

# 2015

Annual Report + Sustainability Report

Enable the Cabled World

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## Leading Solution

'Sustainable management' in LS Cable & System is our belief in the value of going together. It is not just a commitment but what needs to be put into action on a daily basis. Our executives and employees believe in and act on our vision 'Enable the Cabled World' so that our stakeholders such as suppliers, customers, investors and local communities enhance the quality of life. The goal of sustainable management in LS C&S is to create a society of coexistence and a prosperous future.

## 10 Special Themes on C.O.R.E



## About this Report

**Overview** 2015 LS Cable & System Sustainable Management Report is based on GRI<sup>Global Reporting Initiative</sup> G4 Guidelines. In order to increase the credibility of the report and the understanding of G4 Guidelines, the company's 2014 report and the reports of other domestic and overseas companies in the industry have been used as references. Based on the GRI Guideline and the references, we have identified what needs to be maintained and what needs to be improved and reflected them in this new report.

To select top 10 material issues, seven working committees under the sustainable management secretariat have created their own pools of issues and have analyzed the relative importance of 28 issues. The issues selected considering the feedbacks of internal and external stakeholders and the G4 Guidelines are presented in the form of matrix in the report.

A third party assurance has been carried out in order to make up for the weakness in our materiality assessment. In addition, the feedbacks of internal stakeholders have been considered in the assessment to meet the needs of employees. Review results and recommendations of LS C&S executives and of a third party assurance institute have been reflected to finalize this report.

**Reporting Guidelines** · GRI G4 Guidelines · UNGC<sup>UN Global Compact</sup> Index · ISO 26000

**Reporting Period** From January 1 to December 31, 2015 (published annually)

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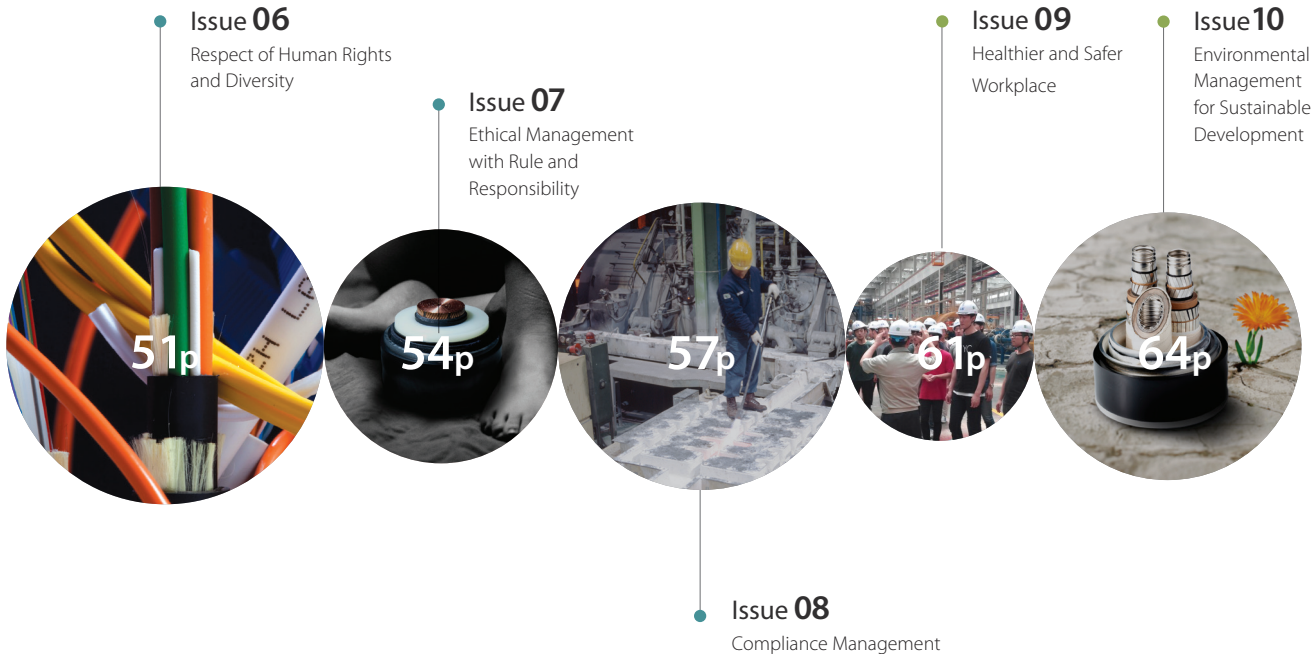
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· To keep track of performance trend, three years' data (from 2012 to 2014) is provided.

· As for the issues considered meaningful and in need of reference, activities carried out in the first half of 2016 are included and their point of time is specified.

**Reporting Scope** LS C&S domestic worksites (headquarters; production sites in Gumi, Anyang, Indong, and Donghae; and a Gunpo R&D center)

**Assurance** Internal review and third party verification for the credibility of the report

**Publication Date of the Latest Report** June, 2015

**Currency** All financial figures are presented in Korean Won (KRW) in the Korean version of the report and in US Dollar (USD) in the English version.

\* All won amounts are expressed in U.S.dollars at US\$1 : ₩1,172.00 the exchange rate in effect on December 31, 2015.

**Data Collection** Data collected from seven working committees has been processed and used under the information management system

· If there are changes in how to collect data, data is adjusted based on the data collection method in 2015 and the adjustment details are specified in the report.

**Key Changes in terms of the Size, Structure, and Ownership of the Organization** None

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## Chairman Message





## **First of all, I would like to express my deepest gratitude to all stakeholders for your continued interest in and support for LS Cable & System.**

I am very pleased to have this sixth edition of the Sustainability Report published as a channel to communicate with you.

The purpose of this report is to share with you what we achieved socially and economically last year and what we have been striving to achieve for sustainable and qualitative growth.


The year 2016 is meaningful for us as we open the 'second phase of business management' to pursue changes and innovation. For the last three years, we have experienced difficulties at home and abroad, but we have intensified our efforts to revamp the organization based on a 'selection and concentration' strategy. As a result, a foundation for growth has been built on which we are preparing for a new growth. I believe the second phase will serve as an opportunity to show you our true strength and value. We will not pursue growth just for showing off. We will pursue solid and qualitative growth so that our organization and businesses will grow gradually.

To fulfill corporate social, economic, environmental responsibility, we are conducting business based on 'C.O.R.E.' or four core values: customer first; one LS C&S; rule and responsibility; and expertise. As we are clearly aware of the importance of communication and cooperation, we are actively engaged in communicating and cooperating with customers, local communities, and stakeholders. Our efforts for another leap forward will continue so that LS C&S, as a global leading company, will be able to achieve the vision 'Enable the Cabled World' for a better quality of life and for a brighter and more prosperous future.

Distinguished stakeholders,

We will continue to be your trusted partner in the next half century by pursuing sustainable and qualitative growth with our new vision of 'LS C&S Way'. Once again, I would like to extend my appreciation for your interest in and support for LS C&S.

Chairman **Cha-Yub Koo**



## Management Messages



**Distinguished stakeholders,  
We would like to express our sincere gratitude for your support and encouragement you showed us the last year.**

As the domestic and global economic environment is getting difficult, the focus of major companies in 2016 is on belt-tightening in order to strengthen the competitiveness for survival. We, however, have enhanced the fundamentals of the company and laid a foundation for qualitative growth in the 'first phase of business management' for the last three years. In the 'second phase' starting from this year, we will make new changes and innovate. Our executives and employees are committed to joining forces for new changes and innovation in order to achieve sustainable and qualitative growth.

### 1 Securing Growth Drivers

Growth drivers help us to provide markets and customers with the products which meet their needs in a timely manner, thereby achieving qualitative growth. To this end, we will build a growth-oriented business structure, implement differentiated product strategies, and communicate closely with customers.

In order to maximize profitability of new businesses such as extra-high voltage cable and submarine cable system, we will not only focus on existing markets, but also actively develop new markets. In addition, an integrated strategy for LS C&S and overseas subsidiaries will create a synergy to become more competitive in the cable business. Future businesses including superconducting and harness and module (H&M), which are starting to be profitable, will serve as a turning point for us.

### 2 Implementing Responsible Management

Responsible management means achieving goals based on executive ability. Efforts made by every sales employee lead to a new supply contract. Hard work and dedication made by employees in production sites and R&D centers lead to quality products. As such, quality and creative technologies achieved ultimately shape the company's future. All our employees will be armed with a sense of ownership, fulfill their roles and responsibilities, and achieve goals so as to keep the promise to internal and external stakeholders without fail.



### 3 Establishing an Organizational Culture Full of Energy

Encouraging employees to act positively can double their performance. When they experience success in their work, it will make an organizational culture full of energy. Since our new vision 'LS C&S Way' was proclaimed in 2015, a lot of efforts have been made to realize the four core values: customer first; one LS C&S; rule and responsibility; and expertise.

Only when employees experience success in their works, it can bring vitality to the organization in a real sense. In this regard, we will strive to secure growth driver and implement responsible management so that the company will become an organization full of energy.

Domestic and global economic prospects in 2016 are not bright.

Despite such difficulties, however, we cannot stop marching toward the future growth. We have revamped the organization based on a 'selection and concentration' strategy ahead of others, and now we are ready to take the initiative to seize the opportunity in the crisis.

All of our executives and employees will strive to achieve the vision 'LS C&S Way' by fulfilling their roles and responsibilities in their position with a sense of ownership so as to implement their commitments, produce tangible results and achieve sustainable growth. For sustainable and qualitative growth, we will spare no effort to become a global leading company serving as 'total cable solution provider' based on our expertise in the cable industry. At the same time, efforts will also be made to establish an organizational culture valuing the balance between work and life.

We look forward to your continued support and interest.

President of Business, Senior Executive Vice President **Jae-In Yoon**  
President of Corporate Management, Senior Executive Vice President **Roe-Hyun Myung**

# Company Vision and Philosophy

Going beyond the role of cable system provider by becoming customers' best partner who enhances customer value, we strive to make a more convenient and prosperous world by innovating a business model, respecting stakeholders, developing eco-friendly and high-quality products, and seeking cooperation based on respect and caring.

## ● LS C&S Way

'LS C&S Way', which serves as a future vision for the company and makes our executives and employees united, envisages the company's new vision and core values that are the principles for executives and employees to act on.

## ● LS C&S Way – Vision

### Enable the Cabled World

The vision 'Enable the Cabled World' has started from the idea that cables we provide should contribute to enhancing the quality of life and to making a brighter future. Our products, which can be found in every corner of people's life, connect the world by providing people with electric power and telecommunication. We will continue to work on the vision so that everyone will be able to have an efficient and convenient access to energy and information without constraints of time and space. Efforts will also be made to become a global leading company serving as 'total cable solution provider'.

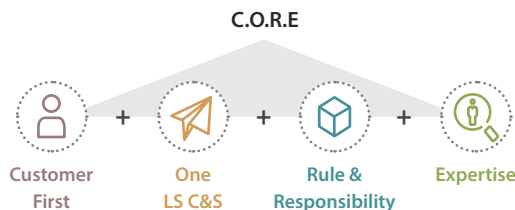
## ● LS C&S Way – Core Value

### C.O.R.E

'C.O.R.E' is the four principles for our executives and employees to act on. As a cable has its core at its center, C.O.R.E. values are what should be at the center of the mind of our executives and employees in LS C&S.

### Core Value

Just like a cable has its core at its center, which is the core conductor, LS C&S executives and employees should keep C.O.R.E. values in their minds.



## ● Management Policy in 2016

**Direction** Internalizing and realizing 'LS C&S Way' as a start of the second phase for change and innovation + Emphasizing responsible management to enhance executive ability for achieving 2016 business goals

### Growth Drivers

- Producing results in new and major businesses
- Successfully conducting and expanding future businesses including superconducting and H&M
- ▶ Becoming a global leading company providing total cable solution through sustainable and qualitative growth

### Responsible Management

- Encouraging employees to work in an autonomous and active manner and be accountable for their work
- Rewarding or penalizing employees by evaluating their performance on goal achievement
- ▶ Establishing a performance-based culture in the organization by emphasizing responsible management

### Organization with Energy

- Promoting communication between job levels/teams/employees
- Boosting the morale of executives and employees and improving work efficiency
- ▶ Creating an environment where cooperation and the good of the whole are valued thereby maximizing business performance

**We aim to become a global leading company providing total cable solution**



**Enable the Cabled World**

**"Improving the quality of life by providing values to customers and to people"**

## Successful Cases



### Saudi Arabia / Riyadh Metro Project



#### Project Overview

380kV power transmission project to provide electric power for the first subway ever built in this country

#### Value Provided

Resolving the issue of traffic congestion in Riyadh

**Helping citizens to reduce commuting time and creating a pleasant city environment**



### Mexico / Giga Optical Network Project



#### Project Overview

Providing eco-friendly All Dry PP Tubes for the project to build an optical network

#### Value Provided

Resolving data traffic issues by establishing a high-speed internet environment

**Improving a living environment by providing a better access to information**



### Venezuela / Corpoelec Project



#### Project Overview

Connecting the mainland and the Margarita island by laying submarine cables for power supply

#### Value Provided

Easing the electric power shortage by replacing old power grid system

**Invigorating the tourism by meeting its electricity demand on time**



### Integrated Wiring System (I2MS\*) – LG Science Park



#### Project Overview

Entering a high-end and high-value-added market by developing I2MS Solution

#### Value Provided

Providing domestic customers with quality made-in-Korea products

**Increased expertise due to the success in developing a new technology domestically**

\* I2MS : Intelligent Infrastructure Management System

Technology for checking the status and changes of the operation system in a building in real time and for responding to system failures

### Customer First

Proactively responding to customer needs

- Understanding the changes in customer's needs
- Providing best values
- Implementing differentiation strategies in competition

### Rule & Responsibility

Ethical management

- Having a sense of ownership
- Sticking to the basics at work
- Sharing failures and working on improvements

### One LS C&S

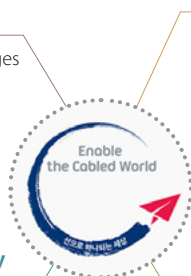
Maximizing synergies

- Respecting diversity and listening to others
- Cooperating among divisions
- Emphasizing the benefit of all

### Expertise

Strengthening basic competencies in work

- Concentrating on work and results
- Acquiring technologies and in-depth knowledge
- Pursuing continuous innovation



## Corporate Philosophy – LSpaartnership

The importance of 'cooperation and communication' is greater than ever. In order to become more competitive under the circumstances where uncertainties are growing and a slowdown in economic growth continues, all affiliates under LS Group share and practice a corporate philosophy by 'creating greater values through cooperation'.

LSpaartnership entails internally achieving great performance through mutual respect, care, and trust by employees armed with a sense of ownership, and externally cooperating with open-mindedness and growing together with stakeholders. All affiliates under LS Group are pursuing 'True Partnership', under which greater values will be created along with global stakeholders.

Greater value together!



### Respect

To understand partners and their values, and cooperate with sincerity

### Care

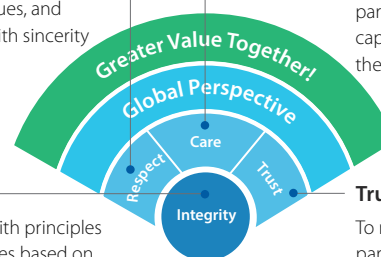
To provide a chance for partners to display their capabilities and help them succeed

### Integrity

To comply with principles and basic rules based on morality and work in a transparent and reasonable manner

### Trust

To make all efforts in partnerships based on responsibility and expertise





## Corporate Governance

### Promoting Management Efficiency and Transparency

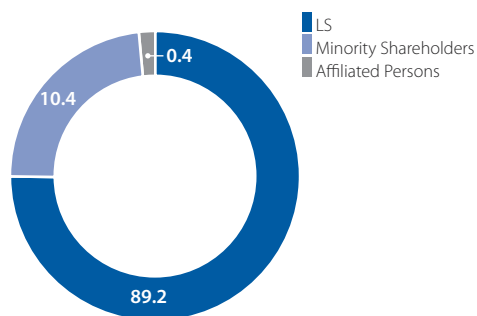
**Auditor** We have one auditor in compliance with the related laws and articles of association in order to secure management transparency and legality. An auditor, who is appointed in the general meeting of shareholders, should not have any reasons for disqualification. The job of an auditor is inspecting and verifying: major issues in the company; internal accounting management system; and financial statements. If it is deemed necessary to perform his/her duties, an auditor can request the sales reports of subsidiaries.

**Information on Auditor** Details on the auditor's profile and other information are specified in the published business report.

### Enhancing Shareholder Value

#### Shareholder Composition (as of December 31, 2015)

##### Shareholder Composition



**Dividends** Dividends are paid by the resolution of the board of directors and of the general meeting of shareholders. In 2015, USD 7.9 million worth of cash dividends were paid, and the company's cash payout ratio based on consolidated financial statements stood at 85.9%.

Dividends	2014	2015
Cash Dividends Total (USD 1million)	1.5	7.9
(Consolidated) Cash Payout Ratio (%)	18.57	85.88

**Composition of Board of Directors (BOD)** We elect as directors those who with expertise in management and the cable industry and of insight into the company and the society in mid- and long-term. Directors are appointed at the general meeting of stakeholders. As of December 2015, the BOD consists of three internal directors. The president serves as the chairman of the board in order to rapidly respond to a large-scale investment and to various risk factors at our overseas business sites.

### BOD Status

as of December 21, 2015

Name (Gender)	Elected as	Responsibility	Relation with the largest and major shareholders
Cha-Yub Koo (M)	Internal director (full-time)	Chairman	Executive of LS Group, the largest shareholder
Jae-In Yoon (M)	Internal director (full-time)	President	Executive of the affiliate of LS Group, the largest shareholder
Roe-Hyun Myung (M)	Internal director (full-time)	President	Executive of the affiliate of LS Group, the largest shareholder

**Operation** The Board Meetings are held according to the pre-established annual plan on a regular basis, and special meetings are convened for prompt decision-making on major items on the agenda. In 2015, 16 board meetings were held in total, in which a total of 34 items were passed, including new investments and evaluation results of the internal accounting management system.

**Evaluation and Compensation** Directors and auditors are evaluated in accordance with performance indicators linked to the company's business goals and evaluation directions. Half-yearly and yearly reviews are conducted based on financial and non-financial performance. Incentives are provided according to the evaluation results within the amount approved by the general shareholders' meeting. In 2015, the general meeting of shareholders approved the remuneration limit at USD 2.9 million

Responsibility (USD 1000)	Person(s)	Total Remuneration	Average per Person
Registered Director	3	2355.7	785.2
Outside Director	-	-	-
Audit Committee or Auditor	1	40.9	40.9
Total	4	2396.7	599.1

**Organization with Two Presidents** Since 2015, the company has been re-organized to have two presidents in charge of business and corporate management respectively. The president of business takes charge of business operation including sales and production while the president of corporate management is responsible for overall management related to business support.

**Information on Directors** Details on directors' profile and other information are specified in the published sales report and business report.

# Risk Management

As the society rapidly changes and uncertainties are growing, it is expected to see the increase of various risks. We are clearly aware that proactively identifying and responding to risks are critical for the company and stakeholders in terms of sustainability. At the same time we are expanding the scope of risk management from finance to business, operation, compliance and supply chain management.

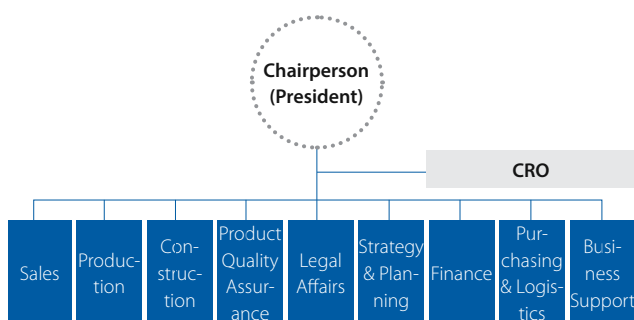
## Risk Management System

In order to manage the risk of uncertainties that reduces the company value and affects or may affect its business goals, we have implemented a risk management system for effective risk prevention, response and control, thereby increasing the safety and soundness in management.

**Risk Management Committee** The company-wide risk management committee is the highest decision-making body on checking potential risk status, sharing identified risks, and implementing response measures. Meanwhile, reviews in regards to major project bidding are conducted in the 'bidding review committee'; issues related to copper management are reviewed in the 'copper futures committee'; and the 'working-level meeting for investment review' and the 'investment risk review committee' deliberate on major investments.

**Risk Management Organizations** Our risk management activities are conducted by departments in charge, by a general management department, and by a company-wide risk management committee. Departments in charge identify and monitor risks. If they detect any abnormal signs or risks, they report to the general management department. The general management department plans risk management activities, checks the management status of each department, and runs the risk management committee meetings. The company-wide risk management committee is the company's highest decision-making body consisting of a president as a chairperson and a strategy planning executive as Chief Risk Officer (CRO). The committee checks the risk status and makes a decision on response measures.

## Organizational Structure of Risk Management Committee



## Risk Management Activities

**Risk Classification** We define five types of risks that may greatly affect us in achieving business goals, manage risks in a proactive and systematic manner, and come up with response measures when risks are detected.

<b>Strategic Risk</b>	It refers to a risk that a company's strategy may fail as the company is losing its reputation or there have been changes in technology, environment or strategic partners.
<b>Regulatory Risk</b>	It refers to a risk that a company may violate laws or regulations related to sales, environment, safety, health in doing business.
<b>Financial Risk</b>	It refers to a risk that a company may suffer financial loss due to changes in interest rate, stock prices, liquidity or credit ratings and to retirement, removal and devaluation of working assets such as long-term inventory and non-performing loan.
<b>Operational Risk</b>	It refers to a risk that a loss may occur due to irregularities, inefficiency and errors caused by an employee, a work process, or a system.
<b>Disaster Risk</b>	It refers to a risk that is hard to control as it is caused by natural disasters, wars or a coup or accidents in logistics

**Risk Management Committee Meeting** The meeting is held on a quarterly basis (January, April, July, and November) to establish response measures. If necessary, a special committee meeting is called and the department that has identified and reported a risk should immediately provide the general management department with the report covering the details on the risk and its impact on the business.

# Challenges & Opportunities

## Cable Business Environment

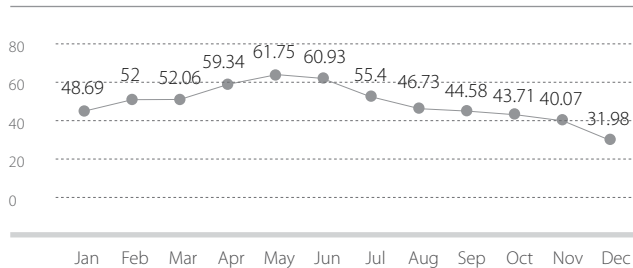
**Decline in Raw Material Prices** International oil prices, which had remained at USD100 per barrel since 2011, has plunged to USD 26 per barrel in January 2016, the lowest in 12 years due to the anxiety over the sluggish economy in China. The price of electrolytic copper has also been decreased last January to USD 4,300 per ton, the lowest level since April 2009 due to the same reason. The prospect that macroeconomic conditions on the global economy and the copper price are not favorable and not enough to drive the recovery prevails. As copper accounts for approximately 65% of our raw materials cost, raw material prices are key variables impacting our business activities.

We are managing risks through futures trading in order to minimize the impact by the volatility in LME <sup>London Metal Exchange</sup> copper prices. In addition, the copper futures operation committee is held on a monthly basis to share and review the information on futures operation and position status.

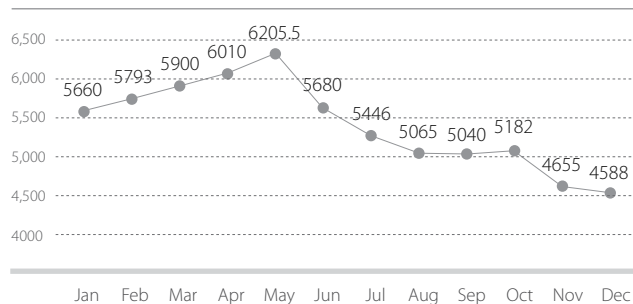
**Global Economic Downturn** The global economy continues to slow down due to a decrease in the global trade, increasing household debt and deflation in Japan. The cable industry is impacted by global economic growth, in particular, by infrastructure investment in emerging countries. The domestic cable industry has entered the mature stage shifting from electric power and telecommunication network building in the 1980s to maintenance and replacement of existing infrastructure. If the economy in the emerging countries continues to slow down, the investment in electric power infrastructure is expected to decline affecting overseas cable businesses.

The cable industry is facing many difficulties including reduced demand and lower profitability due to the sluggish global economy. We, however, are achieving better financial results by focusing on overall management efficiency based on global and regional strategies, and strive to overcome difficulties by strengthening basic competencies in terms of responsibility to stakeholders, quality improvement, and execution.

Dubai Crude Oil Price Trend (USD/bbl)

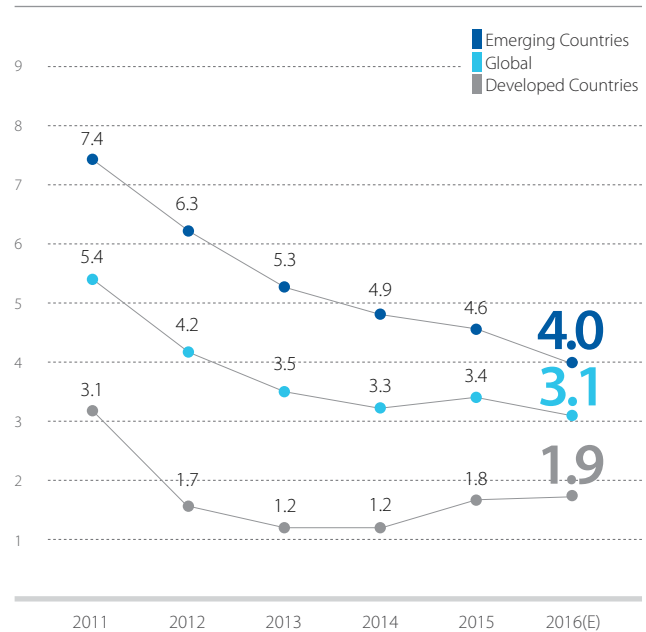


Electrolytic Copper Price Trend (USD/Ton)



Source: Ministry of Trade, Industry and Energy of Korea

Economic Growth Rate (%)

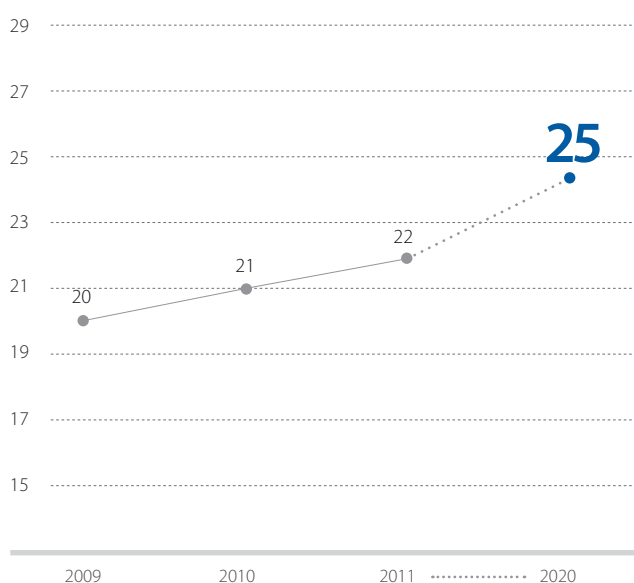


Source: IMF

**Global Electric Power Generation** The growth in electric power consumption slowed down temporarily as the demand for industrial electricity decreased from 2008 to 2009 due to the global economic downturn. However, electric power consumption has steadily increased because of population growth, urbanization, electronic devices with large capacity. According to the US EIA<sup>Energy Information Administration</sup>, global electric power generation is expected to grow annually 2.3% on average and to reach 25TKWh in 2020 and 35.2TKWh in 2035, which means a 87% increase compared to 2007. Consequently, it is expected to see more power plants and further investment in electricity transmission and distribution networks. In order to meet the demand for stable power supply and to minimize transmission losses, in particular, extra-high voltage cables are expected to drive the growth in the cable market.

We have joined global power grid construction projects with our world-class extra-high voltage cables. In addition, our R&D centers and production facilities at home and abroad enable us to continue research and development activities and to strengthen our capability to be involved in cable-related projects worldwide.

**Global Electric Power Generation** (Trillion KWh)



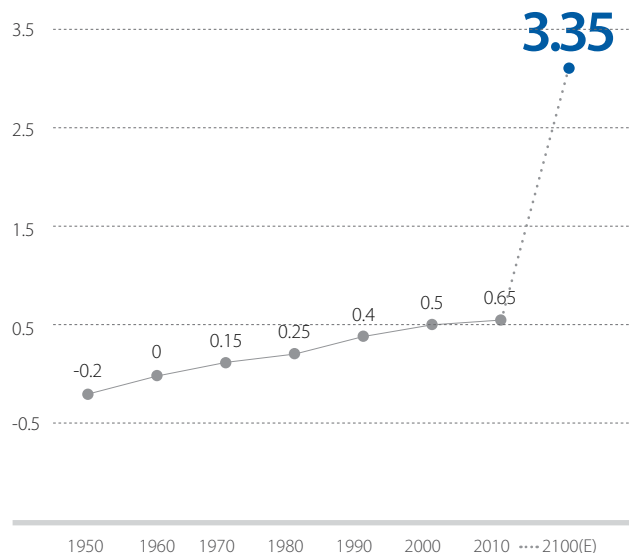
Source: OECD, EIA

## Mega Trends

**Changes in Global Average Temperature** According to NASA<sup>National Aeronautics and Space Administration</sup>, the average temperature of the earth's surface in February 2016 was 1.35°C higher than the average temperature of February from 1951 to 1980, the highest temperature in history. In addition, NOAA<sup>National Oceanic and Atmospheric Administration</sup> published that average global temperature in January was recorded 1.04°C higher than the average January temperature of 12°C in the 20th century. IPCC<sup>Intergovernmental Panel on Climate Change</sup> has pointed out if the average global temperature rises 1 ~ 2°C, the world will face a higher level of risk. CAT (Climate Action Tracker), however, has predicted the average temperature will increase 2.7°C by 2100.

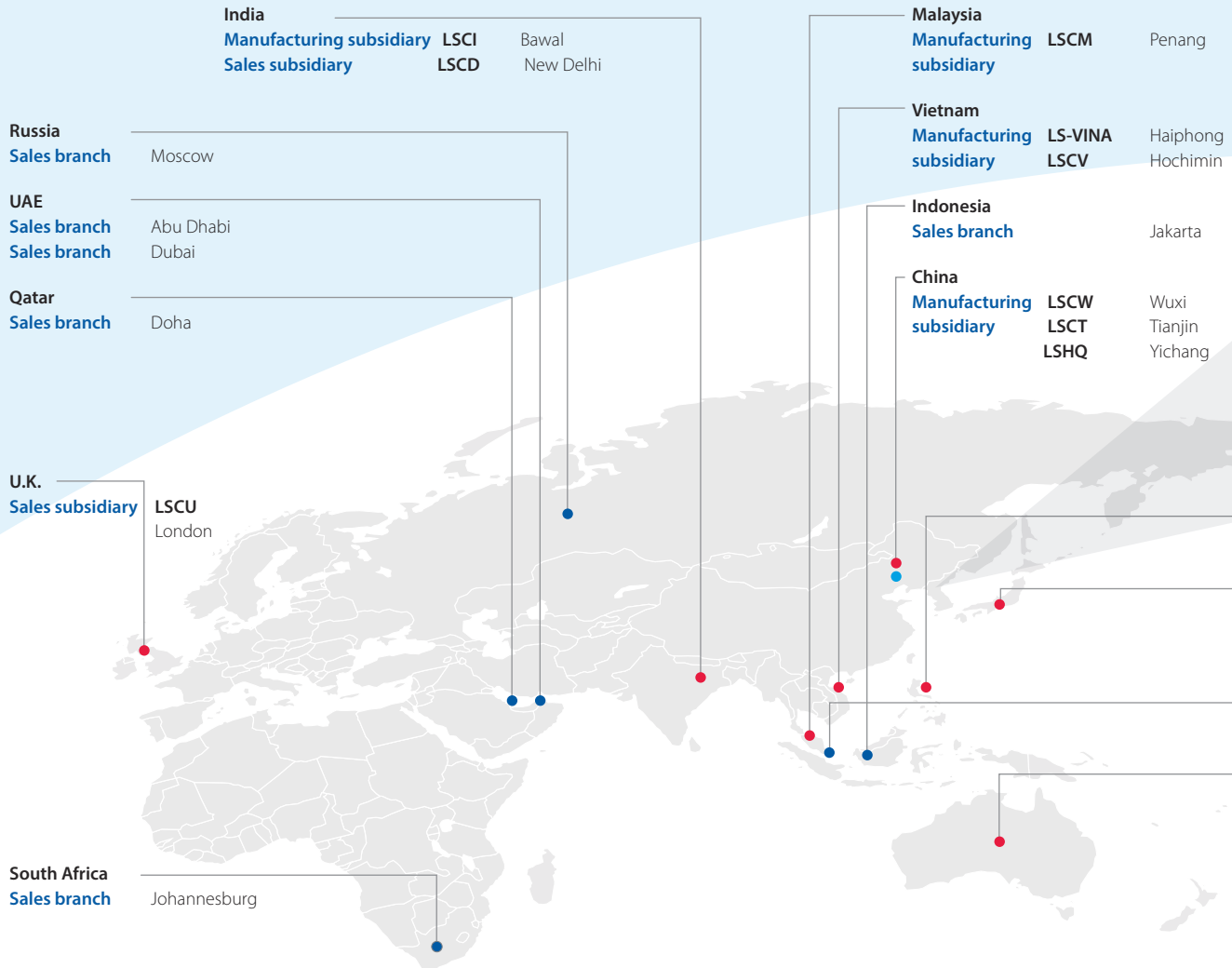
The climate change issue is what the whole world should be engaged to tackle. We take responsibility to respond to the issue and to implement low-carbon management based on our business strategy. Accordingly, activities are being conducted to reduce energy use and greenhouse gas emissions in the all the stages of a product's life from product design to development, production, and shipping.

**Changes in Global Average Temperature** (°C)



Source: NASA

## LS C&S and its Businesses



### Company Profile

Since the company was founded in May 1962, we have developed, produced and sold various kinds of cable-related solutions. Our cutting edge products such as submarine and superconducting cable systems are used by energy agencies and telecommunication companies in many countries, which have helped us to be recognized as a global leading company.

<b>Company Name</b>	LS Cable & System
<b>Headquarters</b>	12th-16th Fl. LS Tower, 127 LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do 431-848 Korea
<b>President</b>	Roe-Hyun Myung and Jae-In Yoon
<b>Date of Establishment</b>	May 1962
<b>Main Products</b>	Energy and industry cables, fiber-optic communication, materials
<b>Subsidiaries</b>	5 domestic subsidiaries, 12 overseas subsidiaries (holding a majority of voting rights)





- LS Cable & system
- Domestic Subsidiary
- R&D Center

Philippines  
Sales branch

Manila

Japan

Sales subsidiary LSCJ

Tokyo

Singapore  
Sales branch

Singapore

Australia

Sales subsidiary LSCAU

Sydney

USA

Sales subsidiary LSCA

New Jersey

Peru

Sales branch

Lima

We operate **14** plants, **32** sales and marketing branches/offices, and **3** R&D centers in **18** countries.

## Company Information

(December 31, 2015 / Consolidated)



Date of Establishment

**May 1962**



Capital

USD **586.3** million



Revenue

USD **2997.1** million  
(Consolidated)



Employees

**4,676**

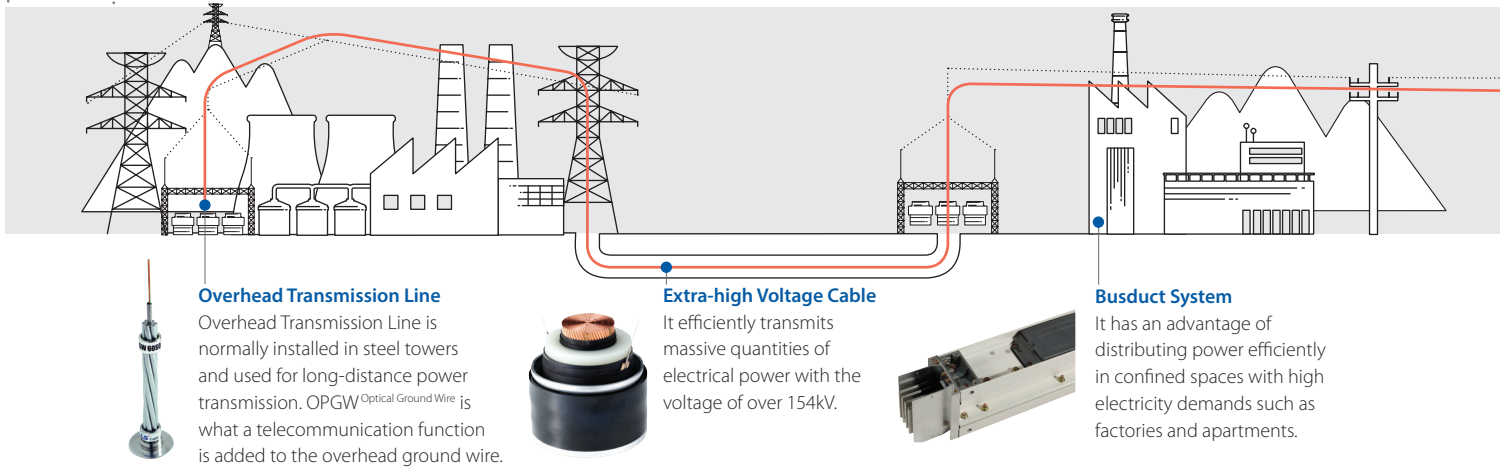


Subsidiaries

**17**

## Our Products

### Energy Cable



#### Overhead Transmission Line

Overhead Transmission Line is normally installed in steel towers and used for long-distance power transmission. OPGW (Optical Ground Wire) is what a telecommunication function is added to the overhead ground wire.

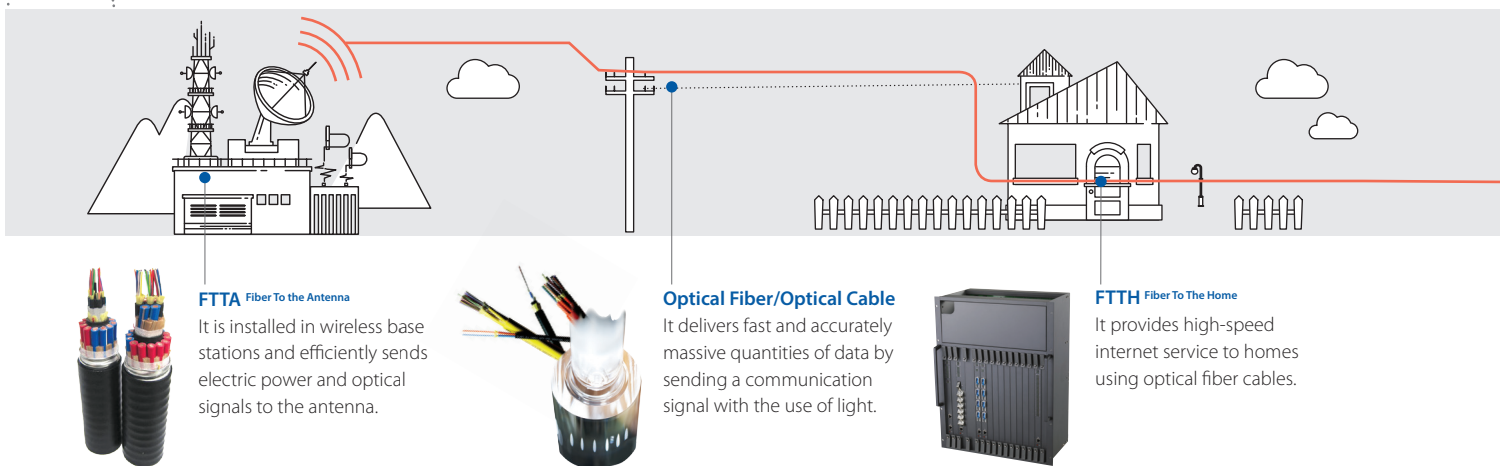
#### Extra-high Voltage Cable

It efficiently transmits massive quantities of electrical power with the voltage of over 154kV.

#### Busduct System

It has an advantage of distributing power efficiently in confined spaces with high electricity demands such as factories and apartments.

### Telecommunication Cable



#### FTTA Fiber To the Antenna

It is installed in wireless base stations and efficiently sends electric power and optical signals to the antenna.

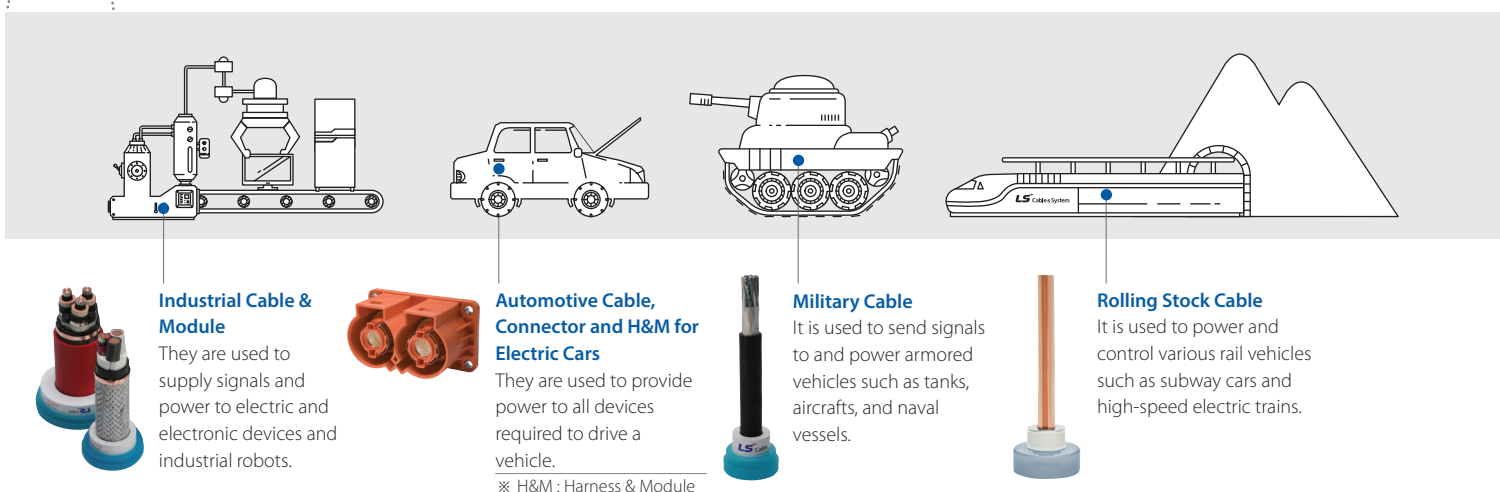
#### Optical Fiber/Optical Cable

It delivers fast and accurately massive quantities of data by sending a communication signal with the use of light.

#### FTTH Fiber To The Home

It provides high-speed internet service to homes using optical fiber cables.

### Industrial Cable



#### Industrial Cable & Module

They are used to supply signals and power to electric and electronic devices and industrial robots.

#### Automotive Cable, Connector and H&M for Electric Cars

They are used to provide power to all devices required to drive a vehicle.

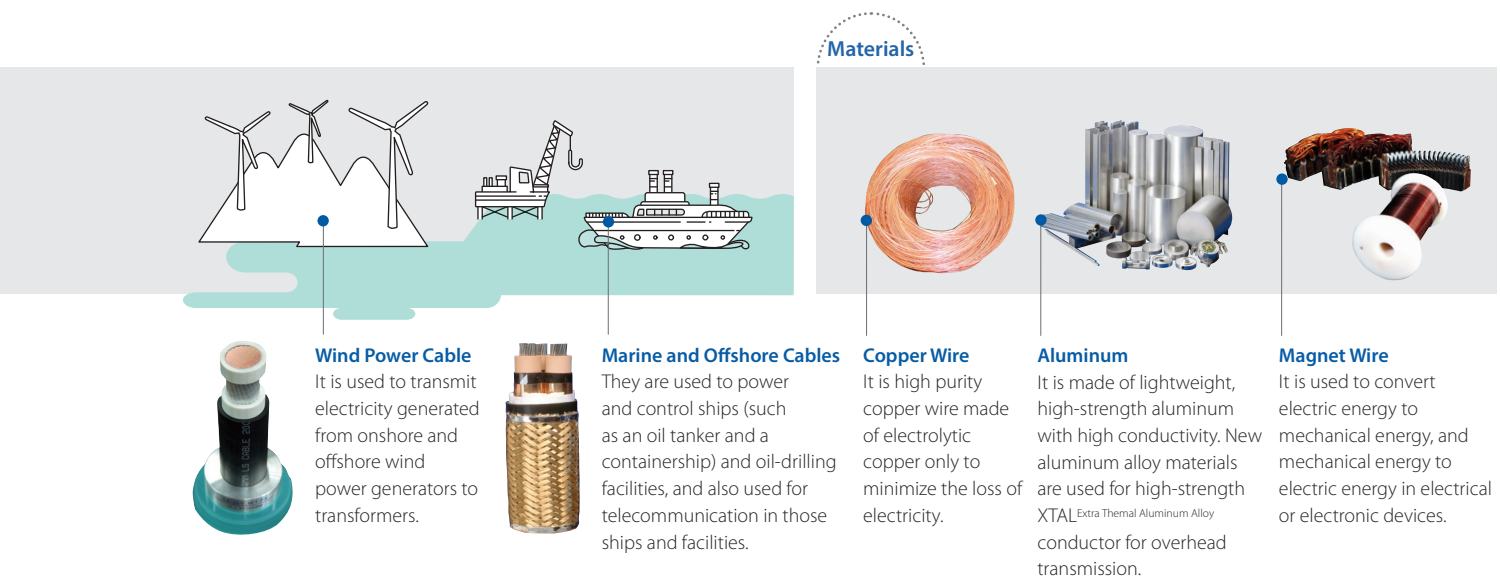
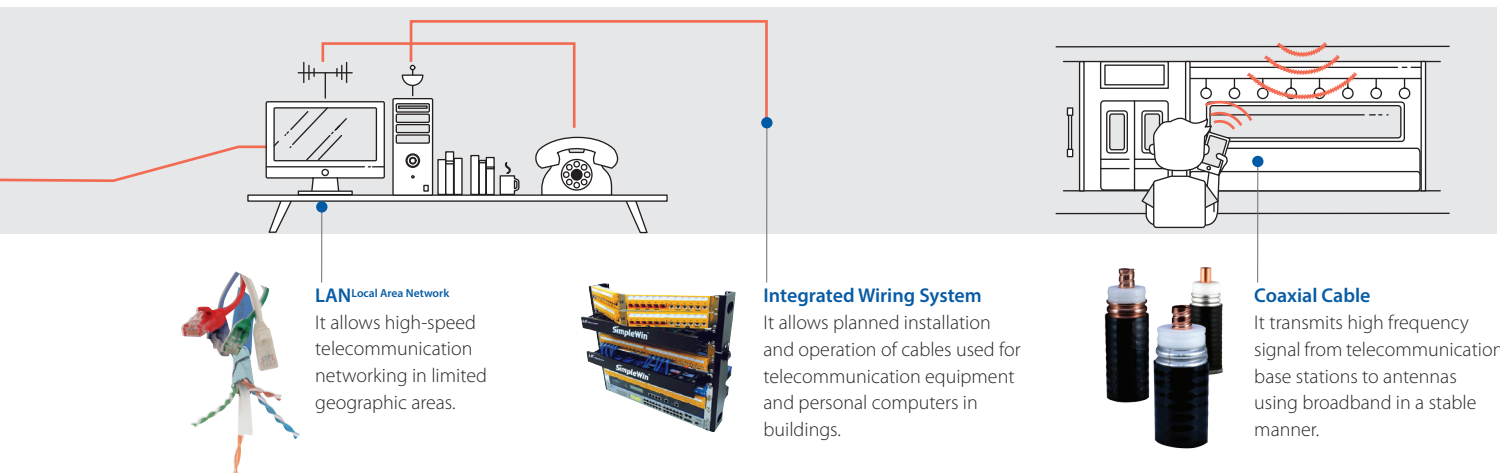
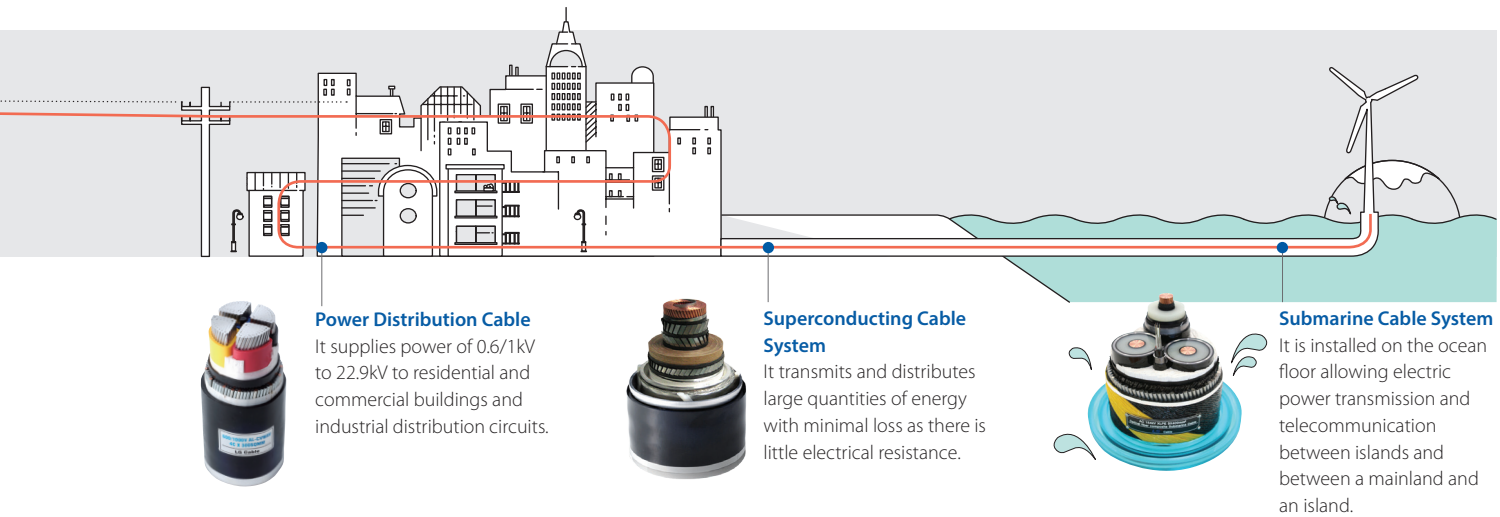
※ H&M : Harness & Module

#### Military Cable

It is used to send signals to and power armored vehicles such as tanks, aircrafts, and naval vessels.

#### Rolling Stock Cable

It is used to power and control various rail vehicles such as subway cars and high-speed electric trains.

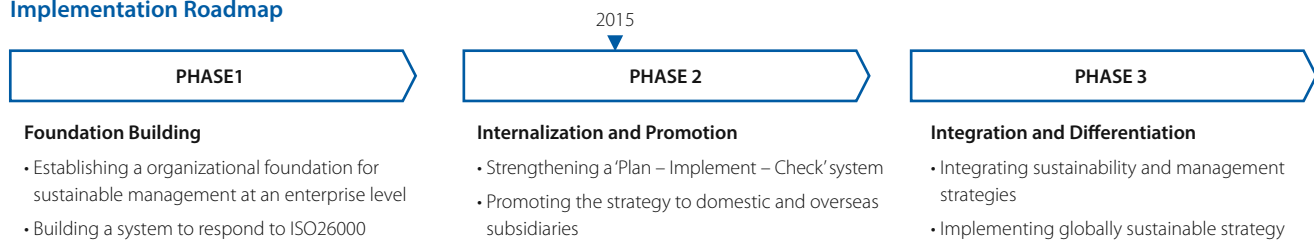


# Sustainable Management

## Sustainable Management Strategy

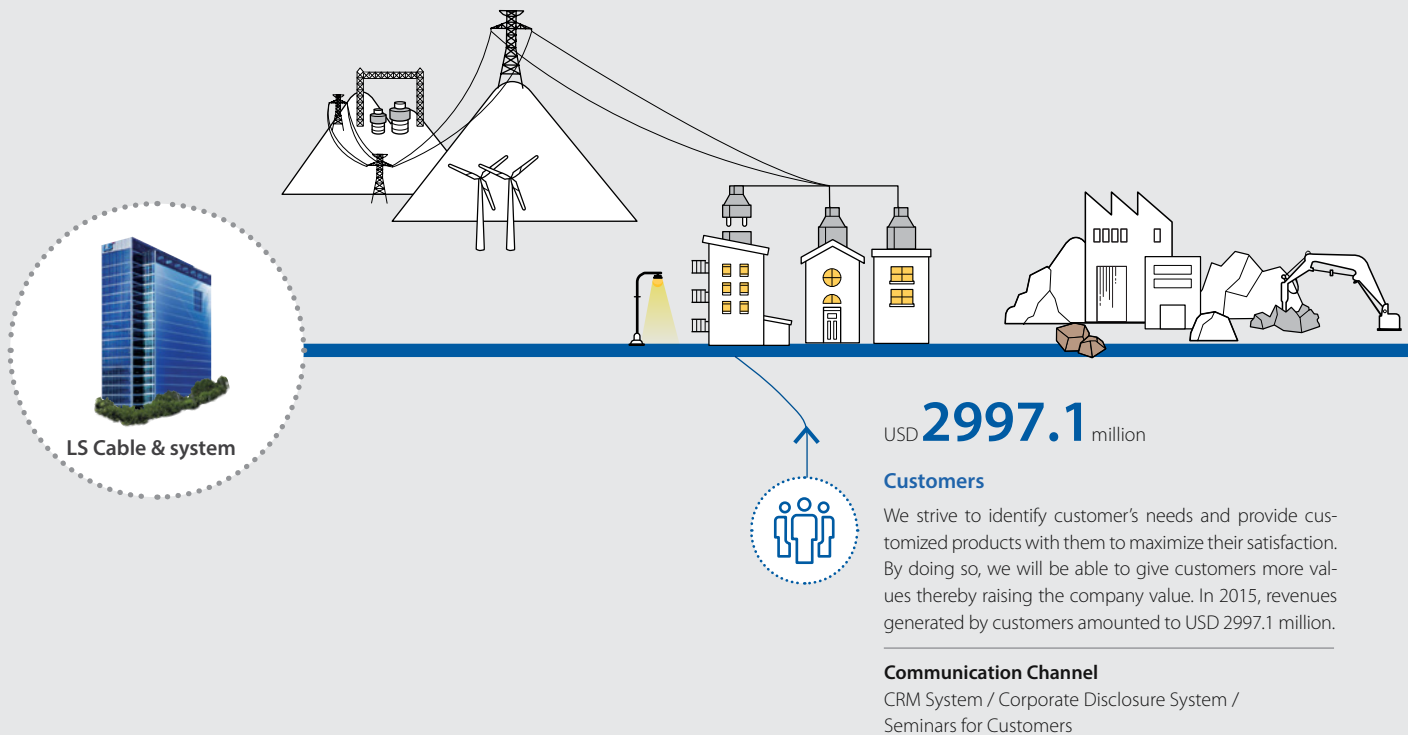
We aim to become a sustainable company by raising stakeholder value, going beyond being a profitable by providing energy and information through cables. To this end, in 2010 we established mid-to-long term strategy and an implementation roadmap for sustainable management focusing on 7 key topics: customer satisfaction; green management; social contribution; employee happiness; shared growth; compliance and fair competition; and ethical management. In 2015, we have laid out core values (C.O.R.E) under the vision of 'LS C&S Way' in line with our sustainable management strategy. We will continue our efforts to promote the core values for sustainability not just to LS C&S but also to its subsidiaries at home and abroad.

## Implementation Roadmap

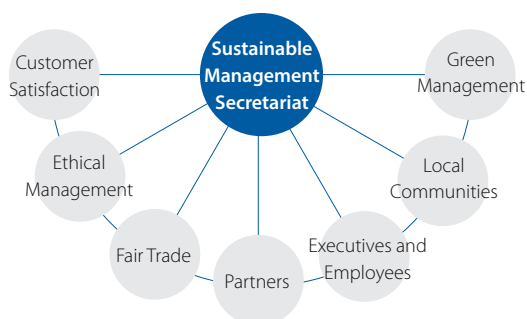


## Engaging Stakeholders

Identifying issues that stakeholders consider important is a prerequisite to have them engaged in our work. Communicating with them is a process to reflect their ideas and feedbacks on our business activities. We sincerely hope to have our stakeholders' opinions which we believe will serve as a foundation for our efforts to achieve sustainability.



**Organization** The sustainable management secretariat is in overall charge and there are 7 working committees under the secretariat. Working committees are implementing strategies and carrying out tasks in order to respond to the needs of stakeholders and to manage related risks. Key issues and achievements are reported to the executive meeting, the highest decision making body, for the resolution on implementation measures.



## Direction



### Partners

As a company providing raw and other materials world-wide, cooperation with partners is a starting point of our competitiveness. In 2015, USD 1762.5 million was distributed to partners for raw materials, energy, water, and repair and other services.

#### Communication Channel

Partner Satisfaction Survey / Open Discussion Meeting / Share Growth Council

USD **1762.5** million



### Executives and Employees

We respect employees' rights and strive to make a company where they want to work for and where they work in the great working environment. Our products are the results of the commitment and dedication of our 2,176 employees. In 2015, USD 159.3 million was distributed to them for wages, employee benefits, and education allowance.

#### Communication Channel

Monthly Meeting / Intranet / Diagnosis of Organizational Capability and Culture / Hotline

USD **159.3** million



USD **7.9** million

### Shareholders and Investors

We strive to enhance competitiveness through technological development and innovation. At the same time we provide clear and transparent information so as to meet the trust of shareholders and investors who have made an investment in the company for its value and potentials. In 2015, USD 7.9 million was distributed to shareholders and investors in the form of dividends.

#### Communication Channel

IR Activities / Business Report / Board Meeting / General Shareholders' Meeting / Management Information Disclosure System



USD **401,237**

### Local Communities

Local communities are the supporting base of a company. We are providing educational support and joining sharing activities to promote the public good and to help local communities to be prosperous. Various activities are being conducted in 4 domestic production sites in Anyang, Gumi, Indong, and Donghae, and 7 overseas production sites. In 2015, we donated USD 401,237 to local communities.

#### Communication Channel

Social Contribution Activities / Cooperation between Business and Academia / Open Discussion with Local Communities



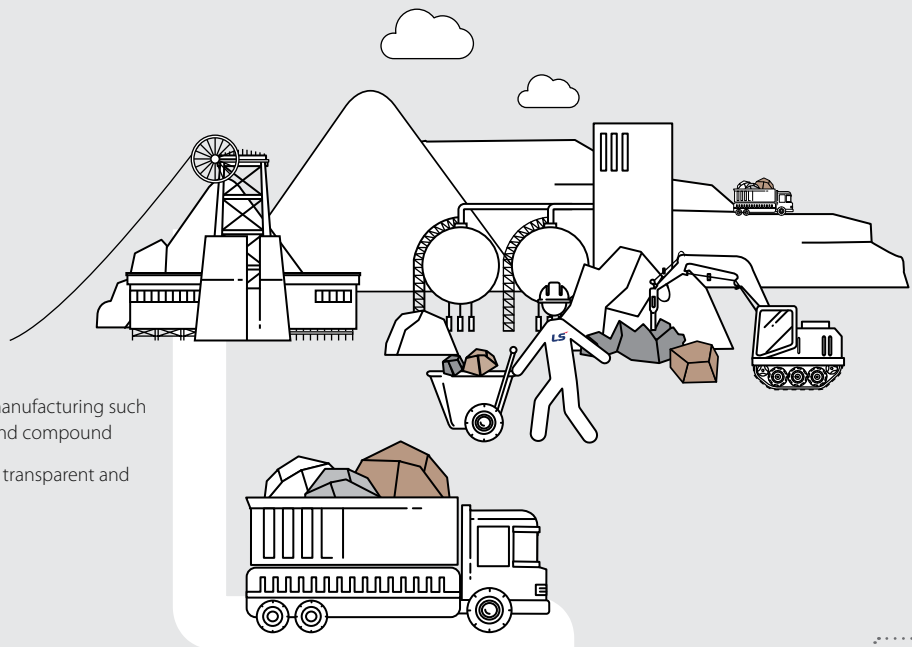
## Activities and Responsibilities to Enhance Stakeholder Value

In order to promote stakeholder value, we strive to maximize a positive impact and minimize a negative impact by closely analyzing the impact of corporate activities and products on the society and stakeholders in the whole process from material procurement to production, use, disposal and recycling. We listen to various ideas and feedback of our stakeholders and consider them in doing our business activities. In addition, created values are distributed fairly so that both the company and its stakeholders are benefited.

### 1 Raw Material Procurement

**Activity** Procuring raw materials for cable manufacturing such as electrolytic copper, aluminum, and compound

**Responsibility** Promoting shared growth through transparent and fair trade with 200 partners

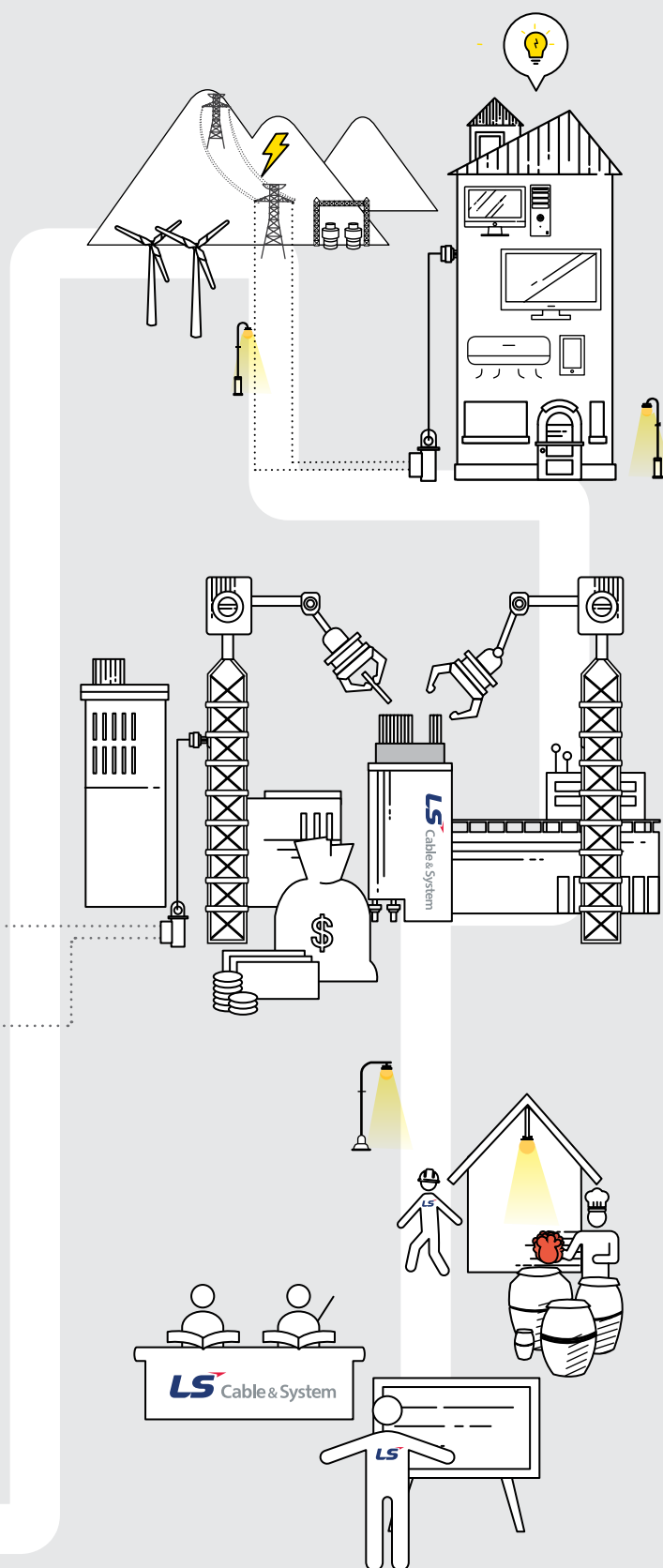


### 2 Production

**Activity** Designing, developing and manufacturing products in 8 domestic factories and 7 overseas factories; and construction and installation in project sites.

**Responsibility** Reducing air pollutants and promoting the wellbeing of employees (by providing equal opportunities, a safe work environment, fair evaluation and rewards)





### 3 Use

#### Activity

Providing stable, convenient and energy efficient products in places where there is a need for energy and information such as power generation, transmission and distribution, and telecommunication

#### Responsibility

Contributing to local community development, energy saving, and customer satisfaction

### 4 Reinvestment

#### Activity

Creating future businesses by conducting R&D and capital investment continuously

#### Responsibility

Enhancing shareholder value by creating profits

### 5 Activities of Corporate Citizen

#### Activity

Implementing ethical management and conducting sharing activities at a regional and a global level

#### Responsibility

Contributing to the development of local communities by building energy infrastructure and promoting public good by making social contributions

## 2015 Material Issues

We prioritize issues and quickly respond to issues with higher importance impacting our sustainability strategy, businesses, and the interests of stakeholders. We established the materiality assessment process in 2010. The assessment is conducted every year and its results are reflected in the next year's sustainability plan and report.

### Selection Process

**STEP1** Identifying

**STEP2** Prioritizing

**STEP3** Finalizing

#### STEP 1

**Identifying :** Select 28 material issues by analyzing company policies and strategies, benchmarking other companies, and checking press reports

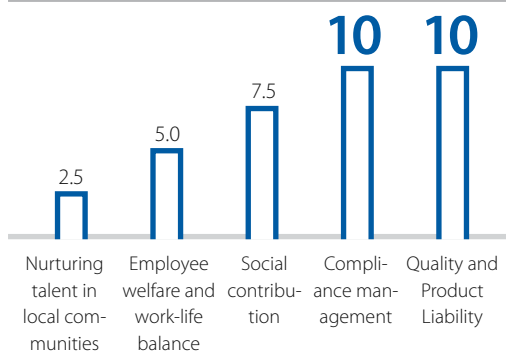
#### STEP 2

**Prioritizing :** Interviews with employees and 7 working committees, and press reports

#### 1 Interviews with Employees and 7 Working Committees

Identifying issues that 7 working committees consider important and scoring them according to their level of importance

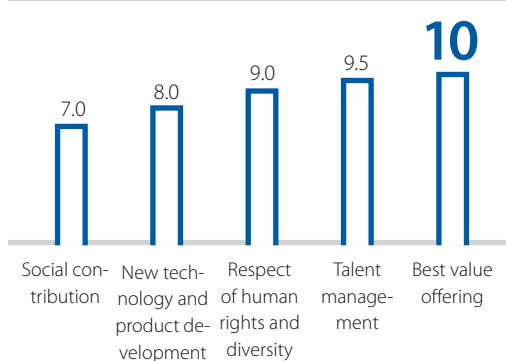
**Interviews with 7 working committees (point)**



#### 2 Company Policy Evaluation

Scoring issues based on what has been discussed in a company-wide meeting and on the importance of management index

**Company policy (point)**



#### 3 Press Reports (%)

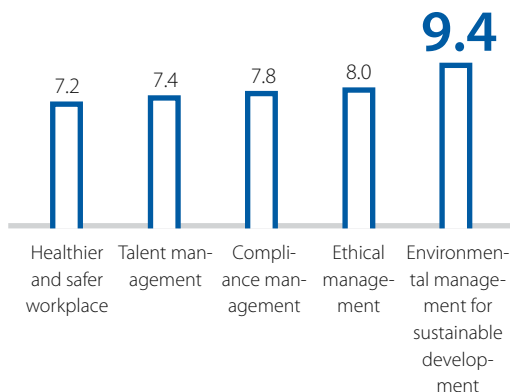
Scoring issues based on the frequencies of being reported in major newspapers, news, and economic magazines



#### 4 Benchmarking Other Companies

Scoring issues based on the assessment results of global companies in the cable industry and of major domestic companies in electricity and electronics

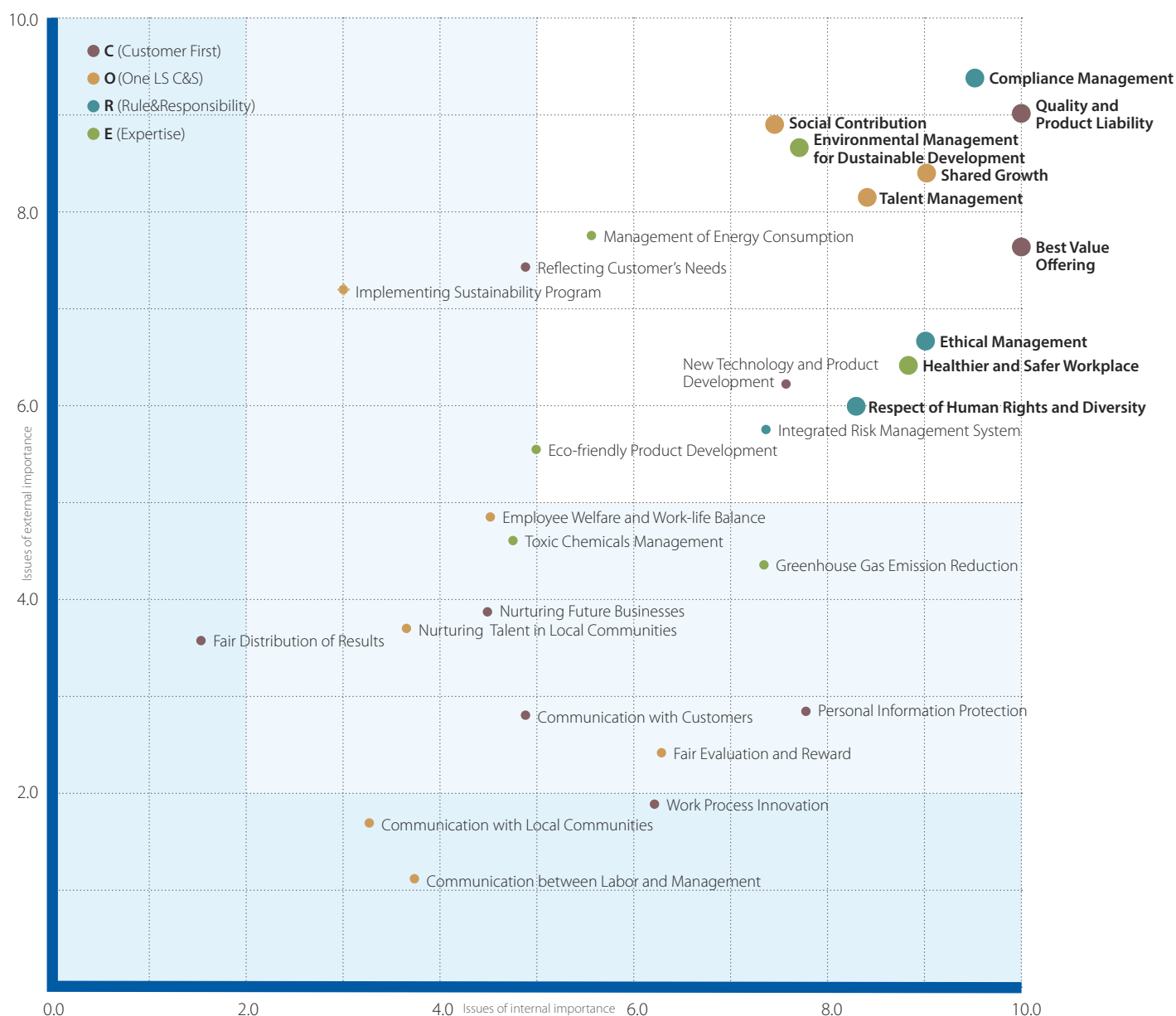
**Benchmarking other companies (point)**



## STEP 3

## Finalizing

For the year 2015, 28 material issues have been identified and top 10 issues are selected considering the level of importance. Newly-added issues for 2015 are 'respecting human rights and diversity' and 'environmental management for sustainable development', which serve as fundamental values in doing our business and becoming a leader in the cable industry. In addition, management goals such as 'enhancing competitiveness in quality for the benefit of stakeholders' and 'achieving shared growth with partners' have been maintained following the last year. As a result, 'quality and product liability', 'compliance management', and 'shared growth' are selected as the most important issues.



# C CUSTOMER FIRST

1. Best Value Offering
2. Quality and Product Liability





## ISSUE 01

# Best Value Offering

In 2015, we have made a remarkable financial achievement in operating profit and net income. Despite the increase in US interest rate, the drop in raw material prices, and the global economic slowdown, such meaningful results show that our competitiveness has been strengthened. We will continue our efforts for changes and innovation by strengthening business competitiveness and fulfilling corporate social responsibility so that we will provide the best value to our stakeholders including customers, local communities, and shareholders.

### ✓ OUR COMMITMENTS

We improve quality, strengthen competitiveness in construction, and target a new overseas market.

### ➔ 2015 STRATEGIC DIRECTION AND KEY TASKS

#### Strategic Direction

**Improving product quality, expanding new business opportunities, and securing profitability**

#### Key Tasks

##### 1. Producing financial results

- Profit-orient management
- Quality management
- Ethical management

##### 2. Developing new products

- Differentiated Products
- Enhanced customer value

##### 3. Nurturing future businesses

- Core business development
- Future business opportunity

### ≡ 2015 KEY PERFORMANCE

#### ► Focusing major businesses

Orders for large-scale projects in global markets received

#### ► Producing financial results

Operating profit and net income improved

### 🕒 2016 PLAN

#### ► Securing growth drivers

To maximize the result of new businesses and lay a foundation for the growth of future businesses

#### ► Strengthening responsible management

To encourage employee to proactively work and be responsible for their works

#### ► Invigorating the organization

To create an environment valuing the interest of the whole thereby maximizing business performance

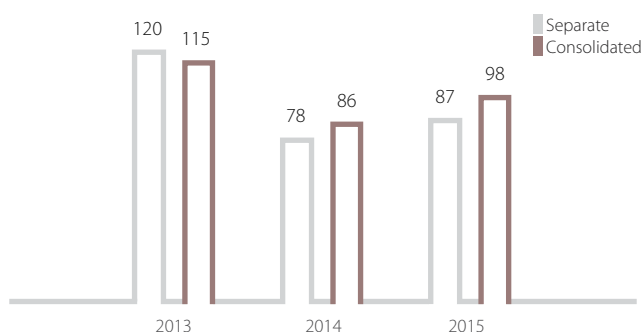


## Producing Financial Results

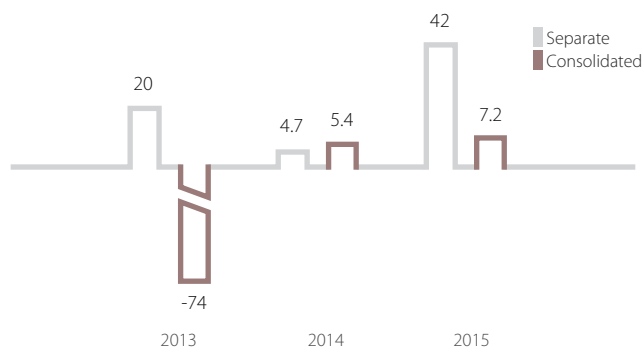
### Profit-oriented Management

In 2015, we focused on major businesses such as extra-high voltage and submarine cable system and won large-scale projects in the US and Canada. As a result, our operating profit increased USD 12.0 million from the previous year to USD 98.8 million (consolidated). In addition, net income also increased USD 1.7 million to USD 7.2 million year on year (consolidated).

Operating Profit (USD 1 million)



Net Income (USD 1 million)



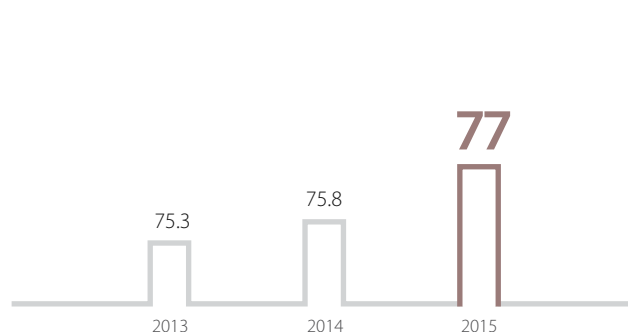
### Quality Management

As we recognize that profit-oriented management starts from building trust with customers based on extensive quality control, we strive to provide customers with differentiated values thereby strengthening our competitiveness in the global market. We have identified potential quality risks in each process, operated the 'new business and product development risk reduction task force', and checked the progress of key projects. As a result, we have achieved 'Zero' in project failure rate. In addition, quality training has also been provided to 63 sales employees as part of the efforts to strengthen our business competitiveness.

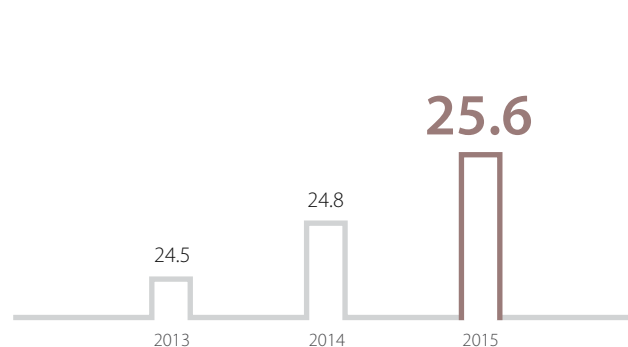
### Ethical Management

In 2015, we committed ourselves to implementing transparent ethical management in a transparent and fair manner to become a company respected by customers, partners and competitors and the society. Since then we have continuously provided ethics training to newly recruited employees and overseas resident employees. As a result, the ethical level of our employees increased from 75.8 in 2014 to 77 points. Meanwhile, we, as corporate citizen, paid USD 25 million worth of taxes and utility bills in 2015 (consolidated).

Ethical Level (point)



Corporate Tax (USD 1 million)



## Enhancing Customer Value with Differentiated Products

### High-fire Resistant Cable for LV/MV

**Development Details** As we live in a society where high-rise buildings, plants, railways and subway stations are crowded with people and the requirement for industrial safety is on the rise, the damages by fire in a short period of time is greater than ever. As a result, it is badly needed to ensure continuously transmitting electric power to an alarm system to detect fire early enough to evacuate people from fire and send electricity to disaster prevention and control systems for the prevention of the spread of fire. To meet such needs, we have developed cables with fire resistant insulation, which is durable in the temperature higher than 750°C and for the time longer than 90 minutes (750°C and 90 minutes is the limit set according to the fire service act in Korea). The structure of fire resistant insulation shield has been strengthened to maintain circuit integrity in a high temperature. Polymer materials with high-performance flame retardant are used in outer sheath to minimize flame propagation.

**Product Advantages** The product is highly functional cable that is durable in a higher temperature and for a longer period of time compared to existing products. It has passed a test where a shock is given during flame. It maintains circuit integrity and is resistant to physical force created by the collapse of buildings and by external impacts in the event of fire. The test results meet not only the highest test criteria in Europe but also the international standard on the cable fire safety function. In addition, the price is competitive despite the optimal structure and strengthened safety functions of the product. This new product is the result of our active response to increasingly higher fire safety standards at home and abroad.

### Product Concept

#### What is a fire resistant cable?

As it maintains circuit integrity in the event of fire, systems powered through cables are able to work thereby minimizing casualties. Fire resistant cables should meet international test standards of IEC, BS, and EN.



#### Fire Resistant Test

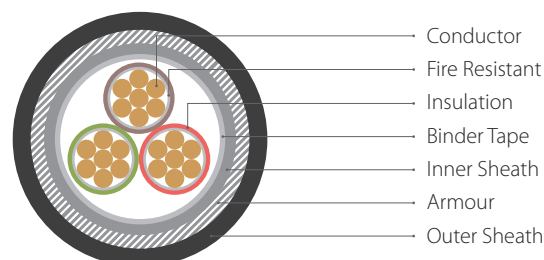


**Fire Resistant**  
750°C/90 min. with flame



**High Fire Resistant**  
Higher than 830°C with  
flame and shock

#### Structure of High Fire Resistant Cable



## 450/750V HFIX+™

**Development Details** Insulation cables consist of conductor and insulation and have two types: PVC-applied HIV and XLPO-applied HFIX. While XLPO (cross-linked polyolefin) used as insulation materials is eco-friendly, installation performance is lower than PVC-applied HIV: XLPO insulation is more rigid and has less smooth surface than PVC insulation. To resolve this issue, we have developed HFIX+ with reduced frictional force on insulation surface by mixing insulation materials with special materials.

When we evaluated the tensile force of HIV, HFIX and HFIX+ by using a simulation evaluation system for installation performance which replicates indoor flexible conduit tube, the tensile force of HFIX was two times higher than HIV. HFIX+ performance in terms of tensile force was similar to HIV, which clearly showed an improvement in installation performance.

**Product Advantages** As 450/750V HFIX is used indoors, it is flame retardant and eco-friendly. In particular, as it deters smoke and toxic gases from being leaked as much as possible in the event of fire, it is useful in high-rise buildings, hospitals, underground shopping malls, airports, and subways. HFIX+ has been developed and structured to drastically reduce the frictional force on the surface in order to improve installation performance, one of the weaknesses of HFIX. The simulation and on-site evaluations have showed that the installation performance of HFIX+ has doubled compared to HFIX.

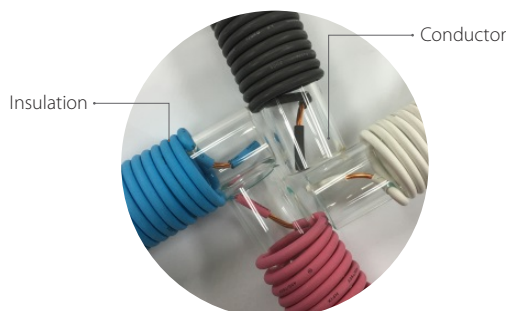
## Product Concept

### 450/750V HFIX+™

HFIX+ was developed to improve installation performance, one of the weaknesses of HFIX. In order to distinguish this new product from HFIX, it is named as HFIX+™, the trademark of LS C&S.

### Installation Performance

Installation performance means a tensile force by frictional force on the surface and curved areas when HFIX is inserted in flexible conduit tubes which are used indoors such as apartments and shopping malls.



## Hybrid Cable for FTTA

**Development Details** Hybrid cables for FTTA are optical fiber and power line composite cables that are installed between an equipment room and an antenna in a telecommunication base station. In specific, power and signals are transmitted from PSU (Power Supply Unit) and BBU (Base Band Unit) in the equipment room to RRU (Remote Radio Unit) near the antenna. We have developed a range of hybrid cables from optical fiber 4 pair and electric wire 2 core cables for 1RRU up to optical fiber 36 pair and electric wire 18 core cables for 9RRU. As one cable has multiple optical fibers and electric wires, it takes less time in cable pulling and additional material cost for installation such as clamps is saved. In addition, WMT armour of coaxial cables that are being used in the same environment is applied. Therefore, existing installation materials can be used and workers feel familiar with the products. Our hybrid cable product is mostly sold in Australia and its market is increasingly expanded.

**Product Advantages** When the existing optical fiber and power line composite cables are pulled vertically, the internal stranding conductor tends to be separated from outer conductor. Our hybrid cables, however, are designed in a way that wrinkles on the outer conductor press the stranding conductor so that the stranding conductor is not separated due to the self load of power lines. These wrinkles also help to improve curve characteristics. As optical fiber cables are inside power lines, they are protected from external impacts without additional armour.

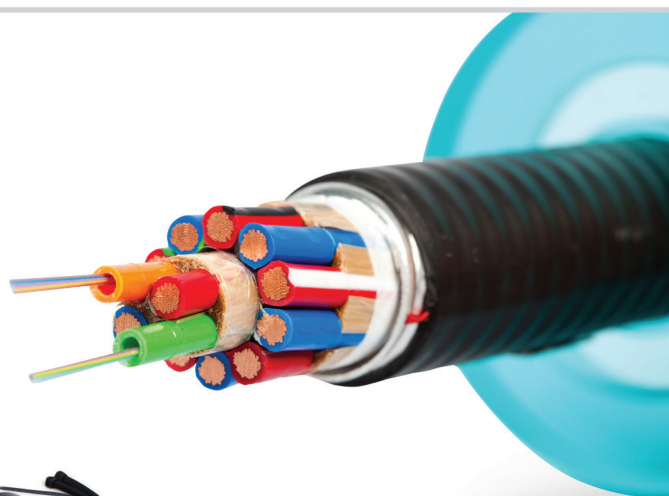
## Product Concept

### What is FTTA (Fiber To The Antenna)?

As the conventional telecommunication base stations convert optical signals to RF signals in equipment rooms and transmit to antennas through coaxial cables with high signal attenuation, signal amplification have been required resulting in decreased efficiency. To resolve the issue, FTTA has been developed. Under this technology, RU is separated in the equipment room and placed on the top of the tower in order to transmit optical signals with low attenuation to near the antenna.

### What is WMT (Wellmantel) armour?

It is one way of armoring coaxial cables that are being used in the conventional telecommunication base stations. After insulators are wrapped with copper or aluminum tape, and welded, wrinkles are shaped.





## 120km/h Rigid Bar (R-BAR) Catenary System

**Development Details** Under the 120km/h rigid bar (R-BAR) catenary system, contact wires which supply electric power to electric railway cars are integrated with rigid bars and installed on the ceiling and walls of a tunnel. In Korea, the rigid bar system was first applied to the Gwacheon Line (Namtaeryeong-Geumjeong) and the Bundang Line (Suseo-Ori) in the early 1990s. However, due to technical barriers, Swiss, France, and Spain have dominated the domestic market. We completed the development of the rigid bar and its accessories, such as expansion joints and connectors in 2012. After the system was installed in the Daebul tunnel section, operating tests were conducted and product characteristics in different seasons were tested. As a result, we acquired the rail facility performance certification from the Korea Rail Network Authority. The system has been applied to the Suin extension line (Incheon-Songdo) and Seongnam-Yeouju line. The Suin extension line has been in operation since February 2016.

**Product Advantages** The rigid bar (R-BAR) system is installed in a narrow space compared to the conventional catenary system, which enables the cross-sectional area of the tunnel to be reduced, thereby saving the construction cost. In addition, as contact wires do not have any tension, there is no need for concern over being broken. The simple structure of the system with a small number of accessories is greatly increasing maintenance efficiency.

It takes much time in cable pulling for conventional catenary system as the system should be connected to each messenger wire. On the other hand, the rigid bar (R-BAR) system enables automatic installation thereby reducing wiring time.

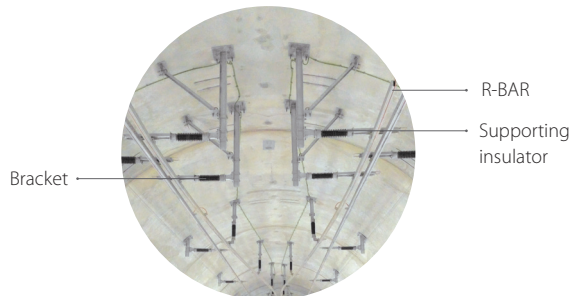
### Product Concept

#### What is a catenary system?

Electric railway cars need not only railways installed on the ground but also overhead lines which supply electric power to the cars. Those overhead lines and the structures supporting the lines are commonly called as a catenary system.

#### What is a rigid bar (R-BAR) catenary system?

As the system is developed suitable for underground installation, contact wires are fully integrated and fixed with the rigid bars. On the ceiling of a tunnel, brackets are attached on the insulator or on the side of the ceiling, on which the system is installed.





## AC 154kV 600MVA High-temperature Superconductivity Cable

**Development Details** Since Heike Kamerlingh Onnes, a Dutch physicist found the phenomenon of superconductivity where electric resistance reaches to '0' under the condition of extreme cryogenic temperatures, a wide range of medical (including MRI) and electrical devices using superconductivity have been developed worldwide. Korea, a latecomer in this area, started its efforts to develop superconductivity cables, fault current limiters, rotating machines, transformers, and wires based on DAPAS (Development of the Advanced Power system by Applied Superconductivity technologies), a national R&D project. As a result, we were able to catch up with the technologies of leading countries. As a follow-up of DAPAS, we joined forces with Korea Electric Power Corporation and Korea Electrotechnology Research Institute and conducted a project to verify superconductivity cables for power transmission and distribution. Verification on AC 22.9kV high-temperature superconductivity cables for power distribution was conducted and completed in 20 months (unmanned operation for 18 months) in Icheon substation and we received a certification card issued by Kinetrics, an international certification company. In 2013, a superconductivity center was established. HVDC $\pm$ 80kV 500MW high-temperature superconductivity cables, which passed the certification test, were verified in 2015. If we complete the verification on AC 154kV 600MVA

superconductivity cables by October 2016, we will be able to achieve the world's highest voltage and the longest transmission line (3-phase 1km). The termination of this cable is the first fixed type in the world. The force created in an axial direction in cooling superconductivity cables is diminished by vertical snake cable pulling, thereby strengthening connectivity with conventional electrical power systems.

**Product Advantages** Superconductivity cable system, which will play a pivotal role in electric power transmission in the next generation, consists of superconductivity cables, a joint box in the middle, termination, and a cooling system. A SCADA monitoring system can be added to the system. This low-loss and low-voltage system transmits high-capacity electric power and reduces losses during power transmission, thereby reducing the number of power plants and the fuel consumption. It means the system has competitiveness in limiting greenhouse emissions. In addition, it is designed to prevent leaks by completely shielding magnetic field occurred by AC. Liquid nitrogen (LN2), which is green material, is being used as refrigerant (material for the phenomenon of superconductivity). The power transmission capacity of AC 154kV 600MVA high-temperature superconductivity cables is five to ten times higher than the cables using copper as conductor. The superconductivity cables can also replace 345kV cables, showing the competitiveness in high voltage insulation.

### Product Concept

#### What is a high-temperature superconductivity cable?

It is a cable to which the 2nd generation of high-temperature superconductivity wire material is applied. The cable shows the characteristics of superconductivity under the condition of cooling liquid nitrogen.

#### What is a magnetic field shielding structure?

As superconductivity wire material, which is applied to the power transmission layer for rated current, is applied to the outer layer in the same manner, more than 95% of rated current is transmitted in the shielding layer so as to prevent magnetic field from being leaked.

#### Characteristics

**Two to ten times of power transmission capacity in the same dimension**

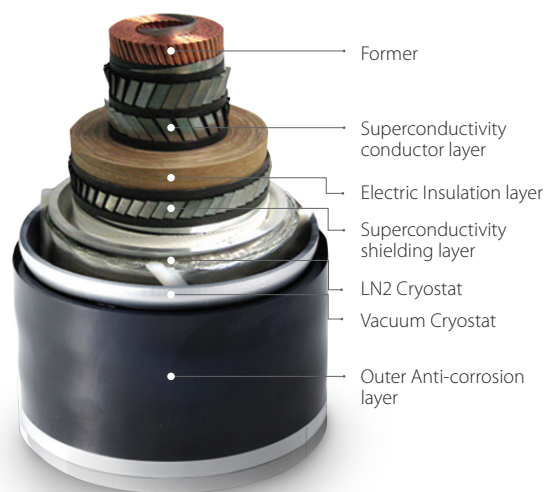
→ Saving the cost of underground engineering work dramatically

**'Zero' electric resistance** → Reducing losses in power transmission

**Internal electromagnetic emission control** → Saving engineering work cost due to the reduced space for cable pulling

**100% recyclable material application** → Creating eco-friendly products

**Thermal de-rating 'Zero'** → Close cable pulling of multiple lines



## Beijing Electric Vehicle C33 HNS Development

**Development Details** Product development is underway on PDU and high-voltage harness used between a motor and inverter. They are applied to C33, a project by Beijing Electric Vehicle to improve the performance of E150 vehicles.

The C33 project is to enhance the performance of E150, an electric vehicle currently manufactured by Beijing Electric Vehicle. The improved model is expected to start production in June 2016. Products are being developed by applying our high-voltage and highly flexible cables and 2- and 3-phase eyelet products which replace connectors and by considering vehicle assembly and harness layout in the vehicle. Application scope of the eyelets and the highly flexible cables developed in the C33 project will be expanded to other vehicle including C50.

**Product Advantages** The harness for eco-friendly vehicles should secure safety, shielding performance, waterproofing by using high voltage of 500V, which is used by 12V vehicles. An economical approach is taken on the eyelet, which is being developed by LS C&S, in its design: aluminum products are used instead of existing plastics to enhance its strength; shielding parts are used in common; and high-voltage cables have a highly flexible conductor structure and use insulation materials in order to promote convenience in vehicle assembly.

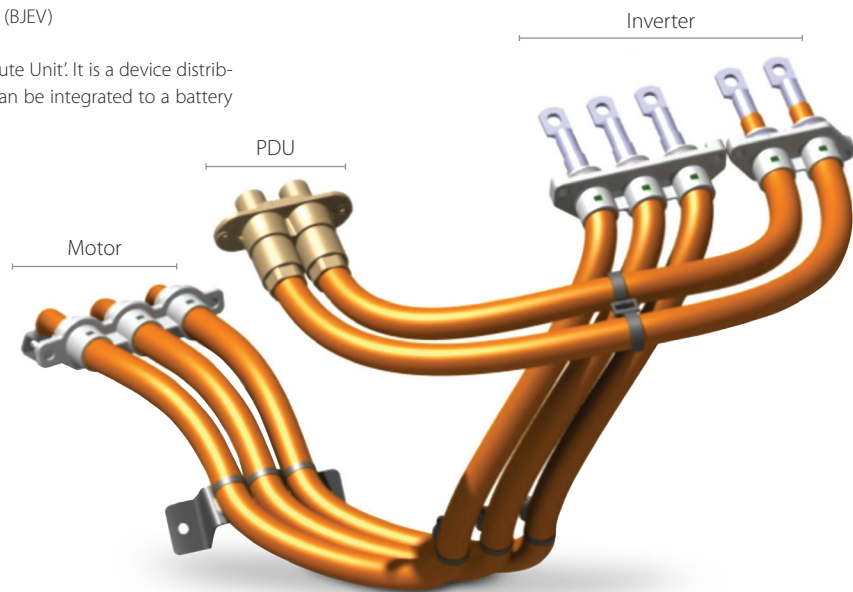
## Product Concept

For the high-voltage harness which connects PDU-inverter and inverter-motor, it is required to have shielding, waterproofing (IPx7, IP69K), and insulation. We are developing 2- and 3-phase eyelet and harness subsidiary materials and will deliver the product by harness to customers.

3-phase harness: Siemens

2-phase harness: Beijing Electric Vehicle (BJEV)

PDU: PDU is an acronym for 'Power Distribute Unit'. It is a device distributing the battery power and the device can be integrated to a battery pack or inverter.



## ISSUE 02

# Quality and Product Liability

Our cable products are being used to transmit power and telecommunication signals for everyday life and for industrial infrastructure and applied to various kinds of power systems. We are proactively conducting activities for quality management to make our product reliable and eco-friendly. Considering the impact of our products on people's everyday life, local communities, or a nation, we have established a risk management system in every process so as to make reliable and high-quality products.

### ✓ OUR COMMITMENTS

We provide products and services that meet customers' expectations and needs anytime, anywhere and under any circumstances.

### ➔ 2015 STRATEGIC DIRECTION AND KEY TASKS

#### Strategic Direction

**Meeting customer satisfaction by focusing on 'Customer First', one of our core values in quality management**

#### Key Tasks

**1. Satisfying global customers' requirements and optimizing a product group-based quality process**

- Acquiring ISO 9001:2015 certification
- Improving quality assurance system for overseas subsidiaries
- Focusing on DR (design review) in development projects

**2. Managing and improving CTQ**

- Implementing SPC (statistical process control) for CTQ to take actions in real time and work on improvement measures

**3. Securing product reliability with assessment technology**

- Ensuring long-term reliability (in association with a technology roadmap (TRM)), and securing credibility of new evaluation facilities

**4. Assuring outsourcing quality based on quality liability**

- Securing the quality of outsourced or OEM products by establishing a quality management system

### ☰ 2015 KEY PERFORMANCE

▶ **Satisfying global customers' requirements and optimizing a product group-based quality process**

ISO 9001:2015 certification acquired in December

▶ **Managing and improving CTQ**

64 Six Sigma activities conducted and 164 themes selected by quality circles

▶ **Securing product reliability with assessment technology**

29 task for securing assessment technology conducted

▶ **Assuring outsourcing quality based on quality liability**

Cooperation with partners and task force activities for quality improvement

### 🕒 2016 PLAN

▶ **Quality management plan**

- To establish a system to quickly respond to quality risks (a system of reporting by risk level, and 5W1H report)

▶ **To redefine LS C&S QHSE\_SR\* internal evaluation structure**

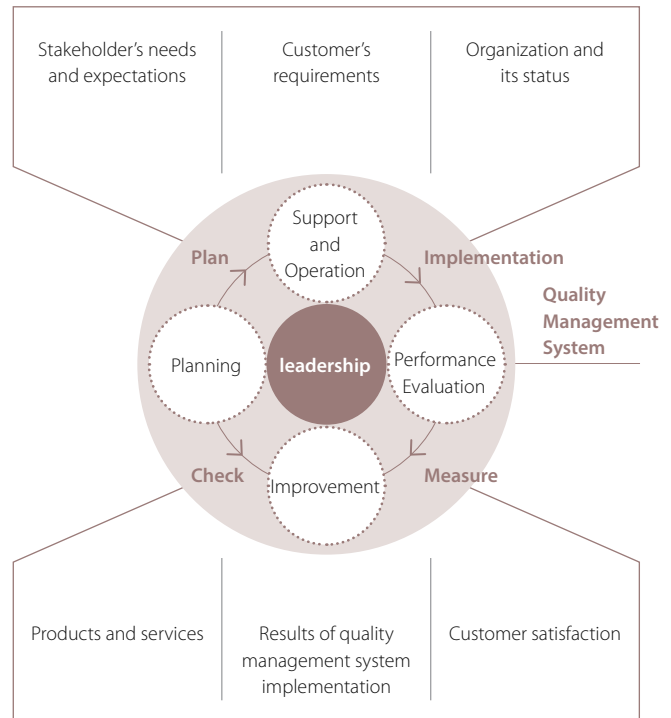
\* Quality Health, Safety, Environment and Social Responsibility

## Meeting Global Customers' Needs and Optimizing a Quality Process

In order to operate an optimized quality management system considering global customers' requirements and product characteristics, we identify and apply VOC (voice of customer), related laws and regulations and global standards to the process.

<b>Energy Transmission/Construction</b>	<b>ISO 9001, KEPIC</b> We have established a risk management system for the whole process to get an ISO 9001:2015 certification ahead of our global competitors.
<b>Telecommunication</b>	<b>TL 9000</b> As for the optical fiber communication products, TL 9000 system which has strengthened risk assessment and disaster recover requirements in this area is being implemented.
<b>Automobile/Materials</b>	<b>ISO/TS 16949</b> We have acquired ISO/TS16949 certification, an international automotive quality management system. We also have been actively engaged in product safety activities to comply with the product liability act and end-of-life vehicle directive required by the German Automotive Industry Association, or VDA. As a result, we have obtained the 1st Tier qualifications from our global clients BDNT and RSM.

### Customer- and Stakeholder-oriented Quality Process



### ISO 9001:2015 Certification Acquired

In order to get ISO 9001:2015 certification, which has been completely revised in 2015, we analyzed issues and risks in the whole work process considering stakeholders' needs, and then made a response plan. A company-wide task force had been operated to proactively take actions. As a result, we became the first in Korea to acquire ISO 9001:2015 certification from DQS, one of the leading certification bodies in automotive and electrical and electronic areas. Our efforts to establish and operate a reliable product quality assurance system will continue by reflecting the requirements of a global quality management system for the industry and customers.

### Improving Quality Assurance System for Overseas Subsidiaries

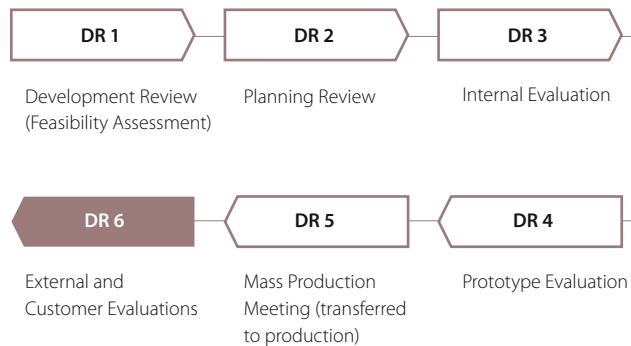
In order to respond to the global environment by enhancing the quality assurance system for overseas subsidiaries, we conducted a diagnosis, identified improvement tasks, and implemented activities at the enterprise level. We plan to introduce a 'rating system' for subsidiaries, to encourage them to continue quality improvement activities, and to strengthen our support activities for them.

### Focusing on Development Project DR

In 2014, the failure rate of projects whose risks were managed in advance by the 'task force to reduce new business/product development risks' was recorded 'ZERO'. In 2015, such activities were expanded to become a company-wide development project. More focus was put on the DR process in each development stage to reduce quality risks beforehand. In 2016, we plan to manage and track product stages from production to operation.

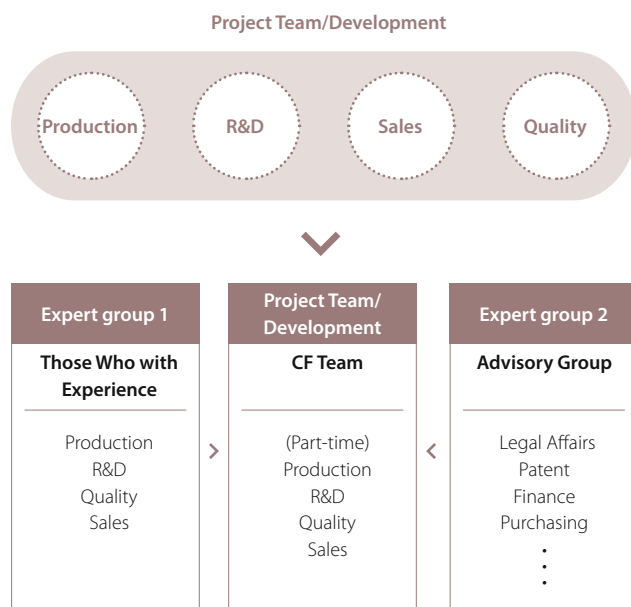
### Risk Management by DR Stage

Development grades have been defined according to the importance of products. Different DR stages are applied based on the development grade. A total of six DR stages help us to identify quality risks and come up with measures so that failure rate in mass production will be minimized. Identified risks in each stage are categorized as high, middle or low depending on their impact. If the risk is 'high', mass production starts only after the risk is eased or eliminated.



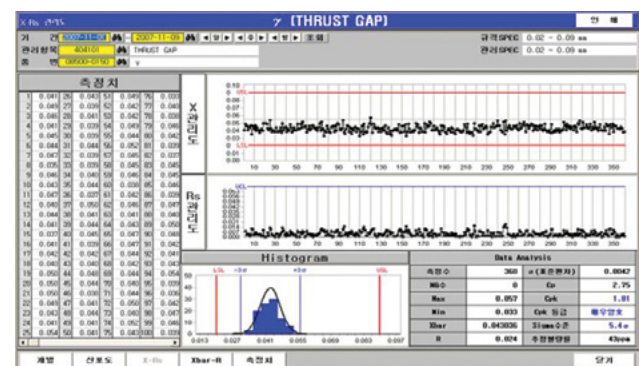
In 2015, a total of 357 DRs were conducted for 144 development projects. DR results have been registered and shared in the internal system. As the cross functional team consisting of quality and production teams and R&D centers, and internal expert groups were required to join the DR process, proactive measures were taken by considering quality risks from a development stage.

#### Development Project Led by Cross-Functional (CF) Team and Internal Expert Groups

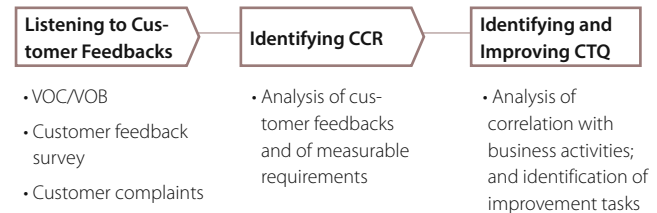


## Managing and Improving CTQ

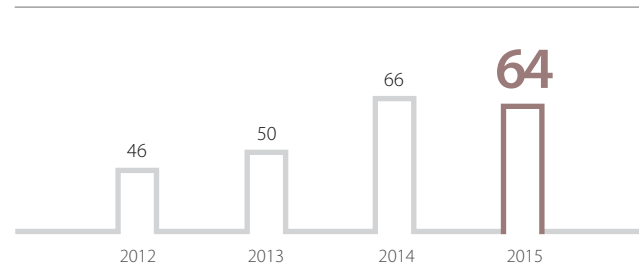
We have selected CTQ by process and come up with improvement tasks along with quality circle activities, Six Sigma, and engineers' tasks to systematically manage quality. Such efforts will help factories to learn about best and worst practices and not to repeat the same failure. In addition, statistical process control (SPC) has been implemented for major processes to monitor risks and take actions in real time.



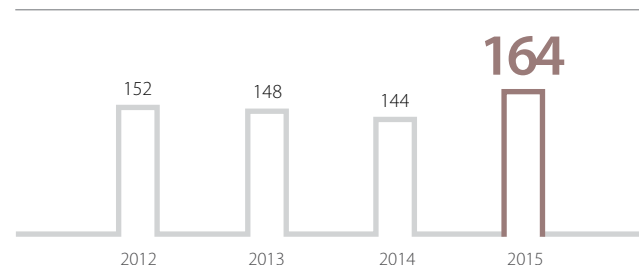
#### CTQ Improvement and Management Activities



#### Six Sigma Projects (number of projects)



#### Quality Circle Themes (number of themes)

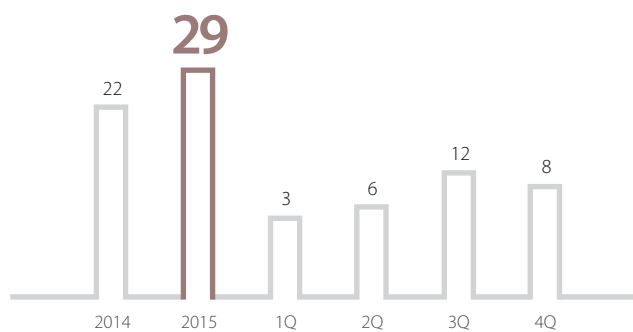


## Securing Product Reliability with Assessment Technology

If defects are found in our products, it may have a great impact on industries and our everyday lives. Therefore, it is essential for us to have assessment technology for product reliability. In this regards, assessment technologies such as long-term reliability, electricity and property tests are being implemented, and we continue to develop surrogate variables for the tests.

Assessment technology refers to techniques evaluating whether the performance of a product is maintained when it is used as intended for a valid period. We have identified assessment technology we need considering the product roadmap (PRM), reflected it in the technical roadmap (TRM), and secured the technology in accordance with the company's mid- and long-term plan

Tasks for Securing Assessment Technology (number of tasks)



2015 Activities for Assessment Technology

Activities/Tasks	
<b>Electric Power (8)</b>	High voltage: AC resistance; superconductivity evaluation (sealed/pneumatic pressure); and PD tests on water termination Power Distribution: Electrostatic capacitance of control cable; ESCR Overhead: Tensile strength test of composite materials (epoxy → inflation agent) Busduct: R-Bar evaluation techniques (bending, flexibility, cycling)
<b>Telecommunication/Industrial Computer System</b>	<ul style="list-style-type: none"> <li>Quality risk reduced by improving the characteristics of Dynamic PIMD (June)</li> <li>ABB panel board tube evaluation technology secured (March)</li> <li>UL1685 (IEEE1202+smoke density) test equipment established (to verify fire safety cables and smoke density)</li> </ul>
<b>Materials</b>	Precision level of component analyzer enhanced (April)

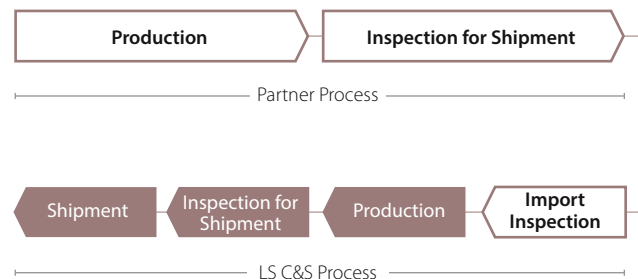
## Assuring Outsourcing Quality based on Quality Liability

As the volume of outsourced or OEM products has been on the rise, we have strengthened quality management measures in order to minimize the quality risk of the products. A lot of efforts such as co-operation with partners and task force activities have been made to manage product quality. In addition, we have encouraged our supplier partners to raise awareness of product quality so that they have enhanced their quality management capabilities. A regular quality inspection has helped them to conduct activities to improve quality on their own.

As part of the efforts to improve the quality of materials, a separate team is in charge of import inspection. Monitoring function has been restored as well. We will continue to evaluate and improve the reliability of materials and parts so as to eliminate potential risks in newly developed products.

Scope of Improvement Tasks

• Scope of improvement tasks: From production/inspection/shipment by partners to import inspection by LS C&S



2016 Plan for Outsourcing Quality

Step	2016					
	March	April	May	June	July	August
<b>Define</b> (issue identification and data collection)	~31 <sup>st</sup>					
<b>Measure</b> (status check)	~15 <sup>th</sup>					
<b>Analyze</b> (data analysis and vital few identification)	~30 <sup>th</sup>					
<b>Improve</b> (vital few improvement)	~31 <sup>st</sup>					
<b>Control</b> (monitoring and result review)	~31 <sup>st</sup>					



## Quality Management Plan

### Quality Risk Response System

As many of our products are used to build the infrastructure of a country, implementing a quality risk response system is very important in order to quickly deal with issues. We will continue to make efforts to have such system take firm root so as to minimize the neg-

ative impact on our customers, society and environment. Under the system, risks will be categorized as S/A/B/C grades considering their importance and urgency. As for S and A grade risks, immediate action will be taken. '5W1H' report will be made on the status, progress and result, and risks will be monitored until they are eliminated.

#### Quality Risk Category

Grade	Criteria	Examples of S- and A-grade Risks
S	<ul style="list-style-type: none"> <li>Risks causing a serious problem for customers, the company, and the society</li> <li>Risks impacting the business as a whole</li> </ul>	<ul style="list-style-type: none"> <li>Causing serious business issues such as contract termination or reduction</li> <li>Causing troubles in society, violating laws and regulation and going against ethical management</li> <li>Causing casualties in building fire and car accidents</li> <li>Accidents impacting the infrastructure of a country</li> <li>Causing environment issues including the leak of harmful chemicals</li> <li>Causing a conflict with local communities</li> <li>Product liability (PL) issues and recall</li> <li>Causing lines to stop supplying electric power to railway cars, and causing a large quantity of product to have defects</li> </ul>
A	<ul style="list-style-type: none"> <li>Quality issues of products worth USD 9,000 and more</li> <li>Products required to be recalled and to stop production or shipment</li> </ul>	
B	<ul style="list-style-type: none"> <li>Quality issues of products worth less than USD 9,000 (approved by a division head)</li> </ul>	
C	<ul style="list-style-type: none"> <li>Quality issues of products worth less than USD 900 (approved by a team lead)</li> </ul>	

※ If the risk is causing ethical issues or conflicts with local communities, it will be immediately reported (even though it does not have any financial issues).

#### Reporting System for S- and A-grade Risks

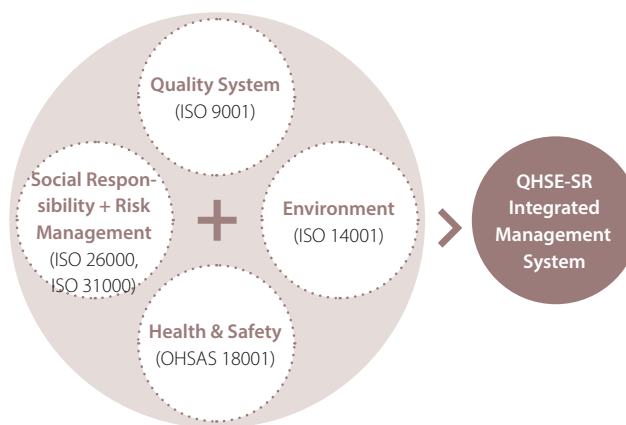


#### 5W1H Report

It is a quality risk report format in LS C&S under which 5W1H (who, when, where, what, why, and how) is specified and potential losses are categorized as Worst/Normal/Best. A plan to prevent its re-occurrence is monitored. After it is confirmed that the plan works, the case is closed. The report is also used as reference when similar risks occur, helping us to deal with such risks more quickly.

#### LS C&S QHSE\_SR\* Internal Evaluation Structure

We will build a LS C&S QHSE\_SR system putting more focus on ISO 26000 and ISO 31000 and redefine our internal evaluation structure so as to satisfy the requirements of our global customers and stakeholders, to manage risks, and to fulfill our social responsibility. As we clearly recognize the importance of corporate social responsibility, requirements will be reflected in our quality management system. At the same time an internal audit will be conducted on a regular basis to check and improve the system.



\* Quality Health, Safety, Environment and Social Responsibility





# O NE LS C&S

- 3. Mutual Trust and Shared Growth with Partners
- 4. Talent Management
- 5. Social Contribution – Enable the Cabled World

## ISSUE 03

# Mutual Trust and Shared Growth with Partners

As we believe the competitiveness of both LS C&S and our partners is our true competitiveness, we do not spare our effort to provide technical, educational and financial support to our partners to strengthen their capabilities. A fair and transparent purchasing process has been established based on a responsible procurement policy and a coexistence strategy to root out unfair trade practices so that we make better products and grow together.

### ✓ OUR COMMITMENTS

We build a partnership with a mutual trust so that we and our partners coexist in harmony in a business ecosystem.

### → 2015 STRATEGIC DIRECTION AND KEY TASKS

#### Strategic Direction

**Building a system and creating a culture to achieve shared growth in a sustainable way**

#### Key Tasks

##### 1. Strengthening a fair trade environment

- Building a partnership with a mutual trust
- Establishing a sustainable supply chain

##### 2. Fostering the competitiveness of partners

- Tailored educational support
- Financial support for business stability
- Shared growth in a business ecosystem

##### 3. Establishing a culture of communication

- Operating a grievance system
- Visit to 2nd tier suppliers by COP (head of purchasing division)

### ≡ 2015 KEY PERFORMANCE

#### ▶ Strengthening a fair trade environment

The status of fair trade with supplier partners inspected internally on a quarterly basis

#### ▶ Fostering the competitiveness of partners

Educational support for partners provided: 126 people from 115 companies; and no-interest, no collateral loan worth USD 2.5 million to partners

#### ▶ Establishing a culture of communication

Unfair Practice Reporting Center being operated (1 case reported); and a visit to 2nd suppliers made by COP to listen to their difficulties (twice)

### ⌚ 2016 PLAN

#### ▶ Nurturing the competitive of partners

To help them to find overseas markets and provide educational support

#### ▶ Establishing a culture of fair and transparent trade

To improve the AVL system

#### Creating a culture of communication and cooperation

To conduct a survey on partner satisfaction



## Strengthening a Fair Trade Environment

### Building a Partnership with a Mutual Trust

We strive to fulfill our responsibility as a global company leading in the cable industry. In this regard, in order to minimize the burden on our supplier partners due to the fluctuations in international raw material prices and in exchange rates, we are operating a price-sliding system, under which the price changes in raw materials are reflected in the payment for purchase. We are procuring copper based on the actual international trading prices. For petrochemical materials, price adjustment is being made depending on the changes in the international oil prices and in exchange rates. In 2015, we have increased purchase prices by USD 3 million in total, according to the price-sliding system and by the request of supplier partners' requests.

### Establishing a Sustainable Supply Chain

**Partner Selection** We always do our best to make the selection of supplier partners and contract process fair and transparent. All processes from bid application to evaluation and to final selection are managed in our E-Procurement system. Selection criteria and procedures are specifically and clearly announced in the system. Except in special cases such as new technology application or customer's request, partners are selected in a competitive bidding in principle. If there are changes in the selection criteria, it will be notified 45 days prior to the implementation of changes in accordance with the company rules on supplier partner selection and management. We evaluate the company based on the submitted documents and on-site inspection results. Evaluation results are notified to individual applicants in writing within 15 days from the day of final selection.

**Price Negotiation** We negotiate prices with our suppliers to agree on a reasonable price by considering the general market trend and situation in terms of quality, quantity, specification, delivery, and raw material prices. In addition, our revised standard subcontracting contract enables our supplier partners to file for purchase price adjustment at any time. If they have valid reasons for adjustment, the contract price can be adjusted based on the mutual agreement between supplier partners and us within 30 days (it can be extended by 30 days) from the date of the application for price adjustment.

**Contract** We make every effort to prevent a wrongful act from the beginning. The contract includes the following transaction details in accordance with the standard contract: payment; payment methods; purchase price adjustment conditions due to raw material price changes; product delivery and; inspection. In principle, the signatures of the contracting parties should be included in the contract.

**Goods Receiving and Inspection** After delivery and services are

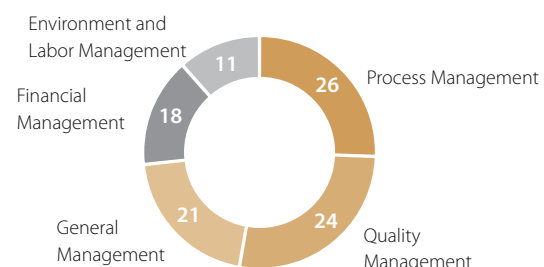
completed, a confirmation document is issued and an inspection is performed in accordance with the pre-agreed standards and procedures to prevent a wrongful act. We are strictly in compliance with inspection rules and with inspector's duty and due diligence, under which returning supplied goods without valid reasons is prevented.

**Payment** We have standardized the payment terms so that a wrongful act that may take place in the process is prevented and our partner suppliers operate in a stable way. As for manufactured goods, we make a payment within 45 days after goods are received or an invoice is issued. In addition, as we have expanded the cash payment, payment is made in cash for less than USD 255,973 worth of transactions. For more than USD 255,973 worth of transactions, payment is made in cash or cash equivalents such as loans on receivable collateral. In 2015, our company's cash payment rate was 48% and the cash equivalent payment rate was 100%.

**Evaluation** To enhance the competitiveness of our partner suppliers, we evaluate quality, price, delivery, and services on a regular basis in accordance with the company's rules on the evaluation and management of suppliers. Evaluation is conducted for the period from January to December of the year targeting suppliers with more than USD 426,621 of transaction and with more than 10 times of delivery. It is composed of three stages: EG\* classification; QCDS evaluation on quality, price, delivery time and the level of cooperation; and reflection of results. We apply different weights in consideration of the characteristics of business and materials. We also give additional points for the achievement made as a result of mutual cooperation with 2nd tier supplier partners so as to promote a culture of shared growth. For the areas that fail to meet our requirements in the evaluation, we provide feedbacks and support including consulting service. We strive to select best partners and support them so that they nurture their capabilities and we grow together in the business ecosystem.

\* EG (Evaluation Group) Classification: Evaluation groups are classified by business type or depending on material characteristics

#### Selection Criteria (%)



## Competitiveness of Partners

### Tailored Educational Support

In order to support 1st tier and 2nd tier supplier in a comprehensive and systemic manner, we are running programs ranging from job competency to compliance with laws on subcontracting and on fair trade. Training programs tailored to suppliers' needs have been developed to enhance their capabilities. In 2015, a total of 126 from 115 companies including 1st tier and 2nd tier supplier partners have attended the training sessions.

### Financial Support for Business Stability

We are running a variety of programs to support SMEs suffering from financing difficulties. As part of such efforts, a mutual cooperation fund of USD 34 million has been created in partnership with Hana bank so that eligible supplier partners have an access to loans at low interest rates. In 2015, a total of 42 supplier partners have received loan support worth USD 17 million through the fund (USD 2.6 million for 11 2nd tier suppliers). In addition, zero-interest, no-collateral direct loans are offered to support our supplier partners who need investment into new technology, facility expansion, and plant relocation by creating USD 2.4 million worth of the fund. We also have created a network loan to reduce the interest rate of the loans for supplier partners to help them with cash flow.

### Creating a Culture of Shared Growth

**Sharing Raw Material Price Information** We strive to create a culture of shared growth by supporting our partner suppliers. We disclose purchase price adjustment information so that 2nd tier supplier partners get benefits from adjusted purchase prices due to raw material price changes from 1st tier suppliers.

**'Coexistence' Payment System** The 'Shinhan Shared Growth Loan' by Shinhan bank makes our 2nd and 3rd tier suppliers eligible for secured loan of credit sales with the credit of LS C&S, helping them to secure cash flow and to enhance their financial soundness.

## Culture of Communication

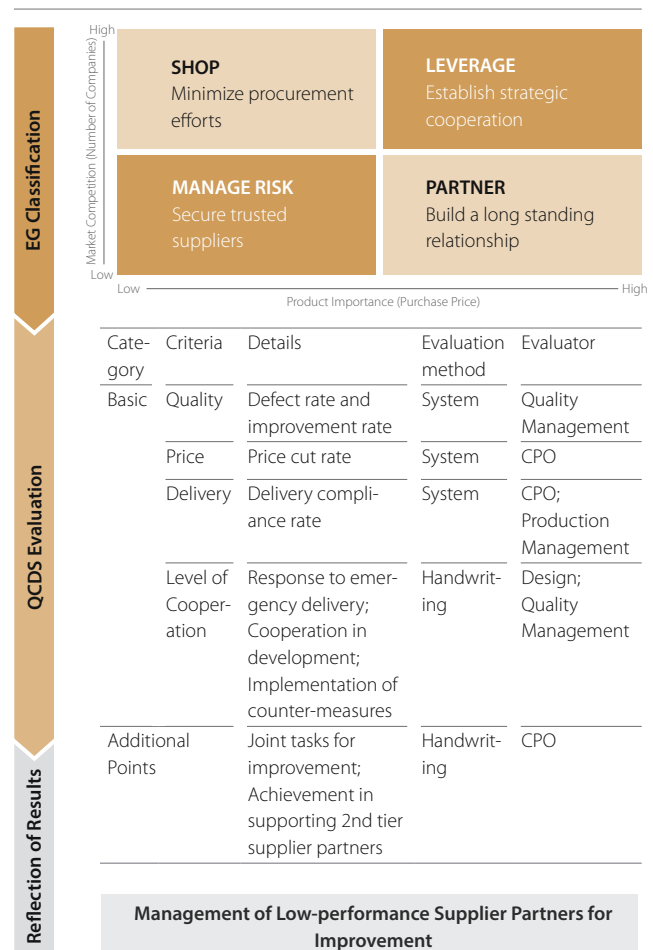
### Grievance Mechanism

We have established the "Unfair Practice Reporting Center", a grievance mechanism where supplier partners report unfair practices such as oral order, delayed payments, no issuance of contracts, or make complaints. They also present their difficulties and suggestions in the Cyber Reporting Channel in our ethical management website. Anonymity is ensured for the comments received from partners and the person in charge at the center closely checks the comments to resolve the issues raised by them. Personal information of the reporter and report details are kept confidential.

### Visit to 2nd Tier Suppliers by CPO

CPO, the head of purchasing division is visiting major 2nd tier suppliers to listen to their feedback and to identify how they conduct business with 1st tier suppliers. In 2015, a visit by CPO has been made to two supplier partners to listen to their difficulties and improve business conditions.

### Evaluation Process



CUSTOMER FIRST

ONE LS C&amp;S

RULE &amp; RESPONSIBILITY

EXPERTISE

## ISSUE 04

# Talent Management

We believe the key to building a creative organizational culture lies in 'People First', our long-standing value under which we are conducting business based on the respect of the rights of employees. In order to achieve a sustainable growth in a fast-changing environment, it is critical to secure talented people armed with creativity and spirit. At the same time a focus should be made on strengthening their capabilities to become competitive on the global stage.



### OUR COMMITMENTS

We support and nurture talented people so that they have a sense of ownership in their work and make a great achievement.



### 2015 STRATEGIC DIRECTION AND KEY TASKS

#### Strategic Direction

Talent management based on 'LS C&S Way'

#### Key Tasks

##### 1. Enhancing employee satisfaction

- Organizational capability survey • On-site satisfaction survey

##### 2. Talent securing and impartial HR management

- Operating recruitment system • Increasing the number of office workers
- Goal-oriented performance management and fair evaluation
- Encouragement for employees with good performance

##### 3. Employee welfare system

##### 4. Nurturing talent

- 'LS C&S Way' declaration and internalization activities
- Trainings on job and leadership



### 2015 KEY PERFORMANCE

#### ▶ Enhancing employee satisfaction

- Organizational capability and vitality indexes improved
- On-site satisfaction level increased • 'LS C&S Way' implementation index

#### ▶ Talent securing and impartial HR management

- Increase in the number of newly-recruited employees (63 employees)
- SPCM operation • Overseas training (79 employees)

#### ▶ Employee welfare system

#### ▶ Nurturing talent

- Training on 'LS C&S Way' conducted (1,959 employees) • Programs to promote 'LS C&S Way': 78 points achieved for 'LS C&S Way' implementation index



### 2016 PLAN

#### ▶ Enhancing employee satisfaction

- To maximize the performance of new businesses and lay a foundation to make future businesses profitable

#### ▶ Talent securing and impartial HR management

- To encourage employee to actively work and be responsible for their works

#### ▶ New corporate culture driving changes and innovation

- To internalize 'LS C&S Way' • To conduct activities to promote C.O.R.E

#### ▶ Strengthening job competency focusing on new businesses

- To establish a system to nurture sales engineers, and construction PMs

## Enhancing Employee Satisfaction

### Improved Organizational Capability and Vitality Indexes

Organizational capability index has increased 6 points from 48 points in 2014 to 54 points and organizational vitality index has risen 4 points from 68 in 2014 to 72. 'Organizational direction' has showed the highest increase (+ 8 points) in organizational capability index, and 'organizational effectiveness' (+ 6 points) in organizational vitality index.

### Increased Employee Satisfaction

Training sessions for employees have been provided to internalize vision and core values after the declaration of 'LS C&S Way'. In addition,

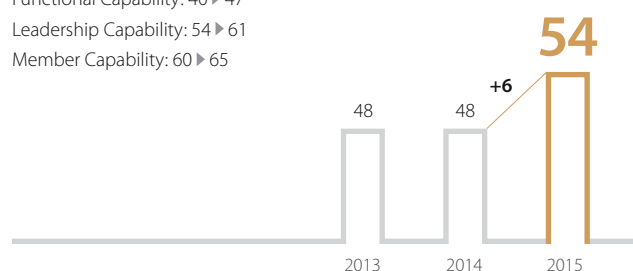
a variety of programs such as a LS C&S Way festival, LS C&S Way Awards, and messages of hope from our presidents have been operated. As a result, organizational capability and activity indexes have increased year on year.

### Enhanced On-site Satisfaction

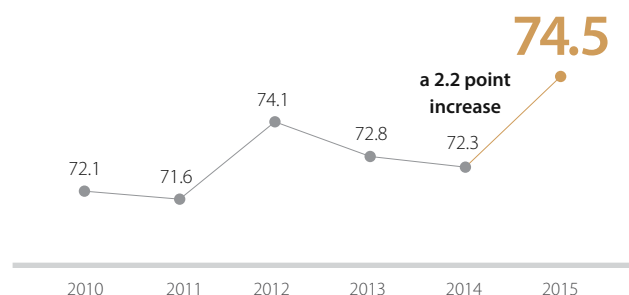
Company-wide composite satisfaction score has greatly increased exceeding the 2012 result, the highest score ever recorded. Worksite-wide satisfaction in 2015 has also seen an increase from the previous year, which is a very encouraging result showing that employee satisfaction has been improved in all of our worksites.

Organizational Capability (3-year trend) (point)

Organizational Direction: 60 ▶ 68  
System Capability: 39 ▶ 43  
Functional Capability: 40 ▶ 47  
Leadership Capability: 54 ▶ 61  
Member Capability: 60 ▶ 65

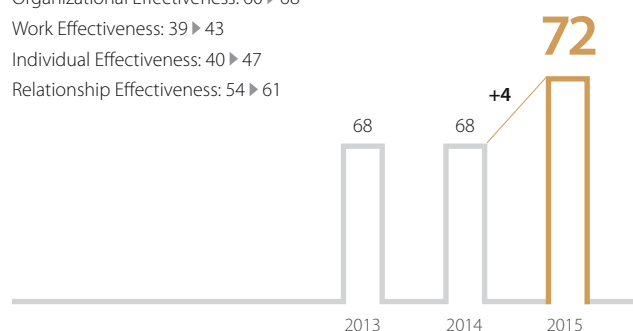


Company-wide Composite Satisfaction (point)

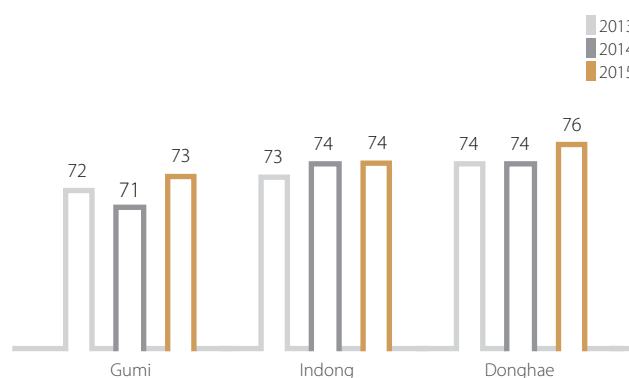


Organizational Vitality (3-year trend) (point)

Organizational Effectiveness: 60 ▶ 68  
Work Effectiveness: 39 ▶ 43  
Individual Effectiveness: 40 ▶ 47  
Relationship Effectiveness: 54 ▶ 61



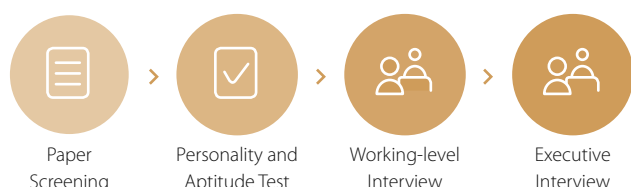
Worksite Satisfaction (point)



## Talent Securing and Impartial HR management

### Recruitment System

We recruit talented people who are positive, creative and professional. Recruitment is made by non-career, by career and by job type under the process of 'a paper screening → a personality and aptitude test → an interview at the working level → an interview by executives'. In order to strength our capability, we also hire international professionals by securing a network of overseas recruitment.



### Increasing the Number of Office Workers

We have hired a total of 201 employees (131 non-career and 70 career employees) from 2013 to 2015, and plan to newly recruit 126 employees in 2016 focusing on securing talent for our major and new businesses.

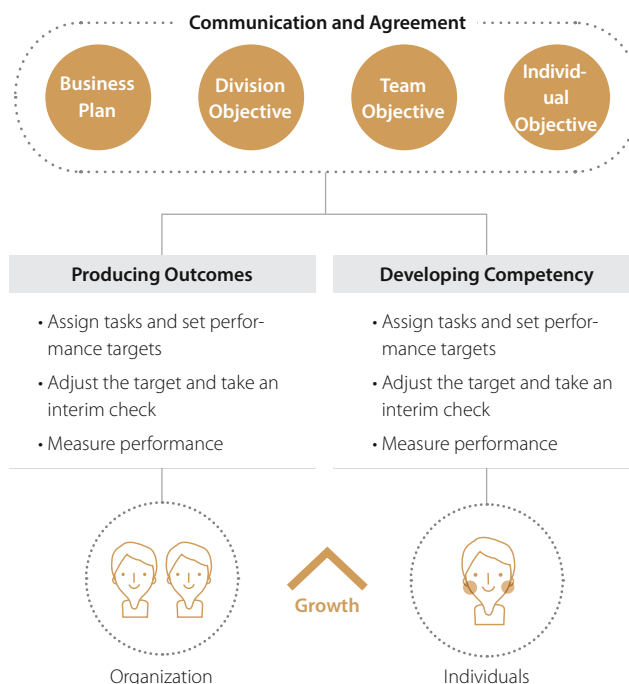
Recruitment Type (person)	2013	2014	2015	Total
Non-career	52	26	53	131
Career	27	33	10	70
Total	79	59	63	201

### Goal-oriented Performance Management and Fair Evaluation

We are implementing SPCM<sup>Strategic Performance & Competency Management</sup> by linking producing outcomes and developing competency. Key tasks are set for each team and division to achieve management goals. Employees set performance targets to conduct the defined key tasks and they establish a competency development plan accordingly. The characteristics of SPCM are as follows: employees feel more responsible for their work as they join activities to set performance targets; and employees are motivated and set the direction for career development in a systematic manner by analyzing their strength and what needs to be improved and developed. In order to evaluate performance in a fair and objective manner, evaluation criteria should be disclosed and the defined evaluation process should be followed. Evaluation results are notified to individuals, teams or divisions for transparency and employees can take issue on the results. By doing so, organizational goals are aligned with individual performance targets, and employees are more receptive to evaluation results. Reward is made based

on evaluation results of both group and individual performance in the form of annual base salary, management incentives and individual incentives.

### Strategic Performance and Competency Management (SPCM) System



### Encouragement for Employees with Good Performance

**Overseas Training** Employees with good performance had the opportunity to attend international fairs and conferences, which gave them a chance to see and learn the latest trend in the industry and to experience different cultures. In 2015, a total of 79 employees received overseas training, which served as an opportunity to improve their job competency and satisfaction and internalize a new organizational culture.

**Reward Based on Performance** For employees who have showed a great performance in sales, production, development and support and who have conducted activities that have served as an example in creating an organizational culture that the company aims for, we share their achievement at the enterprise level and reward them to celebrate their achievement and motivate others to follow suit.



## Employee Welfare System

We operate a welfare system covering six areas considering our employees' wellbeing in terms of healthy body and mind and economic stability so that they take pride in the company and concentrate on their works. In 2015, we invited family members of employees to lectures, offered gifts to employees and supported in-house events and activities to help them to foster comradeship at work. In 2016, we will further promote the "Week for Refreshment". By using the program, employees will refresh their mind and body and restore energy, which helps them to become more creative when they come back to work.

### Healthy Life

- Medical expense reimbursement for employees
- Medical expense reimbursement for family members of employees by using an in-house welfare fund
- Free medical checkup for employees and their spouses
- Sports facilities for employees
- A healthcare room or clinic in the company
- Counseling program

### Cultural Life

- Support for in-house club activities
- Gift cards for anniversaries such as birthday or wedding anniversary
- Cultural events such as offering sports game tickets and inviting employees' family members to lectures

### Energetic Life

- Reward for long-term employees: vacation and financial gifts for employees with 5, 10, 20, 25, 30, and 35 years of service
- Free recreational facilities such as condominiums and a LS Baekam training institute
- Company outing: twice a year (in spring and autumn)

### Stable Life

- Family occasion support: money gift or condolence money for the family occasion of employees such as a wedding or a funeral
- Dormitories or employee apartments at local worksites
- Group life and health insurances for employees
- Commuting support: commuting bus service

### Hopeful Life

- In-house online training course on job skills, leadership, foreign languages every month
- Mid- and long-term educational support for graduate schools, MBA, and intensive foreign language courses
- Outside training courses on job skills and foreign languages

### Prosperous Life

- Financial aid of middle school, high school and college tuitions for the children of employees
- Housing loan support
- Discount for the products of sister companies including all products of LS Networks
- Retirement gifts

## Retirement Pension System

Since 2011, the retirement pension system has been implemented for all employees: they can choose between DB (defined benefit) and DC (defined contribution) plans.

## Nurturing Talent

### 'LS C&S Way' Internalization Activities

On January 2nd in 2015, we declared 'LS C&S Way' to take another leap forward. Since then a lot of activities have been conducted for employees to act on it: the company's management philosophy and business direction were shared with employees in 'management essays'; letters and gifts from presidents were delivered to employees to boost their morale.

In addition, LS C&S Way C.O.R.E festival was held and employees had fun by joining singing, play and UCC contests there. At the same time it also served as an opportunity for them to understand 'LS C&S Way'. On the other hand, under the overseas training program, employees attended international fairs and conferences, which gave them a chance to see and learn the latest trend in the industry.

### Internalization Progress on LS C&S Way

Category	Program	Progress Details
Leadership & Communication	Management essay	5 essays by Chairman and 7 by presidents and division heads
	Messages of hope from presidents	Delivered to 20 employees (2 employees per month)
	PR material creation	PR materials created and distributed
	Bulletin board	Bulletin board created and posted (more than 5 postings per month)
	CA (Core Agent)	Active participation in the festival; and internal promotion on LS C&S Way
	LS C&S Way sharing training	Satisfaction level: executives and team leaders (4.6, completed); employees with an office job (4.5); and employees with a technical job (4.7)
Organizational Vitality	LS C&S Way festival	A total of 25 teams participated
	Core Award	The first half (5 awardees); and the second half (5 awardees)
	Overseas training	Provided to all of 79 employees subject to the training

### Trainings on Job and Leadership to Maximize Performance

In order to strengthen our technical sales capability, in-depth product and process technology training, which consists of 22 courses in common, electric power, telecommunication, industrial cable and materials areas, was conducted for all of sales employees. They also received 30 basic job training courses including R&D, sales and marketing, purchasing. In addition, training was provided for those who were to be promoted and those who were assigned to a new job. Also, LS-MBA and LST-MBA courses were conducted. As such, we provided various internal and external job, leadership and global training courses. In 2015, one employee received a total of 45 hours of training on average, and educational expense per person was USD 1,140.

## ISSUE 05

# Social Contribution – Enable the Cabled World

We are striving to realize the vision ‘Enable the Cabled World’, under which everyone has an access to energy and information without constraints of time and space. As part of such efforts, we are conducting activities to contribute to the society by nurturing future talents who will play a leading role in the future energy industry and information society and by supporting the disadvantaged. Our efforts for social contribution will continue so that we fulfill our social responsibility and grow together with local communities.



### OUR COMMITMENTS

We promote activities to contribute to the society so that the company and the society grow together.



### 2015 STRATEGIC DIRECTION AND KEY TASKS

#### Strategic Direction

#### Growing together with future talents and local communities

#### Key Tasks

##### 1. Nurturing Future Talents

- Nurturing talents through industry-academia cooperation
- Raising the interest on basic science

##### 2. Local community support

- Strengthening relationships with local communities
- Expanding employees' sharing activities

##### 3. Global sharing activities

- Supporting overseas volunteers
- Expanding the scope of local communities for support where our overseas worksites are located



### 2015 KEY PERFORMANCE

- ▶ **‘LS Dream Science Class’ for children conducted**
- ▶ **Worksite training program to students in cooperation with universities provided**
- ▶ **LS undergraduate students overseas volunteers activities**  
Employees participated in the activities; and educational support provided to children
- ▶ **Employees' sharing activities**  
Visit to shelters for children; bazaar; kimchi making and sharing events; and coal briquette support (activities driven by the headquarters and local worksites)



### 2016 PLAN

- ▶ **To conduct national projects through industry-academia cooperation and to provide students on-site training programs**
- ▶ **To support local communities where worksite are located with the participation of employees**
- ▶ **To promote satisfaction on the ‘LS Dream Science Class’**
- ▶ **To continue LS undergraduate students overseas volunteers activities**

## Nurturing Future Talents

### Industry-Academia Cooperation: On-site Training Programs for College Students

We are actively promoting cooperation between industry and academia. We share information on technology related to our projects in the areas of electric power and telecommunication. Meanwhile, students are given opportunities to have on-site experience from our experienced employees in worksites. In regards to cooperation with universities, we have provided lectures and on-site trainings with Kangwon National University and Yeung Jin College by signing MOUs with them. Since 2012 we have been working with Kangwon National University on 'Job Schooling', an internship program for students majoring in electricity and electronics and in IT engineering by providing lectures on: the systems of our main products such as submarine cables and industrial cables; design; manufacturing; and quality management system overview. Our researchers with doctoral degrees and master's degrees and the heads of teams have participated as lecturers to provide classes based on theory and practice. Since February 2013 after an MOU was signed with Yeung Jin College, we have been providing 'a la carte' programs. If the college requests lecturers in the areas such as electrical devices, power systems and electrical installations, we make a curriculum for the college. The students who complete this course with excellent results are preferred when they apply for our company. As such, we take the initiative in finding talents in the electric power and cable industries.

### LS Dream Science Class: Electrical Science Class for Children

We are offering 'LS Dream Science Class' to children in order to nurture future talents and raise the interest on basic science. This program is conducted during summer and winter vacations. Under the program, college students majoring in science and engineering, as teachers and mentors, are giving science classes to the elementary school students in Anyang, Gumi and Donghae where our headquarters and worksites are located. Researchers with doctoral degrees and master's degrees also join as one-day lecturers, making classes more in-depth. Children are learning scientific principles in an easy and fun way by using the science kit co-developed by the National Academy of Engineering of Korea and LS C&S. The curriculum covers energy and telecommunication technology and a variety of science experiments. In the 2015 science class, in particular, following experiments were conducted: a magnetic levitation train test by using superconductivity technology; a self-generating flashlight; and a comparative test between DC and AC transmissions. We will continue our efforts to promote 'LS Dream Science Class' as a science program for children with substance.

## Local Community Support

### Donation from Monthly Salary

Upon the voluntary consent of executives and employees, we are collecting the change less than USD 1 from their monthly salary and incentives to raise a fund to make a social contribution. The amount which is the same as the amount collected from employees is additionally donated from the company to the fund. In 2015, we supported those in need of help, including senior citizens living alone, persons with disabilities, and children living with their grandparents in Anyang, Gumi, and Donghae by donating a total of USD 40,444.

### Employees' Sharing Activities

Our employees are volunteering activities for senior citizens living alone, persons with disabilities, and poorly-fed children to help them stand on their feet. The support is in cooperation with public agencies and the local governments so as to meet the needs of local communities

A volunteer group called 'Chamsarang Society' of Gumi and Indong worksites has 600 members as of now since its foundation in 1999 and 'Jeongnangum Society' of the Donghae worksite has 200 members since it was organized in 2009. These volunteer groups regularly visit the local welfare centers and do the following activities: house improvement; birthday parties; sports events; free meals; free haircuts; fuel and food cost support; scholarships for child breadwinners; protection of cultural properties; and environmental cleanup. At the end of the year, the groups delivered home-made kimchi and briquettes to the elderly who live alone.

In Anyang area, employees visited 'Gyeonggi South's Children's Home', played with them and helped them with meals. In addition, they have donated USD 427 monthly to support children's medical expenses and to improve the facilities.

At the end of 2015, a 'love sharing' bazaar was held in Anyang LS Tower, where our headquarters is located. All the proceeds from 400 donation items including electronic devices, sport goods and clothing and additional USD 8,532 worth of fund were used to buy winter clothes for children in need living in Anyang.

## Global Sharing Activities

### LS Undergraduate Students Overseas Volunteers Activities

To improve the educational environment overseas and to encourage college students to have global citizenship, we are running the program for college students to conduct volunteer activities overseas at the LS Group level. The student volunteer groups have provided a scientific experiment program utilizing the content of LS Dream Science Class and introduced Korean culture to children for 2 weeks during summer and winter vacations respectively. In addition, they have joined activities to improve school facilities in Hai Duong and Phu Tho near Hanoi in Vietnam.

### Manufacturing Subsidiary in Vietnam – Local Community Support

LS-VINA, our subsidiary in Vietnam has been supporting schools for agriculture and for the blind and low-income families in Hai Pong with donations. PCs and schools supplies are provided to agricultural schools. At the same time, employees of the subsidiary regularly visit low-income families, orphanages and the schools for the blind, helping them to have educational opportunities and keep on their dreams. Besides such regular activities, the subsidiary is also supporting local events such as LS-Vietnam national baduk contest and Hai Pong fireworks festival, thereby contributing to the development of the local community and to cultural exchanges with Vietnam.

## 2015 Social Contribution Activities

### 2015 Social Contribution Activities (domestic)

#### Volunteering and Sharing Activities

Organization	Activities	Beneficiary	Frequency	Participants	2015 Support Amount (USD)
Headquarters	Play activities with children; meal preparation support; and support for medical expense and facility maintenance	Gyeonggi South's Children's Home'	1 time/year	9	2,986
	A bazaar was held and all the proceeds from donation items were used to buy winter clothes for children.	Anyang city hall	1 time/year	-	8,532
Chamsarang Society (informal volunteering group in Gumi and Indong worksites)	Activities to keep children company; birthday parties; and a sport day	Aehyang Welfare Home	12 times/year	90	9,317
	Free meals; meal box delivery to the elderly living alone; Kimchi-making events; residential environment improvement activities; and coal briquette delivery	Gumi social welfare center	13 times/year	217	14,053
	Sharing activities in NewYear's and Chuseok holidays; and a family camp	Gumi alcohol center	8 times/year	40	1,775
	Support of daily necessities and house visits; fuel cost support; bathing support; and cleaning	Ansa community in Uiseong	12 times/year	80	1,451
	Free haircut; birthday parties; and event support	Seongsim sanatorium; and Seongsim nourishing home	12 times/year	101	1,408
Jeongnangum Society (informal volunteering group in Donghae worksite)	Kimchi-making sharing event (600 heads of kimchi made and free meal provided)	Songjeong-dong community service center and woman's society in Donghae	1 time/year	20	4,989
	Support for the party for the elderly in Songjeon-dong	Songjeong-dong senior society in Donghae	1 time/year	2	512
Total					45,023



Job Schooling



Employee Volunteering Group: Chamsarang Society (Gumi)



## Donation and Support

Organi- zation	Activities	Beneficiary	Frequency	Partici- pants	2015 Support Amount (USD)
Head- quarters	Donation	Community Chest of Korea; Korean Red Cross; Law compliance Anyang alliance; and patriots & veterans affairs agency	1 time/year	-	288,054
	Donation from monthly salary	Children living with their grandparents; senior citizens living alone; and welfare facilities including children's home in Gumi, and Donghae	Frequently throughout the year	-	40,444
Donghae Worksite	Donghae Mureung festival support	Donghae city; and Donghae Mureung festival organization committee	1 time/year	5	4,437
	16th running event support for citizen health on the occasion of Independence Movement Day	Donghae city; and Gangwonilbo	1 time/year	-	427
	8th drawing contest supporting for environment and for Gangwon	Asia pacific NGO in Korea	1 time/year	-	171
	Donation to Community Chest of Korea	Community Chest of Korea	1 time/year	1	171
	Event support on the occasion of the Day of People with Disability	Donghae city federation of organizations of the disabled	1 time/year	-	256
	Songjeong-dong sporting event support for citizens, public servants and servicepersons	Songjeong-dong community center	1 time/year	-	631
	Support for the 21st pray ritual for a big catch of fish and for 10th fishermen event	Christian council of Donghae city	1 time/year	-	171
	Free standard plastic garbage bags	Samwha temple convalescent hospital for the elderly	1 time/year	-	77
	Support for promoting a local soccer team	Gangwon FC	1 time/year	-	853
Total					335,690

## 2015 Social Contribution Activities (overseas)

Subsidi- ary	Activities	Beneficiary	Frequency	Partici- pants	2015 Support Amount (USD)
LS-VINA	Gifts for low-income families, and Support for: the schools for the blind; children with AIDS HIV; and orphanages	Low-income families in Haipong city; and orphanages under local welfare organizations	1 time/year	5	5,049
	Support for the family members of our employees with disabilities and for retirees	Families of employees and retirees	1~2 times/year	4	927
	Support of residents in the areas of territorial disputes (in China)	Truong Sa Islands residents	One-time event	-	2,317
	Support for employees and retirees	Employees and retirees	1 time/year	-	324
	Support for Global Friends activities (gifts and computers for the elementary, middle and high schools in underdeveloped areas)	Students in Bát Xát	1 time/year	4	4,633
	Support for Hai Pong fireworks festival	HAI PHONG CITY	1 time/year	-	2,317
	Support for events held in the area where LS-VINA is located	HONG BAND DISTRICT	1 time/year	-	463
	Support for Vietnam national baduk contest	Participants; and Vietnam baduk association	Every September	3	3,335
LSCW	Environment conservation fund	Middle school in Wuxi	One-time event	-	307
	Korean school development fund	Korean school in Wuxi	One-time event	-	390
	Support fund for Korean merchant association	Korean merchant association in Wuxi	One-time event	-	469
Total					20,532



LS Undergraduate Students Overseas Volunteers



LS Dream Science Class

The background of the slide is a grayscale photograph of an industrial setting, featuring a robotic arm and various mechanical components. A prominent diagonal teal stripe runs from the bottom left towards the top right, partially obscuring the background image. The title text is overlaid on the upper left portion of the image.

# **R**ULE & **RESPONSIBILITY**

- 6. Respect of Human Rights and Diversity
- 7. Ethical Management with Rule and Responsibility
- 8. Compliance Management



## ISSUE 06

# Respect of Human Rights and Diversity

We value our employees' dignity and diversity based on our management philosophy of respect for human beings. We prohibit unfair discrimination for reasons of nationality, ethnicity, gender, religion and age in regard to recruiting, evaluation, promotion, and compensation. We also support the 'Universal Declaration of Human Rights' and the convention on the protection of workers' rights. We respect the ILO Declaration on Fundamental Principles and Rights at Work: freedom of association; the elimination of forced labor; the elimination of discrimination in respect of employment and occupation; and the abolition of child labor. We ensure the dignity and independence of our employees in accordance with the chapter 5, our code of conduct.

### ✓ OUR COMMITMENTS

We respect the human rights and diversity of our employees and make efforts to meet the global standards in this area.

### ➔ 2015 STRATEGIC DIRECTION AND KEY TASKS

#### Strategic Direction

Respecting the human rights and diversity of our employees

#### Key Tasks

##### 1. Respecting employee rights; and no discrimination

- Respecting culturally diverse backgrounds
- No discrimination
- Human rights protection and education

##### 2. No child and forced labor; and sound labor-management relationship

- No child and forced labor
- Value-creating labor-management relationship

##### 3. Respect for female employees; and employment of the disabled

- Respect for female employees
- Employment of the disabled

### ☰ 2015 KEY PERFORMANCE

#### ▶ Respecting employee rights; and no discrimination

- Foreign employee settlement support service provided
- Help center and cyber reporting channel operated

#### ▶ No child and forced labor; and sound labor-management relationship

- Child and forced labor prohibited
- Worksites without any labor disputes for 27 years

#### ▶ Respect for female employees; and employment of the disabled

- The rate of female managers increased (3.4%)
- Female employee club 'Arom Society' operated
- 31 people with disabilities recruited

### 🕒 2016 PLAN

#### ▶ To respect employee rights and prohibit discrimination (protecting the human rights of employees)

#### ▶ To prohibit child and forced labor

#### ▶ To ensure the freedom of association

#### ▶ To respect female employees and keep the policy of recruiting employees with disabilities

## Respecting Employees' Rights

### Promoting Diversity

We are providing our employees with educational sessions so that employees with different cultural and social background understand and respect each other. In addition, a settlement support system for foreign employees is being operated to help them resolve their difficulties. All employees in overseas subsidiaries are also subject to the educational sessions so that the LS C&S vision and value and the principle of mutual trust under LSpartnership are shared with them. For the Korean employees of overseas subsidiaries and sales or manufacturing branches, educational sessions on the culture, ethics and human rights are provided to help their settlement before they are assigned.

### No Discrimination

In accordance with the chapter 5 in our code of conduct, we prohibit unfair discrimination for reasons of gender, academic background, age, nationality, religion and birthplace in regard to recruiting, promotion, compensation, and education opportunity. All employees are given equal opportunities, and reward is made based on performances. In this regard, we are operating support systems such as the help center, the labor union, the grievance channel, and the cyber reporting channel.

### Human Rights Protection and Education

As we are providing the cyber reporting channel and the counseling service on sexual harassment to our employees, anyone can freely get counseling and report cases in anonymity. In addition, in order to raise awareness of the employees on human rights, we have conducted educational sessions on sexual harassment prevention and on human rights. In 2015, we provided training on sexual harassment prevention for all of our employees, and a total of 2,241 employees participated in the training. A special lecture on sexual harassment prevention and ethical management was provided in the training courses such as the introductory training courses for newly recruited employees and the development course for overseas resident employees. The Serve One, our security-provider is conducting monthly human rights and ethics training to its employees including 18 employees in charge of security at LS C&S.

## Sound Labor-Management Relationship

### No Child and Forced Labor

We strictly prohibit labor by children under 15 years old and by youth who are currently attending schools in accordance with the Labor Standard Act of Korea and the labor principles of UN Global Compact. We also pay attention to prevent a child or youth from being recruited even unintentionally by reviewing documents that verify the identities of job applicants during the recruiting process. As for forced labor, our employees work out of their free will. We do not force our employees to work at night and in holidays. Working hours are 8 hours a day and 40 hours a week and. If they work at night or in holidays upon prior consent, overtime payment is made to them.

### Value-creating Labor-Management Relationship

**Labor-Management Relationship based on Trust and Communication** Our labor union was launched as the Anyang branch of GoldStar chapter of the Federation of Korean Metal Workers Trade Unions in 1976, and has now become the 19th union with 974 members as of the end of 2015. 'Those who work at LS C&S worksites' are eligible for the union members and have a right to freely join and discontinue membership at any time. Both the labor and the management are working hard to establish a sound and harmonious relationship: the management is making efforts to ensure employment stability and compensation based on business performance while the labor union is actively joining activities to achieve the company's business goals. Based on such labor-management relationship, we agreed on the retirement age and introduced wage peak in 2007. In 2014, we have reasonably resolved critical issues related to internal and external trade environment, including the agreement to include regular incentives in salary. As a result of such efforts, our labor and management have maintained cooperative relations without any labor disputes for the last 27 years since 1989.

**Promoting Communication** We are providing corporate management information to our employees through different channels and seeking cooperation by communicating with the labor union. In a monthly meeting, we share our business status and performance and issues. Efforts are also being made to share information and improve employee's working conditions and welfare benefit through the quarterly 'participation and cooperation promotion council meeting' and the 'working-level labor-management meeting' (The clause of notification is included in the article of collective agreement).

**Labor-Management Joint Activities** Since 2007, the labor and the management have jointly introduced and operated the 'donation from monthly salary' system. In 2015, we have created a fund worth USD 40,444 and used the fund for sharing activities for local commu-

nities such as living expenses support for the underprivileged, kimchi-making and -sharing events and free coal briquettes. At the same time, we have conducted '1 Company 1 Stream Conservation Campaign,' and cleaning activities for the environment in the local communities as part of our efforts to fulfill corporate social responsibility. Since last December, the labor union have launched on-site innovation activities focusing on better productivity, improved quality, and cost reduction in order to contribute to meeting our business goals.

**Improvement Activities for Work Satisfaction** The labor and the management are jointly conducting the survey on on-site satisfaction to diagnose and improve the working environment and organizational culture in our production worksites. The survey is conducted under nine categories: 1) manager; 2) supervisor; 3) communication; 4) organizational culture; 5) labor-management relationship; 6) labor union; 7) working environment; 8) job management; and 9) employee benefits. After the survey, we work on the improvement measures for the identified issues and take action to raise the work satisfaction level of our employees. At the same time, a grievance system is being implemented by worksite to respond to the issues on jobs, working environment, and the difficulties of employees.

**Labor Union Members by Worksite**

Worksite (person)	2013	2014	2015
Anyang	65	65	11
Gumi	440	449	485
Indong	281	257	247
Donghae	151	241	231
Total	937	1,012	974

**Communication with Employees for Mutual Trust**

Meeting	Participants	Frequency	Activities
Monthly meeting	All employees	Monthly	Sharing information on business status and performance and issues
Participation and cooperation promotion council meeting	Management: 6 including presidents Labor: 6 including the head of the union	Quarterly	Sharing information on business status and performance and discussing systems and working conditions
Working-level labor-management meeting	Management: the head in charge of labor-management affairs and others Labor: the person wholly dedicated to the union and others	Frequently	Discussing improvement on working conditions and employee benefits

## Respect for Female Employees and Employment of the Disabled

### Respect for Female Employees

Although female workers are still a minority given the nature of the manufacturing industry, which uses big-size machines and equipment, we strive to create a woman-friendly workplace where women are able to show their ability and are evaluated based on their performance. As of 2015, female managers account for 3.4% of the total managerial positions. We plan to provide a leadership training program for female managers and provide support such as parental leave and flexible work time in order to nurture competent female managers.

**LS Daycare Center** At the end of 2014, the LS daycare center was established in the Anyang worksite to help female employees to reduce the burden of childcare and pay attention to their work. Currently, a total of 69 employees are using this daycare center.

**Space for Female Employees** We have nursing rooms for mothers and a female employee lounge. The female employee club 'Arom Society' is being operated to help them to get counseling on their difficulties and promote friendship.

**Parental Leave** Employees with a child aged eight or younger can take parental leave up to one year and they are guaranteed the return to work. In 2015, seven employees took the leave, and one of them was foreign employee and two were male employees, which showed a parental leave benefit was used regardless of gender or nationality.

### Employment of the Disabled

**Regard for Employees with Physical Disabilities** Since the employees in the cable manufacturing industry are required to be more careful about their safety and health, it is true that the ratio of employees with physical disabilities in LS C&S is relatively low. However, as we agree with the purpose of the law on employment promotion and job rehabilitation on the disabled, we continue to hire those who with physical disabilities. As of 2014, 31 employees with disabilities are working in our worksites. We are actively supporting and helping them to adjust to their jobs through guidance and preparatory training and to successfully do their jobs thereby standing on their feet.

## ISSUE 07

# Ethical Management with Rule and Responsibility

Under the ethical management, companies recognize not only economic and legal but also ethical responsibility as the duty of a company, and do business based on ethical compliance. Ethics is the foundation of corporate management. Ethical management is a social responsibility for corporate citizens and a base for business activities and behaviors. As the ethical management with rule and responsibility is our corporate philosophy, we are making every effort to meet our ethical obligations to stakeholders such as shareholders, employees, customers, the society and the nation. We will strengthen the foundation for the culture of ethics where all of our employees implement the philosophy in their everyday life.



### OUR COMMITMENTS

We establish the foundation for ethical management and promote the culture of ethics so as to implement ethical management at a global level.



### 2015 STRATEGIC DIRECTION AND KEY TASKS

#### Strategic Direction

**Building the foundation to implement ethical management by raising awareness on ethics and by strengthening related systems**

#### Key Tasks

#### 1. Establishing the foundation for ethical management

- Implementing a code of conduct
- Operating ethics secretariat

#### 2. Conducting ethical management activities

- Promotion
- Educational sessions
- Evaluation
- Official letters of cooperation to supplier partners

#### 3. Monitoring ethical risks

- Reporting program
- Reward for reporting; and the 'Clean Company' system
- Diagnosis on unethical conducts; and measures against them



### 2015 KEY PERFORMANCE

#### ▶ Report handling

100% completed for 9 reports

#### ▶ Educational sessions on ethics

3 sessions (8.5 hours) conducted; and 37 participants

#### ▶ Postings on ethics

4,703 hits for 12 postings

#### ▶ Ethical level evaluation

An 1.2 point increase from 75.8 in 2014 to 77 points



### 2016 PLAN

#### ▶ To raise employee awareness on the ethical system by running a counseling center and by conducting promotion activities

#### ▶ To promote the ethical culture by strengthening the content of postings and by expanding educational opportunities for employees

#### ▶ To raise awareness of reporting channels and increase its utilization

## Foundation for Ethical Management

### Code of Conduct

We have established and declared a code of conduct that serves as the criteria of action and value judgment for our employees. The code of conduct, which includes the direction of ethical management and actions for implementation, consists of 6 categories: responsibilities and obligations for customers; basic ethics of employees; fair competition; fair business transaction; corporate responsibilities for employees; and responsibilities for country and society. Disciplinary rules have been set for violating the code of conduct to ensure employees implement the principles of corporate ethical management.

For the full text of our code of conduct, please check: <http://ethics.lscns.co.kr/rule/law.asp>

### Ethics Secretariat

We have an ethics secretariat under the internal audit & consulting team. The secretariat is engaged in activities related to ethical management such as establishing and implementing strategies on ethical management. Efforts are also made to prevent non-ethical acts such as violation of code of conduct, unfair trade, and unfair practices by monitoring its implementation. If ethics-related issues occur, the secretariat analyzes the causes and resolves them.



Company-wide Training on Ethical Management and Fair Trade

### Ethical Level Evaluation Results (point)



## Ethical Management Activities

### Promotion

We have been posting articles on our ethical management including our code of conduct, ethical system, implementation guidelines and best practices in our intranet since 2006. In 2015, a total of 12 postings were registered with 4,703 hits.

### Ethics Training

Newly-hired non-career and career employees are required to take ethics training which covers the concept of ethical management, the company's code of conduct, related system and violation cases. Overseas resident employees should also receive the training before they are assigned to overseas worksites. In 2015, ethical training was conducted three times (8.5 hours) for 37 employees.

Ethical Training	2013	2014	2015
Number of Sessions (session)	4	3	3
Training Time (hour)	6.5	5	8.5
Participants (person)	54	33	37

### Pledge for Implementation

All employees pledge to comply with the code of conduct on the first day they start to work, committing themselves to implementing the philosophy of ethical management.



## Counseling Center

We are operating a counseling center for employees and the parties concerned who face ethical issues or want to know about ethical management. The center serves as a channel not only to learn about general information on ethical management and about how to interpret and apply the code of conduct but also to get counseling on ethical conflicts related to work. In order to use the counseling center for questions or for counseling, visit our ethical management homepage and submit the request online. All of the requests are received and handled in an undisclosed manner, and personal information and request details are strictly kept confidential so as to prevent the information from being disclosed against the will of the informants.

## Ethical Level Assessment

Since 2010, we have evaluated ethical level in the second half of a year. The purpose of the evaluation is to diagnose the ethical level that employees are actually thinking of and to improve it. The evaluation is conducted in regard to the following three indexes: ethical management framework; corporate ethics implementation; and work ethics implementation. In 2015, total score has increased from 75.8 in 2014 to 77.0 points. Overall improvement has been made in all of three indexes. Based on the evaluation results, we will continue our efforts to raise employee awareness of our ethical systems and to promote the corporate culture of ethics through training and PR activities, thereby creating a corporate environment for ethical management and enhancing the ethical level.

## Letter of Cooperation to Supplier Partners

Every year, we send an official letter of cooperation asking our supplier partners to cooperate with the company's code of conduct which prohibits valuables, entertainment, or the conducts of giving and receiving money, and providing them with information on reporting channels. After the letter is sent, it is also registered in the purchasing intranet so that all of supplier partners check the information.

## Partners' Pledge for Implementation

In order to promote ethical management to our supplier partners, we ask them to agree on our commitment and to submit a pledge for implementation. We want to take one step further from internal ethical management activities to promoting the culture of ethics to our supplier partners so that we build and develop mutual trust and cooperation and grow together.

## Monitoring Ethical Risks

### Cyber Reporting Channel

We are operating a cyber reporting channel in our website. In 2015, a total of 9 reports were received, investigated, and addressed in compliance with related rules and regulations.



### Informant Protection

We keep the personal information and reporting details of all informants confidential and protect them from being disadvantaged due to the reporting. Their identities, the evidence presented by them and other information related to the reporting are protected. Our reporting system is securely and safely operated and informant information and reporting details are strictly managed as classified information.

### Reward for Reporting and the 'Clean Company' System

To prevent people from condoning unethical behaviors which ultimately undermine the soundness of the organization, those who report irregularities such as bribery are offered a reward of up to five times of the amount of bribe money or a reward of up to USD 4,266 for the reporting. For those who commit irregularities but come clean about their acts, the level of disciplinary actions on them is reduced and the bribe money is spent on volunteer activities. We also have established a mechanism to help employees voluntarily report when they inevitably end up receiving money or gifts. Once they fill out and submit a report form to the ethics secretariat, the money or gifts received are returned to the givers with a note on our ethical management policy. If there is a situation in which received items are hard to be returned, they are donated to social welfare facilities or to religious groups under the name of the giver.

### Actions on Corruptions and Irregularities

We take strong and strict disciplinary actions on corruptions and irregularities while paying full attention to preventing such risks. Disciplinary actions are taken on the employees involved as well as supplier partners who give money and valuables. Depending on the seriousness of the case, the contract with the supplier involved may be suspended.



## ISSUE 08

# Compliance Management

We strive to act in accordance with laws and principles for compliance management and to promote fair trade so as to fulfill corporate social responsibility. In order to root out unlawful acts and cheating in trade, we declared 'LS C&S Way' in January 2015, which maps out four core values. Under the value of 'rule and responsibility', a lot of efforts have been made to establish compliance management to raise employee awareness of compliance and fairness. Since the compliance program (CP) was introduced in 2010, we have set clear behavioral standards and provided compliance training as part of the efforts for compliance and fair management.

### ✓ OUR COMMITMENTS

We minimize business loss by strengthening the role of legal affairs and public affairs teams.

### ➔ 2015 STRATEGIC DIRECTION AND KEY TASKS

#### Strategic Direction

**Promoting compliance management by conducting activities for crisis control and by raising awareness of compliance**

#### Key Tasks

##### 1. Strengthening compliance training activities

- Company-wide training on subcontracting
- Fair trade training for new employees
- Compliance as one of the subjects for the LS Group introductory training course

##### 2. Building a fair trade process

- Revision plan for 28 existing standard contracts
- Creation of 12 new standard contracts for domestic and overseas purposes

##### 3. Internal inspection and legal advice

- Internal inspection and monitoring
- Legal advice on fair trade

### ≡ 2015 KEY PERFORMANCE

#### ▶ Strengthening compliance training activities

Training on subcontracting by external lecturers and fair trade training for new employees provided

#### ▶ Building a fair trade process

Standard contracts revised, newly created and registered in the company website (40 contracts in total)

#### ▶ Establishing a preventive system

Risks selected and monitored; and a real-time preventive system established (including contract review)

### 🕒 2016 PLAN

#### ▶ To plan activities for customized compliance training by organization

#### ▶ To raise awareness of compliance by strengthening the operation of the compliance management bulletin board

#### ▶ To identify improvement points and establish a process to reflect them in management activities

## Strengthening Compliance Training Activities

### Training Status

Training Type	Number of Participants
New employee training	37
LS Group introductory training	15
Overseas resident training	4
Training on subcontracting	174
Training on the agency law	103

### Company-wide Training on Subcontracting

As the news and media reports on the unfair trade of conglomerates are drawing attention in the society and our employees recognize the increase in the external risks, we have conducted a training course on subcontracting for 173 employees in charge of subcontracting from 37 teams in 7 worksites in order to minimize external risks. External experts were invited as lectures to help employees easily understand the subject by providing information on subcontracting and case studies.



First Company-wide Training on Subcontracting (worksites in Gumi and Indong)



Second Company-wide Training on Subcontracting (Headquarters; R&D center in Gunpo; and worksites in Gunpo and Donghae)

### Compliance and Fair Trade Training for Newly-recruited and Sales Employees

All of employees joining new employee training and LS Group introductory training courses are required to take the courses on compliance and fair trade.

We are striving to promote employees' awareness of compliance management by emphasizing its importance in doing business and by taking a zero-tolerance policy on unfair or unlawful acts.



'I Am a Sales Person', an Information Session for Sales Employees on the New Law on the Fair Trade with Agencies

## Building a Fair Trade Process

### Standard Contract Revision and New Standard Contracts

In order to strengthen compliance management, we are offering specific guidelines. Our legal affairs team has revised 28 existing standard contracts for domestic and overseas purposes and made 12 new contracts in order to prevent potential legal issues and risks.

#### Revised (28) and New (12) Standard Contracts

Type	Domestic	Overseas
Revised (Existing)	1. Joint Research Development Contract 2. Construction Subcontracting Contract 3. Technology Introduction Contract 4. Agency Contract 5. Purchase Contract 6. Supply Contract 7. Real Estate Sales Contract 8. Real Estate Lease Contract 9. Confidentiality Agreement (unilateral) 10. Confidentiality Agreement (bilateral) 11. Facility Purchase Contract 12. Facility Lease Contract 13. Facility Sales Agreement 14. Service and Advisory Contract 15. Manufacturing Standard Subcontracting Contract 16. Agent Contract	1. Agency Agreement 2. Distributor Agreement 3. Employment Agreement 4. License Agreement 5. NDA – One way 6. NDA – Mutual 7. OEM Purchase Agreement 8. Purchase Agreement 9. OEM Supply Agreement 10. Supply Agreement 11. Standard Terms and Conditions 12. General Conditions of the Subcontract
New	1. Contract on the Establishment of a Pledge Right 2. Mold Manufacturing Contract 3. Contract on the Assignment of an Obligation 4. Electric Work Subcontracting Contract 5. Business Transfer Contract 6. Business Agreement	1. Service Agreement 2. Joint Research and Development Agreement 3. Consortium Agreement 4. Subcontract Agreement 5. Power of Attorney 6. Board of Resolution
Total	22 Contracts for Domestic Purposes	18 Contracts for Overseas Purposes

## Internal Inspection and Legal Advice

### Internal Inspection and Monitoring

We have identified potential risks of illegality in regard to key businesses in line with management direction and annual management goals. Efforts have also been made to strengthen activities to prevent risks in a rapidly changing environment by establishing strategies. In this regard, we have been conducting internal inspection and continuous monitoring on compliance related business activities, and setting clear behavioral standards to preserve the company value.

- Conducting an internal review on the results of the Fair Trade Commission's paper survey on the actual conditions of suppliers; and taking correction measures
- Taking a status survey and providing an educational session on the guidelines of its legal application due to the passage of agency law in the plenary session of the national assembly
- Reviewing the subcontracting laws and coming up with measures

### Contract Review and Legal Advice on Fair Trade

We are conducting activities for contract review and legal advice in our website in line with the principles of fair trade to prevent unfair contracts with stakeholders.

An easy access to and quick feedbacks for contract review and legal advice is part of our efforts to become a true 'cable solution provider' from the perspectives of customers, laws and fair competition. We are working hard to help our employees to understand the company's compliance management and to provide them with guidelines for its implementation. Such effort will help our employees to become fully aware of compliance management thereby preventing potential economic loss in the company and the society.

#### Contract Review and Legal Advice

Contract Type	Sales		Others		Total	
	Number	Ratio (%)	Number	Ratio (%)	Number	Ratio (%)
Domestic	86	45	107	55	193	100
Overseas	143	80	35	20	178	100
Total	229	62	142	38	371	100





# XPERTISE

9. Safer and Healthier Workplace

10. Environmental Management for Sustainable Development

## ISSUE 09

# Safer and Healthier Workplace

To ensure employees a safe, healthy and great place to work, the safety and health of employees is our top priority. In this context, we are making our best efforts to make a disaster-free workplace by establishing a safety and health management system based on OHSAS18001. The labor and the management are also working together to strengthen their management control over accident and disaster prevention.

### ✓ OUR COMMITMENTS

We make a safe and healthy workplace.

### ➔ 2015 STRATEGIC DIRECTION AND KEY TASKS

#### Strategic Direction

**Strengthening voluntary safety and health activities and making healthy workplace**

#### Key Tasks

**1. Strengthening voluntary safety and health activities**

- Conducting voluntary safety and health activities by team
- Ensuring facility safety
- Strengthening safety management by partner suppliers

**2. Making healthy workplace**

- Activities to prevent occupational diseases
- Activities to prevent lifestyle diseases

### ☰ 2015 KEY PERFORMANCE

▶ **Safety diagnosis and improvement activities**

A joint diagnosis team created; and 834 improvement points identified and resolved

▶ **Strengthening the effectiveness of safety training**

On-line safety training for 177 supervisors and managers and 236 office workers provided; and ESH monthly newsletter published

▶ **Ensuring facility safety**

130 cases of safety device installation for forklifts handled; real-name system implemented; and precise safety diagnosis on large cranes conducted

▶ **Intensive management of processes under PSM** Process Safety Management

Inspection by an external agency conducted and 149 improvement points identified and resolved; and explosion proof improved by using aluminum billet heating

### 🕒 2016 PLAN

▶ **Strengthening voluntary safety and health activities**

- Conducting voluntary safety and health activities by team: to conduct safety activities by production line; to provide effective safety training; and to revise a risk assessment
- Focusing on dangerous facilities management: to ensure the safety of dangerous machines and tools; to examine the regulations on dangerous machines and tools; and to improve PSM management

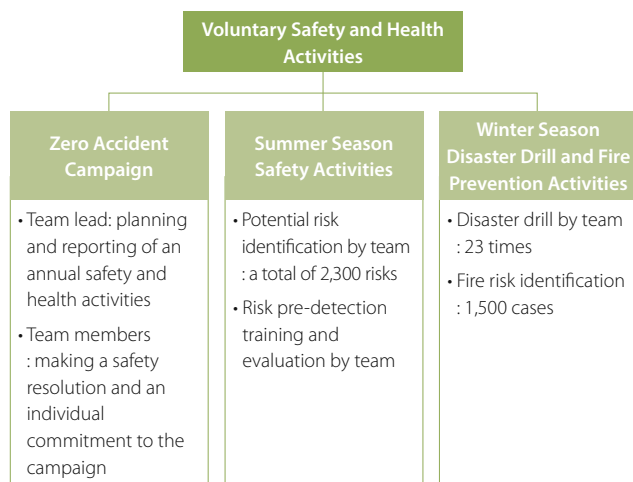
▶ **Ensuring facility safety**

- Activities to prevent occupational diseases: to run a musculoskeletal disease prevention program; and to track the health status of the employees with abnormal finding after special medical check-ups
- Activities to prevent lifestyle diseases: to run an employee health promotion program; and to distribute health education materials

## Strengthening Voluntary Safety and Health Activities

### Conducting Voluntary Safety and Health Activities by Team

Every year, a zero accident campaign is launched to raise safety awareness of employees. Under the campaign, a team lead plans an annual safety and health activities and reports them while team members in the team commit themselves to actively participating in safety and accident prevention activities and adopt a resolution to achieve the goal of zero accidents. Meanwhile, a joint diagnosis team by worksite conducts a safety diagnosis. In 2015, a total of 834 issues were identified and improvement measures have been taken. In addition, we are conducting a range of safety training for our employees such as: training for supervisors and manager; regular training; special safety training; training for new or transferred employees; and online training for office workers.



### Health and Safety Training

Curriculum	Target	Time
Regular training	Production workers	6 hours/quarter
	Office workers	3 hours/quarter (on-line training)
	Supervisors or managers	16 hours or more/year
Training for new employees	New employees	8 hours
Training for transferred employees	Transferred employees	2hours
Special safety and health training	Workers who handle machines and tools with high safety risks	16 hours or more

### Strengthening Safety Management by Partner Suppliers

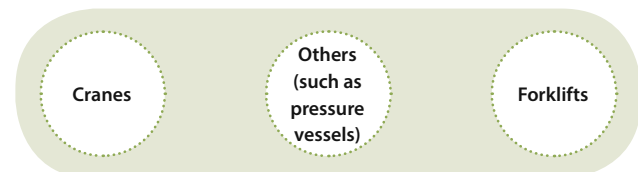
As we believe the safety issues of our partners are directly impacting

our operation, we are striving to increase their safety management level. Every month, we evaluate the suppliers on safety management and give them guidance. As for the improvement points identified in the evaluation, both the supplier partner and the team in charge of the company are held responsible to work on them. In addition, we also run a safety and health cooperation program with the presidents of our partner companies to establish a safe management plan, assess risks and improve on-site safety thereby increasing the safety and health management level of the suppliers.

### Ensuring Facility Safety

All machines and tools are inspected on a regular basis by workers in charge to secure safety while the statutory safety examination and the regular inspection by an external agency (once a year) are conducted for dangerous machines and tools. In 2015, special safety diagnosis was additionally conducted for large cranes and 84 improvement points were identified. Actions were taken on them for improvement. Meanwhile, there were 130 safety device installation cases for forklifts with higher safety risks. The real-name system for heavy vehicle drivers has also been implemented for the safety operation of those vehicles.

### Activities for Ensuring Facility Safety



#### Dangerous machines and tools

Statutory safety inspection by an external agency [1 time/year]



#### Crane Management

'14	'15
90 cases	84 cases

- Special safety diagnosis by an external agency
- Improvement of major safety devices and facilities



#### Forklift Safety Management

'14	'15
133 cases	63 cases

- Installation of cameras, speed limit alarm systems and door alarms
- Real-name system for forklift drivers (84 employees)
  - Pledge on safe driving
  - Collective training
  - Issuance of forklift license notebook

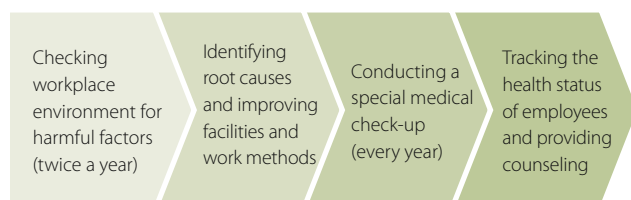


## Making Healthy Workplace

### Occupational Disease Prevention Activities

We continue to conduct activities to prevent the occupational diseases of our employees. First of all, a workplace environment check for harmful factors is conducted twice a year to identify their exposure to workers. As for the processes in which those factors are over the limits, we identify the root cause and work on improvement measures. In addition, workers in charge of the processes have special medical check-ups. For employees with abnormal findings after the check-ups, follow-up examinations are provided to track their health status along with other support including counseling.

#### Process of Occupational Disease Prevention Activities



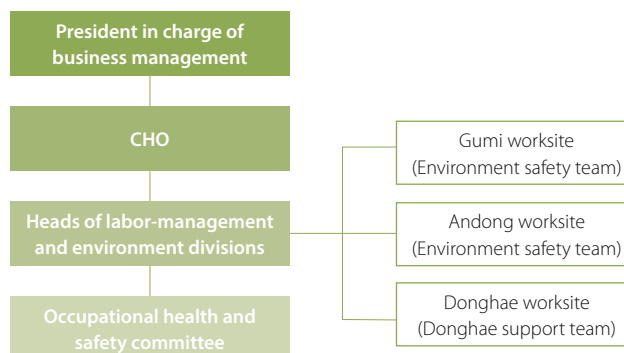
### Lifestyle Disease Prevention Activities

We provide comprehensive medical check-ups for free to employees aged 35 and older and their spouses on a yearly basis. If they need to receive extra medical treatment as a result of the check-ups, we support the medical expenses. For those who need more active health management, advice on lifestyles, workout and diet is provided to them.

### OHSAS 18001, a Safety Health Management System

We have established a management system based on OHSAS18001, an international standard for health and safety management. Every year, the management conducts a review to analyze the activities of the previous year, sets the goals for the current year, and runs programs for improvement. Each team internally reviews the status of implementation, identifies issues and conducts improvement activities on its own. We also have our status on OHSAS18001 certification evaluated by UL, a certification organization every year to meet the global standards in terms of safety health management.

#### Organization Chart



#### Industrial Accidents

Category		2013	2014	2015
Number of Accidents (case)	Gumi	2	1	3
	Indong	1	0	1
	Donghae	1	1	0
	Company Total	3	2	4
Company-wide Industrial Accident Rate (%)		0.25	0.14	0.32
Industrial Accident Rate in the Industry (%)		0.40	0.40	0.34

Category		2013	2014	2015
Frequency Rate of Injury	Gumi	0.32	0.16	0.48
	Indong	0.26	0.00	0.29
	Donghae	0.48	0.48	0.00
Company Total		0.28	0.14	0.34

\* Frequency rate of injury = number of industrial accidents / (total of yearly working hours x 200,000)

#### OHSAS 18001 Certification

Domestic Worksite	Overseas Worksite
Gumi, Indong, Donghae	LSHQ, LSCM

## ISSUE 10

# Environmental Management for Sustainable Development

We continue our efforts to promote environmental management by taking eco-friendly management approaches, by developing green products, and by actively conducting greenhouse gas emission activities. We consider environment in every process from R&D to design and disposal stages in order to reduce the environmental impact of pollution and greenhouse gas emission. Our efforts will not be limited to meeting the legal limits on environment. We will move further by systematically managing environment and by reducing greenhouse gases so that we will be able to secure global competitiveness and contribute to a green society.



### OUR COMMITMENTS

We become a leading green company by conducting sustainable ESH management activities.



### 2015 STRATEGIC DIRECTION AND KEY TASKS

#### Strategic Direction

**Developing green products and building a green worksite through environmental management activities**

#### Key Tasks

#### 1. Building green worksites

- Environmental management activities
- Environmental pollutant management • Improvement case study

#### 2. Sustainable ESH activities

- Securing transparency in environment information disclosure
- Fulfilling corporate social responsibility

#### 3. Product life cycle management

- Strengthening harmful substance management
- Establishing a cable waste recycling system

#### 4. Climate change response

- Managing climate change-related risks and opportunities
- Establishing a system to respond to the emission trading scheme in Korea (K-ETS)
- Conserving energy and reducing greenhouse gas emissions



### 2015 KEY PERFORMANCE

#### ▶ Building green worksites

Pre-emptive action taken for the expanded scope of environmental regulations; environmental pollutants reduced; and environmental facilities upgraded

#### ▶ Sustainable ESH activities

Information on the release of chemical substances, statistics and other environment information disclosed; and activities contributing to local communities conducted

#### ▶ Green Products

Response measures to the regulations on harmful substance taken; and cable waste recycling technology developed

#### ▶ Climate change response

Measures on the emission trading scheme in Korea (K-ETS) taken; and activities to disclose carbon information conducted



### 2016 PLAN

- ▶ To upgrade ESH management system (re-certification of ISO14001 and OHSAS18001)
- ▶ To invest in environmental facilities; and to reduce toxic chemicals and a small amount of harmful substances
- ▶ To come up with a mid- and long-term roadmap to greenhouse gas emissions reduction

## Building Green Worksites

### Environmental Management Activities

Since we declared internally and externally the 'ESH (Environment, Safety, and Health) Policy' for the environment, sustainable development and local communities, a lot of efforts have been made to create an environment where 'business growth' and 'environmental conservation' go together. A system for environmental management has been implemented to prevent environmental safety-related accidents, to manage our performance and goals, and to reduce greenhouse gas. All of our worksites have ISO14001 and OHSAS18001 certified and continue their efforts to implement environmental management in a systemic manner.

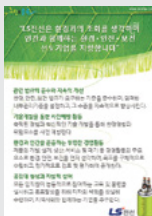


### ISO Certification Status

Catortory	Certification (ISO14001)
Domestic Worksite	Gumi, Indong, and Donghae
Domestic Subsidiary	GCI, Pountek
Overseas Subsidiary	LSCW, LSCI, LS-VINA, LSHQ, LSCM

### Our ESH (Environment, Safety, and Health) Policy

We recognize the impact of our operation on the environment and continue our activities to prevent environmental pollution and to improve the environment. We disclose our EHS policy to stakeholders; continue our efforts for technology development; maintain the safety and sustainability of the company; and comply with laws and regulations related to business activities. We participate in corporate management by setting specific and realistic goals for the prevention of environmental pollution thereby building the trust of local communities, fulfilling corporate responsibility, and achieving our business goals.



### Environmental Pollutant Management

#### Use and Recycling of Main Resources

**Usage of Main Resources** As we face a global crisis of resource and energy depletion, it is not only ethical but also obligatory for us to efficiently use resources and establish a resource recycling system. Our main resources are metals and plastics such as electrolytic copper (CU), aluminum (AL), polyethylene (PE) and polyvinyl chloride (PVC). We continue to review and develop ways to recycle raw materials and our products. In addition, we have signed agreements with government agencies including a 'voluntary agreement for cable waste recycling' and a 'resource recycling project' to take the initiative in building a resource recycling system.

#### Usage of Major Resources

Resource Type (ton)	2013	2014	2015
Electrolytic Copper (CU)	322,989	341,428	294,901
Aluminum (AL)	30,172	32,504	27,197
Polyethylene (PE)	21,919	21,542	18,812
Polyvinyl Chloride (PVC)	4,063	3,901	3,402

**Resource Recycling** Since an MOU was signed with the Ministry of Environment of Korea, we have been conducted a pilot project on waste reduction quota system. The whole processes in which waste is being generated are reviewed in order to minimize the waste to be burned and buried. As for plastics, in particular, its surface becomes contaminated or it tends to lose its material property during production. Therefore preprocessing is required to recycle plastics. In this regard, we continue our efforts to develop technology to recycle plastics as much as possible on our own and in cooperation with our partners.

**Water Resource Usage and Management** In Korea, which is categorized as a water-stressed country, water management is a very critical issue. Most of water we are using is: cooling water for cable manufacturing process such as extruding; indirect cooling water for melting furnace for electrolytic copper and aluminum; and water for residential use such as toilet water. As a result of water saving activities in 2015, total water consumption decreased by 82,000 ton from 658,000 tons in 2014, which can be translated that 226 tons of water on average was saved daily. We will continue our efforts to reduce our water consumption by maximizing water recycling in our production process and by raising the awareness of employees on water conservation.

### Water Usage and Basic Unit for Usage

Water Type (ton)	2013	2014	2015
For residential use	532,532	518,782	495,454
For industrial use	69,035	93,742	62,882
Ground water	48,742	46,245	44,858
Company total	650,309	658,769	603,194
Basic unit [usage (ton)/production volume (ton)]	1.29	1.28	1.55

### Environmental Pollutant Management

In regard to air and water pollutants, wastes, and toxic chemicals, we apply in-house limits stricter than legal limits, and monitor emissions in order to thoroughly manage and reduce environmental pollutants.

**Air Pollutant Management** The major air pollutants such as NOx Nitrogen Oxide, dust and HCl Hydrogen Chloride are released in the cable sheath extrusion and magnet wire coating processes. NOx, in particular, is produced: in the manufacturing process of magnet wires in the Gumi plant; in the SCR Southwire Continuous Rod System process; and from the aluminum smelting furnace. The amount of NOx released is approximately 18 tons per a year, accounting for 75% of total pollutants. As a result of conducting activities to reduce air pollutants, dust emission has increased 0.7 ton while HCl has dropped 0.5 ton. As most of NOx is released in the magnet wire manufacturing process, we are operating facilities such as RTO Regenerative Thermal Oxidizer and SCR Selective Catalytic Reductor to reduce NOx. All of our worksites are monitoring pollutants on a steady basis and set the concentration level of finally-released-pollutants to less than 20% compared to its legal limit.

### Major Air Pollutant Emissions

Air Pollutant Type (kg)	2013	2014	2015
Dust	3,022	3,075	3,719
NOx	20,618	21,557	17,915
HCl	2,457	2,421	1,973
HF	194	217	230
Basic unit [kg/production volume (1,000 tons)]	54.5	54.6	61.10

**Water Pollutant Management** In the cable manufacturing process, water resources are used for cooling extruded sheathed cables and electrolytic copper. As we recognize the importance of efficient waste management, we apply in-house limits stricter than legal limits under the categories of COD Chemical Oxygen Demand, SS Suspended Solids, and T-N Total Nitrogen. The wastewater generated includes certain harmful sub-

stances. However, as an analysis finds that the amount of those substances is smaller than the amount in drinking water, it is fair to say that noxious materials to humans or environment are not released in wastewater. Gumi and Indong worksites treat wastewater in their facilities by setting the level of pollutant concentration to 20% of legal limits, and then discharging water to local sewage treatment plants. Meanwhile, Donghae worksite is building a new wastewater treatment facility for efficient wastewater management. As most of wastewater is released in the process of cooling after cable extrusion, its pollutant level is much lower than in other industries. In addition, our worksites are not located in or near water source protection areas, restricted zones, special management zones, and biodiversity protection zones. Therefore, it is fair to say that the impact of water pollutants released from our worksites on the public waters and ecosystem is minimal.

### Major Water Pollutant Emissions and Basic Unit

Pollutant Type (kg)	2013	2014	2015
BOD	0	0	0
COD	1,465	962	1,319
SS	627	248	149
T-N	517	189	180
Total	2,609	1,399	1,648
Basic unit [emissions (kg)/production volume (1,000 tons)]	5.2	2.7	4.22

**Waste Management** Wastes generated in the cable manufacturing process are mostly: sludge; waste oil; waste organic solvent; waste synthetic resins such as XLPE, PE, and PVC; synthetic rubber wastes; and wood wastes including pallets and bobbins. Meanwhile, other wastes released in the worksites are residential wastes. According to the waste treatment method, wastes are separated for incineration, landfills, and recycling and managed by third party contractors certified by the government. All of metal scraps, in particular, are collected and recycled internally or in other industries. In order to check whether our wastes are treated in accordance of laws and regulations, we frequently visit our contractors for inspection and evaluation. In 2015, designated wastes and general wastes have decreased 277 tons and 1,268 tons respectively. However, as production volume has dropped 24% year on year, the basic unit has risen.



### Waste Generated and Basic Unit for Generation

Waste Type (ton)	2013	2014	2015
Designated wastes <sup>1</sup>	2,170	2,201	1,924
General wastes <sup>2</sup>	12,007	14,181	12,913
Company total	14,177	16,381	14,873
Basic unit [waste generated (ton)/ production volume (1,000 tons)]	28.2	31.9	38.03

<sup>1</sup> Designated wastes: waste oil; waste organic solvent; paint waste; and waste acid

<sup>2</sup> General wastes: cable scrap; waste synthetic resins; rubber wastes; and residential wastes

### Waste Treatment Status

Treatment Method (ton)	2013	2014	2015
Incineration	1,432	1,850	1,847
Landfill	1,825	480	423
Recycling	10,878	14,050	12,366
Recycling rate (%)	77	86	83

**Chemical Substance Management** In order to prevent chemical substance-related accidents and safely manage the substances, all of our worksites have identified the harmful properties and risks of chemical substances they use, and set limits by process. Supervisors who are in charge of the overall management of harmful chemicals and employees who are dealing with those substances in their works have received 16-hour safety training. In addition, safety training on harmful chemical substances has also been provided to all of our employees so that they have learned about: how to handle the substances in a safe manner; how to effectively respond to chemical-related accidents; and measures to prevent the accidents and to minimize damages in the accidents. As for the facilities where those substances are used, employees are conducting a weekly inspection on their own to prevent safety-related accidents. In storage facilities, QR codes of the chemicals are attached so that employees have an easy access to the information on those substances. A response system has also been established in order to swiftly respond to accidents such as the leak of harmful chemical substances, fires, and explosions. In 2016, we will continue our efforts to prevent chemical-related accidents by: evaluating the impact of toxic chemical substances on the areas outside the Gumi and Indong worksites; making plans to manage those substances; and conducting a regular safety inspection and improvement activities.

### Usage of Harmful Chemical Substances

Usage (ton)	2013	2014	2015
Harmful Chemical Substances	667	578	954

## Improvement Case Study

**Case 1 – SCR Dust Collector Upgrade** An investment worth USD 0.3 million was made in the Gumi worksite to upgrade a dust collector which handles emissions generated in the SCR process, and accessory equipment. First of all, aged and corroded ducts were replaced thereby increasing dust collection efficiency in noxious gases. A new investment was also made in a heat exchanger which reduces the temperature of hot emissions to the optimal level. As a result, corrosion in a dust collector and re-synthesis of dioxin due to high temperature were prevented. Meanwhile, additional investment in dioxin reduction equipment will be made in the first half of 2016 as part of our efforts to prevent environmental pollution.



SCR Dust Collector Upgrade

## Case 2 - Water Waste Treatment Facility Monitoring System

A monitoring system was introduced in the process of using harmful chemicals in the water waste treatment facility in Indong worksite so that employees can immediately respond to problems such as a chemical leak. In addition, as the national limits in using harmful chemical substances were subdivided into multiple sets of limits, we plan to: review whether the harmful chemicals we are using now can be replaced by general substances; verify whether the general substances are effective; and apply this new approach in 2016.



Water Waste Treatment Facility Monitoring System



## Sustainable ESH Activities

**Transparent Environment Information Disclosure**  
**Report and Disclosure of Chemical Release Survey** As part of the Korean government efforts to encourage companies to voluntarily reduce the release of chemical substances, companies should report to the government how much chemical substances are released and transferred in their business operation. Reporting should be made on a yearly basis and all of the information submitted is disclosed in the PPTR Pollutant Release and Transfer Registers system so that anyone can have an access to chemical substance release information of companies. In this regard, our worksites commission the survey to external agencies in order to: accurately measure chemical pollutant release and transfer; brace for potential issues; and come up with improvement measures. In addition, we fulfill the legal obligation by reporting the results of the survey to the Ministry of Environment.

Chemical Release Survey

**Disclosure of Corporate Environment Information** The purposes of disclosing corporate environment information in accordance with the 'environment technology and industry support law' are: to promote green management such as energy conservation, and greenhouse gas and pollution reduction; and to encourage companies and institutions to fulfill their social responsibility. Since 2011, we have disclosed our environmental information for transparent green management. Moreover, a variety of activities are being conducted to fulfill corporate responsibility.

Disclosure of Environment Information

Check List

## Fulfilling Corporate Social Responsibility

**1 Company 1 Stream Conservation Campaign** As part of our efforts to make a healthy and bright society, an agreement on '1 Company 1 River Conservation Campaign' has been made between LS C&S and Gumi city. Activities are being conducted to purify a stream in order to contribute to environment conservation in local communities as a green company.



1, 3\_ Purification Activities ▶ Target: Hanchen stream in Okgye-dong, Gumi city (between Bongsan 1 and Yangpo bridges)

2, 4\_ Stream Purification Activities Linking Environment Voucher Scheme

**1 Company 1 Riverside Area Cleaning Campaign** Since we signed an agreement with Gumi city on '1 Company 1 Riverside Area Cleaning Campaign', we have been cleaning up on the side of Nakdong river on a regular basis. To promote the voluntary participation of worksites in the campaign, additional points for the monthly environment safety evaluation are provided for the teams joining the cleaning activities.



Cleaning Area for LS C&S



Cleaning Activities



## Life Cycle Management

### Strengthening Harmful Substance Management

In accordance with the 'law on chemical substance registration and evaluation in Korea (K-REACH)' which took effect in 2015, we have upgraded the company rules on harmful substance management by establishing an internal response process and by building an inventory of chemical substances. Starting from 2019, the RoHS2 directive in EU will expand the scope of harmful substances by adding 4 phthalates (DEHP, BBP, DBP, DIBP) to existing 6 substances. Accordingly, all kinds of electrical and electronic products will be subject to the directive. In this regard, we are working on a quantitative detection test system on those 10 harmful substances in line with IEC 62321. To become qualified as a certified testing agency, we plan to acquire certification from Tüv and KOLAS.

### Establishing a Cable Waste Recycling System

We believe we should act responsibly as a global company by: efficiently using limited resources in earth; conserving them as much as we can; and sharing them with future generations. In order to minimize the environmental impacts of product disposal and to establish a resource recycling system, we are recycling our products and packages and developing technology for recycling cable wastes.

**Collection and Recycling of Cable Wastes** We have signed a voluntary agreement on plastic waste collection and recycling with the Ministry of Environment to recycle plastics in our cable waste for domestic consumption. In addition, we have built and operated a system to recycle cable wastes in cooperation with Korea Electric Wire Industry Cooperative, thereby contributing to resource recycling.

#### Waste Generated and Basic Unit for Generation

Category	2013	2014	2015
Plastics used in products (ton)	21,008	19,281	18,820
Plastics recycled (ton)	2,816	3,145	2,989
Recycling rate (%)	13.4	16.3	15.9

\* The definition of wastes here is limited to the wastes in regards to finished products sold to end users in Korea.

**Collection and Recycling of Plastic Packages** As the EPR (Extended Producer Responsibility) system has been implemented for plastic packages in Korea since 2014, we are fulfilling our responsibility by utilizing the recycling structure from the package recycling business cooperative.

#### CASE STUDY

##### XLPE Recycling Technology Development for Cable Wastes

We have succeeded in developing a technology to recycle XLPE insulating material, which is hard to be recycled. As a result of continuous development activities by joining national projects since 2011, we have successfully regenerated cross-linked polyolefin (PO) resin by decross-linking, thereby recycling it as high-value-added resin. This technology, which is applied not only to materials for cables but also to all PO resin wastes, will be utilized as a new business item and play a pivotal role in building a resource recycling society.



※ Application of this technology is limited to specific products that are agreed with customers. The images provided are for illustrative purposes only.

## Climate Change Response

### Managing Climate Change-related Risks and Opportunities

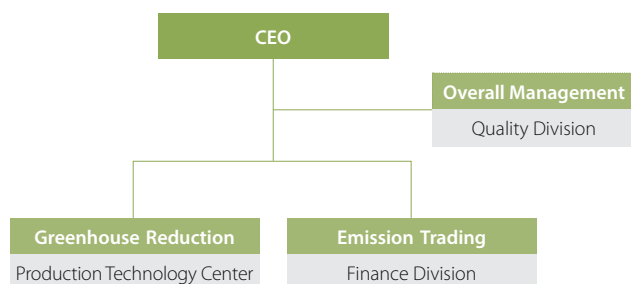
As we have identified a global climate change issue as one of key risks, we continue to manage the issue by: studying its impact; establishing a response strategy; and monitoring. Activities are being conducted to manage the risk and to produce results.

#### Climate Change Risks and Opportunities

Activities	Risks	Type	Opportunities	Activities
<ul style="list-style-type: none"> <li>Reducing greenhouse gas emissions</li> <li>Establishing a system to respond to the emission trading scheme in Korea (K-ETS)</li> </ul>	<ul style="list-style-type: none"> <li>Emission trading scheme</li> </ul>	Regulatory	<ul style="list-style-type: none"> <li>International conventions</li> <li>Energy efficiency regulations</li> <li>New and(&amp;) renewable energy policy</li> </ul>	<ul style="list-style-type: none"> <li>Developing and Selling products for new energy industries</li> <li>Superconducting cable verification</li> <li>Electric vehicles (EV); harness and module in EV and ESS</li> <li>Submarine and industrial cable systems for New and(&amp;) renewable energy such as wind power generation on the sea</li> </ul>
<ul style="list-style-type: none"> <li>Strengthening optical communication clean room management</li> <li>Implementing a risk response process by worksite</li> <li>Facility management and damage prevention; and restoration and investment</li> </ul>	<ul style="list-style-type: none"> <li>Typhoon, flood, and yellow dust due to desertification</li> </ul>	Physical	<ul style="list-style-type: none"> <li>Typhoons; floods; desertification; heavy snowfall; and temperature rise</li> </ul>	<ul style="list-style-type: none"> <li>Enhancing construction technology</li> <li>Developing and selling high-strength/heat-resistant/fire-resistant products</li> </ul>
<ul style="list-style-type: none"> <li>Expanding Scope 3 management</li> </ul>	<ul style="list-style-type: none"> <li>Corporate image</li> <li>Changes in customer behavior</li> </ul>	Others	<ul style="list-style-type: none"> <li>Corporate image</li> <li>Changes in customer behavior</li> </ul>	<ul style="list-style-type: none"> <li>Promoting communication with customers (Carbon Disclosure Project)</li> <li>Taking the initiative in green product development to meet customer's requirements</li> </ul>

### Response System to Emission Trading Scheme

We are making every effort for energy conservation and greenhouse gas reduction by joining the emission trading scheme in Korea. To swiftly respond to climate change issues, we made the company rule on 'greenhouse gas and emission trading management' in 2015. In addition, we have reorganized our greenhouse management system, under which: key issues are reported the management for decision making; and all employees are joining forces for reduction activities.



#### CASE STUDY

##### CDP Carbon Disclosure Project Supply Chain Program

We are joining CDP Supply Chain as a supplier. We provide accurate information to our customers every year, improve based on evaluation results, and fulfill our responsibility to reduce emissions in the life cycle.

## Energy Management and GHG Emissions Reduction

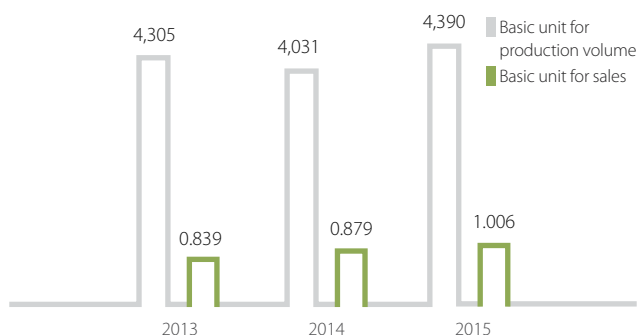
We are conducting company-wide activities to conserve energy and reduce greenhouse gas emissions in the headquarters, worksites, sales branches, and R&D centers. In particular, we concentrate our reduction efforts on worksites which account for more than 98% of our greenhouse emissions.

**Worksite Energy Management** Our production technology center took the lead in greenhouse gas and energy task force activities with the participation of production teams and quality & environment management teams from worksites. Worksites were required to keep track of energy management goal by team and the participants from worksites were cooperative and actively engaged in the energy saving activities.

### Energy Usage

Energy Type (TJ)	2013	2014	2015
Fuel	692	740	723
Electricity	2,122	2,127	2,139
Steam	152	144	132
Total	2,966	3,011	2,994

### Basic Unit for Energy Usage [TJ/production (ton); and TJ/sales (KRW 100 million\*)]



\* KRW 100 million = about USD 85,324

**Scope 1 & 2 Greenhouse Gas Emission Management** We designate a person in charge of greenhouse gas management by emission source. Due to the implementation of emission trading scheme in Korea (K-ETS), we are working on short-term (by 2017) response strategies and on a roadmap in the mid- and long-term for efficient and effective reduction and trading.

### Scope 1 & 2 Greenhouse Gas Emissions

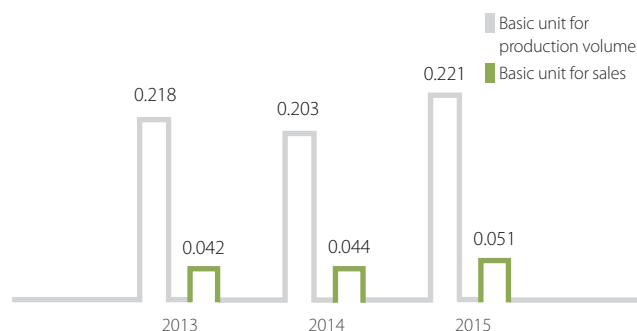
Category (1,000 tons of CO <sub>2</sub> eq)	2013	2014	2015
Scope 1	38	41	40
Scope 2	112	111	111
Total	150	152	151

### Greenhouse Gas Emissions by Type

Type (1,000 tons of CO <sub>2</sub> eq)	2013	2014	2015
CO <sub>2</sub>	149	152	151
CH <sub>4</sub>	0.213	0.254	0.240
N <sub>2</sub> O	0.283	0.285	0.280

### Basic Unit for Greenhouse Gas Emissions

[ton CO<sub>2</sub>eq/production (ton); and ton CO<sub>2</sub>eq/sales (KRW 100 million\*)]



\* KRW 100 million = about USD 85,324

### Use of SF<sub>6</sub> in Product Manufacturing

When extra-high voltage cables are inspected and tested and industrial cables are manufactured, SF<sub>6</sub> gas is used for the purpose of electrical insulation. We have introduced and operated recovery systems in all processes to prevent SF<sub>6</sub> emissions. According to the national greenhouse gas management policy, we make a separate report on SF<sub>6</sub> to the Ministry of Environment and do not include SF<sub>6</sub> in 1 & 2 greenhouse gas emissions.



SF<sub>6</sub> Collection System



Category (kg; and 1,000 tons of CO <sub>2</sub> eq)	2013	2014	2015
SF6 Purchase Quantity	1,056	2,256	2,544
Greenhouse Gas Emissions	25	54	61

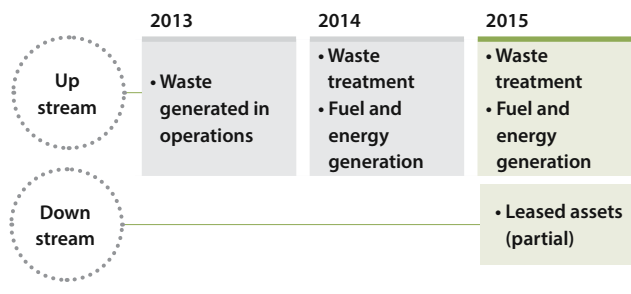
#### Independent Assurance Statement on Greenhouse Gas Emissions

To secure credibility on our greenhouse gas emissions, we have our 2015 greenhouse emissions verified by KMAR Korea Management Association Registrations & Assessments.



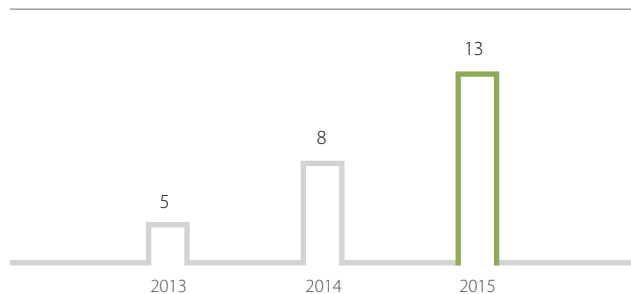
**Scope 3 Greenhouse Gas Emission Management** As greenhouse gas management in the value chain has been increasingly expanded, we are strengthening Scope 3 management. Our high-efficiency products used for power transmission and telecommunication are directly contributing to greenhouse gas emissions reduction. Such reduction activities in the value chain are serving as a driving force in order to build a low-carbon society.

#### Sources of Scope 3 Emissions Management



※ Leased property in Upstream is included in our Scope 1 & 2 emissions.

#### Scope 3 Greenhouse Gas Emissions (1,000 tons of CO<sub>2</sub>eq)



※ Scope 3 greenhouse gas emissions are calculated internally based on domestic and international criteria.

#### Scope 3 Emissions by Source

Source (1,000 tons of CO <sub>2</sub> eq)	2013	2014	2015
Waste generated in operations	5	2	3
Fuel and energy generation	-	6	6
Leased assets (partial)	-	-	4
Total	5	8	13

**Energy Conservation and GHG Emissions Reduction Activities** We implemented 170 energy-saving tasks such as: replacing the lighting with LED; introducing high efficiency facilities and equipment; and eliminating energy waste factors. As a result, USD 1.7 million worth of energy was saved and 9,300 tons of greenhouse emissions were reduced.

#### CASE STUDY

##### Energy Saving by Investing in High-efficiency Facilities

In Gumi worksite, some of fluorescent lights were replaced by LED, and lighting windows were installed instead of metal lamps to save energy.



Before vs. After of LED and Lighting Window Installation

# APPENDIX

**Statement of Financial Position**

**Income Statement**

**Cash Flows**

**Other Key Indicators**

- Business Support Organization
- Our Employees at Home and Abroad
- Human Resources Development System
- 2015 Employee Training
- Employee Value
- Membership
- Risk Management Process
- Independent Assurance Statement
- GRI G4 Index
- Additional Information
- Compliance with the UN Global Compact
- ISO 26000 Self Diagnosis Results

## Statement of Financial Position

(USD 1 million)		LS Cable & System Ltd. (Separate)			LS Cable & System Ltd. and its Subsidiaries (Consolidated)		
		2013	2014	2015	2013	2014	2015
<b>Assets</b>	<b>Current assets</b>	<b>1,278</b>	<b>1,355</b>	<b>1,194</b>	<b>1,747</b>	<b>1,776</b>	<b>1,608</b>
	Cash and cash equivalents	171	150	150	235	201	219
	Financial deposits	16	17	23	20	25	35
	Trade receivables	599	634	669	826	809	823
	Other receivables	23	26	19	33	50	41
	Financial assets at fair value through profit and loss	-	-	-	-	10	9
	Available-for-sale financial assets	-	-	-	-	-	3
	Derivative Financial instruments	11	5	5	12	5	8
	Firm commitment assets	12	29	58	12	29	59
	Inventories	222	212	183	360	339	298
	Other current assets	222	283	87	249	309	115
	<b>Non-current assets held for sale</b>	<b>-</b>	<b>8</b>	<b>7</b>	<b>-</b>	<b>22</b>	<b>21</b>
	<b>Non-current assets</b>	<b>911</b>	<b>859</b>	<b>878</b>	<b>887</b>	<b>831</b>	<b>808</b>
	Property, plant and equipment	487	460	454	713	658	642
	Intangible assets	34	29	29	42	37	37
	Investment property	8	8	7	10	9	9
	Financial deposits	0.02	0.02	0.02	0.45	1	1
	Trade receivables	64	54	47	64	54	47
	Other receivables	22	22	28	25	23	30
	Available-for-sale financial assets	4	4	4	5	5	5
	Derivative financial instruments	0.12	-	0.28	0.13	-	1
	Firm commitment assets	1	2	3	1	2	3
	Investments in subsidiaries	291	266	295	-	-	-
	Deferred income tax asset	-	14	10	5	20	17
	Other non-current assets	1	1	0.45	21	21	19
<b>Total assets</b>		<b>2,189</b>	<b>2,221</b>	<b>2,078</b>	<b>2,634</b>	<b>2,629</b>	<b>2,437</b>
<b>Liabilities</b>	<b>Current liabilities</b>	<b>1,333</b>	<b>1,128</b>	<b>1,016</b>	<b>1,792</b>	<b>1,521</b>	<b>1,395</b>
	Trade payables	452	443	357	543	536	446
	Borrowings	507	315	382	812	565	611
	Derivative financial instruments	13	28	49	17	28	50
	Firm commitment liabilities	8	2	9	8	2	9
	Other payables	107	134	114	132	154	133
	Current income tax liabilities	16	18	18	18	19	20
	Provisions for other liabilities and charges	-	-	-	18	17	17
	Other current liabilities	230	189	88	244	201	110
	<b>Non-current liabilities</b>	<b>404</b>	<b>507</b>	<b>436</b>	<b>458</b>	<b>589</b>	<b>474</b>
	Borrowings	372	480	391	423	554	419
	Derivative financial instruments	1	2	3	2	2	3
	Firm commitment liabilities	0.05	-	0.27	0.05	-	1
	Other payables	5	2	1	3	3	0.32
	Net defined benefit liabilities	10	11	13	12	13	15
	Deferred income tax liabilities	1	-	-	2	1	1
	Provisions for other liabilities and charges	15	12	28	15	16	35
<b>Total liabilities</b>		<b>1,737</b>	<b>1,635</b>	<b>1,452</b>	<b>2,250</b>	<b>2,110</b>	<b>1,869</b>
	<b>Equity attributable to owners of the parent</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>354</b>	<b>493</b>	<b>526</b>
<b>Capital</b>	Capital stock	61	80	80	61	80	80
	Share premium	349	463	463	349	463	463
	Accumulated other comprehensive income	1	1	1	(6)	(4)	(2)
	Other equity components	(0.09)	(0.09)	(0.09)	201	201	226
	Retained earnings(Accumulated deficit)	41	43	82	(251)	(246)	(241)
	Non-controlling interest	-	-	-	29	26	42
<b>Total equity</b>		<b>452</b>	<b>586</b>	<b>626</b>	<b>384</b>	<b>519</b>	<b>568</b>
<b>Total liabilities and equity</b>		<b>2,189</b>	<b>2,221</b>	<b>2,078</b>	<b>2,634</b>	<b>2,629</b>	<b>2,437</b>

## Income Statement

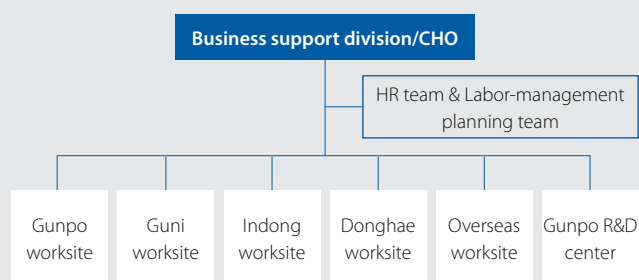
(USD 1 million)		LS Cable & System Ltd. (Separate)			LS Cable & System Ltd. and its Subsidiaries (Consolidated)		
		2013	2014	2015	2013	2014	2015
Continuing operations	<b>Sales</b>	<b>2,974</b>	<b>2,922</b>	<b>2,539</b>	<b>3,879</b>	<b>3,439</b>	<b>2,997</b>
	<b>Cost of sales</b>	<b>2,694</b>	<b>2,667</b>	<b>2,272</b>	<b>3,517</b>	<b>3,113</b>	<b>2,668</b>
	<b>Gross profit</b>	<b>281</b>	<b>255</b>	<b>267</b>	<b>362</b>	<b>327</b>	<b>329</b>
	Selling and administrative expenses	160	177	180	246	240	230
	<b>Operating profit</b>	<b>121</b>	<b>78</b>	<b>87</b>	<b>116</b>	<b>87</b>	<b>99</b>
	Other income	153	169	273	157	176	276
	Other expenses	138	155	263	173	162	272
	Financial income	14	13	8	11	9	5
	Financial expenses	66	30	24	90	44	33
	Other non-operating income	(46)	(40)	(9)	(5)	(25)	(33)
	<b>Profit (loss) before income tax</b>	<b>38</b>	<b>36</b>	<b>73</b>	<b>16</b>	<b>41</b>	<b>41</b>
	Income tax expense	9	21	22	10	25	26
	<b>Profit (loss) for the year</b>	<b>29</b>	<b>15</b>	<b>51</b>	<b>5</b>	<b>15</b>	<b>16</b>
	Loss for the year from discontinued operations	(9)	(10)	(8)	(80)	(10)	(8)
Profit for the year		20	5	43	(74)	5	7

## Cash Flows

(USD 1 million)		LS Cable & System Ltd. (Separate)			LS Cable & System Ltd. and its Subsidiaries (Consolidated)		
		2013	2014	2015	2013	2014	2015
<b>Cash flows from operating activities</b>		<b>179</b>	<b>(31)</b>	<b>97</b>	<b>196</b>	<b>11</b>	<b>153</b>
Cash generated from operations		246	30	124	333	83	197
Interest received		6	3	1	10	5	3
Dividends received		6	6	5	0.06	0.07	0.02
Interest paid		(73)	(36)	(17)	(132)	(38)	(27)
Income tax paid		(5)	(34)	(15)	(16)	(39)	(20)
<b>Cash flows from investing activities</b>		<b>(38)</b>	<b>(24)</b>	<b>(69)</b>	<b>(15)</b>	<b>(43)</b>	<b>(68)</b>
Decrease (Increase) in financial deposits		31	(0.03)	(6)	38	(5)	(10)
Decrease (Increase) in other receivables		2	(2)	(10)	2	(5)	(3)
Proceeds from disposal of assets held-for-sale		63	-	2	63	-	2
Proceeds from disposal of property, plant and equipment		14	1	5	16	2	6
Proceeds from disposal of intangible assets		1	0.03	1	2	0.09	1
Proceeds from disposal of subsidiaries		7	-	46	-	-	-
Proceeds from disposal of other non-current assets		0.02	-	0.10	-	-	-
Proceeds from disposal of available-for-sale securities		-	-	(0.03)	-	-	-
Acquisition of property, plant, and equipment		(95)	(18)	(38)	(140)	(23)	(46)
Acquisition of intangible assets		(0.44)	(0.14)	(0.33)	(1)	(0.33)	(0.42)
Payments for acquisition of financial assets at fair value through profit or loss		-	-	-	-	(10)	(1)
Net increase in derivatives		(6)	(4)	(9)	-	-	-
Increase (Decrease) in derivatives		-	-	-	6	(0.17)	(17)
Others		-	-	-	(1)	(1)	1
<b>Cash flows from financing activities</b>		<b>(121)</b>	<b>34</b>	<b>(28)</b>	<b>(190)</b>	<b>0.27</b>	<b>(63)</b>
Increase (Decrease) in proceeds from short-term borrowings		334	83	(147)	(39)	50	(203)
Proceeds from long-term borrowings		-	-	-	591	66	-
Proceeds from issuance of debentures		-	162	205	-	162	205
Repayment of current portion of long-term borrowings		-	-	-	(341)	(67)	(99)
Repayment of long-term borrowings		-	-	-	(1)	(0.33)	(9)
Repayment of borrowings		(427)	(0.33)	(85)	-	-	-
Redemption of debentures		-	(341)	-	(335)	(341)	-
Payment for investment in subsidiaries		-	-	-	(0.18)	(0.08)	44
Proceeds from the issuance of common stock		-	133	-	(1)	(2)	(1)
Proceeds from the issuance of common stock		-	(2)	-	-	133	-
Decrease in equity due to spin-off		(28)	-	-	(63)	-	-
Others		-	(1)	(0.44)	(0.20)	(1)	(0.44)
<b>Increase (Decrease) in cash and cash equivalents</b>		<b>21</b>	<b>(21)</b>	<b>(0.34)</b>	<b>(9)</b>	<b>(32)</b>	<b>21</b>
Cash and cash equivalents at the beginning of the year		150	171	150	244	235	201
Exchange gains (losses) on cash and cash equivalents		0.11	(0.13)	0.17	(1)	(2)	(3)
<b>Cash and cash equivalents at the end of the year</b>		<b>171</b>	<b>150</b>	<b>150</b>	<b>235</b>	<b>201</b>	<b>219</b>

## Business Support Organization

In order to guarantee the basic rights of employees and create a good working environment, the labor-management planning and the HR teams are conducting HR-related activities: the labor-management team is in charge of company-wide labor-management strategies and manages wages, collective agreements, and labor costs while the works of HR team are domestic and overseas employee management, talent nurturing, and organizational performance management. In addition, each worksite has a labor-management general affairs team to promote communication and to provide HR-related services.



## Our Employees at Home and Abroad

As of the end of 2015, the total number of our employees at home and abroad is 2,176. By place of work, 472 employees are working at the headquarters; 35 in Anyang and Gunpo worksites; 1,096 in Gumi and Indong; 331 in Donghae; 146 in R&D centers; and 96 in overseas worksites. Due to the increase in the number of overseas construction projects, the number of employees assigned to overseas worksites has risen.

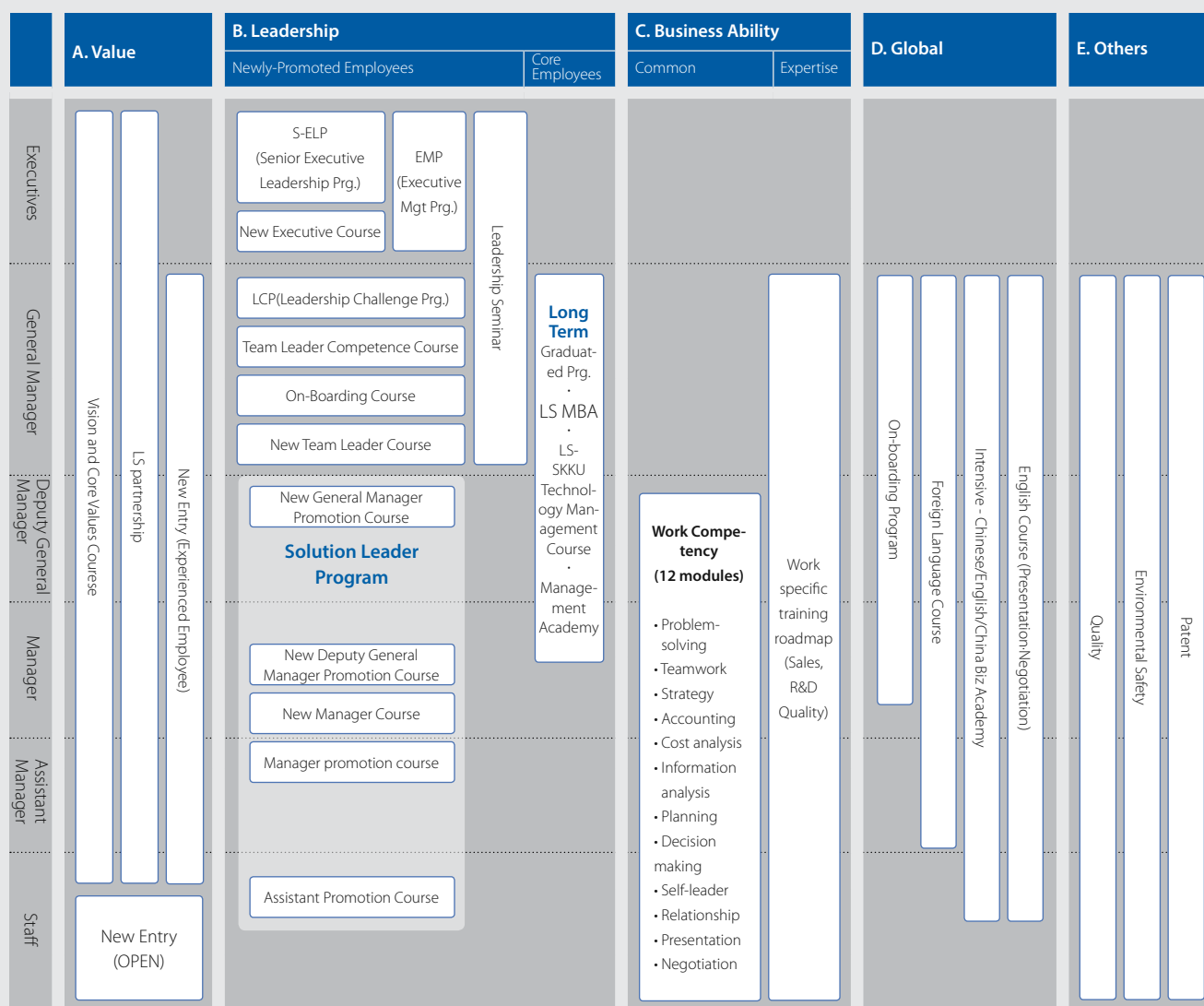
Category ( person)		2013	2014	2015
Place of Work	Headquarters	462	482	472
	Anyang and Gunpo	190	130	35
	R&D Center	162	140	146
	Gumi and Indong	1,107	1,038	1,096
	Donghae	225	330	331
	Overseas	59	79	96
Occupational Group	Office workers	1,054	1,048	1,061
	Oversea resident employees	59	38	38
	Technical workers	934	985	1,000
	Contract workers	158	128	77
Total		2,205	2,199	2,176
Turnover Rate		9.80%	7.50%	6.50%

Our 4,276 employees at home and abroad are the driving force of our growth and development. We are pursuing 'Glocalization (Global + Localization)' under which both the global capabilities of the headquarters and the local capabilities of worksites are strengthened and secured. In order to promote global diversity and capabilities, we are actively recruiting locals in overseas worksites and foreign employees in domestic worksites to create a synergy so that we, as a global leading company, will be able to achieve our vision, 'Enable the Cabled World'. In our global network, foreign employees account for 51%, and 97% of employees at our overseas worksites are locals. We are applying to all of our worksite the basic principles: we respect cultural diversity and different ideas; and values and develop a system considering the characteristics of each worksite. At the same time, our basic principles such as respecting human rights, nurturing talents and putting safety as a top priority are being equally applied to all of our worksite.

Region	Country	Number of Employees
Asia	Korea	2,176
	China	881
	Japan	3
	Vietnam	722
	Singapore	18
	India	287
	the Philippines	1
	Indonesia	2
	Hong Kong	2
	Malaysia	92
Americas	US	3
	Peru	1
Europe	Russia	1
	UK	2
Oceania	Australia	4
the Middle East	Qatar	48
	Pakistan	7
	Dubai	6
	Bahrain	9
	Kuwait	11



## Human Resources Development System

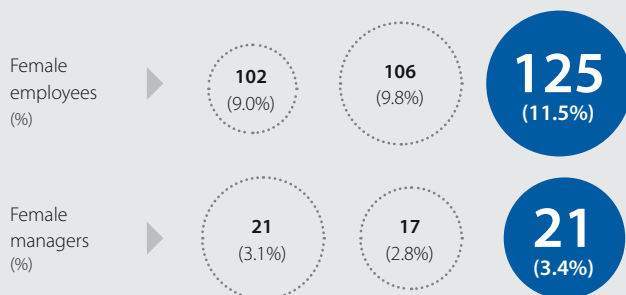


## 2015 Employee Training

Category	2013	2014	2015
Average training time per employee (including technical workers)	33.9	37.7	45
Average training time per employee by job position			
Executives (including the heads in charge of divisions)	23	21	43
Managers (from managers to general managers)	42	74	66
Assistant managers and Rank-and-file employees	81	67	112
Training Expenses (USD 1 million)	2.2	2.3	2.5

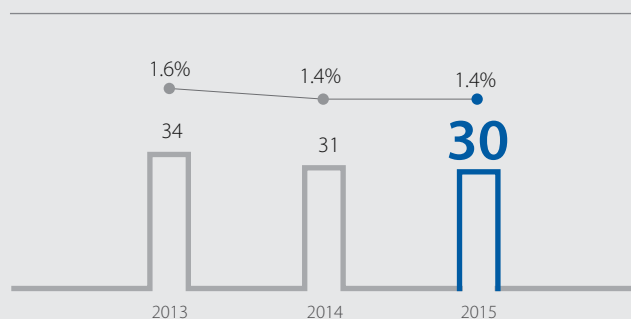
## Employee Value

### Female Employees in Managerial Positions



The ratio of female managers = the ratio of female managers out of all managers

### Employees with Disabilities (person)



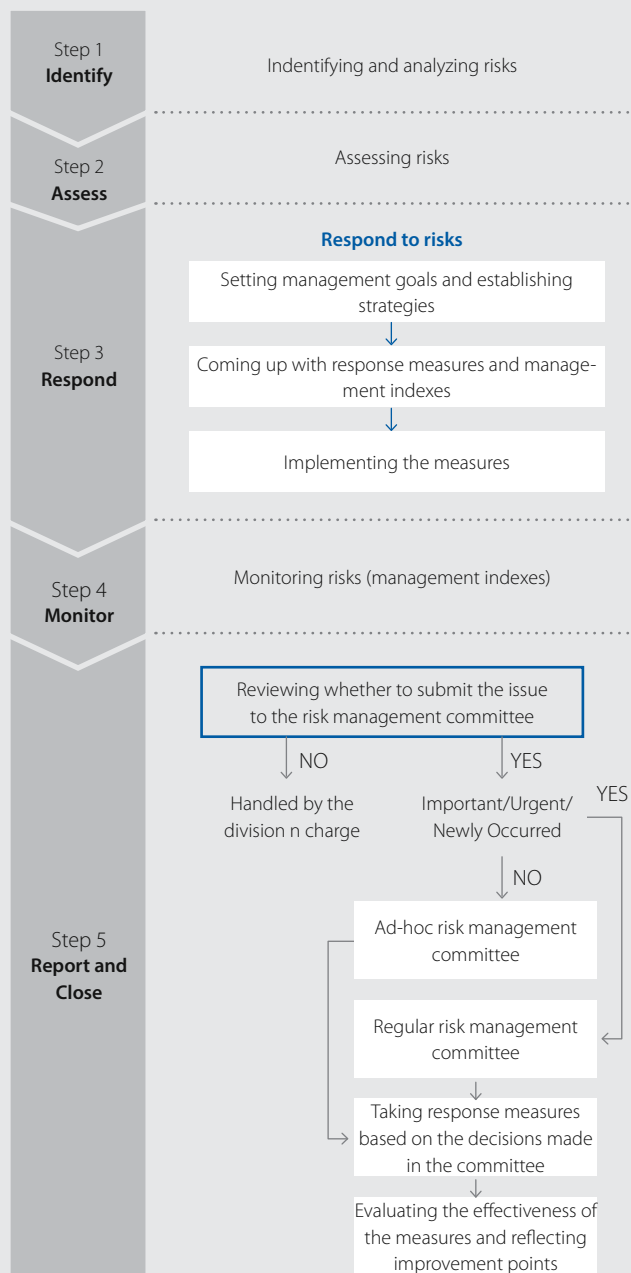
### Use of Employee Welfare Fund

Purpose of Use		2013	2013	2015
Employee welfare fund	Number of beneficiaries (person)	301	289	287
	Amount (USD)	411,945	389,164	388,993
Support of school expenses	Number of beneficiaries (person)	510	674	476
	Amount (USD)	2,571,462	2,629,212	2,360,635

## Membership

- Korean Institute of Electrical Engineers (KIEE)
- Korea Electric Association
- Underground transmission system research society
- CIGRE Korea
- Korea Automobile Manufacturers Association (KAMA)
- Korea Electrical Manufacturers Association
- Korea Electric Wire Industry Cooperative (KEWIC)
- Korea Association for ICT Promotion (KAIT)
- Korea Wind Energy Industry Association (KWEIA)
- CIRED Korea
- ICF
- Korea Engineering & Consulting Association (KENCA)
- Korea Electrical Contractors Association
- Korea Information & Communications Contractors Association (KICA)
- Korea Employers Federation (KEF)
- Anyang Chamber of Commerce
- Korea International Trade Association (KITA)
- Council of the commanders of the reserve forces in Anyang city
- MOTIE emergency plan association, Inc.
- Korea HRD association
- Korea Personnel Improvement Association (KPI) (information exchange meeting for the heads of HR teams)

## Risk Management Process



The purpose of risk management process is to prevent risks and it is composed of the five steps: identify; assess; respond; monitor; and report and close. The process are as follows: identify potential risks which may impact a company and review whether the risk may serve as opportunities or crises; assess the impact of the risks in achieving goals; establish response measures; review, supervise and examine the risks ; and close them.

## Independent Assurance Statement

The Business Institute for Sustainable Development (BISD), led by the Korea Chamber of Commerce & Industry, was requested by LS Cable & System to serve as an independent 'third-party assurance institute' for the '2015 LS Cable & System Sustainable Management Report' (hereinafter 'Report'), and submits the assurance statement as follows.

### Purpose

The purpose of this assurance report is to identify any major errors or biases in the Report, to conduct independent assurance procedures to determine whether the sustainable management issues of LS Cable & System were appropriately reported, and to present an assurance opinion.

### Responsibilities and Independence

This report contains matters on LS Cable & System's sustainable management efforts, achievements and future plans in 2015. All responsibility regarding the drafting of the report lies with LS Cable & System.

In conducting assurance procedures on the report and providing assurance opinions to the board of directors, BISD has no management-related interests in profits with LS Cable & System, aside from carrying out third-party assurance, in order to maintain independence and autonomy.

### Assurance Standards and Restrictions

BISD performed the assurance evaluation in consideration of the three accountability principles (inclusivity, materiality and responsiveness) of AA1000AS (2008) and the principles for defining report content and report quality of the Global Reporting Initiative G4 guidelines.

Physical inspections were conducted at the headquarters of LS Cable & System located in Anyang. The scope of the assurance evaluation was limited to only those performances stated in the Report and excludes data from previous years and data reported online. Furthermore, Green-house gas data that has already been verified from another third-party organization was not subjected to the assurance evaluation.

### Major Assurance Procedures

For the assurance process, LS Cable & System's employees were engaged in interviews. Results from the interview and other relevant documents provided by LS Cable & System were examined. Major assurance procedures undertaken are as follows:

- Review of application of company's internal sustainability report standards
- Review of the Report contents and the information collection process
- Review of the materiality assessment process, core issues and company policies
- Performance of physical inspections and interviews with employees.

### Opinions

BISD performed the assurance evaluation in accordance with the procedures identified above, and the Report was modified by LS Cable & System if and when deemed necessary. Based on the assurance evaluation, BISD is not aware of any significant errors in the Report and confirmed that the Report was written in accordance with GRI G4 guidelines (core option). The opinions of BISD produced as a result of its assurance evaluation and in consideration of the AA1000APS accountability standards are explained below.

- **Inclusivity:** Does LS Cable & System adhere to the principle of stakeholder engagement in order to ensure a responsible and strategic response in advancing sustainability management?
  - LS Cable & System gathered major concerns and opinions from core stakeholders, including its customers, employees, partners, local communities, shareholders and investors through stakeholder communication channels.
  - BISD is not aware of any significant stakeholder groups that were omitted from the process of gathering sustainability management issues through LS Cable & System's stakeholder communication channels.

- **Materiality:** Does LS Cable & System include material issues that affect stakeholders in the entire spectrum of sustainability management in the Report?
  - LS Cable & System identified major issues through the materiality assessment and compiled opinions from each stakeholder group in the process of the materiality assessment process.
  - BISD is not aware of any significant issues that were omitted from the process.
- **Responsiveness:** Does LS Cable & System respond appropriately to stakeholder issues?
  - LS Cable & System has acknowledged the impact of its business decisions on stakeholders and responded properly with coherent actions. The Report presents related performances during the reporting period.
  - BISD is not aware of any violations of the principle of responsiveness in LS Cable & System's response to major sustainability management issues or performances that are described in the Report from the perspective of materiality.

## Recommendations

BISD makes the following recommendations within a scope that does not affect the assurance results:

- The features that stood out in the Report were the systematization and inclusion of various stakeholders' opinion in the materiality assessment. In addition, the inclusion of 'respect for human rights and diversity' and 'environmental system' as top issues in the Report signifies the importance towards the society and environment has been raised. BISD acknowledges the promptness shown by LS Cable & System in recognizing social and environmental issues. From this date forth, through materiality assessment, BISD recommends LS Cable & System to systematically supervise the top issues and to present them in the Report.
- BISD recommends that LS Cable & System continues to put effort holistically into corporate sustainability management and contribute to the society. LS Cable & System is recommended to develop representative social responsibility program with the participation of the entire community with stakeholders.
- BISD recommends reporting Corporate Social Responsibility issues of overseas sites by expanding the boundary of sustainability management. This is due to LS Cable & System expansion in global markets and the upcoming enforcement of the EU non-financial disclosure which will begin in 2017. This will result in increased attention of the stakeholders on the CSR issues.



May 2015  
President  
**Chun, Subong**

## GRI G4 Index (General Standards Disclosures)

● Fully Reported    ◐ Partly Reported    ○ Not Reported    N/A Not Applicable

Category	Indicators		Report level	Page
Strategy and Analysis	G4	1	Statement from the most senior decision-maker	● 4~7
	G4	2	Provides a description of Key impacts, risks, and opportunities	● 12~13
Organizational Profile	G4	3	Report the name of the organization	● 14
	G4	4	The primary brands, products, and services	● 14, 16~17
	G4	5	The location of the organization's headquarters	● 14
	G4	6	The number of countries where the organization operates	● 14~15
	G4	7	The nature of ownership and legal form	● 10
	G4	8	The markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries)	● 14~15
	G4	9	Scale of the organization	● 15
	G4	10	Total workforce	● 77
	G4	11	The percentage of total employees covered by collective bargaining agreements	● 84
	G4	12	The organization's supply chain	● 30, 39~41
	G4	13	Any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain	● 3
	G4	14	Whether and how the precautionary approach or principle is addressed by the organization	● 11
	G4	15	List Externally developed economic, environmental, and social charters, principles, or other initiatives	● 86
	G4	16	Memberships in associations and/or national/international advocacy organizations in which the organization	● 79
Identified Material Aspects And Boundaries	G4	17	All entities included in the organisation's consolidated financial statements or equivalent documents	● 14~15
	G4	18	The process for defining the report content and the aspect boundaries	● 22~23
	G4	19	List all the material Aspects identified in the process for defining report content	● 22~23
	G4	20	For each material Aspect, report Aspect Boundary within the organization	● 22~23
	G4	21	For each material Aspect, report the Aspect Boundary outside the organization	● 22~23
	G4	22	The effect of any restatements of information provided in previous reports, and the reasons for such restatements	● 2~3
	G4	23	Significant changes from previous reporting periods in the Scope and Aspect Boundaries	● 2~3
Stakeholder Engagement	G4	24	List of stakeholder groups engaged by the organization	● 18~19, 84
	G4	25	Basis for identification and selection of stakeholders with whom to engage	● 84
	G4	26	Organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group	● 18~19
	G4	27	Key topics and concerns that have been raised through stakeholder engagement	● 22~23
Report Profile	G4	28	Reporting period such as fiscal or calendar year) for information provided	● 3
	G4	29	Date of most recent previous report (if any)	● 3
	G4	30	Reporting cycle such as annual, biennial)	● 3
	G4	31	Provide the contact point for questions regarding the report or its contents	● 3
	G4	32	GRI Index ('In accordance' option, GRI Content index, and the external assurance report)	● 82~84
	G4	33	Policy and current practice with regard to seeking external assurance for the report	● 80~81
Governance	G4	34	Report the governance structure of the organization, including committees of the highest governance body	● 10~11
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	● 55
	G4	57	Report the internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity, such as helplines or advice lines	● 55~56
	G4	58	Report the internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity, such as escalation through line management, whistleblowing mechanisms or hotlines	● 56



## GRI G4 Index (Specific Standards Disclosures)

● Fully Reported   ● Partly Reported   ○ Not Reported   N/A Not Applicable

Category	Aspect	Indicators		Report level	Page
DMA	DMA	G4	DMA	Report why the Aspect is material Report how the organization manages the material Aspect or its impacts Report the evaluation of the management approach	● 24~25, 33, 38~39
Economic	Economic Performance	G4	EC1	Direct economic value generated and distributed	● 18~19, 26
		G4	EC2	Financial implications and other risks and opportunities due to climate change	● 71
		G4	EC3	Coverage of the organization's defined benefit plan obligations	● 45
		G4	EC4	Financial assistance received from government	● 84
	Market Presence	G4	EC5	Ratios of standard entry level wage by gender compared to local minimum wage	● 84
	Indirect Economic Impacts	G4	EC7	Development and impact of infrastructure investments and services supported	● 46~49
		G4	EC8	Significant indirect economic impacts, including the extent of impacts	● 18~19, 48~49
	Procurement Practices	G4	EC9	Proportion of spending on local suppliers at significant locations of operation	● 18~19
Environmental	Materials	G4	EN1	Materials used by weight or volume	● 65, 70
		G4	EN2	Percentage of materials used that are recycled input materials	● 65, 67, 70
	Energy	G4	EN3	Energy consumption within the organization	● 72
		G4	EN5	Energy intensity	● 72
		G4	EN6	Reduction of energy consumption	● 72
		G4	EN7	Reductions in energy requirements of products and services	● 67
	Water	G4	EN8	Total water withdrawal by source	● 66
		G4	EN9	Water sources significantly affected by withdrawal of water	● 84
	Emissions	G4	EN15	Direct greenhouse gas(GHG) emissions (scope 1)	● 72
		G4	EN16	Energy indirect greenhouse gas(GHG) emissions (scope 2)	● 72
		G4	EN17	Other indirect greenhouse gas(GHG) emissions (scope 3)	● 73
		G4	EN18	Greenhouse gas (GHG) emissions intensity	● 73
		G4	EN19	Reduction of greenhouse gas(GHG) emissions	● 72
		G4	EN20	Emissions of ozone-depleting substances (ODS)	● 72
		G4	EN21	NOx, Sox, and other significant air emissions	● 66
	Effluents and Waste	G4	EN23	Total weight of waste by type and disposal method	● 67
		G4	EN24	Total number and volume of significant spills	● 84
	Products and Services	G4	EN28	Percentage of products sold and their packaging materials that are reclaimed by category	● 70
	Compliance	G4	EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	● 84
	Environmental Grievance Mechanisms	G4	EN34	Number of grievances about environmental impacts	● 84
Social - Human Rights	Investment	G4	HR1	Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	● 84
		G4	HR2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	● 52
	Security Practices	G4	HR7	Percentage of security personnel trained in the organization's human rights policies or procedures	● 52
	Indigenous Rights	G4	HR8	Total number of incidents of violations involving rights of indigenous peoples and actions taken	● 84
Social - Society	Local Communities	G4	SO1	Number of grievances about human rights impacts through formal grievance mechanisms	● 46~49
	Anti-corruption	G4	SO3	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	● 84
		G4	SO4	Communication and training on anti-corruption policies and procedures	● 55, 58
		G4	SO5	Confirmed incidents of corruption and actions taken	● 56
	Anti-competitive Behavior	G4	SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices	● 84
	Compliance	G4	SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance	● 84
	Supplier Assessment for Impacts on Society	G4	SO10	Significant actual and potential negative impacts on society in the supply chain and actions taken	● 84
Social - Product Responsibility	Marketing Communications	G4	PR6	Sale of banned or disputes products	● 84

## Additional Information

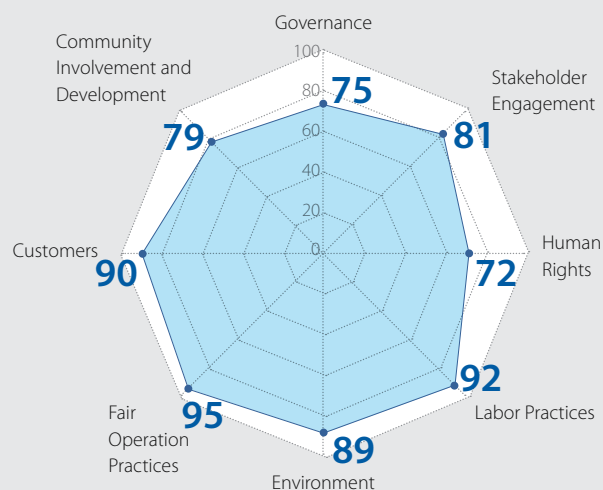
G4 11	All employees are subject to the results of collective bargaining agreements.					
G4 24/25/26	<b>Stakeholders</b> Our stakeholders are 1) an individual or groups that effect/s by business activities 2) an individuals or group that affect/s on business performance, 3) an individual or groups that has/have finical, legal, operational responsibilities. We use various communication channel to communicate with them and place our upmost effort to reflect their opinion when we conduct our business activities.					
EC4	Financial assistance received from government		(In thousand USD)	2013	2014	2015
	Tangible Assets	land		14,029	14,029	13,520
		Buildings		1,867	1,752	1,637
		machines & equipment		315	284	253
	Intangible Assets	R&D		839	589	412
EC5	Ratio of entry level wage compared to local minimum wage is 263%.					
EN9	We receive water resources from the rivers and dams: Gumi/Indong plants from Nakdong River; Anyang plant from Paldang dam; and Donghae plant from Dalbang dam. The water collected from resources was supplied by the water supply offices in each area, after being filtered by K-water, which is Korea's governmental agency for comprehensive water resource development and provision.					
EN24/EN34	No violations of chemical substance spill or environmental regulations during the reporting period					
EN29	There is no fines and sanctions imposed due to environmental law violations in 2015.					
EN31	We have invested USD 15,119 in environment and spent USD 11,314 for the maintenance of the environment.					
LA4	We disclose material information and changes related to employee welfare and benefits on our website in real time.					
LA5	Occupational Health and Safety Committee which is composed of seven representatives from both the management team and the labor union to participate, provide opinions, establishes plans and makes decisions for improving the workplace safety level.					
LA13	Employees with the same position and same job are paid equally. Accordingly, there is no wage discrimination because of gender.					
HR1/HR10/ HR11	When deciding new investment including new business setting-up, acquisition, and joint venture, etc., we carry out QA procedure including labor practice and human right. If a newly invested business site do not meet I international human right principles, we will improve it as a top priority matter.					
HR8	No violation involving rights of indigenous people during the reporting period.					
SO3	No operation site with corruption risks.					
SO7/SO8	We make strenuous efforts to compete in a fair and transparent manner. However, some fair trade violation cases that occurred before we introduced the Fair Trade Compliance and Compliance Program (CP) are still under investigation and subject to lawsuits as of 2015. Please refer to our 2015 audit report for more information about these lawsuits. We will make the utmost effort to encourage our employees to comply with laws and not to do anything wrong to violate fair trade norms.					
SO10	As long as we know, there is no supplier that caused negative impacts in 2015.					
PR6	There is no products that has been prohibited to sell in 2015.					

## Compliance with the UN Global Compact

	10 Principles	Major Activities	Page
Human Rights	1. Businesses should support and respect the protection of internationally proclaimed human rights and;	We respect the internationally declared standards and regulations on human rights protection including UN Global Compact based on our core values of 'One LS C&S'. A lot of efforts have been made to protect human rights and prevent human rights abuse in accordance with the chapter 5 in our code of conduct.	9, 18~19
	2. make sure that they are not complicit in human rights abuses.		39~41, 51~53
Labor	3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	We provide human rights education to promote mutual respect among employees with different cultural and social backgrounds. Our vision and values are shared with overseas subsidiaries. We prohibit unfair discrimination for reasons of gender, educational background, age, nationality, and religion and in regard to recruiting, promotion, and compensation in line with the chapter 5 in our code of conduct. We also strictly prohibit child and forced labor in accordance with the Labor Standard Act of Korea and the labor principles of UN Global Compact. We have promoted harmonious and cooperative labor-management relationship. As a result, there have been no labor disputes for the last 27 years since 1989.	51~53
	4. the elimination of all forms of forced and compulsory labor;		51~53
	5. the effective abolition of child labor; and		51~53
	6. the elimination of discrimination in respect of employment and occupation.		51~53
Environment	7. Businesses should support a precautionary approach to environmental challenges;	We strive to contribute to the sustainable social development by developing eco-friendly products and by running an environment management system. Efforts are made to prevent environment safety accidents, to manage goals and results, and to reduce greenhouse gas. All of our worksites have acquired ISO14001 and OHSAS18001 certifications to systematically manage environment.	64~73
	8. undertake initiatives to promote greater environmental responsibility; and		64~73
	9. encourage the development and diffusion of environmentally friendly technologies.		27~32
Anti-Corruption	10. Businesses should work against corruption in all its forms, including extortion and bribery.	Based on 'Rule & Responsibility', one of our core values, we have established a code of conduct that serves as the criteria of action and value judgment. Our ethics secretariat under the internal audit & consulting team is monitoring non-ethical acts such as violation of code of conduct, unfair trade, and unfair practices to prevent them. In addition, we are operating a cyber reporting channel and have established systems such as reward for reporting and 'Clean Company' so as to help employees voluntarily report when they inevitably end up receiving money or gifts. As for irregularities and corruption, a thorough investigation is conducted and disciplinary actions are taken.	54~59

## ISO 26000 Self Diagnosis Results

We use ISO 26000, the international standard on social responsibility, as the basis for checking and improving the present status of the company. Using a BISD-IPS SR index model, we have examined our social responsibility under ISO 26000 guidelines' eight core subjects of stakeholders' engagement, governance, customers, the environment, labor practices, human rights, community involvement and development and fair operation practices. The results are shown below.



This year, improvement has been made in 'Governance' and 'Stakeholder Engagement' as a result of our efforts to respect diversity and to listen to stakeholders. In regard to our social responsibility, we will continue our efforts to implement sustainability management by communicating with our stakeholders, discussing issues with the board of directors and reflect what have been communicated and discussed in our business activities.

Core Subject	Issue	Page
Organizational Governance	Decision-making Process and Structure	10, 18~19
Human Rights	Due Diligence	51~56
	Human Rights Risk Situation	
	Avoidance of complicity	
	Resolving Grievances	
	Discrimination and Vulnerable Groups	
	Civil and Political Rights	
	Economic, Social, and Cultural Rights	
	Fundamental Principles and Rights at Work	
Labor Practices	Employment and Employment Relationships	42~45, 51~53, 77~79
	Conditions of Work and Social Protection	
	Social Dialogue	
	Health and Safety at Work	
	Human Development and Training in the Workplace	
Environment	Prevention of Pollution	64~73
	Sustainable Resource Use	
	Climate Change Mitigation and Adaptation	
	Protection of the Environment, Biodiversity and Restoration of Natural Habitats	
Fair Operating Practices	Anti-Corruption	39~41, 54~56
	Responsible Political Involvement	
	Fair Competition	
	Promoting Social Responsibility in the Value Chain	
	Respect for Property Rights	
Consumer Issues	Fair Marketing, Factual and Unbiased information, and Fair Contractual Practices	27~32, 57~59
	Protecting Consumers' Health and Safety	
	Sustainable Consumption	
	Consumer Service, Support, and Complaint and Dispute Resolution	
	Consumer Data Protection and Privacy	
	Access to Essential Services	
	Education and Awareness	
Community Involvement and Development	Community Involvement	46~49
	Education and Culture	
	Employment Creation and Skill Development	
	Technology Development and Access	
	Wealth and Income Creation	
	Health	
	Social Investment	







## Enable the Cabled World



If you need any additional information or have any questions about this report, please contact us.

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