13 Sharing the Tea of Love with Navy

Doosan Engine has sent the tea of love to naval training headquarters since 2007 as a token of gratitude for their pain and effort to protect our territory.

APPENDIX

62 Facts & Figures: Economy, Environment, and Society

64 Independent Assurance Statement

65 GRI Content Index

Economy

| Category | | Unit | 2013 | 2014 | 2015 |
|----------------------------|-----------------------------|-----------------|---------|---------|----------|
| Major Economic Performance | Sales | KRW million | 743,879 | 888,826 | 693,645 |
| | Operating profit | KRW million | 721 | -39,596 | -63,754 |
| | Current Net income | KRW million | -5,236 | -42,231 | -125,442 |
| Growth indicator | Sales growth rate | % | -46.0 | 19.5 | -22.0 |
| | Growth rate of net profit | % | -102.8 | -706 | -197.0 |
| | Growth rate of total assets | % | -6.9 | -7.4 | -8.7 |
| Stability indicator | Current ratio | % | 91 | 83 | 83.8 |
| | Debt ratio | % | 110 | 120 | 144.7 |
| | Fixed rate | % | 149 | 157 | 167.3 |
| | Dependence on orrowings | % | 19 | 20 | 23.8 |
| Profitability indicator | Operating profit rate | % | 0.1 | -4.5 | -9.2 |
| | Net profit rate | % | -0.7 | -4.8 | -18.1 |
| | ROA | % | -0.3 | -2.6 | -8.5 |
| | ROE | % | -0.7 | -5.7 | -19.7 |
| Activity indicator | Total capital turnover | Times | 1.0 | 1.2 | 0.5 |
| | Receivables turnover | Days | 14.6 | 21.2 | 11.9 |
| | Inventory turnover | Days | 3.6 | 4.7 | 3.5 |
| Income tax | Income tax expense | KRW 100 million | -1 | -94 | -403 |
| R&D | R&D expenses | KRW 100 million | 138 | 238 | 202 |
| | R&D expenses to sales | % | 1.85 | 2.68 | 2.92 |
| Dividend | Earnings per share | KRW | -75 | -608 | -1,805 |
| | Dividend per share | KRW | - | - | - |
| | Dividend yield | % | - | - | - |
| | Total dividends | KRW 100 million | - | - | - |
| Labor costs | Total annual salary | KRW 100 million | 700 | 694 | 585 |
| | Average per capita wage | KRW million | 69 | 69 | 70 |

Environment

| Category | | Unit | 2013 | 2014 | 2015 |
|--|--------------------------------------|---------------------|---------|---------|---------|
| Materials used | B-A | kℓ | 5,096 | 7,010 | 4,308 |
| | LNG | 1,000m ³ | 488 | 606 | 369 |
| | Gasoline(vehicles) | kℓ | 71 | 70 | 70 |
| | Diesel | kℓ | 60 | 135 | 227 |
| | Kerosene | kℓ | 84 | 74 | 71 |
| Energy Usage | Power | MWh | 31,500 | 36,302 | 30,451 |
| | Electric Power/Sales | MWh/KRW million | 0.04 | 0.04 | 0.04 |
| Water | Industrial water | m ³ | 336,378 | 384,122 | 282,263 |
| Greenhouse gas emissions | SCOPE1 | 1,000tco2 | 18 | 21.5 | 13.6 |
| | SCOPE2 | 1,000tco2 | 12 | 16.9 | 14.3 |
| | Unit emission | tCO2/KRW million | 0.04 | 0.04 | 0.04 |
| Air pollutants | Dust | mg/m ³ | 7.6 | 9.1 | 10.9 |
| | Total hydrocarbons(THC) | ppm | 44.4 | 44.2 | 44.3 |
| Waste | Incineration | ton | 1,517 | 1,824 | 1,494 |
| | Recycling | ton | 853 | 922 | 607 |
| Wastewater | Waste throughput | ton | 40 | 54 | 47 |
| By-product recycling | Scrap metal, Machined chips | ton | 2,300 | 2,720 | 2,174 |
| | Copper scrap | ton | 10 | 4 | 3 |
| | Waste wood | ton | 647 | 777 | 524 |
| | | | | | |
| Environmental investment | High-efficiency lighting replacement | KRW | - | - | 2,100 |
| | Cooling and heating control system | KRW | 1.12 | - | - |
| | Environmental protection costs | KRW million | 34 | 200 | 198 |
| Compliance with environmental statutes | Number of sanctions | Case | - | - | - |
| | Fines | KRW | - | - | - |
| Assistance to suppliers | EHS support | No. of suppliers | 41 | 42 | 40 |

Society

Workforce status

| Category | | Unit | 2013 | 2014 | 2015 |
|----------------------------|----------------------------------|---------|------|------|-------|
| Total number of employees | Officers | Persons | 20 | 20 | 16 |
| | Employees | Persons | 990 | 976 | 816 |
| By business area | Clerical staff | Persons | 512 | 500 | 386 |
| | Technical staff | Persons | 498 | 496 | 446 |
| By employment type | Full-timers | Persons | 993 | 995 | 829 |
| | Non-regular employees | Persons | 17 | 1 | 3 |
| | Rate of non-regular employees | % | 1.68 | 0.10 | 0.36 |
| Length of service | Average length of service | Years | 8.42 | 9.51 | 10.54 |
| | Retirement rate | % | 4.36 | 3.51 | 1.97 |
| Labor union | Employees eligible for the union | Persons | 678 | 626 | 526 |
| | Joined members | Persons | 492 | 491 | 446 |
| | Membership rate | % | 73 | 78 | 85 |
| Female staff | Number of persons | Persons | 40 | 38 | 26 |
| | Rate | % | 3.96 | 3.81 | 3.13 |
| Employment of the Disabled | Number of persons | Persons | 22 | 22 | 16 |
| | Rate | % | 2.18 | 2.21 | 1.92 |
| R&D personnel | Number of persons | Persons | 66 | 67 | 33 |

Welfare and benefits

| Category | | Unit | 2013 | 2014 | 2015 |
|---|--|---------|------|------|------|
| Ratio of benefit packages expenditure to sales | | % | 2.0 | 1.5 | 2.2 |
| Rate of paid leave utilization | | % | 65.4 | 62.2 | 54.2 |
| Number of employee(s) who obtained parental leave | | Persons | 1 | 3 | 7 |

Education and training

| Category | | Unit | 2013 | 2014 | 2015 |
|---|--|--------------|------|------|------|
| Education and training time per person | | Hours | 36 | 27 | 32 |
| Education and training expenditure per person | | KRW thousand | 920 | 690 | 714 |

Health and safety

| Category | | Unit | 2013 | 2014 | 2015 |
|---------------|-----------------------|------|------|------|------|
| Accident rate | Serious accident rate | % | - | - | - |
| | Direct accident rate | % | - | 0.10 | - |

Financial assistance to suppliers(Shared Growth Fund)

| Category | | Unit | 2013 | 2014 | 2015 |
|-------------------------------------|--|-----------------|------|------|------|
| Raised amount of Shared Growth Fund | | KRW 100 million | 350 | 390 | 390 |
| Loans from Shared Growth Fund | | KRW 100 million | 200 | 212 | 220 |
| Beneficiaries of Shared Growth Fund | | Companies | 18 | 19 | 21 |

Customer satisfaction

| Category | | Unit | 2013 | 2014 | 2015 |
|-----------------------|--------------------------|-------|------|------|------|
| Customer satisfaction | End user(Chief Engineer) | Score | 8.48 | 8.50 | 8.59 |
| | Ship Owners | Score | 7.73 | 8.04 | 7.88 |
| | Shipyards | Score | 8.01 | 8.26 | 7.77 |

Social contribution

| Category | | Unit | 2013 | 2014 | 2015 |
|---|--|-----------------|------|------|------|
| Donations for social contribution | | KRW 100 million | 27 | 2 | 2 |
| Volunteering hours per individual | | Hours | 2.98 | 3.37 | 7.65 |
| Participation rate of employees in volunteering | | % | 32 | 42 | 80 |

Independent Assurance Statement



To: The Stakeholders of Doosan Engine

Introduction and objectives of work

IMCSR (the ‘assurance provider’ hereafter) has been engaged by Doosan Engine to conduct an independent assurance of 2015 Doosan Engine CSR Report(the ‘Report’ hereafter). This assurance statement applies to the related information included within the scope of work described below. The information and its presentation in the Report are the sole responsibility of the management of Doosan Engine. Our sole responsibility was to provide independent assurance on its content.

Assurance standard and scope of work

The assurance process was conducted in line with the requirements of the Assurance Standard AA1000AS(2008) Type1 assurance. GRI G4 guidelines and ISO 26000 were also used. The scope of work included:

- Data and information included in the Report for the reporting period;
 - Appropriateness and robustness of underlying reporting systems and processes, used to collect, analyze and review the information reported;
 - Evaluation of the Report against the main principles of the AA1000 Assurance Standard
 - Evaluation against GRI G4 ‘In Accordance’ Criteria;
- The moderate level of assurance has been applied.

Methodology

As part of its independent assurance, the assurance provider undertook the following activities:

- Interviews with relevant personnel of Doosan Engine;
- Review of documentary evidence produced by Doosan Engine;
- Audit of performance data;
- Site visits;
- Review of data and information systems for collection, aggregation, analysis and review;
- Review of stakeholder engagement activities;

Our work was conducted against standard procedures and guidelines for external assurance of CSR reports.

Our findings

On the basis of our methodology and the activities described above, it is our opinion that:

- Doosan Engine has established appropriate systems for the collection, aggregation and analysis of relevant information. The information and data included in the Report are accurate, reliable and free from material mistake or misstatement.
- The Report properly reflects the organization’s alignment to and implementation of the AA1000 Assurance Standard(2008) principles of Inclusivity, Materiality and Responsiveness in its operations. Further detail is provided below:

▸ Inclusivity

Doosan Engine has processes in place for engaging with range key stakeholders including shareholder/investor, customer, supplier, licensor and local community. Doosan Engine has undertaken a number of formal stakeholder engagement activities.

▸ Materiality

The Report addresses the range of environmental, social and economic issues of concern that Doosan Engine has identified as being of highest material importance. The identification of material issues has considered both internal assessments of risks and opportunities to the business, as well as stakeholders’ views and concerns.

▸ Responsiveness

Doosan Engine has integrated material sustainability issues into organization’s strategy and operation. The Report properly reflects the organization’s response to the material issues which are defined through process for identifying material issues.

- Based on our work, it is our opinion that the Report has been prepared in accordance with the ‘Core Option’ of GRI G4. Further detail is provided below:

▸ General Standard Disclosures

The assurance provider reviewed General Standard Disclosures, and believes that the Report meets the Core Option requirements of General Standard Disclosures.

▸ Specific Standard Disclosures

The assurance provider reviewed Material Aspects, DMAs and Indicators, and believes that the Report meets the Core Option requirements of Specific Standard Disclosures.

Key areas for ongoing development

The following is a recommendation which does not affect our conclusions on the assurance statement. Based on the work conducted, we recommend Doosan Engine to consider the following:

- It is highly evaluated that Doosan Engine has set CSR strategies, implemented management system and programs, measured performance, and managed change. Doosan Engine is advised to consider development of Key Performance Indicators against areas and issues of concern where they do not already exist.
- The assurance provider believes that Doosan Engine is operating appropriate processes and channels to ensure stakeholder engagement. Doosan Engine is advised to implement more strategic stakeholder engagement program to continuously manage and report stakeholder engagement process and performance in the future.

Statement of independence and competence

The assurance team has conducted this assurance independently. The assurance team consists of the best experts equipped with sufficient knowledge and expertise in the relevant areas.

April 2016

Hyun Lee, CEO
IMCSR Co. , Ltd.

Sunho Jang
Expert Adviser

Insil Gwak
Expert Adviser

Taehun Jang
Expert Adviser

GRI Content Index

| General Standard Disclosure | | Page | Assurance |
|--|--|--------------|-----------|
| Strategy and Analysis | | | |
| G4-1 | Provide a statement from the most senior decision-maker of the organization (incl. strategy relates to sustainability, impacts of the activities in relation to the stakeholders) | 6~7 | 64 |
| Organization Profile | | | |
| G4-3 | Report the name of the organization | 8 | 64 |
| G4-4 | Report the primary brands, products, and services | 8~9 | 64 |
| G4-5 | Report the location of the organization’s headquarters | 8 | 64 |
| G4-6 | Report the 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 | 8 | 64 |
| G4-7 | Report the nature of ownership and legal form | 8~9 | 64 |
| G4-8 | Report the markets served(including geographic breakdown, sectors served, and types of customers and beneficiaries) | 8~9 | 64 |
| G4-9 | Report the scale of the organization | 62~63 | 64 |
| G4-10 | a. Report the total number of employees by employment contract and gender b. Report the total number of permanent employees by employment type and gender c. Report the total workforce by employees and supervised workers and by gender d. Report the total workforce by region and gender e. Report whether a substantial portion of the organization’s work is performed by workers who are legally recognized as self-employed, or by individuals other than employees or supervised workers, including employees and supervised employees of contractors f. Report any significant variations in employment numbers | 27, 63 | 64 |
| G4-11 | Report the percentage of total employees covered by collective bargaining agreements | 63 | 64 |
| G4-12 | Describe the organization’s supply chain | 32~37 | 64 |
| G4-13 | Report any significant changes during the reporting period regarding the organization’s size, structure, ownership, or its supply chain | 8 | 64 |
| G4-14 | Report whether and how the precautionary approach or principle is addressed by the organization | 14~15 | 64 |
| G4-15 | List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses | 67 | 64 |
| G4-16 | List memberships of associations and national or international advocacy organizations | 67 | 64 |
| Identified Material Aspects and Boundaries | | | |
| G4-17 | a. List all entities included in the organization’s consolidated financial statements or equivalent documents b. Report whether any entity included in the organization’s consolidated financial statements or equivalent documents is not covered by the report | 2 | 64 |
| G4-18 | a. Explain the process for defining the report content and the Aspect Boundaries b. Explain how the organization has implemented the Reporting Principles for Defining Report Content | 20~21 | 64 |
| G4-19 | List all the material Aspects identified in the process for defining report content | 20~21 | 64 |
| G4-20 | For each material Aspect, report the Aspect Boundary within the organization | 20~21 | 64 |
| G4-21 | For each material Aspect, report the Aspect Boundary outside the organization | 20~21 | 64 |
| G4-22 | Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements | 2 | 64 |
| G4-23 | Report significant changes from previous reporting periods in the Scope and Aspect Boundaries | 2 | 64 |
| Stakeholder Engagement | | | |
| G4-24 | Provide a list of stakeholder groups engaged by the organization | 18~19 | 64 |
| G4-25 | Provide the contact point for questions regarding the report or its contents | 18~19 | 64 |
| G4-26 | Report the organization’s approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process | 18~19 | 64 |
| G4-27 | Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns | 18~19 | 64 |
| Report Profile | | | |
| G4-28 | Reporting period (such as fiscal or calendar year) for information provided | 2 | 64 |
| G4-29 | Date of most recent previous report (if any) | 2 | 64 |
| G4-30 | Reporting cycle (such as annual, biannual) | 2 | 64 |
| G4-31 | Provide the contact point for questions regarding the report or its contents | 2 | 64 |
| G4-32 | a. Report the ‘in accordance’ option the organization has chosen b. Report the GRI Content Index for the chosen option (see tables below) c. Report the reference to the External Assurance Report, if the report has been externally assured. GRI recommends the use of external assurance but it is not a requirement to be ‘in accordance’ with the Guidelines | 2 | 64 |
| G4-33 | a. Report the organization’s policy and current practice with regard to seeking external assurance for the report b. If not included in the assurance report accompanying the sustainability report, report the scope and basis of any external assurance provided c. Report the relationship between the organization and the assurance providers d. Report whether the highest governance body or senior executives are involved in seeking assurance for the organization’s sustainability report | 64 | 64 |
| Governance | | | |
| G4-34 | Report the governance structure of the organization, including committees of the highest governance body | 10~11, 16~17 | 64 |
| Ethics and Integrity | | | |
| G4-56 | Describe the organization’s values, principles, standards and norms of behavior such as codes of conduct and codes of ethics | 4~5, 12~13 | 64 |

| Specific Standard Disclosures | | Page | Assurance |
|--|---|--------------|-----------|
| CATEGORY : Economic | | | |
| Material aspect : Indirect Economic Impacts | | | |
| G4-DMA | Disclosure on management approach | 30, 57 | 64 |
| G4-EC7 | Development and impact of infrastructure investments and services supported | 30-31, 57-60 | 64 |
| G4-EC8 | Significant indirect economic impacts, including the extent of impacts | 30-31, 57-60 | 64 |
| CATEGORY : Environmental | | | |
| Material aspect : Energy | | | |
| G4-DMA | Disclosure on management approach | 46 | 64 |
| G4-EN3 | Energy consumption within the organization | 47 | 64 |
| G4-EN5 | Energy intensity | 47 | 64 |
| G4-EN6 | Reductions in energy consumption | 47 | 64 |
| Material aspect : Emissions | | | |
| G4-DMA | Disclosure on management approach | 46 | 64 |
| G4-EN15 | Direct Greenhouse Gas(GHG) emissions(SCOPE 1) | 47 | 64 |
| G4-EN16 | Energy indirect GHG emissions(SCOPE 2) | 47 | 64 |
| G4-EN18 | GHG emissions intensity | 47 | 64 |
| G4-EN19 | Greenhouse gas(GHG) emissions reduction | 47 | 64 |
| Material aspect : Effluents and Waste | | | |
| G4-DMA | Disclosure on management approach | 46 | 64 |
| G4-EN23 | Total weight of waste by type and disposal method | 48 | 64 |
| CATEGORY : Social | | | |
| Material aspect : Occupational Health and Safety | | | |
| G4-DMA | Disclosure on management approach | 42 | 64 |
| G4-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 | 42-45 | 64 |
| Material aspect : Training and Education | | | |
| G4-DMA | Disclosure on management approach | 27 | 64 |
| G4-LA9 | Average hours of training per year per employee by gender, and by employee category | 27-29 | 64 |
| Material aspect : Human Rights Investment | | | |
| G4-DMA | Disclosure on management approach | 39 | 64 |
| G4-HR12 | Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms | 40 | 64 |
| Material aspect : Local Communities | | | |
| G4-DMA | Disclosure on management approach | 57 | 64 |
| G4-SO1 | Percentage of operations with implemented local community engagement, impact assessments, and development programs | 57-60 | 64 |
| Material aspect : Anti-corruption | | | |
| G4-DMA | Disclosure on management approach | 12-13 | 64 |
| G4-SO4 | Communication and training on anti-corruption policies and procedures | 12-13 | 64 |
| G4-SO5 | Confirmed incidents of corruption and actions taken | 12-13 | 64 |
| Material aspect : Customer Health and Safety | | | |
| G4-DMA | Disclosure on management approach | 51-55 | 64 |
| G4-PR2 | Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes | 51-55 | 64 |
| Material aspect : Product and Service Labeling | | | |
| G4-DMA | Disclosure on management approach | 54 | 64 |
| G4-PR5 | Results of surveys measuring customer satisfaction | 54-55 | 64 |

Memberships

| Category | Name of Association/Society | Remarks | Category | Name of Association/Society | Remarks |
|----------|--|----------|----------|--|----------|
| 1 | The Federation of Korean Industries | Member | 12 | The Korean Society of Mechanical Engineers | Member |
| 2 | Fair Competition Federation | Member | 13 | Korea Federation of Combustion Engines | Member |
| 3 | Gyeongnam Employers Federation | Director | 14 | The Korean Society of Mechanical Engineers | Member |
| 4 | The Society of Naval Architects of Korea | Member | 15 | Korea Industrial Technology Association | Member |
| 5 | Changwon Chamber of Commerce & Industry | Auditor | 16 | Korean Nurses Association | Member |
| 6 | Korea Association of Machinery Industry | Director | 17 | Korean Association of Occupational Health Nurses | Member |
| 7 | Korea International Trade Association | Member | 18 | Korea Marine Equipment Association | Auditor |
| 8 | Korean Standards Association | Director | 19 | Korea Marine Equipment Research Institute | Director |
| 9 | Korea Electric Engineers Association | Member | 20 | Korea Industrial Safety Association | Member |
| 10 | Korea Customs Logistics Association | Member | 21 | Korea Fire Safety Association | Member |
| 11 | Korea Industrial Technology Foundation | Member | 22 | Korea Association of ESCO | Member |

The UN Global Compact's ten principles

Doosan Engine supports the Ten Principles of UN Global Compact.

Human Rights

Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and

Principle 2: make sure that they are not complicit in human rights abuses.

Labour

Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;

Principle 4: the elimination of all forms of forced and compulsory labour;

Principle 5: the effective abolition of child labour; and

Principle 6: the elimination of discrimination in respect of employment and occupation.

Environment

Principle 7: Businesses should support a precautionary approach to environmental challenges;

Principle 8: undertake initiatives to promote greater environmental responsibility; and

Principle 9: encourage the development and diffusion of environmentally friendly technologies.

Anti-Corruption

Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

Global Network

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