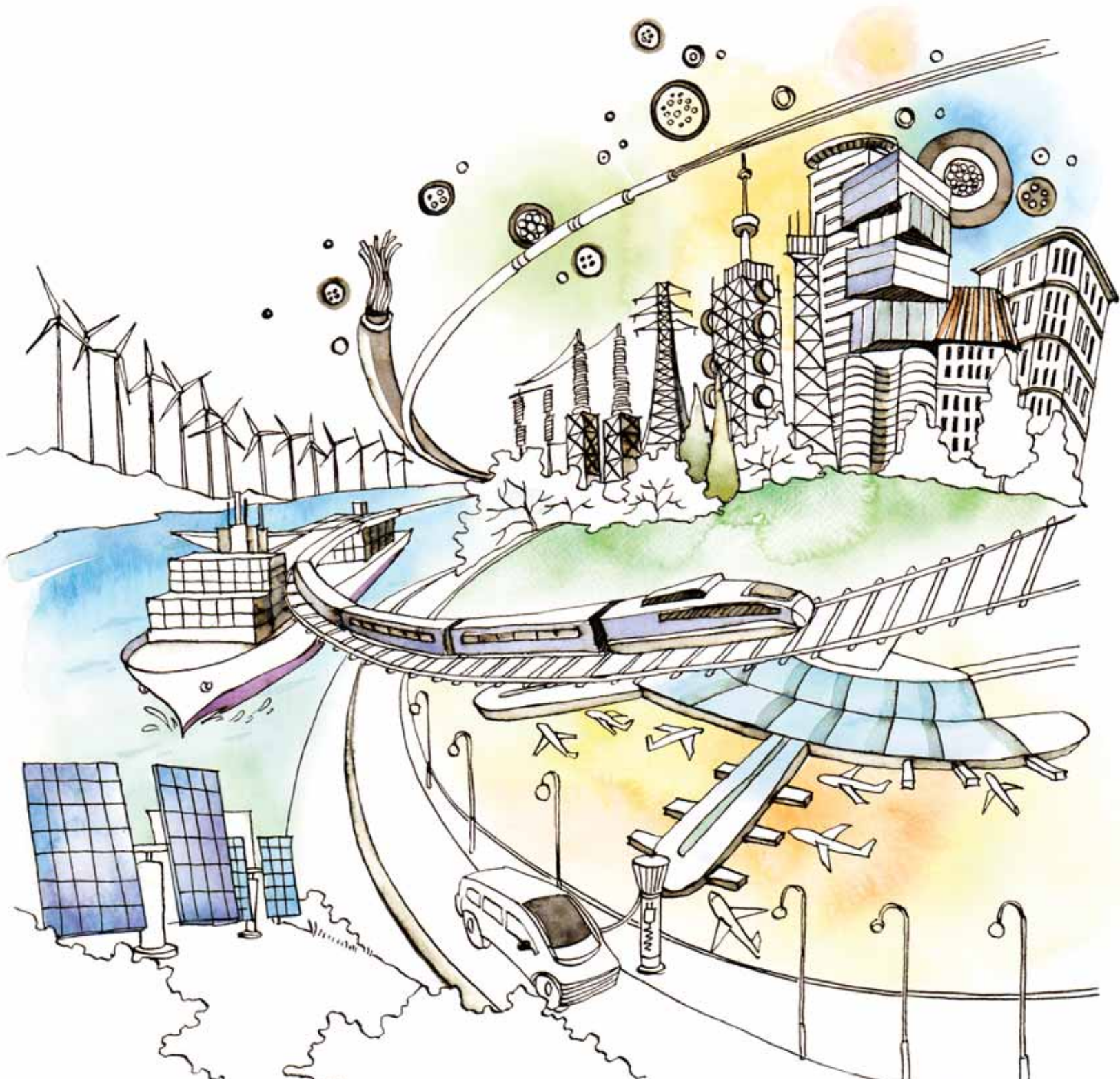


# Link the World, Think the Future

LS Cable & System 2010 Sustainability Report



# Link the World, Think the Future

## ABOUT THIS REPORT

### Purpose of our Reporting

Upon the incorporation of the LS Group into a holding company in July 2008, LS Cable & System was reborn as an affiliate of the LS Group and has committed itself to sustainability management as a Creative Partner, responsible for the development of customers, society and future generations. It is our hope that this first sustainability report sparks the increasing dialogue with stakeholders and manifests a commitment to social responsibility by disclosing our contribution to the economy, society and environment with full transparency.

### Reporting Guidelines

The 'LS Cable & System 2010 Sustainability Report' has been prepared in accordance with the GRI G3 Guidelines<sup>1)</sup> and the BEST Guidelines<sup>2)</sup>.

### Reporting Period & Scope

The report covers LS Cable & System's performance from January 1, 2010 to December 31, 2010, including some achievements prior to 2010 or during the 1st half of 2011 which deemed to deserve reference herein. To enable a comparison of performance trends, performance data of 3 years from 2008 is provided. When it was not possible to collect relevant data, we specify these cases herein where necessary.

Monetary data are presented in Korean Won(KRW) and US Dollar(\$). The report contains the performance of the head office of the LS Cable & System, its research institute, plants in Korea(Anyang, Gumi, Indong, Donghae) and including some activities from its subsidiaries in Korea and/or elsewhere in the world. We have a plan to publish sustainability reports annually and expand communication with stakeholders.

### GRI G3 Guideline Application Levels

LS Cable & System has self-declared its reporting to be the level of 'A+' against the following[Criteria for the GRI Application Level]. A third-party assurance provider has confirmed that the report fulfills the requirements of Application Level A.

#### [Criteria for the GRI Application Level]

Report Application Level		C	C+	B	B+	A	A+
Standard Disclosures	G3 Profile Disclosures	Report on: 1.1 2.1-2.10 3.1-3.8, 3.10-3.12 4.1-4.4, 4.14-4.15	Report Externally Assured	Report on all criteria listed for Level C plus: 1.2 3.9, 3.13 4.5-4.13, 4.16-4.17	Report Externally Assured	Same as requirement for Level B	Report Externally Assured
	G3 Management Approach Disclosures	Not Required		Management Approach Disclosures for each Indicator Category		Management Approach Disclosures for each Indicator Category	
	G3 Performance Indicators & Sector Supplement Performance Indicators	Report on a minimum of 10 Performance Indicators, including at least one from each of: Economic, Social and Environmental.		Report on a minimum of 20 Performance Indicators, at least one from each of Economic, Environmental, Human Rights, Labor, Society, Product Responsibility.		Report on each core G3 and Sector Supplement Indicator with due regard to the Materiality Principle by either : a) reporting on the Indicator or b) explaining the reason for its omission.	

### Assurance

The information contained in the report has been subject to in-house management reviews, expert advisory services and 3<sup>rd</sup> party verification, The 3<sup>rd</sup> party assurance report is presented in the Appendix.

### Contact Information

If you need additional information or have an inquiry in relation to this report, please refer to the following information to contact us.

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- Fax • +82-2-2189-9129
- Contact Dept. • Sustainability Management Secretariat, LS Cable & System
- Website • <http://www.lscns.com>

<sup>1)</sup>GRI G3 Guidelines: The sustainability reporting guidelines, developed jointly by CERES, an international environmental organization and the UN Environment Program, in 1997

<sup>2)</sup>BEST Guidelines: The sustainability reporting guidelines, developed jointly by the Ministry of Knowledge & Economy, the Korean Chamber of Commerce & Industry and the Institute for Industrial Policy Studies, to promote sustainability reporting among Korean businesses

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## Chairman Message



CEO & Chairman  
Christopher Koo

A handwritten signature in black ink, reading "Christopher Koo".

Hoping for a sustainable future for mankind,  
our primary goal is to contribute to making  
a better world



2011 marks the 49<sup>th</sup> anniversary of LS Cable & System.

For the past half-century, We have been growing with stakeholders in energy and information & communications sectors. Our secret in growing to be the world's 3<sup>rd</sup> largest cable supplier in 2010 in terms of sales is found in our commitment to diversifying markets and products on the basis of talent and technology.

However, a cable market is expected to face more intensive competition throughout the world. The global community will strengthen multilateral efforts, such as climate change conventions, to keep our future sustainable. Accordingly, business capabilities to secure green energy sources, and efficient transmission and consumption of energy will become key determinants of corporate competitiveness. In terms of the information & communications sector, wireless telecommunication, ever-increasing data transfer volume and rate are fast becoming the norm of the day.

Responding to such changes, we have been stepping up R&D initiatives to expand new product lineups and turning towards innovation in our business models, from distribution of cable to provision of total solutions.

Furthermore, to ensure incumbency benefits in emerging economies such as China and India, we have been actively strengthening our global presence by acquiring local market players and expanding business coverage.

Notably, in 2010, we build an overall framework of sustainability management. We developed a corporate vision and strategy for sustainability management, established organizational capabilities, assigned roles and conducted systematic activities in order to promote sustainability management. This report illustrates how we are working hard to improve our framework of policies and management system and what we are carrying out.

We will strive to make our life more bountiful and valuable by implementing sustainability management as a foundation of business and developing better products and services in the energy and information & communications sectors. Based on preparation and competency for a better future, we will continue to communicate with stakeholders and carry out our social responsibility as a global corporate citizen.

We ask for your continuous interests and support.

## CEO Message



CEO  
Jongho Son

*J. H. Son*

Sustainability management will pave the way for us to become the world's leading cable manufacturer.

## Implication of Sustainability Management for LS Cable & System

You may find our products and services right beside you in your daily life. Consumption of energy and information will increase ever more, as urbanization and technological development continue to accelerate in the future.

At the same time, stakeholders will require more efficient energy solutions and green products and services. Without communication with stakeholders throughout the world, we will be unable to globalize our business and presence, to the extent which we aim at. Against this backdrop, we fully understand the importance of sustainability management as the centerpiece of our competitive edge.

## Sustainability Management Implementation Strategy

In 2010, LS Cable & System developed a mid- and long-term master plan(throughout 2015) to implement sustainability management and establish a full-scale implementation of organization consisting of the sustainability management secretariat and 6 sections.

By year's end, LS Cable & System will focus on further enhancing the sustainability management implementation system by solidifying a relevant framework from within, as well as expand to cover bases overseas from the next year on.

In the long run, we will make sure that our sustainability management will be implemented in line with our business strategy at the global level.

## Features of Sustainability Report

Upon publication of the 1<sup>st</sup> Sustainability Report, we will further expedite communication with stakeholders and enhance change and innovation from within. We will realize green management, customer satisfaction through quality management and a mutual cooperation with suppliers through fair trade. We will also continue to keep employees satisfied with enjoyable workplaces and remain committed to social contribution activities at the enterprise level.

The revenue of LS Cable & System jumped up approximately 25% in 2010 from 2009, in spite of the rise in oil and other commodity prices. This is attributable to the global synergy with Superior Essex, acquired in 2008, successful innovation of our business model and enhancement of global capabilities. Going forward, we will continue to try to maximize synergy.

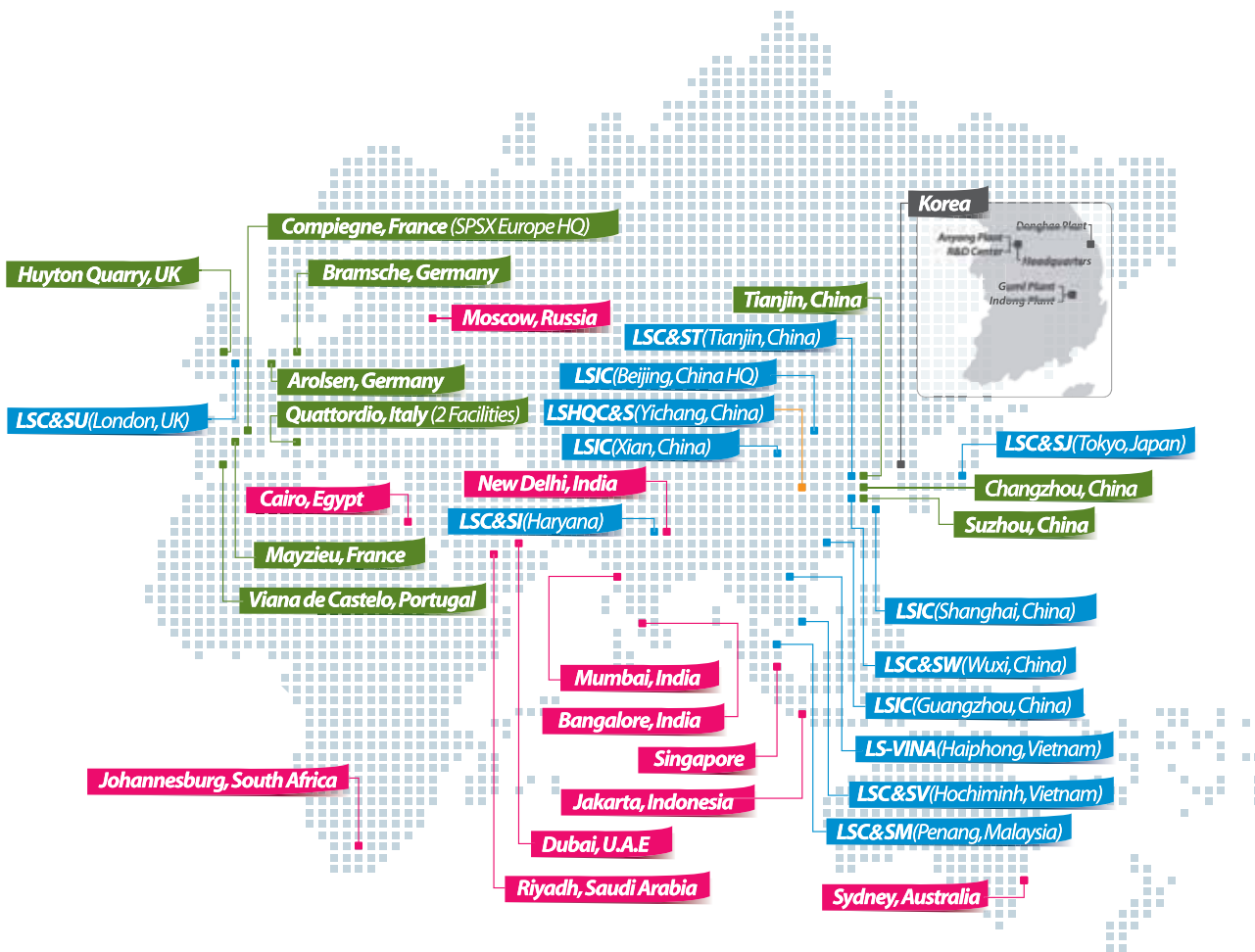
We would like to ask your interests and encouragement for us to grow into a leading sustainable company, with contributions to global society.

# About LS Cable & System

## Corporate Profile

Established in 1962 as Korea Cable Industry Co., Ltd., and renamed to Gold Star Cable(1969-) and LG Cable(1995-), we was renamed as LS Cable in 2005 and separated from LS Mtron in July, 2008 when the LS Group transformed into a holding company. In 2011, we was renamed as LS Cable & System. Offering a variety of cable solutions ranging from extra high voltage cables and mid/low voltage power cables for energy transmission, to wireless/wire telecommunications cables, LS Cable & System has played a key role in building up the power grid and communication network, underpinning the national economy.

Since the early 1990s, under the strategic objective of developing overseas bases, we have advanced into the global markets, starting from Vietnam to Europe, the U.S., China, India, Malaysia and so on, focusing on exporting and implementing energy and telecommunications infrastructure. In 2005, we became the world's top ship cable manufacturer upon the acquisition of Jinro Industry(now JS Cable), and in 2009, the world's No. 3 cable manufacturer upon the acquisition of Superior Essex, which was the biggest cable manufacturer in the U.S. and the biggest Magnet wire<sup>1)</sup> manufacturer in the world. Since the 2009 acquisition of Hongqi Electricity of China(now LS Hongqi Cable & System), which produced a full lineup of cable products, we have expanded our business coverage in China, the world's biggest market.



<sup>1)</sup>Magnet wire: Insulated conductor(round wire, rectangular wire, etc.) made of copper and aluminum and coil-wound within electric/electronic device to convert electric energy to electromagnetic or mechanical energy and to convert mechanical energy to electric energy



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 CEO Message  
**About LS Cable & System**  
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 Sustainability Management  
 Topic 01. Creativity & Innovation

In Korea, we have our head office in Anyang, manufacturing plants in Anyang, Gumi, Indong and Donghae, and research laboratories in Anyang. Elsewhere in the world, our global network consists of 28 plants and 37 sales bases in 23 countries. In addition, our domestic subsidiaries include JS Cable Co., Ltd., Global Cable Incorporated Co., Ltd., Alutek Co., Ltd., LS Global Incorporated Co., Ltd., Pountek, Co, Ltd. and Kospace Co., Ltd.



- **LS Cable & System Branches**
- **LS Cable & System Subsidiaries**
- **Superior Essex**

#### Domestic subsidiaries

Company name	Major businesses	Percentage of ownership (%)
JS Cable Co., Ltd.	Manufacturing & distribution of cable and ship components	69.91
Global Cable Incorporated Co., Ltd.	Manufacturing of rolled, drawn and folded copper products	98.23
Alutek Co., Ltd.	Windows & doors construction	100.00
LS Global Incorporated Co., Ltd.	Wholesale & commodity brokerage	51.00
Pountek Co., Ltd.	Manufacturing of synthetic resin & other plastic substances	51.00
Kospace Co., Ltd.	Manufacturing of satellite telecommunication system components	99.19

#### Overseas subsidiaries

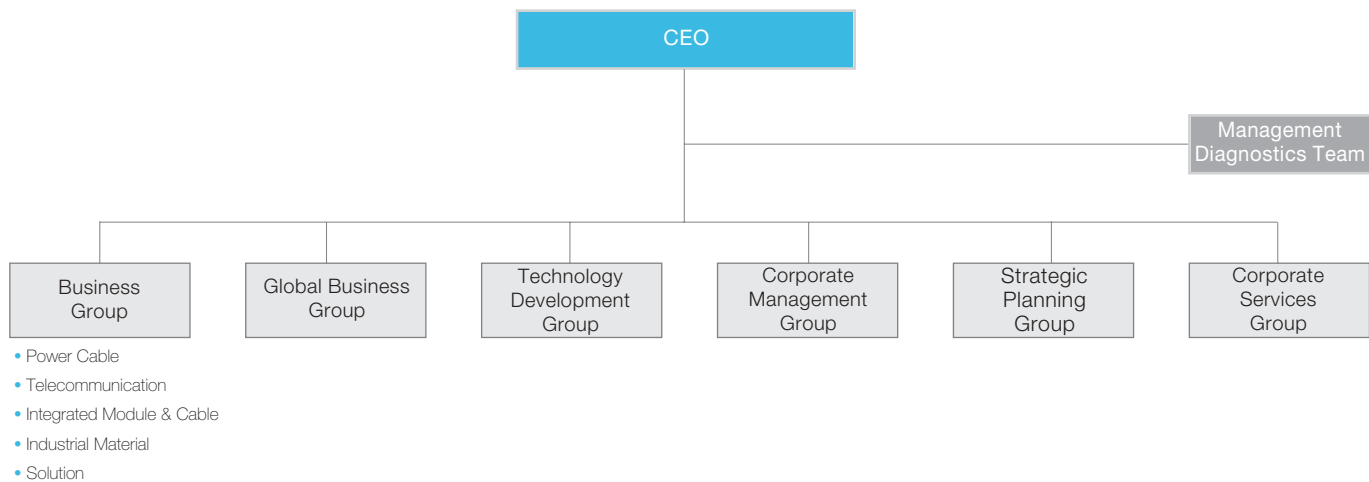
Company name	Major businesses	Percentage of ownership (%)
LS C&S Wuxi Ltd.	Manufacturing of insulation wire & cable	100.0
LS-VINA	Manufacturing of insulation wire & cable	80.7
LS C&S Malaysia	Manufacturing of magnet wire	100.0
LS C&S Tianjin Ltd.	Manufacturing of magnet wire	87.5
LS C&S America Inc	Distribution of electric cable	100.0
LSIC(Shanghai) Ltd.	Distribution of electric cable	100.0
LS C&S Vietnam Co., Ltd.	Manufacturing of insulation wire & cable	100.0
LS C&S India Pvt., Ltd.	Manufacturing of insulation wire & cable	100.0
LS C&S UK Ltd.	Distribution of electric cable	100.0
LS C&S Japan Ltd.	Distribution of electric cable	100.0
LS Hongqi C&S(Hubei) Ltd.	Manufacturing of insulation wire & cable	75.1
Cyprus Investments, Inc.	Holdings operation(In relation to SPSX)	100.0
-Superior Essex Inc.	Manufacturing of magnet wire & cable	81.0

## About LS Cable & System

### Organization

Our organization consists of 5 business groups, 5 supporting groups and other functions under direct control of CEO. As of 2010, total number of employees in domestic places of business amounts to 2,412 persons, with sales reaching KRW3,868 billion.

#### Organization



#### LS Cable & System in Numbers

(As of the end of Dec, 2010, excluding domestic/overseas subsidiaries)

Employees	2,412 persons
Places of business	4 in Korea and 16 overseas
Sales	KRW 3,868.4 billion
Operating income	KRW 130.2 billion
Shareholders' equity	KRW 115.0 billion
Total assets	KRW 3,319.8 billion
Total liabilities	KRW 2,466.5 billion
Total shareholders' equity	KRW 854.3 billion

### Governance & board of directors

#### Shareholders

To maximize corporate value, we was divided into an investment management division, and cable and machinery(including components) manufacturing business divisions, which were split into LS Co., Ltd., LS Cable & System Co., Ltd., and LS Mtron Co., Ltd., in July, 2008.

As of the end of 2010, we were not listed, and the total number of shares issued is 23,000,000 common shares. Accordingly, the number of shares outstanding is 23,000,000 shares. Our largest shareholder is LS Co., Ltd., which owns 86.95% of the shares of LS Cable & System as of the end of 2010. The balance 13.05% is owned by ordinary shareholders.

## Board of Directors

The Board of Directors consists of 3 members, including the Chairman, CEO and CFO. The board of directors resolves matters specified in applicable laws and regulations or the articles of incorporation or delegated by the general shareholders' meeting in regular or occasional board meetings. In addition, in accordance with clause 4 of Article 37, of 'the articles of incorporation', directors with special interest in pending resolutions of the board are restricted from voting rights to prevent conflicts of interest.

Remunerations payable to directors and auditors are capped as approved by the general shareholders' meeting. Remuneration of director consists of salary, bonus and special bonus, and is capped at KRW2.5 billion as resolved by the general shareholders' meeting in

2011. Remuneration of auditor consists of only salary and is capped at KRW100 million as resolved by the general shareholders' meeting in 2011.

The board meeting was held a total of five times in 2010 and voted for the adoption of a self compliance program for fair trade and operation of an internal accounting system. Notably, in September 2010, the Board of Directors resolved the adoption of a self compliance program for fair trade and appointment of the Managing Director Wonhyung Ahn as the Self-compliance Manager, kicking off the self-compliance program for fair trade in earnest.

## Board of directors

(As of May, 2011)

Name	Position	Responsibility	Career highlights
Christopher Koo	CEO & Chairman	Chairman	BA of Business Administration, Korea University. The former Managing Director of LG International The former vice-president of LG Investment Securities LS Cable & System/LS Mtron Chairman of Business Division
Jongho Son	President	CEO	BA of Linguistics, Seoul National University. MBA, McGill University. LS Cable & System President
Roehyun Myung	Senior Managing Director	CFO	Master of International Business Administration, Yonsei University. LS Cable & System Senior Managing Director

## BOD activities

Year	Major agenda
2010	<ul style="list-style-type: none"> <li>• Approval of financial statements and annual report of 2nd fiscal year</li> <li>• Approval of capital increase with consideration</li> <li>• Reporting on internal accounting system evaluation</li> <li>• CP(self-compliance program for fair trade) adoption &amp; appointment of self-compliance manager</li> <li>• Approval of 2010 management performance estimation &amp; 2011 business plan</li> <li>• Approval of 2011 commercial paper issuance cap</li> <li>• Repayment guarantee of borrowing by overseas subsidiary</li> <li>• ABS issuance plan of Anyang plant</li> <li>• Reporting of PLA agreement execution with holding company(conversion of RCPS to common shares)</li> </ul>

## Major Products & Services

Our business encompasses a route of energy and information. We try to maintain a profound insight of resources and creates new technologies with various R&D programs in the effort to deliver high-tech solutions. Our goal is to help a society to make a progress, caring for the future of mankind. As our environment changes, electric cable solutions will continue to evolve in different shapes and functions. We promote creative ideas and put such ideas and spirits into our products in order to achieve the goal.



### Extra-high Voltage Cable System

### Submarine Cable System

### Super-conduction Cable System

### IT Solutions for Electric Power(R-TAS™: Real Time Ampacity Estimation System)

### Over Head Transmission Line, OPGW(Optical fiber overhead Ground Wire)

## Energy Cable & Systems

### Setting the Standard of Total Solutions Delivering Light and Energy to the World

The cable system installed and operated in underground electric culvert to transmit electrical power at extra-high voltage, conserving urban aesthetics.

The 250kV DC MI(mass impregnated) extra-high voltage submarine cable, developed by LS Cable & System for the 1<sup>st</sup> time in Korea and the 4<sup>th</sup> time in the world, is used to transmit massive quantities of electric power between nations or between mainland and islands. The system is to be installed in the 105km-long seabed section between Jindo and Jeju islands in 2011.

The submarine cable can be offered as a part of a total solution for submarine fiber optic telecommunication cable or special cables supplying gas or water to marine plants, bringing together the gems of cable technologies.

Utilizing the super conduction phenomenon that reduces electrical resistance to an almost nonexistent level at extremely low temperatures(below minus 196°C), the super-conduction cable system is known as the 'dream power cable', transmitting massive volumes of energy with minimum electrical loss. LS Cable & System is stepping up its super-conduction cable business, with solution supply to the U.S. Tres Amigas Superstation Project, attempting to commercialize the super-conduction power grid for the first time in the world in partnership with AMSC(American Superconductor Corporation).

This system collects transmission lines and installation environmental temperatures, thermal capacity and transmission load data in real time. It converts such data to transmittable power, and quantitatively provides short/long-term load allocation to the administrator of the power transmission line.

Overhead lines usually installed in steel towers include overhead transmission lines and overhead ground wires. Transmission lines transmit power from power plants to primary substations near customers. Optical fiber overhead ground wire not only performs its conventional functions of protecting transmission lines from lightning strikes and flow fault current, also serves as telecommunication line.

- Extra-high Voltage Cable
- Submarine Cable
- Super-conduction Cable
- Over Head Transmission Line



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**Medium & Low Voltage Cable**

Power distribution cable from 0.6/1kV to 22.9kV is used to supply power to distribution circuits in residential, commercial or industrial buildings.

**Industrial Specialty Cable**

A variety of cables in maritime structures, commercial ships, military ships, nuclear power plants, wind turbines, railways, subways, high-speed rail rolling stocks and station buildings are used supply power, monitor and control diverse systems and provide telecommunication links. Used in confined spaces, they are resistant to oil, seawater, radioactivity and mud. They are also flame-retardant, and do not emit poisonous gases when burned.

**Busduct System**

This system has advantage of establishing additionally and relocating with easiness due to its capability of transmitting large volumes of electric power per unit and an easy load bifurcation and simple cabling structure. This system finds applications in a variety of locations, such as factories, buildings, apartment housing, discount outlets, research laboratories, department stores, golf courses, tunnels, extra-high voltage substations, LNG depots, airports, seaports, etc.

- Shipboard Cable
- Wind Power Cable
- Busduct System



**Optical Fiber,  
 Optical Fiber Cable**

**Telecommunication Systems**

Providing High-Tech Network for a Ubiquitous World

Optical fiber generates total reflection of light due to the reflexive index differential between the core and clad layer and transfers light containing information via its core layer. Optical fiber cable consists of several strands of optical fiber and performs a critical role in a wire/wireless telecommunications network in the wake of the rapid advancement of the IT industry.

**Local Area Network Cable System  
 (LAN cable systems),  
 Coaxial Cable**

LAN cable systems are high-transfer rate telecommunication cables and wires used for voice, video and data communications in a customer's premise telecommunications link system. Coaxial cables are used as high-frequency signal transfer links between transfer equipment and antenna within mobile telecommunications base stations. These include high-frequency cables for signal transfer and signal-radiating leaky coaxial cables that enable wireless telecommunications in basements or tunnels shielded from external radio signals.

**Fiber To The Home Solutions**

The FTTH solution is a total solution consisting of GPON(gigabit passive optical network)/EPON(ethernet passive optical network) linking optical fiber cable network between phone station and subscriber, optical fiber cable system linking a long-distance transfer network to subscriber home and network integration services offering network consulting, design and deployment to meet customer's needs.

**Quadruple Play Service Solutions**

QPS system, the first of its kind in the world, developed by LS Cable & System, is a solution that concurrently enables a single line to support four different services including Internet, digital broadcasting, VoIP and mobile telecommunications.

- Optical Fiber Cable
- Local Area Network Cable
- Coaxial Cable
- Fiber To The Home Solutions







Industrial Cable & Module

Automotive Wire & Cable

Automotive Electric/Electronic Component Solutions

Heat Shrinkable Tube

- Industrial Cable & Module
- Micro Coaxial Cable Modules
- High-voltage Cables & Connectors for Eco Friendly Vehicles
- Tube

### Integrated Module & Cable Systems

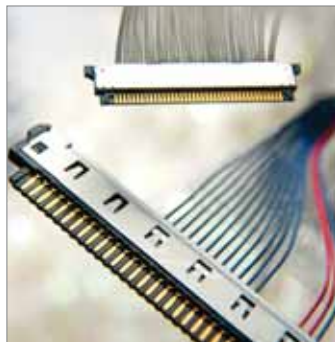
Offering optimum cable solutions to specialty requirements

Industrial cable & modules include home appliance cables that link various electrical devices within electric/electronic appliances, factory automation cables to transfer signals and power for industrial robots used for factory automation, military cables to provide signal and power links in military weapon systems, such as tanks, aircraft and ships, as well as network cables used in industrial telecommunications and control system. Micro coaxial cable modules, used in mobile phones and ultrasonic medical instruments due to their compact size and flexibility, are increasing in great demand, as mobile phones support multimedia features, home appliances reduce in size, data transfer networks become faster and data transfer volume increases to massive levels. LS Cable & System now supplies the world's finest 0.016mm-wide MCX cable to global mobile phone manufacturers.

Automotive wires & cables are used in providing power to various systems required by automobiles to run and activate/control diverse sensors. Notably, automotive wires & cables provided by LS Cable & System are highly durable and flexible, and thermal resistant up to 150~200°C. The Company is also stepping up its efforts to develop eco-friendly products such as recyclable PP(polypropylene) cable.

High-voltage cables, which are thermal resistant up to 125~200°C, corrosion-resistant, flame-retardant, highly flexible and electromagnetically shielded, high-voltage sealing and shielding connectors and harness products, all developed by LS Cable & System, are used as critical components for high-efficient and eco-friendly vehicles(EV/HEV/FCEV). They also find increasingly more applications in other sectors where high-voltage and high amperage products are needed such as industrial heavy-duty equipment, ships and plants.

Heat shrinkable tube is a polymer synthetic resin product that, when exposed to heat, shrinks at a pre-specified rate from its original shape. Depending on specific product configurations, it shrinks 33% to over 75% widthwise and 10% or less lengthwise to adhere tightly to their target in order to provide insulation, to identify cores and to prevent corrosion. The applications are found in a wide variety of uses such as industrial, telecommunications, automobile, power distribution panel, ship, electric power, defense industry, household appliance, precision electronics and cable breakout, etc.



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Copper Rod

**Industrial Materials**

Spearheading core technologies with high-tech materials

LS Cable & System uses only copper cathodes to manufacture copper rods that minimize electric loss. The copper rods are mainly used for conductors to make cables and for other special uses(e.g., train wires and rectangular wires). In addition, the Company is enhancing its presence as a global player by developing cutting-edge new materials such as oxygen-free copper and a copper-replacing alloy and localizing operations in other countries.

Magnet Wire

Magnet wire is made by coating the surface of the wire(copper or aluminum) with a special varnish that has insulating properties. It is wrapped inside electrical or electronic devices in the form of a coil to convert electric energy to electromagnetic and mechanical energy, and to convert mechanical energy to electric energy. This product is required for any and all machines that consume electricity such as transformers, dynamos, vehicle components, TVs, refrigerators, washing machines, air conditioners, microwave ovens, and motors. Notably, fine rectangular wires for automobiles that are 1/10<sup>th</sup> as thick as conventional rectangular wires and suitable for small & high-throughput motor increase motor output by over 50% from conventional round magnet wire, thereby improving fuel-efficiency by reducing automobile weight.

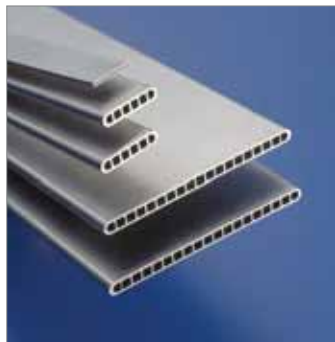
Aluminum Materials

LS Cable & System succeeded in developing a variety of industrial materials such as those used for vehicle forgings, materials for ABS(anti-lock brake systems) and ESP(electronic stability program) housings, tubes for condensers, polyamide-coated aluminum tubes, and high strength heat-resistant alloy cables, entire quantity of which domestic businesses had imported from abroad. LS Cable & System has an efficient mass production system. Notably, the high-strength XTAL(extra thermal aluminum alloy) conductor for overhead transmission lines ensures a stable conductivity at a high temperature without changes in strength or form by using a new aluminum alloy. This type of advanced innovation shows our commitment to focus on our customers and innovation.

Greenflor, Industrial Rubber

LS Cable & System produces industrial-use rubber products and rubber tiles(flooring materials) based on its rubber compounding technology. In particular, the carpet tiles that we developed for the first time in Korea through the flocking method are premium commercial carpet tile featuring a high density that is ten times greater than conventional ones, preventing the entry of contaminants and reproduction of dust mites and bacteria.

- Copper Rod
- Magnet Wire
- Aluminum Materials
- PURGOTEX(Flocking Carpet)





## Business Solutions

Offering optimum solutions by innovating business models with focus on solution and application



● Power Transmission & Distribution Solution

# Busin



● Photovoltaic Solution



● Marine & Offshore Solution



● Railway & Rolling Stock Solution



● Wind Power Solution



● Airport Solution

We have engaged in a variety of successful businesses around the world, leveraging over 50-year experience in technological expertise and engineering capability in cable and system sectors. Since 2008, we implemented a customer-focused, application specific business model to offer more differentiated and competitive services to customers.

Based on our core capabilities in energy and telecommunication, we have designated 1) energy and ecology business 2) wire/wireless solutions, and 3) automobile components as our three growth engines.

One of the best-known business models is the **Power transmission and distribution solution** that transmits electricity from power plants to substations near customers and distributes it again from substations to customers. It also provides transmission operation systems and PD monitoring systems that help prevent power system failure and ensure stability of power transmission and distribution.

The **Marine and offshore solution** provides the system to supply electrical power to maritime devices, control various equipment and enable wire/wireless telecommunications, and the customized system such as submarine cable systems suitable for specific features of maritime devices, including fire monitoring systems, flooring material and fire-resistant sealing materials.

We also offer **Photovoltaic solution(SolarSol™)** that encompass photovoltaic power generation complexes, BIPV(building integrated photovoltaic) systems, as well as various cables and relevant materials for photovoltaic modules, **Wind power solution(WindSol™)** that offer not only cables and materials for wind power plants/turbines but also a real time condition monitoring system and **Railway & rolling stock solution(RailSol™)** that cover power, telecommunication and signaling systems used for rolling stock, tracks and railroad stations and a power feed system for heavyweight subways.

In addition, there is also an **Airport solution(AirSol™)** that implements not only power and telecommunications infrastructure for airports and provides customized solutions for runway, loading bridge, luggage management system and airport railway.

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● Metro Network Solution



● Inbuilding Solution



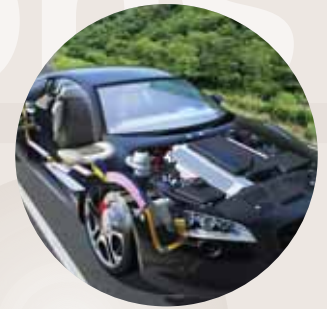
● U-IBS Solution



● OSP Solution



● U-City Solution



● Automotive Solution

# ess Solutions

We provide the **OSP(Outside Plant) solution** which is a high speed wire/wireless backbone network linking maritime devices, power plants, overhead transmission grids, road networks, tunnels and buildings and controlling and monitoring relevant operation facilities. We also provide the **Metro Network solution** which is a next-generation broadband network infrastructure solution offering voice, video and data services to subscribers over broadband exceeding 100Mb through FTTH solution and LS-HFC(LS-hybrid fiber coaxial) solution. Besides, it is possible to integrate and operate all in-building applications including a datacenter with RF distribution system and LAN solution by the **Inbuilding solution**.

There is also the **Ubiquitous IBS(intelligent building system) solution** for realizing a building automation that supports facility/power/lighting control in residential, commercial, business and public buildings, CCTV and access/parking control, an office automation for information system and teleconferencing system, and integrated intelligent system that implements a wire/wireless telecommunication environment.

We provide **U-City solution** which covers: u-Green, controlling weather and pollution data, along with water leak management; u-Life Safety for prevention of crime, disaster and accidents; u-Traffic, offering traffic signal control, bus arrival announcements, transport transfer announcements and public parking lot control applications; u-Education providing e-learning, e-book and e-Campus, u-Portal consisting of mobile complaint filing, wire/wireless portal and media board solutions; u-Home supporting home care and e-Care; u-LED including LED lighting; as well as u-Gallery offering exhibitions, conventions and visitor data to deliver a convenient and safe modern city.

Our **Automotive solution** includes PFC(parallel flow condenser) tube for onboard heat exchanger, magnet wire for motor, seat heating wire, GPS, Hi-Pass terminals, power, signals, control and telecommunication cables, heat shrinkable tubes, aluminum panels and high-voltage components for hybrid and electric vehicles.



# Highlights



## New vision of 'becoming global No.1 in the cable manufacturing sector by 2015 '

- Entrench ourselves as global No.3 in the cable manufacturing sector
- Strengthen the application & solutions businesses
- Enhance global management synergies



## Sustainability management strategy

- Establish implementation organization and governance structure
- Implement 13 strategic initiatives and 61 implementation tasks



## Win-Win cooperation with suppliers

- Promote on/off-line communication
- Extend practical support to enable suppliers to improve their competitiveness
- Develop & enforce a global procurement policy



## Adoption of self-compliance program



A rise in sales by 24.5% in 2010 from 2009



## Enjoyable work environment

- Extend a variety of support to ensure a 'balance between work and life'
- Implement infrastructure to expand global diversity
- Provide various counseling services to enable employees to enjoy their work



## Environment management system

- Strengthen green management organization
- Operate an environment management system & green worksites
- Expand green product lineup



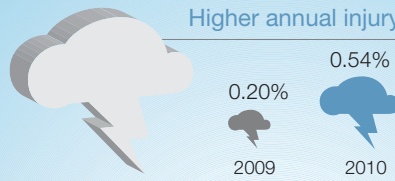
## Social contribution for the underprivileged

- Promote volunteer activities in partnership with local communities
- Promote donations and academic-industrial partnerships
- Operate undergraduate volunteer programs

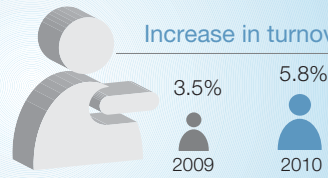


# Lowlights

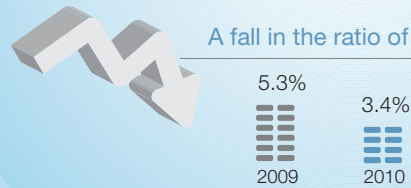
## Higher annual injury ratio



## Increase in turnover rate



## A fall in the ratio of operating profit



# Sustainability Management

## Vision & Core Values

We strive toward our new vision to become the ‘No.1 Global Company in Cable Sector by 2015’. The new vision represents our strong commitment to identifying the needs of markets and consumers, contributing to making our society more bountiful with continuous innovation and sustaining growth by enhancing global competitiveness. We enforce four strategic initiatives: enhancement of global presence, business model innovation in favor of solution businesses, improvement of management capability to a level corresponding to global presence and the enhancement of a financial structure in order to grow to be a global leader in the cable manufacturing sector in the face of intensive market competition.

We encourage our employees to strengthen the corporate the 3 core capabilities, Market intelligence, Technology, Creative Executor. Market intelligence is to grasp the needs of the market and customers and create strategies to meet them. Also, we strive for pioneering technologies to meet market needs with products and services that optimize process efficiency, and being a creative executor who develop and implement the most efficient solutions. Besides, we underline ‘Trust’, ‘Passion’, and ‘Challenge’ as our core value, which form the foundation on which we perform work and conduct ourselves. ‘Trust’ means a respect for each individual and reliable cooperation with customers and colleagues. ‘Passion’ indicates continuous self motivation and immersion with a sense of ownership. ‘Challenge’ represents the spirit to set a stretch goal proceed with self confidence and a pioneering mindset.

## Sustainability Management Strategy and Goals

We have established the ‘LS Cable & System Sustainability Management Strategy and Implementation Roadmap’ to share a corporate value system throughout our workplaces around the world and to strengthen global competitiveness. Since 2010, we aim to reflect sustainability management activities on our management processes and promote them to workplaces around the world, with the ultimate goal of integrating sustainability management strategies with our existing management strategy.

We have developed a sustainability management master plan covering 2010~2015 in Phase I, II and III, each for 2 years. The master plan draws upon the enterprise sustainability management strategy roadmap and provides for implementation policies of the Sustainability Management Secretariat and 6 sections, 13 strategic initiatives and 61 implementation tasks and organizations and operation of the governing body-‘Sustainability Management Council’.

### Sustainability management strategy roadmap



## Sustainability management organization

The Sustainability Management Organization is headed by the CEO and consists of the Sustainability Management Council of all executives and the Sustainability Management Secretariat responsible for hands-on operations and 6 sections, including Green Management, Suppliers, Employees, Ethical Management, Social Contribution and Risk Control.

The 'Sustainability Management Council' is a corporate level of consultative body that decides on a corporate sustainability management policy, discusses pending issues and prompt implementation. It search for ways what we should do in order to carry sustainability strategy in practice. We hold the first council meeting in February, 2010 and shared an understanding of the 'Sustainability Management Roadmap' and the 'section-specific roadmaps' for Green Management, Ethical Management, and Social Contribution sections. In April, 2010, working-level sustainability management communities were formed to implement the Sustainability Management System, which was followed by efforts to share information on and promote sustainability management.

In September, 2010, the 'LS Cable & System Sustainability Management Strategy and Implementation Roadmap' was finally reported to the Management Council which was the most senior enterprise decision-making body and accompanied by reporting of the 2010 Sustainability Management Progress and 2011 Implementation Plan by Green Management, Ethical Management, and Social Contribution sections.

The Sustainability Management Secretariat runs the Plan-Do-See cycle of the Sustainability Management Strategy at the corporate level. Each section implements detailed strategies aligned with the corporate strategy in specific tasks to put the strategy into practice systematically. We will comply with global norms and standards such as ISO 26000 International Guidance on Corporate Social Responsibilities and Bali Roadmap, as well as promote sustainability management more specifically via our Sustainability Management Organization at the enterprise level.



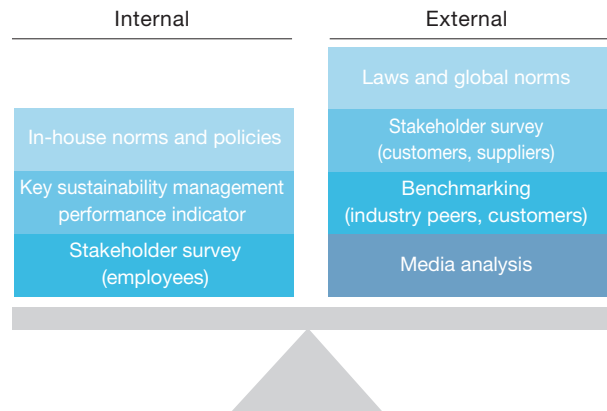
## Issues Having Importance to the LS Cable & System

### Approach to material issues

Prior to the publication of the '2010 Sustainability Report', we integrated the Sustainability Management Strategy with the management strategy in an effort to overhaul our future strategy. Subsequently, We went into the process to identify the issues that are significant to LS Cable & System for about 2 months from February 2011.

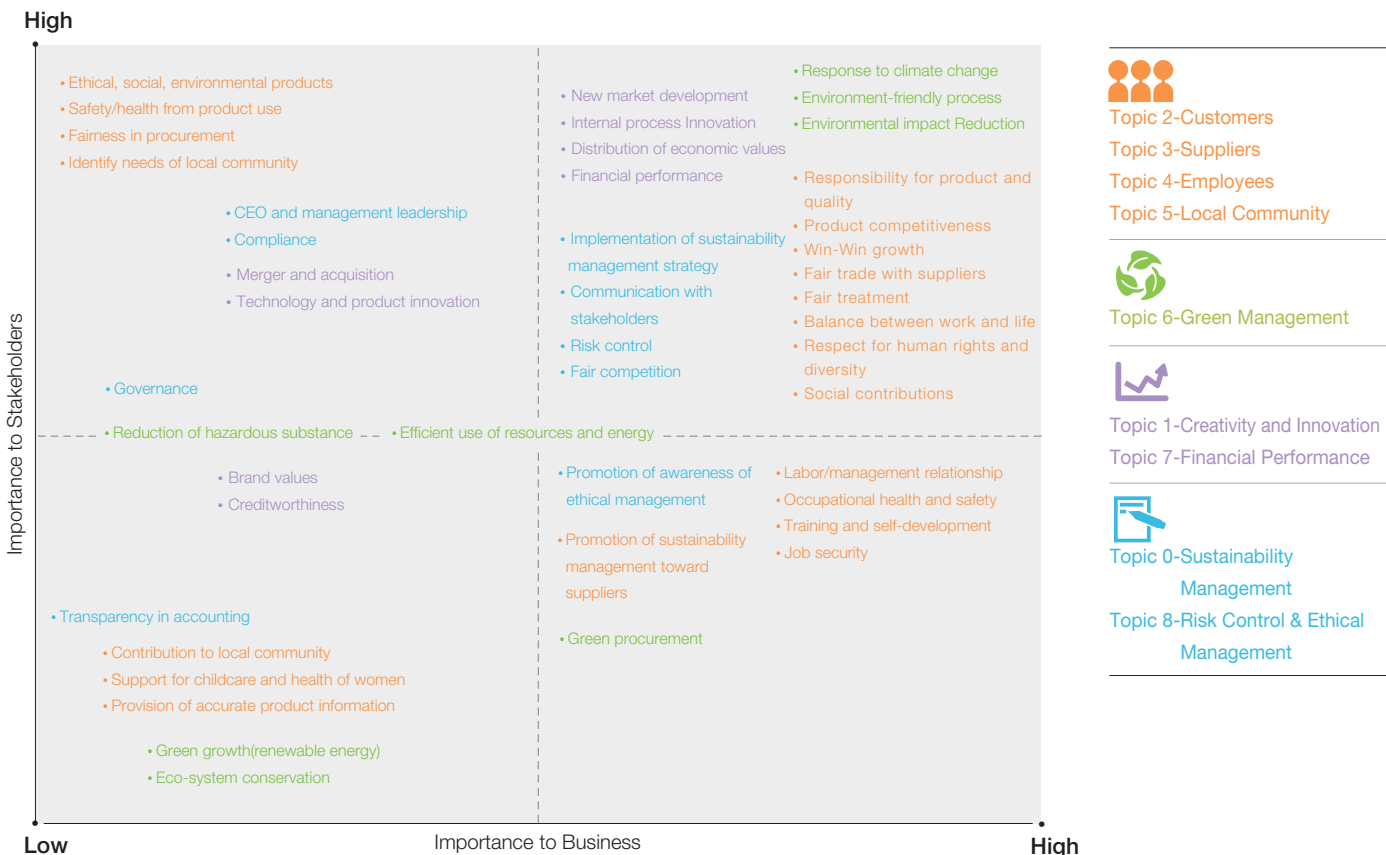
We conducted a comprehensive analysis of the material issues, considering internal and external perspectives as well as the perspectives of our stakeholders in a balanced manner. Notably, applicable laws and regulations in Korea and elsewhere in the world were reviewed to respond to regulatory risks. We also refer to not only cases of industry peers, but also major customers' opinion to identify issues for a more comprehensive perspective.

### Material issue identification process



### Material issues identified

We identify the significant issues regarding our 8 sustainability topics and the Sustainability Management Implementation System through the materiality test stated above. The most material issues are found in the top right of the picture below, and performance and plans relating to each issue are reported in the topic section in detail.









## Stakeholder Engagement

Consumers, suppliers, employees, local communities, shareholders/ investors and environment are our key stakeholders, who affect our business or who are affected by our activities. Listening and responding stakeholders is a core part of our sustainability management. We try to understand stakeholders' needs and expectations through enhanced communication with stakeholders.

Customers	External customers, who produce, use products of the LS Cable & System and receive services and auxiliary customers including subsidiaries and agencies.
Suppliers	195 suppliers providing raw materials and other equipment to LS Cable & System as of the end of 2010.
Employees	Executives, office workers and engineering workers totaling 2,412 persons as of the end of 2010.
Local communities	Anyang(including research laboratory), Gumi, Indong, Donghae, where the head office and domestic plants are located, and China, India, Vietnam, Malaysia, etc., where overseas plants are located.
Shareholders and investors	Shareholders mean the members of general shareholders' meeting as an owners of equity of LS Cable & System, including individuals and institutions investing in the equity capital of the Company.
Environment	Area where the workplaces of LS Cable & System are located, indicating the coverage of products and services of LS Cable & System.

## Communication channel

Category	Channel	Description
 Customers	<ul style="list-style-type: none"> <li>Customers satisfaction Survey</li> <li>CRM system</li> <li>Cyber Sinmungo(petition) center</li> </ul>	<ul style="list-style-type: none"> <li>Try to improve customer satisfaction level</li> <li>Share customer and technology information at enterprise level</li> </ul>
 Suppliers	<ul style="list-style-type: none"> <li>Win-Win Growth Council</li> <li>Open discussion meeting with suppliers(every February)</li> <li>Satisfaction survey</li> <li>Trainings for suppliers(twice a year)</li> </ul>	<ul style="list-style-type: none"> <li>Share information with suppliers and support their improvement activities</li> <li>Discuss business plan and procurement strategy of LS Cable &amp; System and try to resolve grievances of suppliers</li> <li>Conduct perception surveys on mutual cooperation</li> <li>Conduct quality assurance and sustainability management training for suppliers</li> <li>Share market intelligence</li> </ul>
 Employees	<ul style="list-style-type: none"> <li>Diagnosis of organizational capability and culture</li> <li>Son's Book Cafe'</li> <li>Field satisfaction survey</li> <li>Hotline/Ombudsman system</li> <li>Monthly meeting</li> <li>Council for Participation and cooperation promotion</li> </ul>	<ul style="list-style-type: none"> <li>Conduct surveys on organizational capability and internalization level</li> <li>Promote internal communication and reading management</li> <li>Identify implications for system improvement</li> <li>Resolve grievances of employees</li> <li>Share management status and performance data</li> <li>Discuss pending management issues and matters relating to employees</li> </ul>
 Local communities	<ul style="list-style-type: none"> <li>Support for the neglected class of people</li> <li>Contribution to global community</li> <li>Business-Academic cooperation</li> <li>Environment conservation activities</li> </ul>	<ul style="list-style-type: none"> <li>Promote volunteer activities in each workplace, salary odd-sum donation</li> <li>Plan and run undergraduate overseas volunteer program</li> <li>Make a contribution by overseas subsidiaries</li> <li>Provide environment educations to children cultivate a professional of energy/electricity</li> <li>Do Environmental cleanup activities</li> </ul>
 Shareholders and investors	<ul style="list-style-type: none"> <li>Shareholders' meeting</li> <li>Corporate IR activities</li> <li>Public disclosure</li> </ul>	<ul style="list-style-type: none"> <li>Discuss corporate strategies and directions</li> <li>Respond to corporate credit evaluation</li> <li>Disclose corporate information through website, etc.</li> </ul>
 Environment	<ul style="list-style-type: none"> <li>Green management committee(twice a year)</li> <li>Climate change response committee, Green product committee, ESH committee</li> <li>Operate ESH system</li> </ul>	<ul style="list-style-type: none"> <li>Expand internal communication to strengthen green management</li> <li>Convene meeting once every quarter to determine implementation strategy and direction</li> <li>Internal communication</li> </ul>

## Stakeholder Survey

We conducted a Sustainability Management Survey on major consumers, suppliers and employees(2011.3.9~3.14) and reflect significant implications on the materiality test and the goals for the next year as well.

Customers	The result says that customers trust the products of LS Cable & System(83.3 point) and recognize the Company as an ethical corporation(79.2 point). Also, they point out that we need to pay attention to new growth drivers, technology development and prompt reaction to market for sustainable development. Also, we plan to step up communication more actively to further raise the customer satisfaction level.
Suppliers	The survey shows that our suppliers have recognized the implementation of environmental management most positively. On the other hand, it is found that we need to put further efforts on supports for suppliers in the area of mutual growth and sustainability management implementation.
Employees	It is found that employees are most concerned about customer satisfaction, quality improvement, manufacturing innovation and employee welfare improvement as the most critical issue for LS Cable & System to sustain its growth. The results are the same as those of the 2010, which indicated that the employees prioritize sustainability management issues from external and internal customer perspectives.



# TOPIC 01. Creativity & Innovation

We are aspiring to become a global No.1 cable manufacturer by 2015 beyond a top company in the Korean market. To achieve this challenging and future-oriented goal, we have a concrete plan to expand our global presence through business model innovation and development of new growth engines.

We try to create values by accelerating global market management developing a new technology and product and innovating a corporate business model. To enhance global competitiveness, we will expand global presence, notably with a focus on Asia among emerging markets. We will also try to provide differentiated values to customers through a cutting edge technologies, new products and integrated solutions that match global expectations. Our efforts to create values help us not only to provide promoted service to stakeholders but also to have a key role in shaping a better world.

## Creativity Management

### Global Market Management

#### Exploring global markets through M&A

We have a plan to position us to be capable of meeting the needs of global demand, not just staying in domestic market. We have secured synergies by merging and acquiring market players that have a strong bearing on our business with significant technological savvy and market presence, so that we expect to improve profitability of the existing businesses and find future growth drivers. As part of this focus, we acquired Superior Essex, the largest cable manufacturer in North America, in 2008 and HongQi Electricity in China in 2009.

#### Acquiring Superior Essex, the largest cable manufacturer in North America

Superior Essex, headquartered in Atlanta, GA, is a 78 year-old cable manufacturer that posted annual revenues of about \$2.99 billion as of 2007. It operates a magnet wire<sup>1)</sup> and telecommunication cable business comprising 20 plants located in 9 countries including the USA, Canada, Mexico, China, France, Germany, U.K., Italy and Portugal, etc.

Upon acquisition of Superior Essex, we jumped to the world's No.3 from No.7 and achieved not only an external growth but also enhanced capabilities through an access to the technological savvy, worldwide sales network and production capacity of Superior Essex. Greater synergies are expected from this combination.

Notably, we are collaborating in various sectors in order to realize the vision to grow into a global player with Superior Essex. Our efforts are concentrated on stabilizing the operation of Superior Essex while we intend to boost sales through a cross-selling of the products, save purchasing costs through global sourcing and share best practices in R&D and production technology.

In the telecommunication sector where both companies operate similar businesses, we cooperate with a focus on telecommunications solutions, while we have focus on high end products in the magnetic wire sector. This approach help us build a mutual cooperation in profitability improvement, not only in increase in sales. More than anything, we are developing new businesses by combining the production capacity and customer network of Superior Essex with the forward-looking technologies of LS Cable & System.



<sup>1)</sup>Magnet wire: Insulated conductor(round wire, rectangular wire, etc.) made of copper and aluminum and coil-wound within electric/electronic device to convert electric energy to electromagnetic or mechanical energy and to convert mechanical energy to electric energy

## Acquiring HongQi Electricity, a Chinese electric cable manufacturer

We acquired Hubei Yongding HongQi Electricity, the cable manufacturing company of Yongding Group, China, in September 2009 and renamed it LS HongQi Cable & System in December. Hubei Yongding HongQi Electricity was a medium-sized cable manufacturer with annual sales revenue of about KRW100 billion. We have a plan to make it the China's No.1 cable manufacturer with annual sales revenue of about KRW1 trillion by 2015. LS HongQi Cable & System is located in Yichang City, the 2<sup>nd</sup> biggest in Hubei Province around the midstream of the Yangtze River, producing various cable products including electric power cable including 220kV extra high voltage cable, submarine cable and industrial specialty cable etc. in a plant covering about 406.611m<sup>2</sup>.

China has risen to be a great economic power and is expected to grow to have the world's largest economy in 2020 and possibly become twice as big as the U.S. economy by 2030.

We believe that China will be a key market to realize our vision of becoming the global No.1 cable manufacturer, in that it accounts for 24% of the global electric power cable market. We will be assiduous in making LS HongQi Cable & System the biggest cable solution provider of China by 2015, based on our business experiences in China which made around the LSCT magnet wire plant located in Tianjin, the LSCW automotive cable, instrument cable and busduct plant located in Wuxi and the LSIC distribution branch located in Shanghai.



## Development of New Technology and Product

In terms of R&D strategy, We continue to keep eye on technology trends from a mid-to-long-term perspective and reflects them into our mid-to-long-term product and technology roadmap, Furthermore, we manage a patent strategically in a corporate level.

### Managing a corporate core technology strategically

We have selected a corporate global competitive-edge technology in consideration of market influence and technological importance to secure a foothold in global market and to get new customers.

In addition, We monitor trends of market and technology regularly to select and develop more competitive-edge technologies.

As a result, we have developed cutting edge technologies, and promoted an ability to respond flexibly to changes in business models and market environment with these technologies. As a representative example, there are an XLPE insulation material that enhances the insulation of extra high voltage cable, an ultra fine new wire manufacturing processes for manufacturing the fine conductors as thin as a human hair, a sheath design that prevent signal disruption from electric or electromagnetic waves, insulation materials changing from existing AC insulation to DC insulation, and a power system interlocking technology that better facilitates power supply between different electric power systems.

## Core strategic products

In terms of the product promotion strategy, we seek to develop a core strategic product and establish a promotion program specialized in each product. This customer oriented product enable us to enter into the top global league and enhance competitiveness in line with the vision of becoming the global No.1.

### Energy transmission/distribution

A growth of the current distribution networks and expansion of smart grids requires independent energy source networks or larger-capacity energy storage mechanisms.

As AC networks are being transformed into DC networks, we need to respond to demands for DC cable and smart grid technology trends.

### High-temperature superconductor cable

With regards to extra high voltage cable, we have continued to build a R&D and production framework for more than a decade, to prepare for mass production of future oriented high-temperature superconductor cables.

### Submarine cable

To produce submarine cable that enables electric power transmission or telecommunication between countries or between islands and a nearby mainland, we have built the first submarine cable plant in Donghae since May, 2009. It is our long-desired goal to enter into the submarine cable market, where a few top global player have held a prominent position.

Our entry into a submarine cable market will help meet domestic demands. The extra high voltage submarine cable developed by us is expected to substitute the imported cable worth KRW300 billion in cumulative terms by 2011 and post KRW750 billion in sales by 2015.

### Overhead transmission line cable

We give a focus on the increasing capacity of power transmissions regarding overhead transmission line cable. We are in the development process of the lighter cable design and the system considering a way of transmitting power and products.

### Telecommunication

In preparation for penetration of the various 4G telecommunication applications, we search for ways to diversify fiber optic cable products and bolster solutions to accommodate the increasing base stations.

In terms of commercialization of the key corporate competitive-edge technologies, we concentrate on technology with more growth potential in each cycle, as each technology have a different product cycle from a development, and a growth to commercialization. In other words, we provided a single cable product to customer in the past, but adopted a new sales approach, in an effort to increase profitability. We diversify the product lineup into the solution business including equipments, connectors, accessories and integrated services to cater to new market needs and new industry. Recently, as customers have become increasingly interested in environment friendly products and marine cable, our focus is being placed on fostering such products intensively.

## Patent Management

### Direction for patent management

As intellectual property rights are increasingly emphasized these days, we continuously enhance a corporate patent management. We have implemented patent management activities notably in the following 3 aspects.

First, our patent portfolio searches for and focuses on the practical technologies. To that end, we try to secure and manage intellectual property rights at the corporate level and obtain the rights of technology development as well.

Second, the patent management is set to be offense-oriented rather than defense-oriented. An R&D framework transition is being implemented to shift from a simple conventional patent application to the more aggressive patent development, and studies and analyses are being conducted to innovate the patent dispute prevention system.

Lastly, a patent application and dispute response will be driven at the enterprise scale rather than by researchers as was the case in the past. In so doing, we select practical technologies, analyze and review prior arts, develop a patent map, and exercise our right of technology.

This process helps us choose an area of concentration in the patent management.

### Performance of patent management

We are implementing our patent management strategically by identifying and securing the technology necessary for business in each business group in accordance with the patent management implementation direction. Notably, patents can be applied for by any employee, but usually are filed by a researcher, a development and production process personnel. The result of our patent management shows that the patent in the area of research are made as a result of the researchers' activities in the laboratory center, while in the production process area, team members of each business group play a key role in patent application by their organizational needs and strategic considerations.

The patent management implementation is, in general, implemented along the 3 lines of concern. First is to secure the core competitiveness, We will make use of intellectual property rights to boost management performance. In other words, we determine if our intellectual property rights are worth maintaining and viable for utilization, and use them for royalty revenue, patent right transfer or marketing activities.

Second is to secure the future growth drivers. The intellectual property rights are enhanced to support mid-to-long term growth and development of the Company. Key activities include the development of standard patents, and alternative patents, and patent application rating activities.

Lastly, it is for responding to patent disputes. As patent disputes or patent suit can bring about enormous costs, the prevention through a study and analysis can be a way of cost control. You can refer to the case of base station antennas, electric vehicle rechargers and square magnet wire for electric motors.

Notably, in terms of our patent portfolio, it is considered that we may be somewhat weak with regards to the standard technology but have strength in applications, thanks to intensive patent applications to that area. This is consistent with the corporate strategy to diversify the business model from product manufacturing to provision of solutions and applications as well.

### Patent applications

(Unit: the number of patent application)

Year	Korea	US	China	Others	Overseas total
2008	179	14	17	45	76
2009	155	17	13	42	72
2010	140	11	6	21	38

## Innovation Management

We have promoted the innovation management as a corporate key policy since 2003 when we were spun off from LG Group. Back then, we were at the end of a growth phase following several years of sluggish performance, suffering uncertain profitability and inadequate preparation for the future.

To overcome a challenging situation, we implemented a corporate wide 'Process Innovation' activities and built an ERP system consistent with global standards for 2 years from 2003, completing a platform for the continued innovation management. Notably, we established a principle of the employee engagement as a key of corporate innovation, aiming at improving employee's comprehensive problem solving capabilities in statistical, logical and practical aspects.

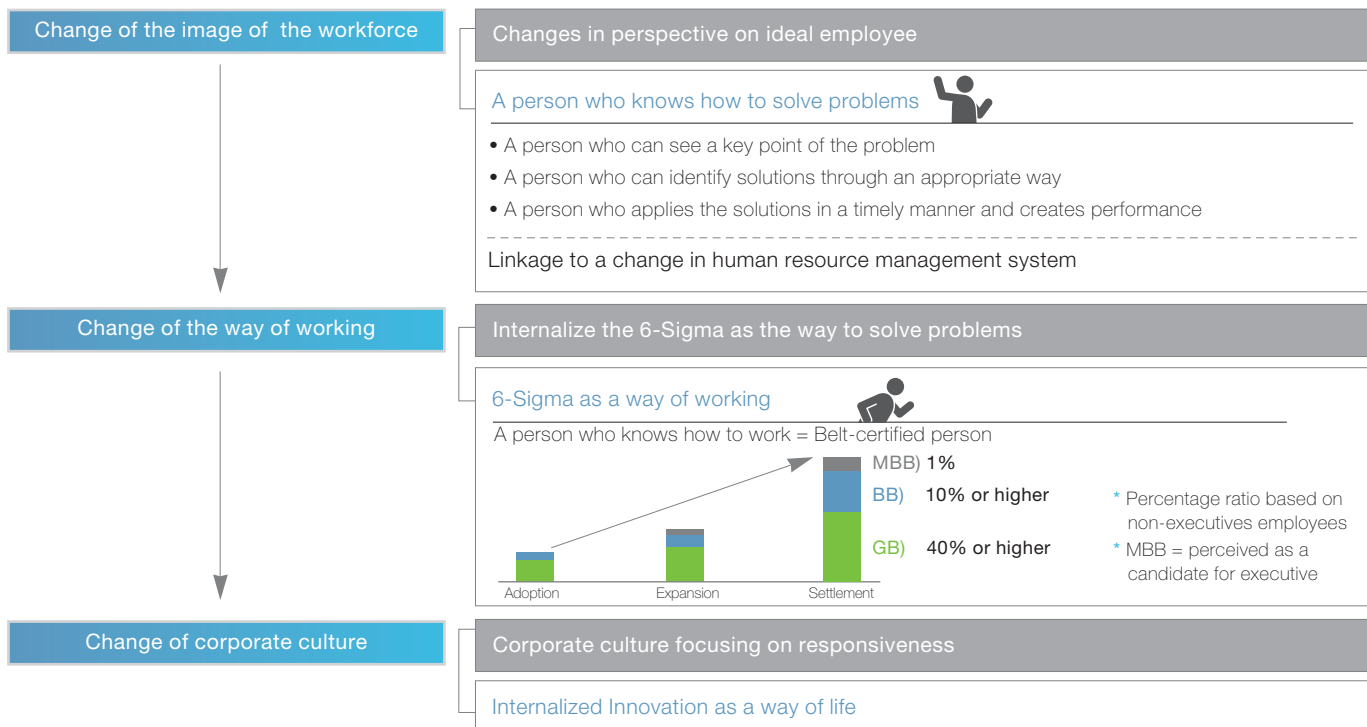
Our innovation programs are centered around 4 columns, 6-Sigma activities for innovating a way of working, a 'Big Y' of directors for better preparation for the future and a business model innovation, Cost reduction for improving internal efficiency, site/field innovations, Supports for innovation of subsidiaries both at home and abroad, and Organizational culture change.

### 6-Sigma activities as an innovative way of working

6-Sigma activities are zero-defect quality improvement activities that remove the causes of defects so that reduce errors to the level of 3.4 per 1 million on average by implementing statistical and logical innovations. We introduced the 6-Sigma in 1999 when we were still a part of the LG Group, but suspended it due to an inadequacy of underlying infrastructure such as a management information system. However, we build the required management information infrastructure through an introduction of 'process innovation' and ERP system, and then began to implement the 6-Sigma as a full-fledged policy in 2007. The 6-Sigma activities in which all employees participates have been internalized as an enterprise innovation program to ensure a quality level for customer satisfaction and contribute to eliminating wastes and improving the corporate culture. Since 2009, we make use of the 6-sigma as an innovation platform along with "knowledge management" practices for sharing of corporate knowledge resources.


We try to suggest 'the ability to solve a problem', as a capability that employees need to obtain. We encourage our employees to approach to a problem and to be a people of action through the 6-Sigma techniques. It is expected that the 6-Sigma causes a fundamental change in our corporate culture.

### Image of workforce as envisioned by LS Cable & System





We emphasize the innovation by suggesting goals and directions of the 6-Sigma program from the perspective of customer satisfaction and the achievement of management goals.




“We need to focus on identifying optimum conditions that can maximize profits and efficiency via the 6-Sigma.”

• Interview with Seoul Economic Daily, 2006

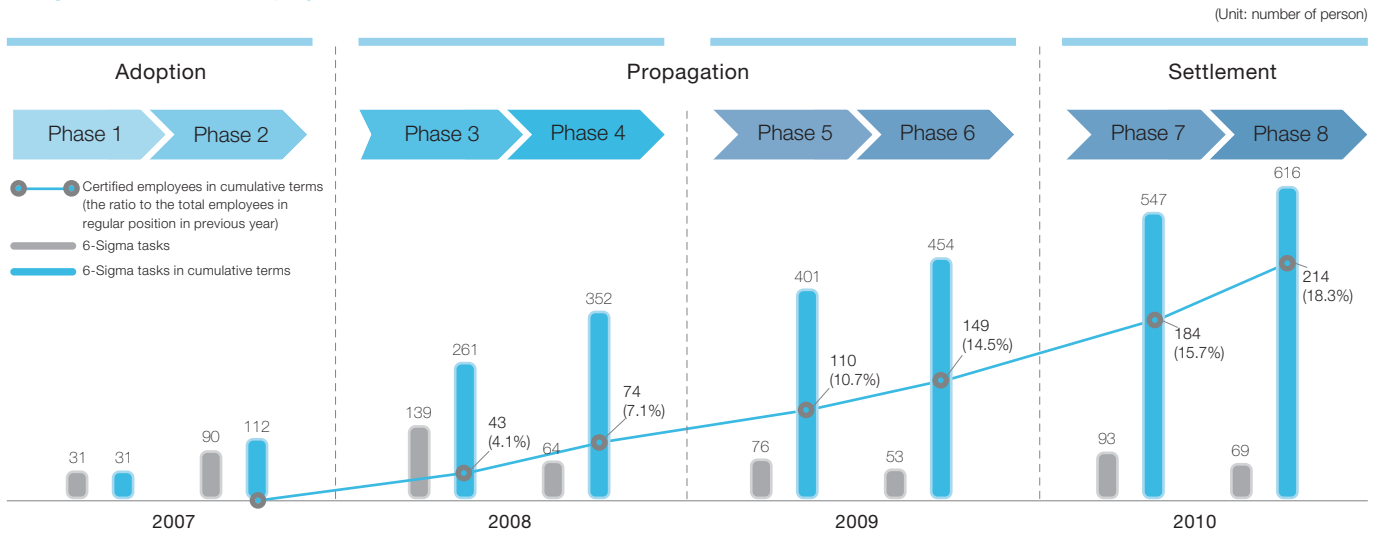
“6-Sigma is not simply for performance disclosure but for our own survival. We must maximize performance and press on with innovation via the 6-Sigma.”

• Innovation Promotion Conference, June, 2007

 **interview**

we plan to expand the scope of the 6-Sigma implementation to cover the entire business and nurture the 6-Sigma belt-certified employees, with a goal to cultivate employees to 6-Sigma experts as many as 40% of total regular position of employees by 2012.

**6-Sigma belt-certified employees**



**‘Big Y’ for directors, as a tool for achieving mid/long term strategy**

We implement the ‘Big Y’ for directors in which the directors of each business group carry out the tasks on the basis of 6-Sigma activities.

Every ‘Big Y’ task for directors is future-oriented and aligned with the business group strategy, involving the directors not only in production, development and R&D group but also management and support organizations and the presidents of the subsidiaries at home and abroad. Since 2007, the 6-Sigma activities and the ‘Big Y’ tasks for directors have contributed significantly to business performance. Notably in 2010, financial achievements made by the 6-Sigma activities and the ‘Big Y’ tasks for directors accounted for more than 80% of the operating income of the company, which indicates how significantly our innovation activities have contributed to the business performance.

**Financial effects of innovation activities**

(Unit: 100 million of KRW)

Category	2007	2008	2009	2010
‘Big Y’ tasks for director	451	572	1,583	846
6-Sigma activities	86	118	84	157

### Cost Innovation for Improving Internal Efficiency(COPQ: Cost of Poor Quality)

We try to improve internal efficiency to enhance a product competitiveness in terms of price, quality and delivery in comparison with other competitors worldwide.

To that end, COPQ activities are conducted, covering the entire spectrum of costs including materials, processing, sales & administration, procurement/logistics, R&D and general expenses.

In addition, we manage the major tasks of COPQ as the 6 Sigma activities for implementing them in more systematical and effective manner. Also, we support for improvements throughout the all business site, using the '7 key management indicators' including internal failure costs, execution losses and a long standing inventory, etc. The COPQ activities contributed to KRW70.6 billion of profitability in 2010, targeting KRW87 billion for 2011 at the enterprise level.

### Supports for innovation of the Subsidiaries and the Suppliers

We have implemented the 6-Sigma activities jointly with the subsidiaries and the suppliers at home and abroad to improve the overall quality level of our supply chain. To that end, we began to provide a 6-Sigma 'Green Belt' training program for our domestic subsidiaries in 2009 and dispatch our MBB(master black belt) holders to provide a guidance on how to manage innovations and foster innovation talents to our subsidiaries.

In addition, we have provided 6-Sigma trainings on task selections and management to the overseas subsidiaries in accordance with the same processes applied to the domestic ones since 2010. As of 2011, the 6-Sigma innovation activities of the 4 domestic subsidiaries and the 4 overseas subsidiaries of China, Malaysia and Vietnam are being supported.

At the same time, the 6-Sigma training has been provided to 31 suppliers from the end of 2010 to help them upgrade their quality level, with GB training for 15 suppliers and a task selection/guidance for 5 suppliers. Therefore, it is our goal that all subsidiaries and suppliers at home and abroad implement a quality innovation and a enhance infrastructure via continued talent developments.

In case of the overseas subsidiaries with a their different culture and work environment from those of domestic companies, we develop training materials considering best cases and capabilities of subsidiary employees, and try to apply training skills and way of managing tasks which are proven to be effective.

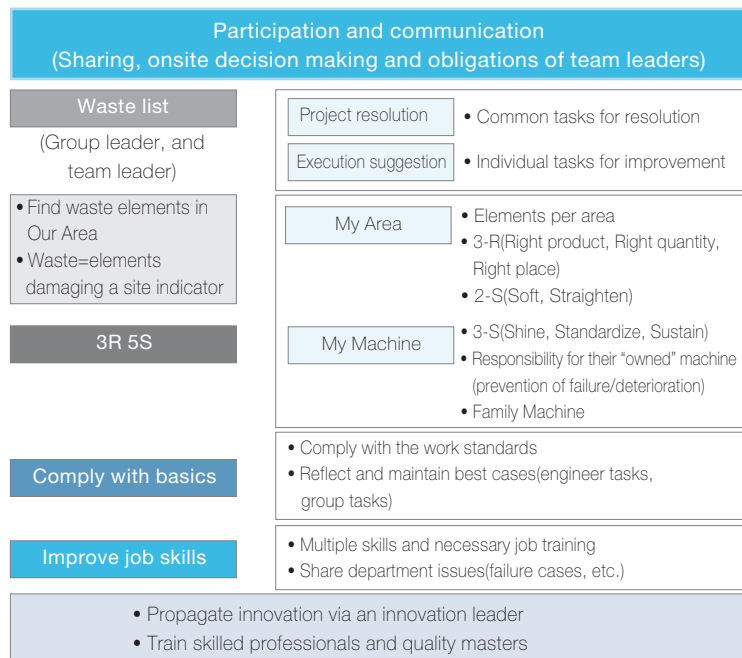
Our innovation leaders are sent from Korea to provide a training and guidance for a specified period of time and employees of subsidiaries are trained to develop their capability for independent innovation activities.

In addition, the employees of each subsidiary are becoming better aware of a value of the 6-Sigma and are engaging actively in the program to develop their personal capabilities and improve achievement, thus improving overall performance continuously.

### Site Innovation Activities - 3-R, 5-S, Group Activates and Suggestion Program

We have implemented 3-R, and 5-S activities onsite. The 3-R, and 5-S pertain to "right product, right quantity, right place"(3-R) and "soft, straighten, shine, standardize and sustain"(5-S). The activities are linked to 'My Machine' activities and 'Our Area' activities. The 'My Machine' activities require all employees to maintain their site production facilities with a sense of ownership and the 'Our Area' activities urge them to keep their areas clean.

Group activities make an active use of the 6-Sigma methodologies and manage a task in 5 steps designated as: Define, Measure, Analyze, Improve and Control. Notably, the 6-Sigma belt holders are appointed as a secretariat of the group activities to support problem-solving activities, which helps resolve group activity tasks in a simpler manner.



## Innovation of corporate culture

We operate a variety of corporate culture programs to make a 'great place to work' and 'a company to which willing to go even in Monday'. Our corporate culture programs apply to every employee from the top to working level and include the 'Talk with the CEO' which is the forum where employees can engage in a dialogue with the CEO as an informal manner, 'Son's Book Cafe' where employees can communicate with the CEO through sharing their thoughts on the books they read together, and 'Imagination Island' where employees actively engage in management with their own creative ideas.

The 'Talk with the CEO' has been conducted annually since 2006. It is an open forum through which employees may present their ideas directly to the CEO and the CEO can share his management philosophy with them.

The 'Son's Book Cafe' facilitates communication with the CEO through an online channel, where anyone is encouraged to post his or her thoughts of the book recommended by the CEO. The CEO continues to have heart-to heart discussions and share ideas with our employees by replying to the suggested ideas on the book.

The 'Imagination Island' is an organizational motivation program that allows the employees to post their creative ideas to our online menu consisting of 6 categories: business, products, sales, production, IT and organization culture. An outstanding ideas are rewarded through a process of evaluation and review. This system is regarded to contribute to invigorating a corporate culture and employee's participation.

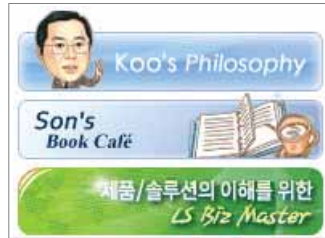
At the same time, an in-house knowledge management system titled 'Knowledge Union', or '*Knowledge Dure*' in Korean words, is under operation so that business knowledge and best practices can be shared in an effort to enhance overall knowledge management.

Notably, to motivate employees, the employee who has made an outstanding achievement in sales, production, development, support, etc. is selected each month as the 'Employee of the Month' and duly rewarded.

Photos and credits of 'Employee of the Month' are published on the front page of the 'Knowledge Union'.



Talk with the CEO



Son's Book Cafe



Imagination island



Knowledge management system





SOCIETY





**LS Cable & System is spearheading commitments to make the world a better place where everyone can smile with heartfelt happiness.**

Sharing dreams and vision with stakeholders is what we desire to do.

We aim at going together with customers, suppliers, employees under a common vision.

We realize our responsibility to heighten the value of stakeholders by performing our duties as a corporate citizen.





# Social DMA Disclosure on Management Approach

Division	Policy	Objectives	Department in charge	2010 Achievements	2011 plan
Customers	<ul style="list-style-type: none"> <li>To walk with customers</li> </ul>	<ul style="list-style-type: none"> <li>Develop improvement activities to better understand and raise the level of customer satisfaction</li> </ul>	<ul style="list-style-type: none"> <li>Each sales team, Quality &amp; environment management office</li> </ul>	<ul style="list-style-type: none"> <li>Conduct a customer satisfaction survey for quality, service, delivery(once a year)</li> <li>Reflect customer feedback by operating a comprehensive CRM system</li> <li>Implement continuous improvement activities with the 6-sigma initiatives</li> </ul>	<ul style="list-style-type: none"> <li>Continue the existing programs</li> </ul>
Suppliers	<ul style="list-style-type: none"> <li>To realize a sustainable supply chain management framework</li> </ul>	<ul style="list-style-type: none"> <li>Adopt a global purchasing policy management framework</li> </ul>	<ul style="list-style-type: none"> <li>Purchasing planning team</li> </ul>	<ul style="list-style-type: none"> <li>Enforce fair trade and Win-Win growth cooperation agreements</li> <li>Organize the Win-Win Growth Council</li> <li>Develop global purchasing policies</li> </ul>	<ul style="list-style-type: none"> <li>Win-Win Growth Council every quarter</li> <li>Propagate global purchasing policy to business partners</li> <li>Provide business capability enhancement training for partner companies</li> <li>Develop a sustainability management monitoring manual</li> </ul>
Employees	<ul style="list-style-type: none"> <li>To create an enjoyable workplace</li> </ul>	<ul style="list-style-type: none"> <li>Build a global system to promote an enjoyable work environment</li> </ul>	<ul style="list-style-type: none"> <li>HR team</li> <li>HR development team</li> <li>Labor/management planning team</li> </ul>	<ul style="list-style-type: none"> <li>Expand mentoring</li> <li>Develop and operate Biz. Master job training programs</li> <li>Promote management objectives through a reading a book program</li> <li>Launch/develop a help desk for foreigners</li> <li>Launch/develop a sexual harassment helpline</li> </ul>	<ul style="list-style-type: none"> <li>Improve work &amp; life balance</li> <li>Build and expand infrastructure to promote global diversity</li> </ul>
Local communities	<ul style="list-style-type: none"> <li>To build a corporate social contribution framework</li> </ul>	<ul style="list-style-type: none"> <li>Establish a unified social contribution platforms</li> </ul>	<ul style="list-style-type: none"> <li>PR team</li> </ul>	<ul style="list-style-type: none"> <li>Promote volunteer group activities in workplace</li> <li>Operate salary odd sum fund</li> <li>Dispatch undergraduate volunteers overseas</li> <li>Provide an environmental educations for children/foster engineering experts</li> <li>Conduct cleanup activities in each workplace</li> </ul>	<ul style="list-style-type: none"> <li>Develop social contribution strategy</li> <li>Designate dedicated organization including volunteer groups and promote activities</li> <li>Develop model social contribution programs</li> </ul>

Importance to Stakeholders	<b>High</b>	<p>[Customers]</p> <ul style="list-style-type: none"> <li>Ethical, social, environmental products</li> <li>Safety/health from product use</li> </ul> <p>[Suppliers]</p> <ul style="list-style-type: none"> <li>Fairness in procurement</li> </ul> <p>[Local Community]</p> <ul style="list-style-type: none"> <li>Identify needs of local community</li> </ul>	<p>[Suppliers]</p> <ul style="list-style-type: none"> <li>Win-Win growth</li> <li>Fair trade with suppliers</li> </ul> <p>[Local Community]</p> <ul style="list-style-type: none"> <li>Social contributions</li> </ul>	<p>[Customers]</p> <ul style="list-style-type: none"> <li>Responsibility for product and quality</li> <li>Product competitiveness</li> </ul> <p>[Employees]</p> <ul style="list-style-type: none"> <li>Fair treatment</li> <li>Balance between work and life</li> <li>Respect for human rights and diversity</li> </ul>
	<b>Low</b>	<p>[Customers]</p> <ul style="list-style-type: none"> <li>Provision of accurate product information</li> </ul> <p>[Employees]</p> <ul style="list-style-type: none"> <li>Support for childcare and health of women</li> </ul> <p>[Local Community]</p> <ul style="list-style-type: none"> <li>Contribution to local community</li> </ul>	<p>[Suppliers]</p> <ul style="list-style-type: none"> <li>Promotion of sustainability management toward suppliers</li> </ul>	<p>[Employees]</p> <ul style="list-style-type: none"> <li>Labor/management relationship</li> <li>Occupational health and safety</li> <li>Training and self-development</li> <li>Job security</li> </ul>
		<b>Low</b>	Importance to Business	<b>High</b>

# TOPIC 02. Customers

## Growth with Customers

Guided by the management philosophy of 'Walking with Customers' and with the vision of being 'Your No.1 Creative Partner,' we seek to provide the best services to our current and future customers.

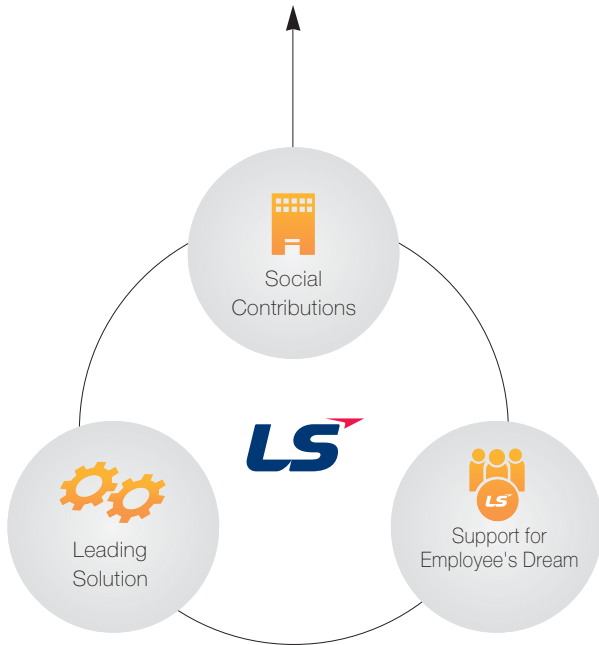
We define our customers as both those entities buying and using our products in the narrow sense and all entities engaged in the entire process of production, use and service involving our products in the extended sense. Based on this definition, we seek to fulfill our customer requirements and conduct systematic customer satisfaction activities to build solid partnerships with the customers.

### Management policy

#### " Walking with customers "



To be a company delivering leading solutions to customer and contributing to society through a employee's participation



### Vision



<b>Your</b> LS Cable & System for Internal and External customers as well as Present and Future Ones
<b>NO.1</b> Best and Only Leading Company
<b>Creative</b> Unique, Creative Thinking for Providing the Best Solutions
<b>Partner</b> Continuous Partnership Toward Common Goal

## Customer Satisfaction

### Listening to our customer

In order to ensure customer satisfaction, we have built a framework to analyze customer requirements, identified and resolved relevant problems and shared the results with all relevant sales and engineering personnel. This customer information and feedback are also used as key inputs that help us formulate our sustainable growth strategy. Customer information, regional information and business information collected from various customers both at home and abroad are analyzed and shared with relevant business groups and notably, the market development team. We make strategic use of the analyzed information in improving an access to customer, exploring new markets and nurturing new growth engine. In addition, customer information is managed at the enterprise scale with the market development team in the center and the collected information is communicated to relevant departments to help improve our overall management activities.

Furthermore, all employees are allowed to share customer information and technology trends via the enterprise portal system to better manage information at a corporate context. Furthermore, we developed a customer relationship management system, a CRM system, particularly for supporting a sales department, who listen to and serve customers in person.



Customer information in the CRM system



Customer information in the "Knowledge Union"

### Customer satisfaction process

Each year we conduct a customer satisfaction survey to better understand the customer satisfaction level and identify areas for improvement. Notably, the survey measures covers the satisfaction level of not only domestic customers but also global customers in the area of quality, service and delivery and then satisfaction level improvements every year. Also, we manage identified areas for improvement using 6-sigma methodology.

The figure and table below shows how the tasks for improving customer satisfaction level are selected and what tasks we have dealt with.

#### Process to link customer requirements to 6-sigma projects



#### Listen to voice of the customers(VOC)

##### VOC / VOB Collection

Customer		Voice of the Customers, Business
Customer		Customer issues & problems
External customer (VOC)	Delphi	UL certification of product, reasonable price, quality
	DUNBAR	Stable product supply, stable business relationship, extension of exclusive rights, delivery in installments
	LEONI/LEAR	VOC collection
	NexenTech	Reliable water tightness, prevention of defects in bond application
	Jungseung/THN	Quick responsiveness to customer requirements(complaint handling and IMDS availability, etc.)
Internal customer/process (VOB)	Production control	Decrease in rework regarding quality issues, productivity improvement
	Tube team	Higher yield, cost saving, high profitability and productivity, production of longer tube, increase in production throughput, raw material quality, possible spec revision(extrusion inner diameter oversize), price competitiveness, acceleration of new product development, acceleration of UL certification

- Topic 02. Customers
- Topic 03. Suppliers
- Topic 04. Employees
- Topic 05. Local Community

**Customer segmentation & customer core requirements(CCR)**

**CCR identification**

Voice of customers (VOC)	Key customer issues (KCI)	Customer core requirements (CCR)
<ul style="list-style-type: none"> <li>Need to improve productivity</li> <li>Need to increase production volume</li> <li>Need to stabilize delivery volume</li> <li>Need to assure product quality</li> <li>Need to secure price competitiveness</li> <li>Need to obtain product certification</li> <li>Need to secure product reliability</li> <li>Need to decrease rework</li> <li>Need to be more responsive to customers</li> <li>Need to review specifications</li> <li>Need to control raw material quality</li> <li>Need to review other customer requirements</li> <li>Need to comply with delivery schedules</li> </ul>	<ol style="list-style-type: none"> <li><b>1. Gain in productivity</b> <ul style="list-style-type: none"> <li>Raise extrusion flux</li> <li>Raise expansion flux</li> <li>Optimize spec.(product structure)</li> <li>Produce longer product</li> <li>Minimize rework</li> </ul> </li> <li><b>2. Quality</b> <ul style="list-style-type: none"> <li>Water tightness</li> <li>Lengthwise contraction rate</li> <li>Inner diameter defect</li> <li>Appearance defect</li> <li>Raw material quality</li> </ul> </li> <li><b>3. Responsiveness to customer</b> <ul style="list-style-type: none"> <li>Delivery schedule</li> <li>Delivery volume</li> <li>Product certification(UL)</li> <li>Data request(PPAP, IMDS, etc.)</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li><b>1. Gain in productivity</b> <ul style="list-style-type: none"> <li>Raise extrusion flux</li> <li>Raise expansion flux</li> <li>Optimize design (extrusion inner diameter)</li> <li>Increase product length by securing sales Improve productivity without sacrificing quality</li> </ul> </li> <li><b>2. Quality</b> <ul style="list-style-type: none"> <li>Water tightness : See ES91409-Rev00</li> <li>Lengthwise contraction rate : -10~0% (R 10)</li> <li>Appearance : Hot-melt unequal application and bubble</li> <li>Raw material : Review material spec.</li> </ul> </li> <li><b>3. Responsiveness to customer</b> <ul style="list-style-type: none"> <li>Meet delivery schedule and volume requirement by improving productivity</li> <li>Delivery volume</li> <li>Obtain product UL certification</li> </ul> </li> </ol>

**Select CTQ(Critical to quality) based on CCR**

**Pulling output indicator & CTQ out of CCR**

CCR	Output indicator	Upper CTQ	Sub CTQ
<ol style="list-style-type: none"> <li><b>1. Improve productivity</b> <ul style="list-style-type: none"> <li>Improve extrusion productivity</li> <li>Improve expansion productivity</li> </ul> </li> <li><b>1. Quality productivity</b> <ul style="list-style-type: none"> <li>Uniform extrusion/expansion</li> <li>Quality of finished product</li> </ul> </li> </ol>	<ul style="list-style-type: none"> <li>Extrusion flux</li> <li>Expansion flux</li> <li>Extrusion inner diameter</li> <li>Extrusion thickness</li> <li>Lengthwise contraction rate</li> <li>Expansion inner diameter</li> <li>Water leak</li> <li>Bond bubble</li> <li>Uniformed bond application</li> </ul>	<ul style="list-style-type: none"> <li>Extrusion flux</li> <li>Expansion flux</li> </ul>	<ul style="list-style-type: none"> <li>Extrusion inner diameter(bond)</li> <li>Extrusion thickness(bond)</li> <li>Lengthwise contraction rate</li> <li>Expansion inner diameter</li> <li>Bond application status</li> </ul>
<ol style="list-style-type: none"> <li>1. The attempt to increase extrusion flux with the existing applicator resulted in a change in the inner diameter of the extrusion Installed new dedicated large-capacity applicator Measured and verified improvement</li> <li>2. Measured current CTQ level at the targeted expansion flux</li> <li>3. Fixed extrusion/expansion flux targeted herein at upper CTQ and finalized key quality elements from the Output Indicator as sub CTQ gauge R&amp;R and measure current level</li> </ol>			

We collect customer requirements on quality, delivery and prevention of defect recurrence. In addition, we respond to customer needs and improve customer satisfaction by making a systematic analysis of each requirement methodically by the step based process.

To conduct customer satisfaction improvement initiatives, we select customer requirements to be managed as 6-sigma project first. In the next step, we prioritize the requirements and identify important issues from analysis and review of the customer needs. Finally, core customer issues are identified and managed under the goal of improvement initiatives.

Notably, we reflects the customer satisfaction results into management activities and has operated 'The customer satisfaction management rules' since 2004 to provide guidelines for customer satisfaction activities. Against this backdrop, we continually improve the customer satisfaction survey method, reflect survey outcomes, provide feedback to customers and operate systematic follow-up processes in an effort to deliver better values to customers.

Thanks to such efforts, the level of customer satisfaction has steadily improved. We reinforce the customer satisfaction management system with a goal of achieving a satisfaction level of at least 4.0 point on a scale of 5.0 point by 2011.

As we measure customer satisfaction in accordance with our own in-house criteria, it is hard to compare it with competitors. However, we analyze annual trends and the extent of overall customer satisfaction improvement.

**Customer satisfaction trend by year**

		(Unit: Point)			
Biz. unit	Item	2007	2008	2009	2010
Automotive cable	Quality	3.5	3.5	3.8	3.9
	Delivery	3.4	3.7	3.8	3.9
	Service	3.5	3.6	3.8	3.9
	Average	3.5	3.6	3.8	3.9

## Management of customer complaints

We continually try to improve customer safety and reliability with quality innovation activities seeking zero-defects and address quality issues responsively in accordance with enterprise management regulations.

Notably, we address customer feedback and grievances through the established management system that methodically manages the entire process from problem occurrence, complaint receiving, determination of a handling process and final judgment on a customer grievance. After resolving a complaint, we are able to check a record of complaint reporting and incurred costs from the complaint handling through the system.



Customer grievance handling details - ERP screenshot

Upon receipt, customer complaint is handled in accordance with customer grievance control regulations. Roles and responsibilities are clearly specified for each procedure and process.

In addition, a customer grievance history is maintained and updated in the enterprise resource management system and improvement activities are implemented innovatively to prevent recurrence of a similar quality problem.

## Innovative Products & Services Considering Social/Environmental Issues

We deeply consider social and environmental issues when developing products and services. Notably, we seek to raise the ratio of environment friendly products to 90% of the total product portfolio by 2013 as part of our comprehensive green product policy and to develop a variety of innovative products to improve their environment-friendly value with a focus on customer needs.

For example, we replace copper with aluminum in the conductor for power line transmission cable. This has significantly increased product reliability and efficiency by securing a stable conduction ratio at 230°C or more.

For telecommunication cables, we have developed a lead-free indoor cable.

The Integrated Module & Cable business group has developed and commercialized a next-generation green heat shrinkable tube that does not contain any red phosphorous or halogen thus addressing the key concern of using conventional green tube products.

In addition, we are developing and commercializing a variety of innovative products with a keen consideration on social and environmental issues and are continuously concentrating on R&D initiatives to meet customer interests and needs for green products and raise the ratio of green products to 90% of the total product portfolio by 2013.



# TOPIC 03. Suppliers

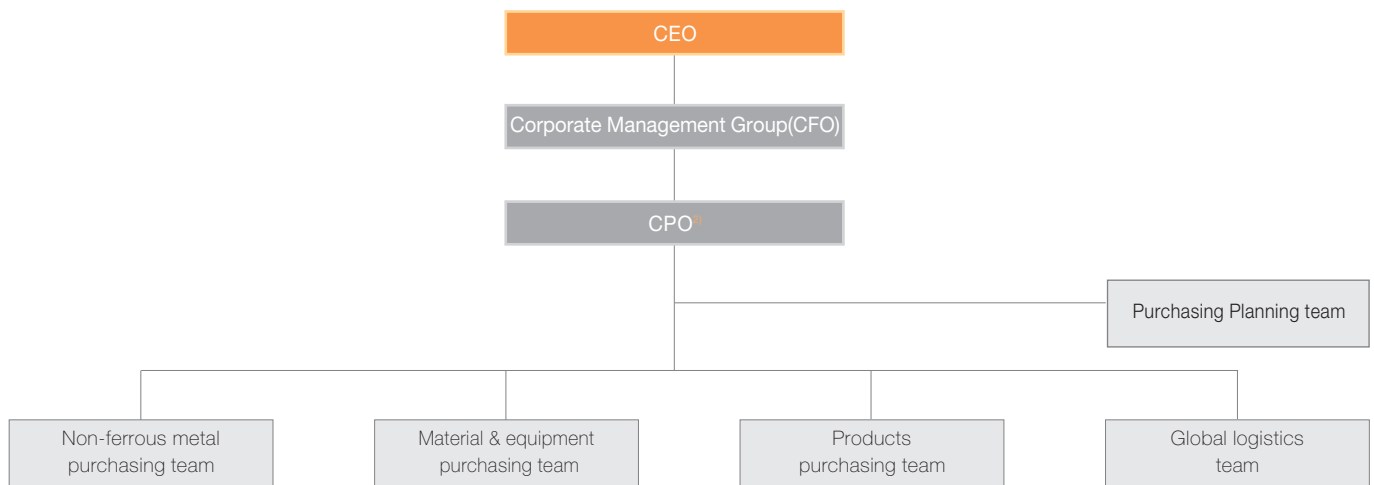
Our suppliers are vital to the ongoing global operations of the company as they provide the key materials and services needed for efficient and profitable production. Generally suppliers are classified into four main categories according to the kind of provided products or service: suppliers of (1) raw materials, (2) commodities, (3) non-ferrous metals, and (4) maintenance service. As they have a significant impact on the quality, delivery and cost of products manufactured and marketed by us, mutual cooperation and trust are critical. In 2010, we maintained transactions with 1,819 suppliers manufacturing or supplying goods or services, including overseas vendors, large domestic businesses, agencies, subsidiaries and contracted suppliers. Among them, we select 195 suppliers as major suppliers and seek to grow with them by building a reciprocal network of evaluation and management.

## Mid-term roadmap

	Establishment of the framework 2010-2011	Strategy promotion 2012	Global SCM development 2013
Promote sustainability management among suppliers	<ul style="list-style-type: none"> <li>Sustainability management monitoring criteria were developed</li> <li>Green procurement management system was developed</li> </ul>	<ul style="list-style-type: none"> <li>Monitor sustainability management performance</li> <li>Disseminate sustainability management know-how among suppliers</li> <li>Promote green procurement &amp; green partnership</li> </ul>	<ul style="list-style-type: none"> <li>Establish a framework for sustainability management of suppliers</li> <li>Establish a green SCM<sup>1)</sup></li> </ul>
Fair trade	<ul style="list-style-type: none"> <li>Ensure fairness in trade by selecting suppliers through transparent processes, implementation of a fair evaluation and management system, and develop a system to continually upgrade both.</li> </ul>		
Win-Win Growth	<ul style="list-style-type: none"> <li>Implement a virtuous Win-Win cycle</li> <li>Expand communication channels</li> </ul>	<ul style="list-style-type: none"> <li>Expand customized support program</li> <li>Internalize communication outcomes</li> </ul>	<ul style="list-style-type: none"> <li>Establish partnership system</li> </ul>

## Operating organization in charge of building partnership with supplier

The purchase planning team is a dedicated department that focuses on mutual growth with suppliers and is responsible for supporting and managing them.



<sup>1)</sup> SCM: Refers to Supply Chain Management

<sup>2)</sup> CPO: Refers to Chief Purchasing Officer

## Dialogue with Suppliers

We are keen to listen carefully to the ideas and suggestions of our suppliers via a variety of communication channels such as the Win-Win Growth Council, online procurement site, public meeting, open discussions meeting and surveys. These channels help strengthen mutual communication with the suppliers.

### Win-Win Growth Council

We established and operate a Win-Win Growth Council with a purpose of understanding our suppliers' current situation and finding ways to growth together. In other words, the Win-Win Growth Council is expected to carry out an important role in supporting the suppliers and helping them share our corporate strategy. Against this backdrop, starting from the end of 2010, we began to benchmark best practice cases of business partner councils of other industry leaders and design an organization plan. We selected a participant, who deemed eligible for a strategic relationship with us in consideration of trade volume and the importance of trade. We invited the suppliers who admitted our participation to the set sail in April, 2011 and will meet 4 times a year. As the council does not limit discussions to official agendas, we expect the council members to produce productive synergies through a mutual cooperation.



Q-Partner certification & Win-Win Growth Council inauguration ceremony

### E-Procurement system(<http://eproc.lscable.com>)

We operate an E-Procurement site to enable suppliers to access our procurement system with ease. Thanks to the E-Procurement system, suppliers may openly share their opinions concerning transaction with us, with our limit in space and time while preventing sensitive transaction information from 3<sup>rd</sup> parties.

### Open discussion with suppliers

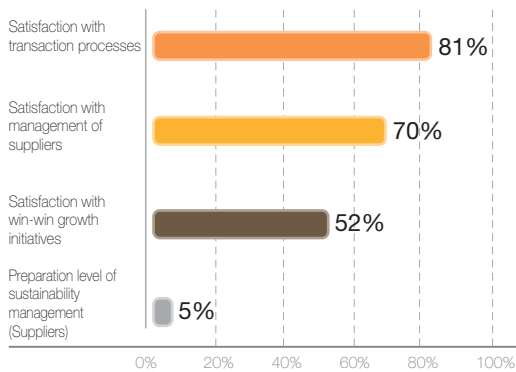
We have open discussions meeting among our business groups and suppliers every February. The meetings have proven to be productive venues for partners to discuss the business plans and our procurement strategies in an open and honest manner. We listen to challenges/problems that suppliers face, and try to deal with them through the meetings. In addition, we shares the result of market analysis with suppliers to help them develop their mid-term business strategies while also disclosing quality performance metrics of the previous year and quality control plans of the current year to provide guidance to suppliers. In 2010, 14 suppliers for the Integrated Module and Cable business group joined the open discussions. We plan to extend the agenda and expand the scope of discussion to a corporate level, in an effort to help improve the overall quality of management of suppliers.

Topic 02. Customers  
 Topic 03. Suppliers  
 Topic 04. Employees  
 Topic 05. Local Community

## Survey of suppliers

In December, 2010, the Purchase Planning Team conducted a survey of suppliers to better understand their awareness of our assistance and their preparation for sustainable. Targeting around 200 suppliers having a significant business relationship with us, the survey asked a total of 49 questions in 4 categories(Transaction Processes, Management of suppliers, Level of Satisfaction with the 'Win-Win Growth Initiatives' and Awareness of Sustainability Management of suppliers).

### Satisfaction level in each category of the 2010 survey



### Survey findings

In the survey, more than 70% of respondents responded positively with regards to how transaction processes are handled and with how suppliers are managed<sup>3</sup>. However, the satisfaction level with the win-win growth initiatives consisting of awareness of 'Win-Win Growth' of LS Cable & System(20%) and willingness to join such initiatives in the future (88%) was about 52%. As about 50% of the respondents were newly registered suppliers with little access to our support program, they accounted for rather low awareness. However, as they were willing to join the initiatives in the future and as we also plans to promote them actively, the level of satisfaction with win-win growth initiatives is expected to go up. It should be noted that most suppliers are not adequately interested in sustainability management so this is an area that should be improved upon. We plan to monitor the sustainability management of suppliers continuously in the 2<sup>nd</sup> half of 2011, providing supports to them wherever possible.

## Fair Trade Environment Promotion

We place top priority on transparency and mutual trust among our suppliers. We operate a global procurement guideline set forth in the company's internal code of ethics and promulgate the guidelines among the suppliers. In addition, we issue electronic copies and hard copies of standard terms and conditions in relation to trade with suppliers and request statements of commitment to ethical management promising not to engage in unfair trade practices.

### A trustworthy and dependable company

In 2009, we signed off on a 'Triangle Cooperation Program(TCP)' established by the Fair Trade Commission to promote mutual cooperation and fair trade among small, medium and large size enterprises and our suppliers with a view to promoting a win-win growth. We developed the program to more specific supporting and laid the groundwork for fair trade in the implementation process with regards to improving payment terms and conditions, technological support and protection.

In addition, to promote best trade practices between small and large enterprises and to adopt the top 3 guidelines for cooperation between small and large businesses<sup>4</sup> developed by the Fair Trade Commission, we reviewed the existing procurement regulation and developed new guidelines for contracts process, and selecting & registering of suppliers, and established an in-house subcontracting review committee. Notably, we introduced a fair trade self-compliance program(CP) encouraging our employees to comply with fair trade laws and regulations at their initiative.

<sup>3</sup> Positive Response: In a scale of 1~5, 4 or more was deemed to be a positive response.

<sup>4</sup> Top 3 guidelines for cooperation between small and large businesses: Guidelines on business contracting practices, suppliers selection/management and in-house review committee establishment/operation

Accordingly, we have implemented a system that should prevent non-compliance in advance and promote fairness and transparency in all business transactions, and posted the code of ethics applicable to transactions with suppliers on the ethical management site. Furthermore, our fair trade performance is reviewed with the win-win growth index that the Win-Win Growth Committee introduced in 2011, so that we establish global standard-compatible best practice of transactions.



Win-Win Growth & Fair Trade Agreement declaration ceremony

## Our partners of co-prosperity

### Features

We executed business transactions worth about KRW3.126 trillion with 195 suppliers in 2010, which accounted for around 97% of the total purchases. In terms of the significance of materials to be purchased, the suppliers can be broken down into large businesses supplying non-ferrous metals and petrochemical products accounting for a significant portion of the procurement amount and other small and medium-size businesses supplying other materials. As the suppliers are clearly divided into two distinct groups, we consider the size of the suppliers and features of items that they supply in relations with suppliers.

As suppliers are highly susceptible to the fluctuation of raw material prices and market conditions, our support and cooperation is critical for ensuring their stability. We are to grow together with our suppliers by sharing market information and increasing company-furnished free materials<sup>9</sup>.

### Selection

We select suppliers through a fair and transparent process, with comprehensive consideration of economic and environmental conditions.

### Selection process



<sup>9</sup> Company-furnished free materials: materials furnished by LS Cable & System free of charge

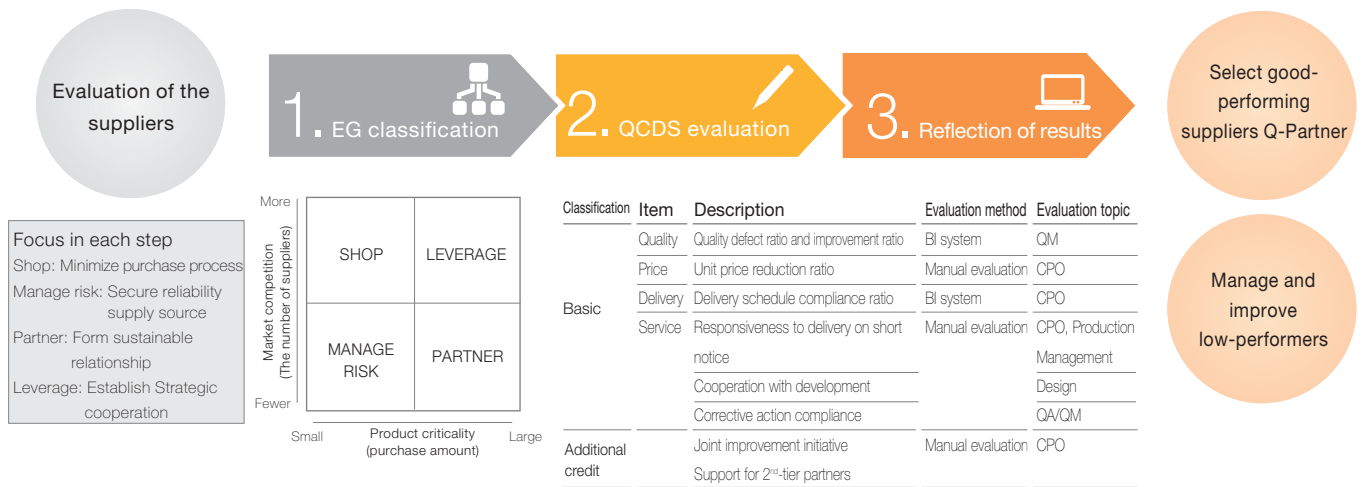
- Topic 02. Customers
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**Evaluation**

We operate an evaluation system to encourage the growth of suppliers. Evaluations are conducted annually focusing primarily on the suppliers that have transaction with more than KRW500 million in amount of money 10 deliveries in number of cases annually. There are three main steps to each evaluation: EG classification(evaluation group<sup>6)</sup>), QCDS evaluation<sup>7)</sup> and Reflection of results.

First, we classify all suppliers subject to evaluation according to business line and material profile to ensure fairness with consideration given to the profile of the suppliers. Following classification, we conduct an evaluation in accordance with objective and fair QCDS evaluation criteria that assign different weights across evaluation categories. Furthermore, suppliers are also entitled to additional credits in relation to the Win-Win growth cooperation so that second-tier suppliers may enjoy the benefits of Win-Win growth.

**Evaluation and management process**

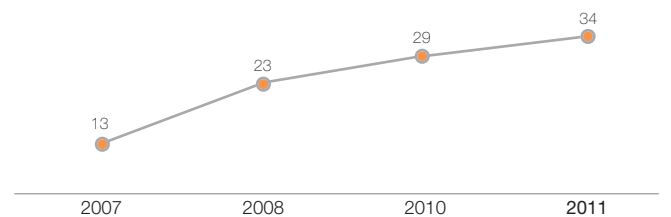


**Management**

We believe that the competitive suppliers are a starting point of competitiveness. From this point of view, we customize our management approach considering the capability profile of each supplier. First, we have been certifying suppliers that excel in evaluation pursuant to internal evaluation criteria as Q-Partners since 2007. Q-Partners are entitled to prize money, certificates, medals and overseas training, supports for quality certification expenses as well as other incentives such as in-house training programs, marketing support and acceleration of payment due dates. Suppliers certified as Q-Partners are entitled to such benefits for 2 years. In 2010, a total of 6 suppliers were certified as Q-Partners with 5 more added in 2011.

**The number of annual cumulative certified Q-Partner**

(Unit: the number of supplier)



Q-Partner certificate ceremony

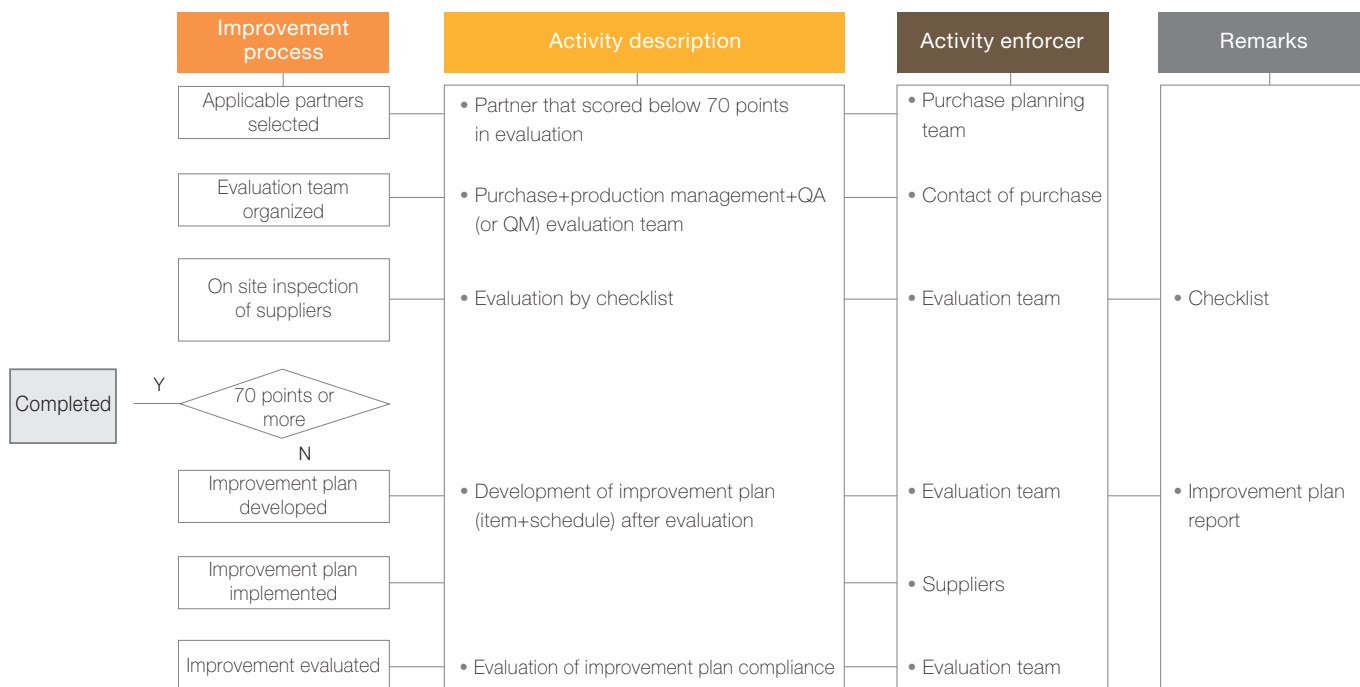
<sup>6)</sup> EG classification: classification of evaluation group by business line and material profile

<sup>7)</sup> QCDS evaluation: evaluation approach to weighting each evaluation item with comprehensive consideration of quality(Q), commercial terms(C), delivery terms(D) and service(S)



On the other hand, suppliers who fail to meet the evaluation criteria are required to implement capability enhancement programs. First, a joint workshop is conducted with us to determine items and methods for improvement. An improvement plan is then developed and implemented for 6 months after which the suppliers are re-evaluated. This management process has proven to be effective by not only helping low-performers catch up but also holding them accountable for the success of collaborative initiatives.

**Low-performer management process**



## 'Partnership' for Sustainability Management

We provide support for and cooperate with suppliers in a variety of sectors including management, financing, technology, training and sustainability management in line with the mutual cooperation and win-win growth policy drive of the government. Such commitment helps plant a sense of trust among suppliers, we intend to strengthen communication with the suppliers and develop initiatives for mutual development to ensure substantial cooperation beyond perfunctory support. Furthermore, we will continue to seek partnerships with suppliers for sustainability management.

### Support for management improvement

#### Joint innovation initiatives

We improve the competitiveness of the suppliers by supporting their innovation programs with proprietary know-how and processes. About 20 suppliers are selected each year who are encouraged to identify and resolve issues requiring improvement. In 2010, 27 raw material and commodity suppliers were selected to be entitled to support for innovation. Innovation activities across the entire business spectrum from quality, processes, sales, delivery and specifications for development are covered to enhance product improvement.

#### Support for job recruitment exhibition

The job fair hosted by the Federation of Korean Industries and sponsored by the Special Committee on Job Creation of the National Assembly, the Ministry of Employment and Labor and mass media presents windows of opportunity to promote the growth potential and reliability of entrant businesses. In this year's event joined by 12 business groups, 296 enterprises and about 15,000 job seekers, we donated KRW5 million to help 3 suppliers interview prospective candidates for their job openings. We also prepared presentation materials, assigned staff members to help at the suppliers' booths, and paid for the exhibition admission expenses of the suppliers as well as gifts to be handed out to booth visitors.

#### Joint entry into overseas market

We support the suppliers in their efforts to make inroads into global markets by arranging transactions between Superior Essex and our suppliers. In 2010, we supported 8 suppliers in total of which 5, including Hanhwa and SKC Inc., have already posted about KRW8 billion in sales from mass-production delivery while the other 3 are undergoing quality tests.

#### Coupon-based consulting

Coupon-based consulting is a management consulting program for SMEs implemented by the Korea Consultants Association and the Small and Medium Business Administration to improve the global competitiveness of small- and medium-sized businesses. Up to 55% of consulting costs are funded by the government and small- and medium-sized companies are given expert diagnosis and guidance on a viable strategy to cope with changes in management and technology landscapes.

For the 2<sup>nd</sup> half of 2010, we requested a service-proven consultant to support 4 suppliers of which two qualified for the consulting program. The two suppliers will receive advice from professional consultants on the development of their vision and mid-long-term growth strategies with a goal to achieve productivity gains by 60% within 4 to 5 months. We will continue to provide management consulting support to improve the competitiveness of the suppliers.

#### TPS: Toyota Production System training

We provided the TPS (Toyota Production System) training opportunities to good-performing suppliers via the Korea Standards Association and with the sponsorship of GyeongGi Province. During the programs, trainees from 6 suppliers studied in classroom lectures and field tours. The trainees learned the TPS philosophy as well as the JIT<sup>®</sup> system, smart automation with a human touch, multi-skilling and toured the Toyota Gato plant in an effort to benchmark the TPS system of Japan. As our suppliers applied lessons learned from the TPS training program to improve their own processes, we found the field tour program to be more helpful than classroom training sessions. Considering effectiveness of the program, we will continue to offer overseas benchmarking tours to suppliers in the future.

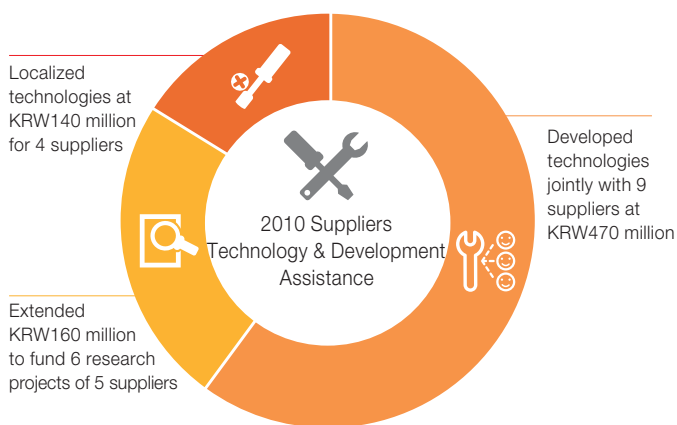
<sup>®</sup>JIT(Just In Time): production system to supply products as necessary rather than stocking inventory

## Supports for fund raising

We try to ease funding shortage issues of the suppliers by extending credit at low interest rates and offering mutual cooperation funds and shared growth financing pools, etc.. Notably, we have paid cash or cash equivalents<sup>9)</sup> for delivery for all transactions since 2010 and reduced the payment lead time from 60 to 45 days, improving the cash flow position of the suppliers. We will further expand the scope of financial assistance and reduce the payment lead time to the suppliers to facilitate their financial operations.

### Financial assistance available to suppliers

Item	Financial assistance in 2010	Financial assistance target in 2011(pending)
Financing (funding) assistance	Direct assistance	KRW600 million in direct loans(commercially available at 5% interest)
	Indirect assistance	KRW10 billion in network loans(agreement with IBK)
	Hybrid assistance	KRW15 billion in Mutual Cooperation Fund(KRW3 billion in capital contribution)
Improvement of payment terms	100% cash equivalent payment(trade receivable-secured loan without recourse)	100% cash equivalent payment Cash payment ratio(16 35%)
Improvement of payment lead time/frequency	Reduction of payment lead time(60 45 days)	Within 30 days



## Support for technical development

Believing that supplier’s technology development lead our competitiveness, we help the suppliers with technology localization, joint development programs, research services and commissioned R&D activities. So far we have implement the technology localization project worth KRW140 million for 4 suppliers and developed technologies jointly with 9 suppliers worth KRW470 million. We also extended KRW160 million to fund 6 research projects of 5 suppliers and will remain supportive of technology development and assistance throughout 2011 as a key part of the global growth strategy. We also aims to enable the suppliers to be as competitive as their global rivals by developing technologies jointly, conducting technology transfer and guidance, sharing technology information in relation to R&D, and assisting with production process and quality improvement.

## Purchase-conditional new product development project

We participate in the purchase-conditional new product development program sponsored by the Large & Small Business Cooperation Foundation. The program is 55% funded by the government up to a total program investment of KRW500 million, with large businesses funding about 20% to participate in new product development projects

of SMEs. Currently, we are is localizing an LVDS<sup>10)</sup>/TMDS<sup>11)</sup> interface connector for next generation FPD<sup>12)</sup> jointly with suppliers and planning to develop a vertical type pitch connector for Micro Coaxial cables<sup>13)</sup>.

<sup>9)</sup> Cash equivalent payment: payment in assets that are almost as liquid as cash

<sup>10)</sup> LVDS(Low Voltage Differential Signaling): transmission of signals at 2 different voltages from one transmitter

<sup>11)</sup> TMDS(Transition Minimized Differential Signaling): TMDS transmits data in parallel at a high transfer rate

<sup>12)</sup> FPD(Flat Panel Display): flat panel display thinner and lighter than a computer monitor or conventional CRT(Cathode Ray Tube) TV

<sup>13)</sup> Micro Coaxial cable: ultra fine coaxial cable about a quarter the thickness of a strand of hair capable of transferring large volumes of multimedia data with applications for portable multimedia devices such as mobile phones and digital cameras

Topic 02. Customers  
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## Support of trainings

We provide training programs for the suppliers at least twice a year. The training program covers transformational leadership, domestic/global economy outlook, patent management, non-ferrous metals/petrochemical/logistics market outlook, sustainability management, and the AEO (authorized economic operator) certification<sup>14)</sup> system, etc., all of which are needed for the suppliers to grow into global players. As both in-house and 3<sup>rd</sup> party instructors with various backgrounds are invited and training contents and intensity are controlled, suppliers participate in the program with more enthusiasm.

### 2009~2010 Suppliers training

Category	Training schedule	Venue	Training topics	Trainees	Remark
Training	21~23, Oct 2009	Korea Professional Education Center, Chungnam Province	Transformational leadership	26 persons from 25 companies	Dialogue with CPO (2 2 <sup>nd</sup> -tier suppliers participated)
	25~26, May 2010	LS Cable & System Geumwang Training Center	AEO certification system, Sustainability management, Environmental management	26 persons from 25 companies	Introduction of the company evaluation system and dialogue with CPO
	98~09, Nov 2010	LS Future Center	2011 domestic/global economy outlook, Understanding 6 sigma, Patent management, Making enjoyable workplace	28 persons from 28 companies	
Seminar	16 Jun 2010	LS Tower Training Center	Domestic/global economy outlook, Non-ferrous metals/petrochemical/steel market outlook	14 companies	3 <sup>rd</sup> party instruction invitation
	10 Nov 2010	LS Tower Training Center	Domestic/global economy outlook, Non-ferrous metals/petrochemical/logistics market outlook	5 companies	

In 2011, to provide more professional training, we provided quality control training programs for 22 suppliers in the 1<sup>st</sup> half of the year, forging a consortium with Eretec Inc.(a professional training center) with the sponsorship of HRD Korea. As the trainees evaluated the program with a relatively high 4.15 points on a scale of 5, we plan to continue to provide the training programs. In the 2<sup>nd</sup> half of the year, we will use a business-academia collaboration program available to our affiliates as a training venue for the suppliers.



Enhanced quality control training for suppliers

## Walking together for sustainability management

### Promotion of global purchasing regulations

Our purchasing division has enforced global-standard purchasing regulations to facilitate support operations, ensure fairness in business trade and support sustainability management. The new purchasing regulations are differentiated from the existing one in that they consider not only fairness of the purchasing process but also economic, social and environmental considerations such as the ethical conduct of the purchasing staff and “green” purchase practices. The regulations will not only be used as an in-house guideline but also help the suppliers implement sustainability management.



Global purchasing regulations of LS Cable & System

### Sustainability management monitoring

We try to understand the status of sustainability management of the suppliers and encourage their development by monitoring the progress of their sustainability management initiatives. To achieve this, we will develop an applicable manual and checklist within the 1<sup>st</sup> half of the year and conduct an on-site inspection from the 2<sup>nd</sup> half, for improving monitoring activities. We currently intend to monitor the 10 suppliers in 2010 to help them become aware of the needs for sustainability management and realize it in their operations.

<sup>14)</sup> AEO certification: customs clearance process is streamlined for AEO-certified exporters meeting specified criteria

# TOPIC 04. Employees

## People, Most Valuable Corporate Asset

We hire a variety of talent from around the globe without discrimination and enable them to become global leaders through a rational incentive system and systematic development support. In addition, labor and management mutually trust and cooperate with each other to promote a creative and innovative corporate culture.

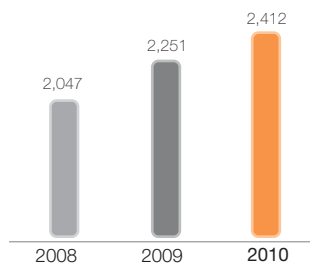
### A Variety of Talent Working Together with Mutual Trust

#### Overview of employees

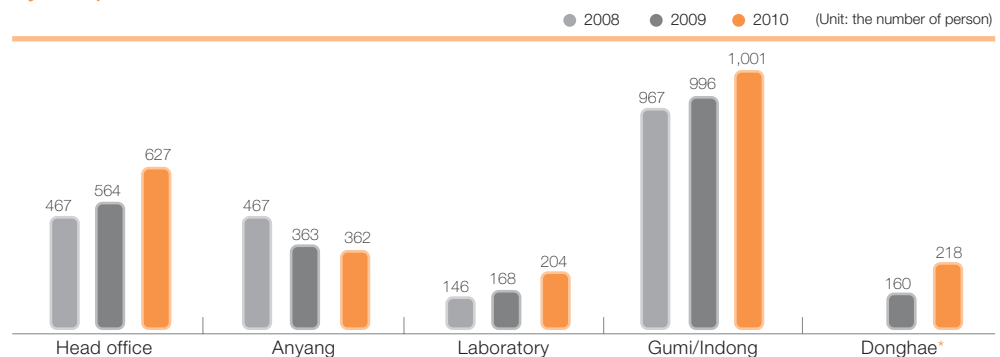
As of the end of 2010, the number of employees in domestic worksite totaled 2,412. In terms of breakdown of workplace, the head office employed 627 persons, the Anyang plant 362, the research laboratory 204, the Gumi & Indong plants 1,001 and the Donghae plant 218.

Advancing actively in global markets with a vision of becoming the No.1 global leader in the cable industry by 2015, we have grown to a global company with 5,641 employees in 20 countries throughout Asia, Europe, America, the Middle East, Africa and Oceania.

**The number of employees in Korea**  
(Unit: the number of person)

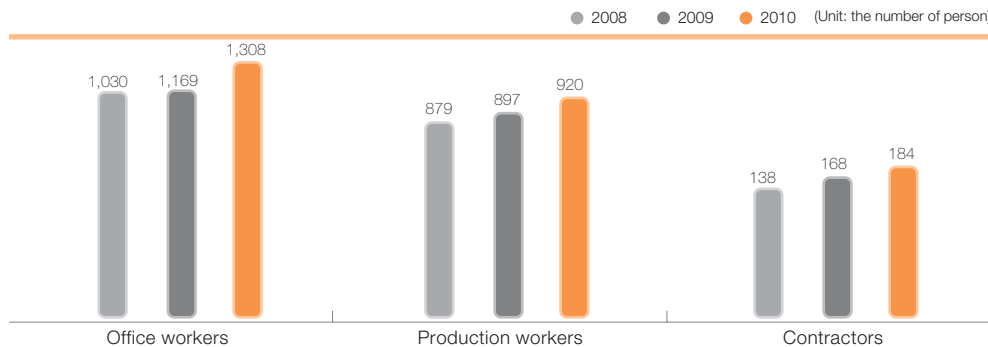


**By workplace**

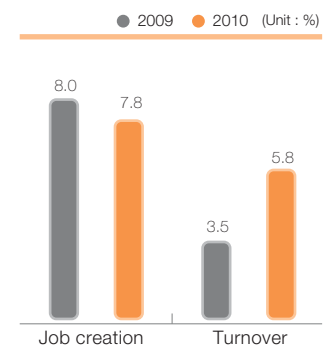


\* No 2008 data available for Donghae plant as it went into the operation in 2009

**By employee group**



**Job creation & turnover ratio**



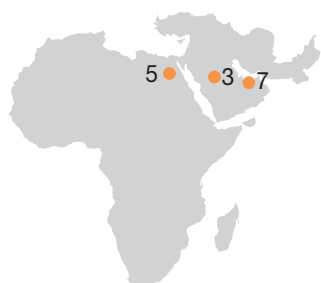
\* Job creation/turnover ratio, number of newly hired employees have been collected since 2009, when data collection criteria was revised because of the separate from LS Mtron in July, 2008

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The number of employees overseas (total 5,641 employees)

(As of the end of 2010)  
 (Unit: the number of person)

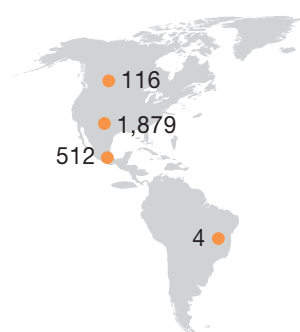
ME/Africa



Country

UAE	7
Saudi Arabia	3
Egypt	5

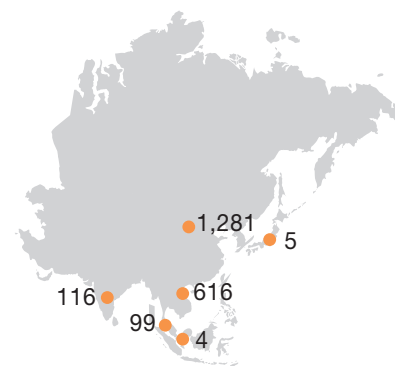
Americas



Country

USA	1,879
Canada	116
Mexico	512
Brazil	4

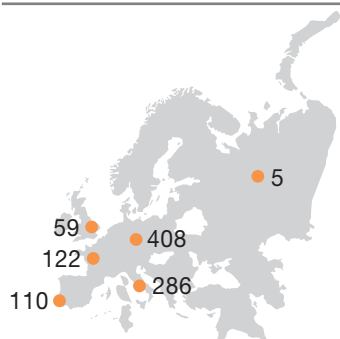
Asia



Country

China	1,281
Japan	5
Vietnam	616
Singapore	4
India	116
Malaysia	99

Europe



Country

Russia	5
UK	59
Italy	286
Germany	408
Portugal	110
France	122

Oceania



Country

Australia	4
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## Respects for diversity & pursue for steady job creation & security

### Recruiting talents with diverse backgrounds

We hired talented resources in Korea and elsewhere in the world via various recruitment channels, without discrimination based on gender, education, nationality or religion, but solely on the basis of skills and qualifications.

Notably, with the goal of increasing the share of foreign employees to 10% of office employees in total, we try to procure global pool of talent with partnership with search firms in key strategic spots around the world and with campus recruits in prestigious universities in North

America and Europe. Furthermore, we provide a variety of training on Korean language and culture and operate a global help desk to enable foreign employees to settle down in Korea in far more improved environment. We also provide an opportunity to get a position and short-term training packages in Korea to the employees working in other regions, with a purpose to nurture them to global leaders. In the meanwhile, all employees in Korea are required to get global culture training, in order to promote respect for diversity and understanding of global culture, so to become global citizens.

### Global resources

(Unit: the number of person)

Category	2008	2009	2010
Foreign employees	10	25	30
Ratio of foreign employees to the total office employees	1.0%	2.1%	2.3%

Given the nature of the industry, a material manufacturing industry, female workers are still a minority in portion, however their number continues to increase. Thanks to the evaluation and remuneration system based on performance and female leadership programs, the female managers increase to 2.5% of the total of management positions, up 0.3% from the previous year. We also make an effort to develop a career of female talents. Notably, each workplace supports

social activities among female employees and listens to their opinions via open discussion with the CEO, etc. We have a plan to recruit female talent without discrimination and support female leaders via specialized leadership training programs, etc.

### Female resources

(Unit: the number of person)

Category	2008		2009		2010	
	Number of employees	Share	Number of employees	Share	Number of employees	Share
Female employees	193	9.4%	197	8.8%	218	9.0%
Female managers	9	1.5%	14	2.2%	17	2.5%

\* Share of female managers: share of female managers among all managers

Given the specific requirements of the cable manufacturing industry for health & safety, we have relatively a few employees with physical handicaps, accounting for only 1.1% of the total of human resources. However, we plan to provide more job opportunities for those with physical handicaps and actively try to recruit them with a focus on office positions.

### Employees with handicaps

(Unit: the number of person)

Category	2008		2009		2010	
	Number of employees	Share	Number of employees	Share	Number of employees	Share
Employees with handicaps	22	1.2%	23	1.1%	25	1.1%

- Topic 02. Customers
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- Topic 04. Employees
- Topic 05. Local Community

### Anti-sexual harassment and human rights training

We provide anti-sexual harassment and ethical management training programs to the entire employees every year, in order to promote respects for diversity and prevent discrimination. In 2009, an online ethics training program was provided to all employees in the all domestic and overseas subsidiaries. A total of 1,167 persons completed the program. In 2010, we conducted an anti-sexual harassment training for all employees and 2,400 persons completed the program. In 2011, a fair trade self compliance program was conducted in all the workplaces and all employees signed a pledge on self compliance. In addition, we conduct anti-sexual harassment and ethical management training in the corporate core training programs for new hires, overseas transferees and newly appointed managers.



An oath on ethical management and fair trade self compliance in 2011

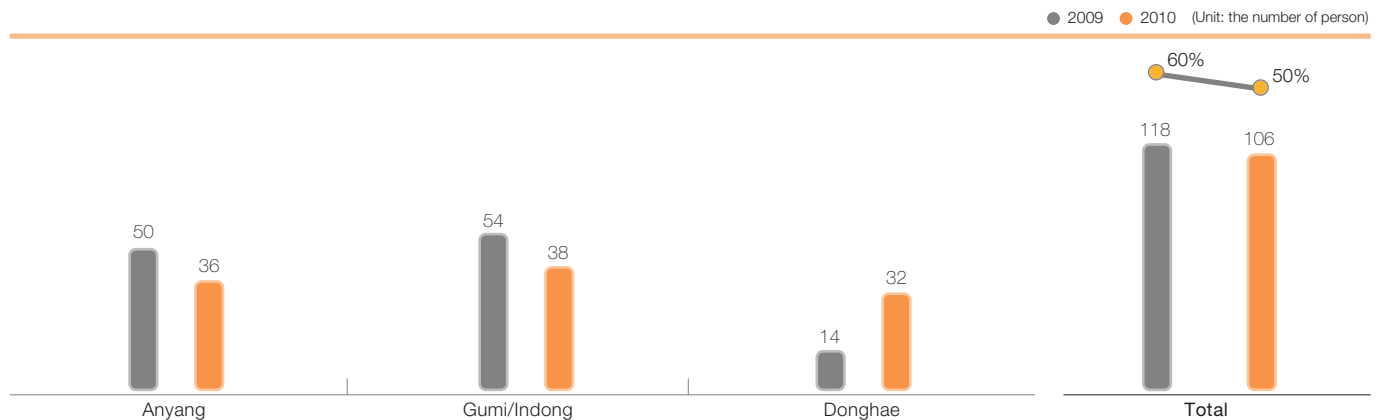
### Cyber ombudsman & sexual harassment helpline

We provide a variety of channel through which discriminatory practices can be reported, such as the cyber ombudsman(called *Sinmungo* in Korean), hotline and helpline for preventing any kind of sexual harassment. In 2010, one case was reported regarding a discrimination, we deal with it in accordance with corporate regulations.

### Contribution to local community by creating jobs

We contribute to the local community by local hiring up to 50% of job openings.

#### Local talents hired at each local workplace



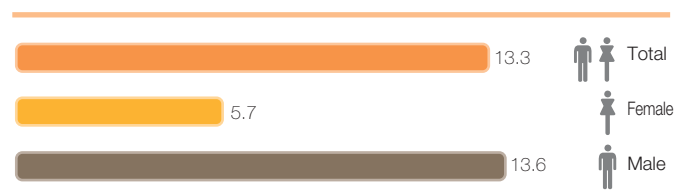
### System for more job security

By an agreement with the labor union in 2007, we adopted a wage peak system and extended the retirement age to create more jobs for the elderly in an effort to prepare aging society. As the retirement age is now extended from the age of 58 to 60, workers are better supported financially and organization culture improved through a boosted loyalty to company. Also, this system has resulted in gains in production efficiency.

The average year of employees' service is 13.3 years, which is above the national average of 6.2 years of the domestic manufacturing industry(as published by the Statistics Korea).

### Average employment duration

(As of the end of 2010, domestic workplaces) (Unit: year)



## A Company helping Employee Growth as a Global Leader

The professional development of the workforce underpins the corporate competitiveness for us to join the league of global leaders. We establish a human resource development system to nurture global talents. The 'Human Resource Development Committee' in which top manager participate, continues to review corporate activities for selecting and developing employees with potentials, who will implement the corporate business strategies and enhance the company's global competitiveness.

### Rational rewards for performance

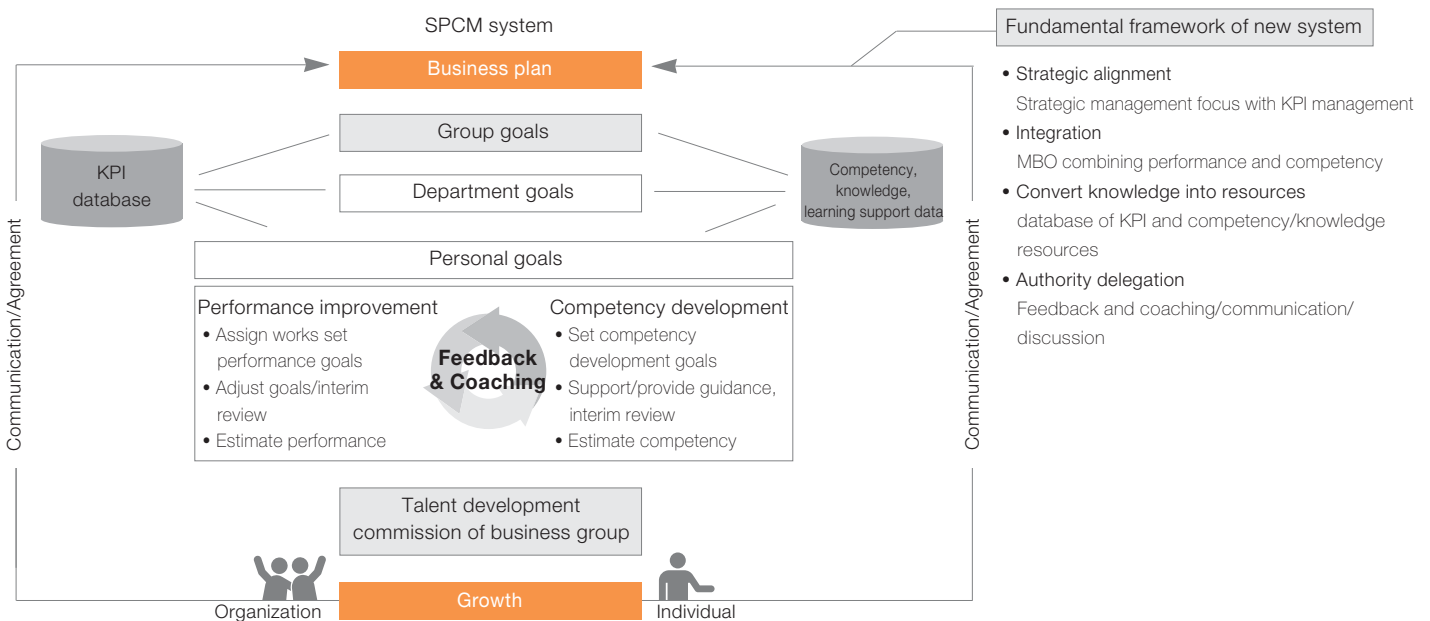
We have a SPCM(Strategy Performance Competency Management System) to manage and improve the performance of our employees. The SPCM system set up a KPI(Key Performance Index) and competency metrics focused on the performance of individuals to ensure effective achievement of business strategies and facilitate improvement through regular review and feedback.

The performance management system provides a clear guideline on competency and performance evaluation criteria in accordance with human resources management regulations and the company's code of conduct, so that ensures strict compliance to promote fair competition. The system requires complying with established processes to ensure fairness and accuracy of evaluation and allows supervisors to provide feedback on evaluation results. Furthermore, it guarantees employees the opportunity to raise an appeal as necessary to prevent distortion of the evaluation and ensure transparency. According to determined principles of the evaluation, equal rewards are provided for equal performance, and there is no discrimination in salary between male and female employees.

The performance management system encourages performance improvement with a link to an incentive system that provides merit pay per team or a corporate performance.

In addition, top level managers are also subject to performance evaluation system. Performance indicators are selected for each manager and final evaluation results are reflected in the rewards via regular feedback and process management in conjunction with business plan and evaluation direction.

### The evaluation system overview

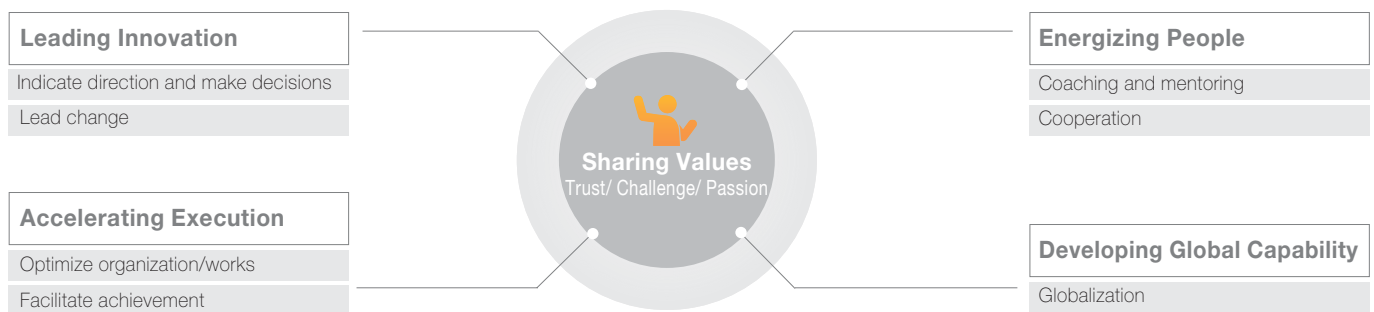


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### Talent development and training system to produce global leaders

We have defined the image of a leader by specifying qualifications that global business leaders must possess. To cultivate the global leader, we have developed a customized leadership program comprising courses that are specifically designed to develop each competency such as a Leading Innovation, Energizing People, Accelerating Execution and Developing Global Capabilities. In addition, we have the development training programs and courses not only for inside employees but also those of the subsidiaries and suppliers. All employees are given equal opportunities to improve their capabilities in accordance with human resources management regulations and the company’s code of conduct.

#### The image of the leader

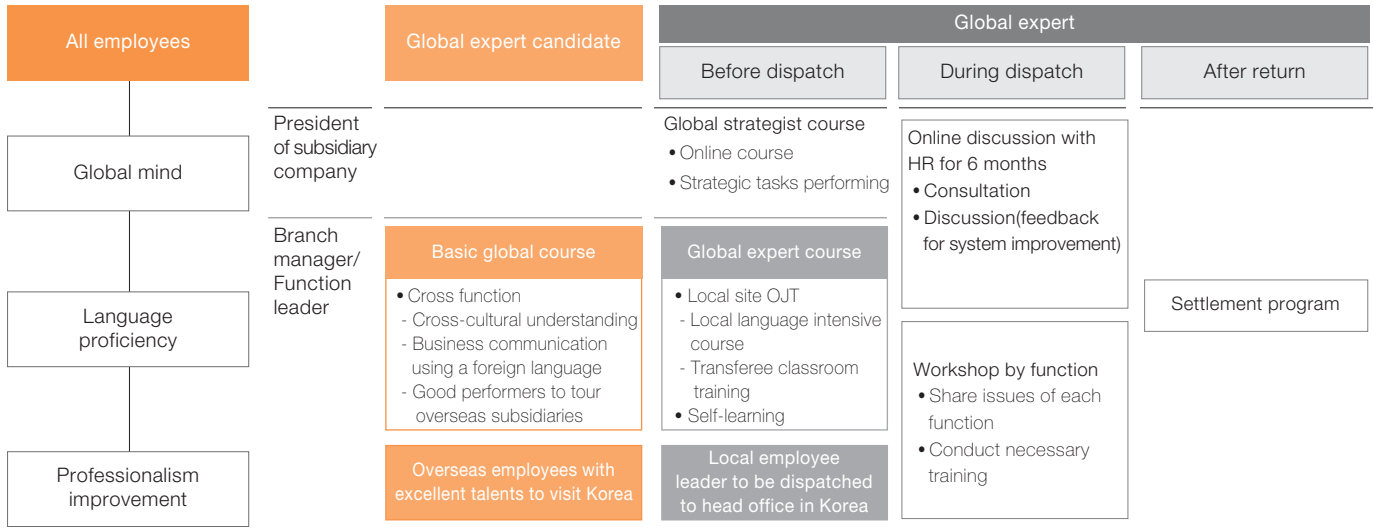


#### Leadership development system

Classification	Leadership track	Key talent track	Common track <sup>1)</sup>
Top management	Expert coaching		
Group director	Expert coaching		
	New executive: Course for challenge		A course for new executive
Team manager	Team manager workshop 3 yrs or more	(an expectant executive heir) Executive coaching	
	Team manager development center 2 yrs	Course for challenge	A course for new senior manager
	New team manager Introduction course 1 yr	Assessment center	
Manager	Basic management course	(an expectant team managers/ next generation leaders) Team manager preparation course	A course for new deputy senior manager A course for new manager course
Team member	Junior MBA Asst. manager 3-4 yrs		A course for new assistant manager
	New hire/experienced hire introduction course		A course for new hire/experienced hire

<sup>1)</sup> Common courses for promoted employees in LS Group

**Global talent development system**



**Proactive training for talent development**

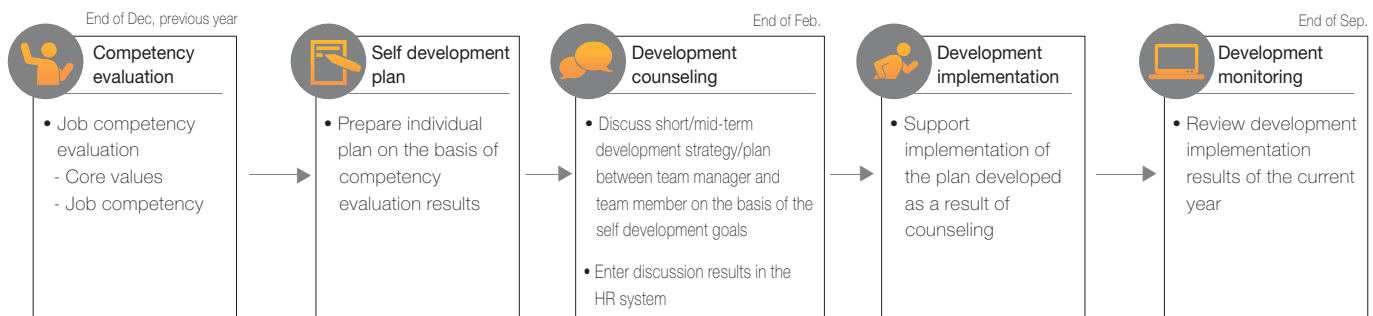
We continually provide a variety of training programs to achieve the corporate vision and to foster the growth of employees. In 2009, the training time per capita was 8.57 hours with training expense of KRW834,500 a per capita. For 2010, both training time and expenses jumped significantly to 16 hours and KRW1,436,300. Notably, a training credit system has been put into place to ensure training opportunities for every employee. As a company policy, each individual is required to complete 32 hours of training as an annual minimum. We consider whether employees complete the courses as an important evaluation item of their supervisor.

**Counseling system geared for performance and career development**

We have set up a counseling system that enables employees to meet with their supervisors early every year to discuss their goals and development strategy. The interview with the supervisor helps employees to develop their career with a link to corporate development direction.

The meeting also provides a venue through which grievances of each individual can be addressed in a private manner. We promote this kind of interviews by reflecting how many interview supervisors conduct onto their evaluation. For the newly hired rookies and experienced hires, mentors are designated to provide counseling on career development and job responsibilities to help them adjust to the organization with ease.

**Talent development counseling process**











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## An Enjoyable Workplace, Harmonizing Life and Work

### The welfare system for a better life

We offer industry-best rewards and benefits to ensure a better life for all employees.

Our welfare system 6 goals to be achieved, ①healthy life, ②cultural life, ③energetic life, ④stable life, ⑤promising life and ⑥affluent life, giving comprehensive consideration on physical, mental and economical health. The employee benefit system provides various programs to achieve the target of keeping employees and their family members healthy, supporting leisure activities and encouraging network among colleagues so that employees can refresh themselves. In addition, children scholastic benefits and housing assistance programs keep employees financially secured so that they can focus on their jobs with a sense of self-esteem.

Benefit descriptions		Disbursement highlights																									
<b>Healthy life</b>  <ul style="list-style-type: none"> <li>• Medical expenses reimbursed for employees</li> <li>• Medical expenses reimbursed for family members by the in-house welfare fund</li> <li>• Medical checkup funded for employees/spouses</li> <li>• Sports facilities</li> <li>• Medical clinic/first-aid room</li> <li>• Counseling program</li> </ul>	<ul style="list-style-type: none"> <li>• In-house welfare fund disbursement(2010)</li> </ul> <table border="1"> <thead> <tr> <th>Workplace</th> <th>Beneficiaries(persons)</th> <th>Amount(millions of KRW)</th> </tr> </thead> <tbody> <tr> <td>Head office</td> <td>60</td> <td>108</td> </tr> <tr> <td>Laboratory</td> <td>19</td> <td>30</td> </tr> <tr> <td>Anyang</td> <td>28</td> <td>49</td> </tr> <tr> <td>Gumi</td> <td>76</td> <td>114</td> </tr> <tr> <td>Indong</td> <td>25</td> <td>39</td> </tr> <tr> <td>Donghae</td> <td>19</td> <td>26</td> </tr> <tr> <td><b>Enterprise total</b></td> <td><b>227</b></td> <td><b>365</b></td> </tr> </tbody> </table> <p>※ KRW1.61 million per capita on average</p>	Workplace	Beneficiaries(persons)	Amount(millions of KRW)	Head office	60	108	Laboratory	19	30	Anyang	28	49	Gumi	76	114	Indong	25	39	Donghae	19	26	<b>Enterprise total</b>	<b>227</b>	<b>365</b>		
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<b>Enterprise total</b>	<b>227</b>	<b>365</b>																									
<b>Cultural life</b>  <ul style="list-style-type: none"> <li>• Club activities(46 clubs)</li> <li>• Anniversary celebration(birthdays, weddings): gift cards offered</li> <li>• Culture events: movie tickets, family invitation, tickets for sports event such as football/baseball matches, family day(once a month)</li> </ul>																											
<b>Energetic life</b>  <ul style="list-style-type: none"> <li>• Refresh leave: twice a year, 1<sup>st</sup> &amp; 2<sup>nd</sup> annual half for 3 days or more</li> <li>• Family refresh grant: for employees working 15 and 20 years consecutively</li> <li>• Condominiums</li> <li>• Resort</li> <li>• Free lodging at the Baekam training center</li> <li>• Overseas tour for the employees of great performance</li> </ul>																											
<b>Stable life</b>  <ul style="list-style-type: none"> <li>• Allowance for congratulations &amp; condolences: allowances and leave for congratulations &amp; condolences of employees and their family members</li> <li>• Housing loan</li> <li>• Dormitory and/or apartment housing</li> <li>• Scholarships: full scholarship for children of middle/high school/university students (No limits in number of child)</li> <li>• Insurance: group life insurance(covering death, incapacitation due to disease)</li> </ul>	<ul style="list-style-type: none"> <li>• Scholarship disbursement(2010)</li> </ul> <table border="1"> <thead> <tr> <th>Workplace</th> <th>Beneficiaries(persons)</th> <th>Amount(millions of KRW)</th> </tr> </thead> <tbody> <tr> <td>Head office</td> <td>72</td> <td>424</td> </tr> <tr> <td>Laboratory</td> <td>22</td> <td>100</td> </tr> <tr> <td>Anyang</td> <td>105</td> <td>608</td> </tr> <tr> <td>Gumi</td> <td>281</td> <td>1,343</td> </tr> <tr> <td>Indong</td> <td>93</td> <td>454</td> </tr> <tr> <td>Donghae</td> <td>63</td> <td>412</td> </tr> <tr> <td><b>Enterprise total</b></td> <td><b>636</b></td> <td><b>3,341</b></td> </tr> </tbody> </table> <p>※ KRW5.25 million per capita on average</p>	Workplace	Beneficiaries(persons)	Amount(millions of KRW)	Head office	72	424	Laboratory	22	100	Anyang	105	608	Gumi	281	1,343	Indong	93	454	Donghae	63	412	<b>Enterprise total</b>	<b>636</b>	<b>3,341</b>		
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<b>Promising life</b>  <ul style="list-style-type: none"> <li>• Online training course: in-house online training course available each month(job skills, leadership, foreign language, etc.)</li> <li>• Mid/long-term education support: master's degree course, MBA, intensive foreign language course, etc.</li> <li>• Outside training courses: job skills(professional qualification) education, foreign language course fees</li> </ul>																											
<b>Affluent life</b>  <ul style="list-style-type: none"> <li>• Discount on products manufacture by the group(all products of LS Networks)</li> <li>• Awards for long-term employees</li> <li>• Gift for the retired employee</li> </ul>																											

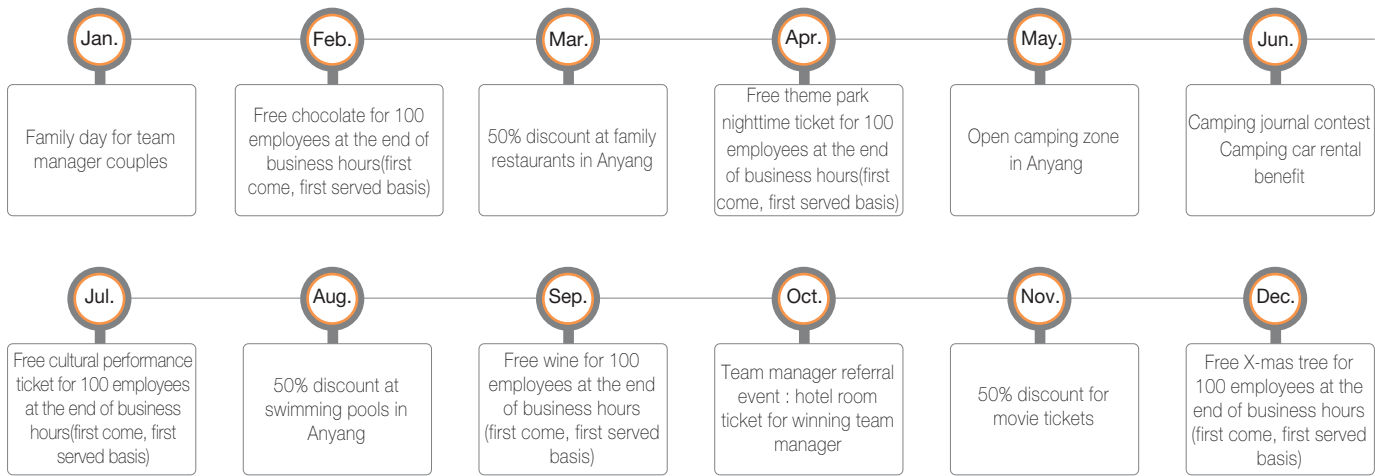
### Family-friendly management - Happy families ensure business success

We have implemented various initiatives to ensure family-friendly management. We designate one day per month as family day on which employees may go home on time to have time with their family members. We also host various family day events engaging employee family members, and invite parents of employees to various events on a regular basis. For example, in 2010, 140 parents and family members of employees were invited to visit and tour the plants. We have also hosted a variety of family-centered events such as the FIFA World-Cup supporting event, sunrise festival, retiree executive homecoming events, etc.



Donghae plant family sunrise festival (Jan.1, 2010)

#### Family day events



### Creating an enjoyable working environment

We provide clean and safe workplaces along with various counseling rooms and lounges to provide an enjoyable working environment for all employees.

#### Providing clean and safe workplaces

As we try to provide clean and safe workplaces, we appoint the health & safety supervisors with an entire responsibility in workplace safety in every plants and take initiative for making the workplace free of accidents through a cooperation of the every employee. Notably, we have obtained OHSAS 18001 certification to implement health & safety management activities in a systematic manner. Our key health & safety management practices include a 'zero-accident operation' declaration, seasonal efforts to identify and remove potential risks at worksites

involving all employees, regular medical checkups for all employees and operation of in-house medical clinics to keep employees healthy, etc. In addition, a process safety control system is operated to monitor the processes using large amounts of flammable gases and combustible substances. Importantly, 3<sup>rd</sup> party specialist agencies conduct a review and inspection on facilities to help prevent occupational accidents each year.



Safety control training by 3<sup>rd</sup> party specialist agencies



Safety audit by 3<sup>rd</sup> party specialist agencies



On-site inspection by 3<sup>rd</sup> party specialist agencies



- Topic 02. Customers
- Topic 03. Suppliers
- Topic 04. Employees
- Topic 05. Local Community

**Occupational Health and Safety Committee**

We operate the Occupational Health and Safety Committee, in which equal numbers of labor and management representatives participate, including labor union leaders, honorary health & safety supervisors, safety managers and health managers. The Occupational Health and Safety Committee is convened once every quarter but a special session can be called when needed with a role of improving the entire level of safety by collecting feedback and making decisions to mitigate safety risks on the site. Also, the committee collects inputs from

employees; ensures that statutory, regulatory and customer requirements are incorporated into daily operations; performs labor and management joint safety inspections; improves safety conditions; conducts measurements necessary for improving working conditions; ensures that safety hazards are removed; helps improve the health of employees and arranges medical checkups for them; and implements a joint safety culture campaign to improve safety awareness.



Occupational Health and Safety Committee



Zero-accident declaration



Hazard detection exercise

**Health & safety training**

We are aware that health & safety training is a foundation of all health & safety activities. Accordingly, we conduct health & safety trainings on the regular basis for employees and suppliers. We ask a 3<sup>rd</sup> party training agency for safety management trainings for safety supervisors and for trainings focused on case studies for onsite workers every year, in order to enhance the effectiveness of health & safety. Notably, workers handling hazardous/dangerous materials or machinery /equipment are required to have applicable qualifications and complete a training to maintain their qualifications. Also, for ensuring the health & safety of the suppliers, we quality suppliers with the permit of safe work and provide safety training.



Regular health & safety training



Business partner health & safety training

**Health & safety training**

Category	Courses	Target	Training hours
Employees	Regular training	Production workers	2 hrs per month
		Office employees	1 hr per month
		Managers/supervisors	16 hrs or more per year
	Course for new hires	New hires	8 hrs
	Course at the change in works	Newly appointed employees to safety related works	2 hrs
	Special training	Workers handling hazardous/dangerous machinery/equipment	16 hrs or more
Suppliers	Regular training	In-house construction contractors	1 hr per month

### Improvement of working conditions

The Occupational Health and Safety Committee request the 3<sup>rd</sup> party expert agencies for inspection of manufacturing process treating hazardous substances or generating excessive noise twice a year. A result of the inspections, including all measured data, is disclosed to all employees in each department transparently and is an important agenda of the Occupational Health and Safety Committee. For example, sound barriers have been installed to insulate mechanical

noise and local ventilation equipment installed for chemical processes in an effort to promote a more pleasant working environment. Unfortunately, for 2010 the occupational accident ratio actually increased to 0.54%, due to inadequate response in facility maintenance and commissioning operations, etc.

### Occupational accident count and ratio

(Unit: the number of case)

Category		2008	2009	2010
Industry accident	Gumi	1	3	4
	Indong	3	0	3
	Anyang	2	0	1
	Donghae	-	0	1
	Enterprise total	6	3	9
Enterprise accident ratio(%)		0.41	0.20	0.54
The average accident ratio in cable manufacturing industry(%)		0.62	0.55	0.61

### 2010 absences due to injury or illness

(Unit: the number of person)

Leave duration	Below 2 weeks	Below 5 weeks	Below 10 weeks	Below 15 weeks	Below 20 weeks	Total
Anyang	-	-	-	-	1	1
Gumi	-	2	1	2	2	7
Indong	-	1	1	1	-	3
Donghae	1	-	-	-	-	1
Enterprise total	1	3	2	3	3	12

\* 2010 absence ratio: 0.118%(days off duty / annual days on duty of all employees=710 days ÷ 600,000 days(5 days per week × 50 weeks × 2,400 employees))

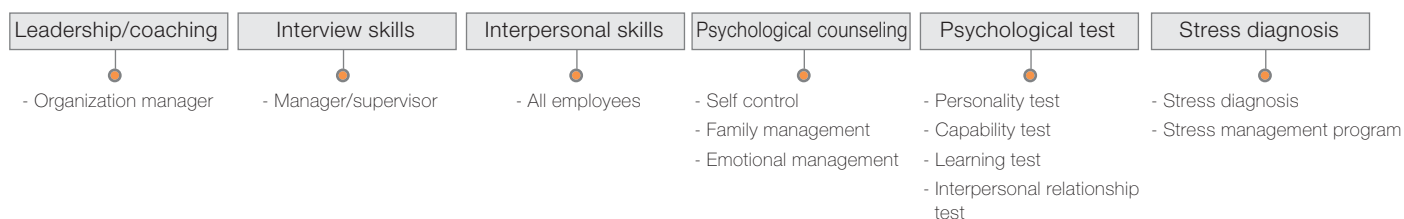
### Grievance counseling service

We provide a counseling service to employees in every workplace to mitigate their grievance. It encourages employees to discuss any issues that regarded to be difficult to be addressed through formal communication channels with their supervisors. Representatives of labor, management and the employees association serve as secretaries and listen to employees in person to address their grievances.

### Psychological counseling service

To help keep employees psychologically healthy, the corporate laboratory and the Gumi plant provide a psychological counseling service. Professional psychiatrists provide one-on-one counseling for all employees who may want counseling on a continual basis.

### Counseling service



- Topic 02. Customers
- Topic 03. Suppliers
- Topic 04. Employees
- Topic 05. Local Community

Space for female employees

Each workplace has a formula room and lounge where female workers may relax and enjoy their break times.

Space for creativity

We encourage each workplace to improve the working environment in various ways so that employees may enjoy their work time. As part of such efforts, we launched the 'Door to Imagination' in 2010, which serves as a space where employees can read books, do culture activities, have a discussion, and take a rest as an activity for improving creativity.



Space for creativity on the 13<sup>th</sup> floor of the head office



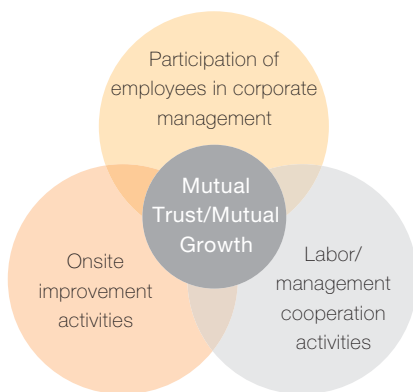
Employees enjoying playing games during break in the space for creativity

## Trust & Cooperation, Enabling Company and Employees to Grow Together

### Overview of the labor union

Since its beginning as the Anyang Branch of the National Metal Workers Union in 1967, the labor union has played an important role in improving the working conditions of employees while also facilitating corporate growth. Both labor and management continue to work together to create values for the future on the basis of mutual trust and mutual growth, enabling participation of employees in corporate management, joint collaboration initiatives and onsite improvement programs.

The by-law of the labor union defines a labor union member as 'any employee working in any workplace of LS Cable & System' who submits an application for admission to the labor union. As of the end of 2010, 920 out of 2,201 permanent employees are members of the labor union.



● **Participation of employees in the corporate management**

The Cooperation Promotion Commission, the Labor/Management Council, sharing of the status of the business in monthly enterprise/group morning meetings

● **Onsite improvement activities**

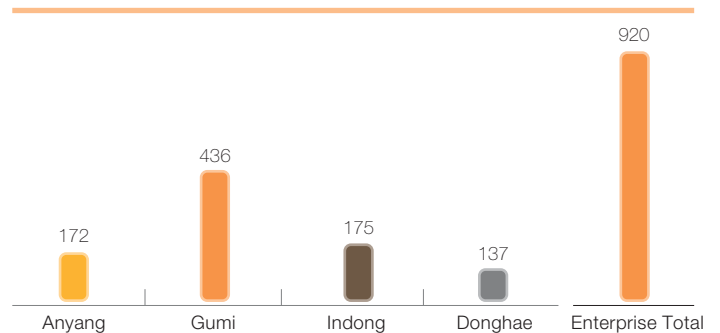
Worker satisfaction surveys, open discussions, dialogue with employees, grievance counseling

● **Labor/management cooperation activities**

Onsite grievance handling, local community service, environmental conservation programs

### Union membership by workplace

(Unit: the number of person)





## Management information sharing and communication channels with employees

We provide a corporate management information to employees via various channels and communicates actively with them to promote mutual understanding. We share ideas on a corporate policy and way of improving business performance etc. with employees regularly in monthly morning meetings and enterprise training programs, collect their feedback via various channels such as the Labor/Management Council and Employees Association, as well. Notably, we are subject to discuss an issues related to changes in working conditions with the labor union in an effort to prevent degradation of working conditions and ensure job security.

As a result, both labor and management have been able to maintain a value-creating corporate culture on the foundation of mutual trust, suffering no labor disputes for the past 22 years in a row.

[Collective Employment Agreement Article 20]	The company shall try as much as possible to ensure job security of the members and discuss matters having an important effect on job security(new HRM system, wages, benefits, organizational restructuring and downsizing, etc.) via the Participation & Cooperation Promotion Council in each workplace before implementation.
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### Key communication channels

Category	Attendants	Frequency	Description
Monthly morning meeting	All employees	Monthly	Share business status and performance
Group morning meeting	All employees of each group	Monthly	Share business status and performance
Talk with CEO	Employees picked for specific topic	Monthly	Share opinions on specific topics with the CEO
Junior Strategy Board	Selected 20 employees	Monthly	Discuss corporate culture & strategies and provide feedback to management
Participation & Cooperation Promotion Council	Labor union leader & 7 others CEO & 7 others	Quarterly	Discuss present management issues Discuss issues related to employees
Working-Level Council between Labor and Management	Union Secretary General & 3 others Labor relations planning team manager & 3 others	Quarterly	Discuss issues related to employees
Employees Association	All employees	Monthly	Address grievances and improve the HR system Organize various events
Son's Book Cafe	All employees	Ongoing	Share ideas and provide feedback on corporate management

## Honoring principles and fundamentals

We comply with all labor laws and regulations and continue to monitor them. We establish a labor union website on an independent 3<sup>rd</sup> party server to prevent unfair labor practices and to provide a channel to make suggestions. Any employees can access to online bulletin boards and post their ideas anonymously, without log-in. Furthermore, employees may report unfair labor practices through the cyber hotline without identifying themselves. In addition, we guarantee the right to collective bargaining and the right to collective action as set forth in Article 33 of the Constitution and bans child labor and forced labor.

- Topic 02. Customers
- Topic 03. Suppliers
- Topic 04. **Employees**
- Topic 05. Local Community

### Communication based on trust

To listen to the views of employees regarding corporate management, we operate various communication channels and conduct surveys every year to measure the satisfaction level of employees for diagnosing the organization culture.

#### Management through reading

We support for a way of management through reading to facilitate internal communication and improve the capabilities of employees. Notably, selected books by the CEO are distributed to all employees regularly and the employees are encouraged to post their ideas of the books on the website, titled 'Son's Book Cafe'. The 'Son's Book Cafe' is used as a channel for employees to share their ideas on corporate management. The 'Son's Book Cafe' received the Reading Management Grand Prize in 2010(1,636 articles were posted in just 2 years from its launch in March, 2009 to April, 2011).

#### Onsite satisfaction survey

To better manage the working conditions at the production sites, the labor/management joint council conducts an onsite satisfaction survey every year. The satisfaction level of the employees is measured and analyzed year-on-year results to identify areas of improvement. In addition, the satisfaction trend by workplace and year is compared to draw out implications for system improvement from a long-term perspective.

#### Organizational capability diagnosis

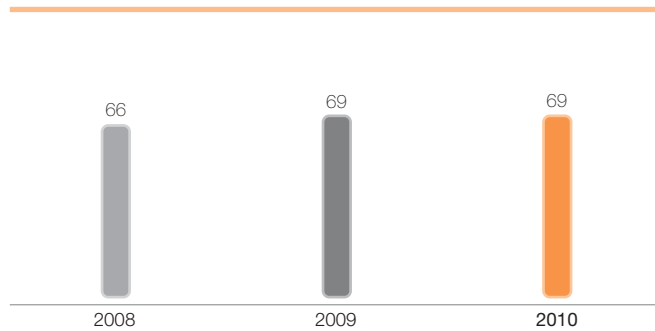
Since 2004, we have conducted an organizational capability survey each year in an attempt to improve the employees' satisfaction level and organization culture. Findings from the survey are critical inputs to be reflected into the evaluation of individual executives and to implement improvement activities. Recent findings indicate that the organizational capability and activity have risen steadily for 3 years in a row since 2008.

#### Question structure



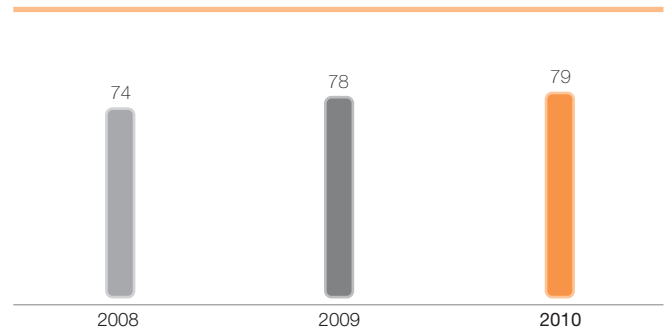
#### Organizational capability index(positive response ratio)

(Unit: %)



#### Organizational activity index(positive response ratio)

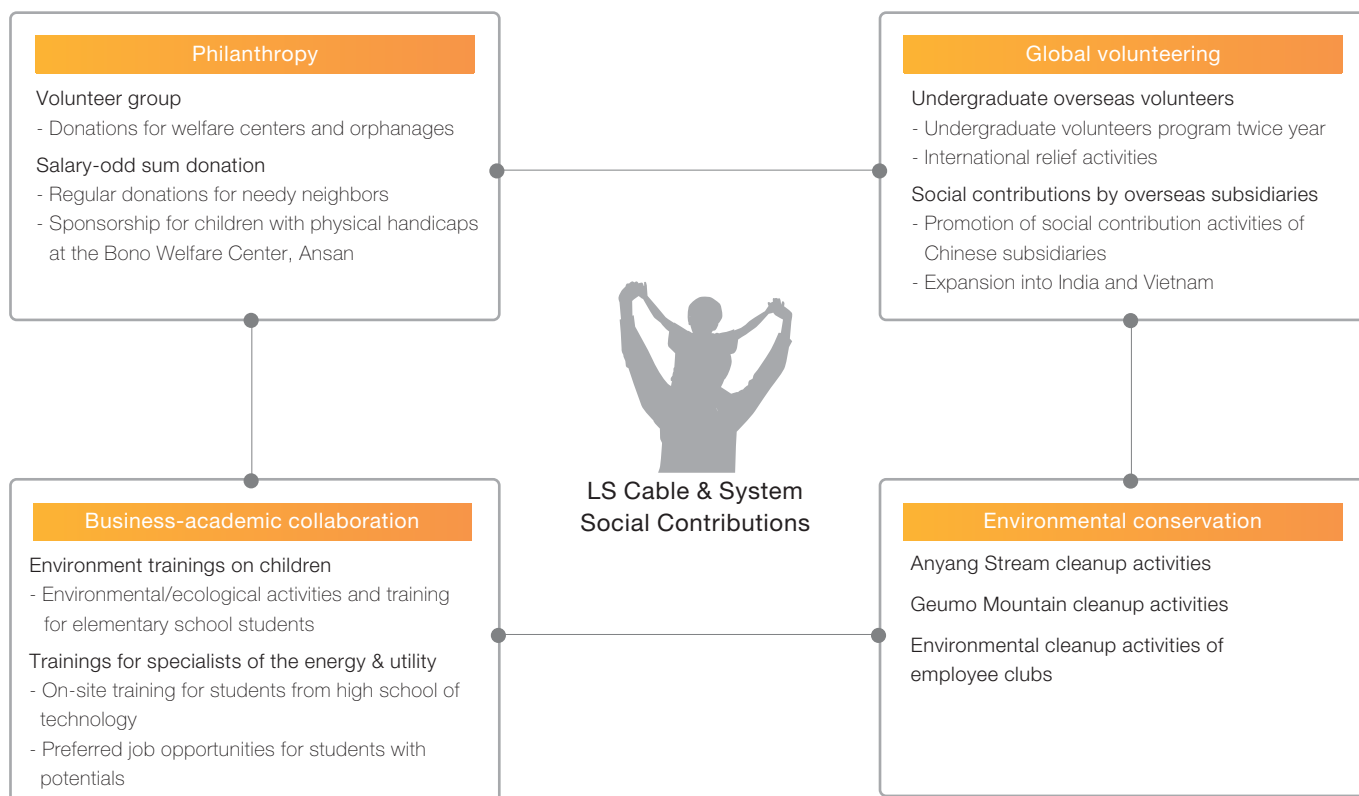
(Unit: %)



# TOPIC 05. Local Community

## Social Contribution in Global Society

We define the cities of Anyang, Gumi, Indong and Donghae where domestic business sites locate, and China, India and Vietnam, where our overseas subsidiaries operate, as the local communities. We carry on a wide variety of social contribution activities in our local community. We make a contribution to the local communities with a focus in 4 categories: philanthropy, global volunteering, business-academic collaboration and environmental conservation.



For 2011, we plan to establish a corporate social contribution strategy for more systematic supports. Besides, we are going to organize employee's volunteer groups in the corporate level. Notably, we are going to develop a representative contribution program considering our business characteristics and improve existing programs. Our plan aims at encouraging more employees to participate in the programs.

### Social contribution in numbers

(Unit: thousand of KRW)

Category	Funding source	2008	2009	2010
Corporate	Donation, matching grant	461,988	663,421	1,576,296
Volunteer group	Membership fees, in-house reserve	26,788	24,747	22,821
Employees	Odd sum of salary	20,982	21,902	23,385
<b>Total</b>		<b>509,758</b>	<b>710,070</b>	<b>1,622,502</b>

\* Approximately KRW1.6 billion was spent on social contribution activities in 2010.

Topic 02. Customers  
 Topic 03. Suppliers  
 Topic 04. Employees  
 Topic 05. Local Community

## Philanthropy

### Volunteer groups at each plant

We have promoted social contribution activities through the volunteer groups organized at each plant in Anyang, Gumi, Indong and Donghae cities. They pursue for long-term relationship and partnership with local neighbors through an activity considering local community's needs.

The volunteer groups, called '*Chamsarang Society*' of the Gumi and Indong plants were born in June 1999 and have grown to include 470 members at the end of 2010. The volunteer group, called '*Sarang-Silcheon Society*' of the Anyang plant made a start in April 1997 and

remained in operation until the plant was relocated in October 2010. The major activities of the '*Chamsarang Society*' and '*Sarang-Silcheon Society*' are as follows:

### Major activities of the '*Chamsarang Society*' and '*Sarang-Silcheon Society*'

(Unit: thousand of KRW)

Group	Description	Beneficiary	Frequency	2008	2009	2010
<i>Chamsarang</i> (Gumi/Indong)	Free meals for the elderly	Gumi Social Welfare Center	Monthly	4,478	2,923	2,883
	Kimchi-making campaign for neighbors		Once a year(Nov.)	2,594	2,789	3,000
	Birthday parties for orphans, volunteer labor, invitation programs, children activity sponsorships, etc.	Gimcheon Welfare Home	Monthly	4,354	5,125	4,654
	Provision of lunch for needy children	Booksam Elementary School, Yesan Elementary School	Monthly	1,854	664	800
	Briquette donation for needy neighbors	-	Once a year(Nov.)	3,475	3,050	2,764
	Birthday party for the elderly, hair cut and treatment service, heating expense donation	Seongsim Elderly Home, Ansa Elderly Community	Twice a month			
	Living expense donation for needy neighbors	-	Monthly	1,320	1,440	1,320
	Housing renovation service for needy neighbors	-	Ad-hoc	913	646	-
<i>Sarang-Silcheon</i> (Anyang)	Regular sponsorship for local welfare organizations	Children Foundation	Monthly	5,400	5,400	4,500
		St. Lazarus Village, etc.		2,400	2,400	2,000
<b>Total</b>				<b>26,788</b>	<b>24,747</b>	<b>22,821</b>

The Donghae plant established the '*Love-Sharing Society*' in December 2009 and had 121 members at the end of 2010. Though it is still in the early stage, it has a plan to find more activities in partnership with local communities.



Volunteer activities at the Gimcheon Welfare Home



Heating coal briquette donation for needy neighbors



Kimchi-making campaign for neighbors

**Salary-odd sum donation**

Upon the voluntary consent of employees, we collect odd sums amounting to less than KRW1,000 from their salaries and bonuses on a monthly basis. We donate a matching sum to fund that adds the same amount of grant as employees' offer. With the odd sum donation, we grant about KRW3.4 million in sponsorship every month to 76 needy neighbors including senior citizens living alone, people with physical handicaps or children living with their grandparents in Anyang, Gumi, Indong and Donghae(as of 2010).

In addition, we support the Bono Welfare Center in Ansan City which takes care of children with physical handicaps through salary-odd sum donation program. Every summer, we invite children with physical handicaps and their family members to a two-day summer camp and hosts cultural activity events at resorts and museums three times or more each year. Such programs enable children with handicaps to communicate better with the rest of the world and hold on to their dreams.

**Global volunteering activities**

Undergraduate overseas volunteers

We provide undergraduate students of Korea with opportunities to join overseas volunteer programs twice a year during vacation seasons. (The program was previously run by LS Cable & System independently from August, 2007 to August, 2009 and then jointly with other LS Group affiliates from August, 2010.) Such opportunities have enabled some youth of Korea to share their love with the rest of the world and develop a global mindset.

Since 2008 we have sent over 100 undergraduates together with 11 employees to Vietnam(twice), Bangladesh, Cambodia and India to help educate children, improve the community environment and renovate parts of the community infrastructure. In addition, we organize the communities of volunteers and help them engage in local volunteer programs and workshops.



Undergraduate overseas volunteer: local community environment enhancement program



Undergraduate overseas volunteer: children's education program

**Salary-odd sum fund**

(Unit: thousand of KRW)

Category	2008	2009	2010
Supporting the neglected group	36,000	36,000	40,800
Sponsoring the Bono Welfare Center	5,964	7,804	5,970
<b>Total</b>	<b>41,964</b>	<b>43,804</b>	<b>46,770</b>



Culture event for the Ansan Bono Welfare Center



Summer camp, for the Ansan Bono Welfare Center

Social contribution by overseas subsidiaries

We are expanding social contribution activities into our overseas subsidiaries as a global program. From 2005, we have sponsored scholarship programs of Qingdao University of Technology and Harbin University of Technology in China. In 2006, we donated RMB1 million(approximately KRW120 million) to the China Disabled Persons Association. In July 2010, we support for 55 undergraduate students in Yichang City, Hubei Province, to visit the 2010 Shanghai Expo. The students were also given opportunities to tour the LS Industrial Complex in Wuxi and the Superior Essex plant in Suzhou.

We plan to offer a variety of self-development opportunities to talented local youth and reach out to local communities by developing and expanding social contribution activities tailored to the regional needs.



Chinese undergraduates EXPO tour

- Topic 02. Customers
- Topic 03. Suppliers
- Topic 04. Employees
- Topic 05. Local Community

**Business-academic collaboration**

Promoting dream trees of the environment

We contribute to the development of youth in the area of environment and energy, which have a close relationship with our business development, by promoting business-academic collaborations. The environment training program, titled the Dream Trees of the environment, which we have promoted jointly with Yesan Elementary School in Gumi City since 2007

aims to help elementary school students to understand more about environmental issues so that they have interests in environment protection. We select 10 students from the 3<sup>rd</sup>-5<sup>th</sup> grades each year and gives them opportunities to join expert instructor lectures, ecological field observations, seasonal experience programs, participate in environment contests and preparation of study reports. For our environment education programs for children, we received a letter of appreciation from Yesan Elementary School in June, 2008.



Environment education program

Educating talented youth in the energy & utility sectors

We signed an MOU with Sudo High School of technology in July, 2010 in order to nurture a specialist of the energy and utility and promote exchanges. We selected 5 students and granted them opportunities onsite training for 23 weeks in August 2010. Excellent performers in the program will be hired preferably over other candidates when job openings are available.



Business-academic collaboration MOU signing ceremony

**Environmental conservation**

As the cities in which we have the plants, such as Anyang, Gumi, etc., are already packed with industrial factories, they are highly concerned about environmental issues. Accordingly, we have carried out a variety of activities to conserve the local environment.

In Anyang plant, 'Saving Anyang Stream' campaign is conducted at least once a quarter as part of the 'Green Anyang' initiative, while the Gumi and Indong plants perform the cleanup activities in Mountain Geumo regularly. These programs have the distinct characteristic of the participation of both labor and the management.

In addition, employee clubs such as the mountain climbers club and scuba diver club also participate in environmental cleanup campaigns. In January, 2008, 55 employees joined in oil spill cleanup program at the Gureumpo Beach in the Taean area.



Anyang stream cleanup

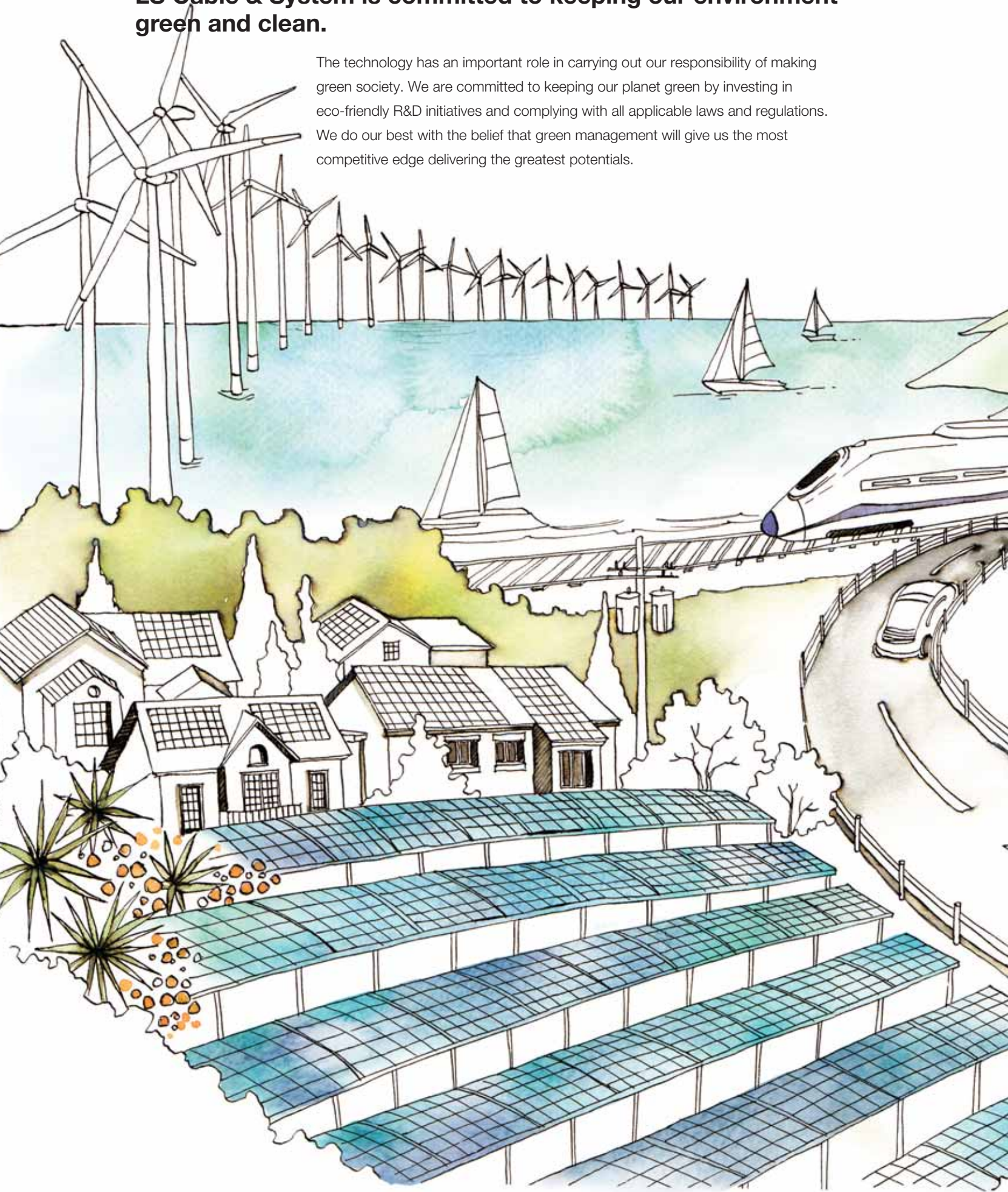


Taean oil spill cleanup



## **LS Cable & System is committed to keeping our environment green and clean.**

The technology has an important role in carrying out our responsibility of making green society. We are committed to keeping our planet green by investing in eco-friendly R&D initiatives and complying with all applicable laws and regulations. We do our best with the belief that green management will give us the most competitive edge delivering the greatest potentials.







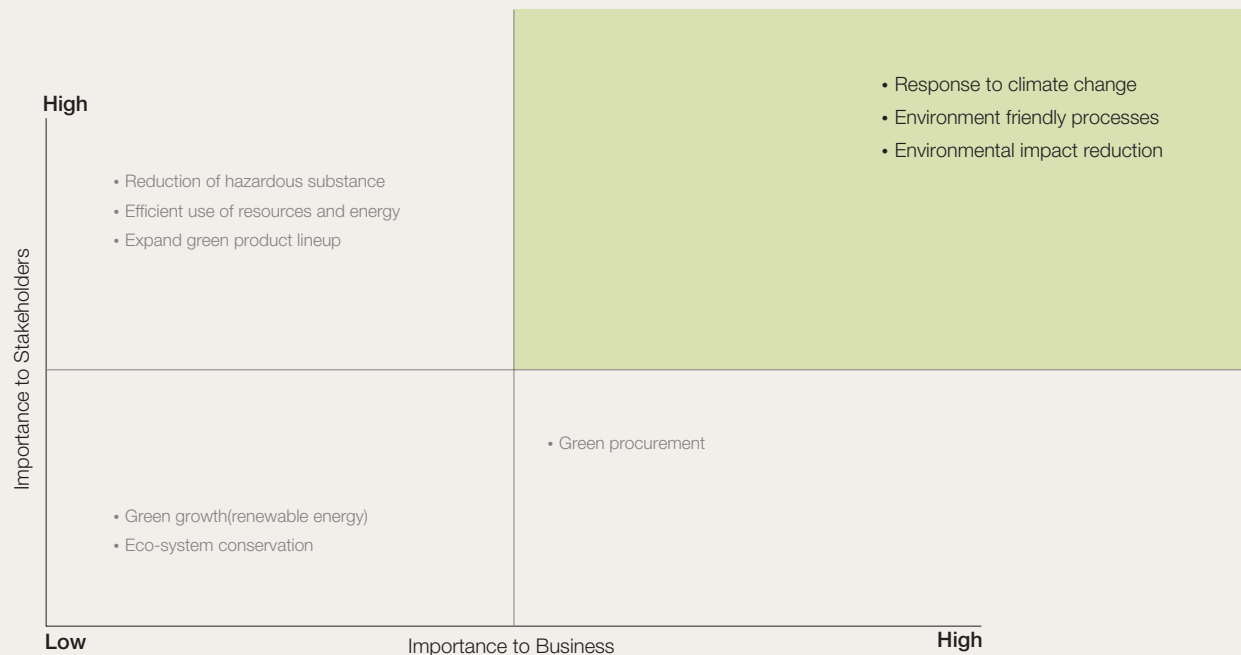
ENVIRONMENT



# Environmental DMA Disclosure on Management Approach

Division	Policy	Direction	Department in charge	2010 Achievements	2011 Plan
Green Management	<ul style="list-style-type: none"> <li>Minimize environmental impacts and energy consumption</li> </ul>	<ul style="list-style-type: none"> <li>Expand 'green practices' at workplaces</li> <li>Reduce energy consumption/green house gas emissions</li> </ul>	<ul style="list-style-type: none"> <li>Environment planning team</li> <li>Facility planning team</li> </ul>	<ul style="list-style-type: none"> <li>Re-designate and newly designate 'a green company' (Gumi, Indong, Donghae)</li> <li>Use of 'green' drums for cable packaging/shipping</li> <li>Implementation/verification of green house gas inventory</li> <li>Maintain ISO 14001 certification in all workplaces in Korea</li> </ul>	<ul style="list-style-type: none"> <li>Expand ISO14001 certification to overseas sites</li> <li>Build end-to-end process recycling system</li> <li>Establish green house gas reduction targets and continuous effort to achieve the target.</li> </ul>
	<ul style="list-style-type: none"> <li>Expand lineup of green technologies and products</li> </ul>	<ul style="list-style-type: none"> <li>Expand green product lineup</li> <li>Build green product infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>Environment planning team</li> <li>Technology management team</li> </ul>	<ul style="list-style-type: none"> <li>Eco-Design system implementation</li> <li>8 new green product certification (Greenflor<sup>TM1</sup>) models, the most certification in number in Korea.)</li> </ul>	<ul style="list-style-type: none"> <li>Expand Eco-Design system to subsidiaries and business partners</li> <li>Expand new green product certification</li> </ul>
	<ul style="list-style-type: none"> <li>Promote green partnerships</li> </ul>	<ul style="list-style-type: none"> <li>Build green supply chain management system</li> <li>Disclose environment information</li> </ul>	<ul style="list-style-type: none"> <li>Environment planning team</li> <li>Purchasing planning team</li> </ul>	<ul style="list-style-type: none"> <li>Build green supply chain management system with green purchase policy</li> <li>Disclose carbon emission data</li> <li>Disclose a green product and policy suggestion venue</li> <li>Received Global Green Management Grand Prize</li> </ul>	<ul style="list-style-type: none"> <li>Disseminate green supply chain management - subsidiaries and business partners</li> <li>Disclose environment and carbon data transparently</li> </ul>

<sup>1</sup>Greenflor<sup>TM1</sup>: environment-friendly PVC-free rubber flooring material that contain neither formaldehyde which damage the environment nor halogen(HCL, HCN)



# TOPIC 06. Green Management

## Green Management Policy & Investment

### Green Management Policy

We have implemented green management policies to achieve sustainable growth through green businesses and green products. More specifically, we always look for ways to minimize detrimental loads of environment and energy, reduce energy consumption and enhance green technology and product development. We actively encourage employees to become “green professionals,” disclose green data transparently and pursue sustainable green policies. Notably, from 2010, we implemented a green purchasing system and Eco-Design processes and focused on green product production to respond to climate change preemptively by minimizing the environmental impacts of the products and maximizing energy efficiency. Furthermore, we are fully aware that green workplaces and improved energy efficiency from reduction of greenhouse gas emission will lead directly to the global competitiveness of our products. From this point of view, we have implemented green management policies as our key strategy to ensure sustainability.

### Green Management Organization

To enhance green management and facilitate internal communication, we have a green management steering committee meeting twice a year under the leadership of the CEO. The green management policies and implementations are overseen by the Environmental Planning Team within the Quality Environment Management Office which itself is under the control of the Director of the Technology Development group. Three committees, the Climate Change Committee, Green Product Committee and the Environment Safety & Health Committee operate green management with a deep consideration of group-specific role/characteristics. The Climate Change Committee has an Energy Management Committee<sup>2)</sup> under its control since 1991. Each committee is convened every quarter to determine an implementation strategy and direction.



In 2010, the Climate Change Committee vote for the establishment of greenhouse gas inventory system and its verification, 2011 greenhouse gas emission reduction target and CDP(carbon disclosure program) for customers. The Green Product Committee revised the existing definition of green products and apply an Eco-Design process to our product development in order to boost green business. The Environment Safety & Health Committee initiated a green workplace designation program for all our workplaces in Korea, decided to use specially designated drums made from woods harvested from certified forests for packing and shipping cable and resolved on an 'Implementation of Voluntary Agreement to Collect and Recycle Waste' to facilitate resource recovery in the waste treatment process. Thanks to such green management activities at the corporate level, we received the Global Green Management Grand Prize in 2010.

For 2011, we will operate a greenhouse gas and energy target management task force team to reduce environmental impacts of products and enhance green partnership with suppliers. We will also implement green accounting system and recycling program with a purpose of reducing energy consumption and green house gas emission.

<sup>2)</sup> Energy Management Committee: Responsible for identifying energy saving opportunities mostly in the utility sector and manages efficiency of key energy sources(electricity, steam, LNG) intensively.




### Mid-term green management roadmap

We are expanding our green communication and green supply chain management by implementing a green strategy, responding to climate change, building green workplaces and developing green products and technologies. We aim to build a global green management system integrating both domestic and overseas workplaces by 2015 as part of our mid-term roadmap.

#### Mid-term green management roadmap

		Establish green management system	Expand green management into all subsidiaries/supplier	Establish a global green management system
		2010~2011	2012~2013	2014~2015
<b>Global green management system</b>		<ul style="list-style-type: none"> <li>Establish green management strategy</li> <li>Acquire a reputation of a green company</li> <li>Build a green accounting and training system</li> </ul>	<ul style="list-style-type: none"> <li>Disseminate a green management system (subsidiaries/business partners)</li> </ul>	<ul style="list-style-type: none"> <li>Expand the green management system to overseas workplaces</li> <li>Integrate green management of all workplaces at home and abroad</li> </ul>
Green Operation	Response to climate change	<ul style="list-style-type: none"> <li>Build a greenhouse gas inventory in all domestic workplaces</li> <li>Define and achieve energy/greenhouse gas reduction targets</li> </ul>	<ul style="list-style-type: none"> <li>Build and expand an integrated energy/greenhouse gas management system</li> <li>Review adoption of CDM</li> </ul>	<ul style="list-style-type: none"> <li>Integrate energy/greenhouse gas target management for all global workplaces</li> <li>Establish the green house gas inventory at all workplaces at home and abroad</li> </ul>
	Global green workplaces	<ul style="list-style-type: none"> <li>Designate all domestic workplaces as green companies</li> <li>Expand ESH system certification to overseas workplaces</li> <li>Implement an integrated ESH evaluation system</li> </ul>	<ul style="list-style-type: none"> <li>Have all domestic/overseas workplaces ESH system-certified</li> <li>Expand the integrated ESH evaluation system to subsidiaries/suppliers</li> </ul>	<ul style="list-style-type: none"> <li>Integrate ESH system operation at home and abroad</li> <li>Integrate ESH target management for all global workplaces</li> </ul>
Green Product	Green product management	<ul style="list-style-type: none"> <li>Define green product management processes</li> <li>Build an environmentally hazardous substance management system</li> <li>Expand green product certification</li> </ul>	<ul style="list-style-type: none"> <li>Integrate a green design system for all groups at home and abroad</li> <li>Adopt an in-house green product label</li> </ul>	<ul style="list-style-type: none"> <li>Integrate global green product management</li> <li>Expand low-carbon green product certification</li> </ul>
Green Partnership	Green communication	<ul style="list-style-type: none"> <li>Expand CDP</li> <li>Disclose environmental data transparently</li> </ul>	<ul style="list-style-type: none"> <li>Expand carbon partnerships</li> <li>Disclose environment data transparently</li> </ul>	<ul style="list-style-type: none"> <li>Publish a carbon management report</li> <li>Disclose environment data of all global workplaces</li> </ul>
	Green supply chain	<ul style="list-style-type: none"> <li>Implement a green purchase system</li> <li>Provide green management training to suppliers</li> </ul>	<ul style="list-style-type: none"> <li>Expand the green purchasing system</li> <li>Expand green management training to suppliers</li> </ul>	<ul style="list-style-type: none"> <li>Apply green purchasing to all global workplaces</li> <li>Manage green purchasing targets</li> </ul>

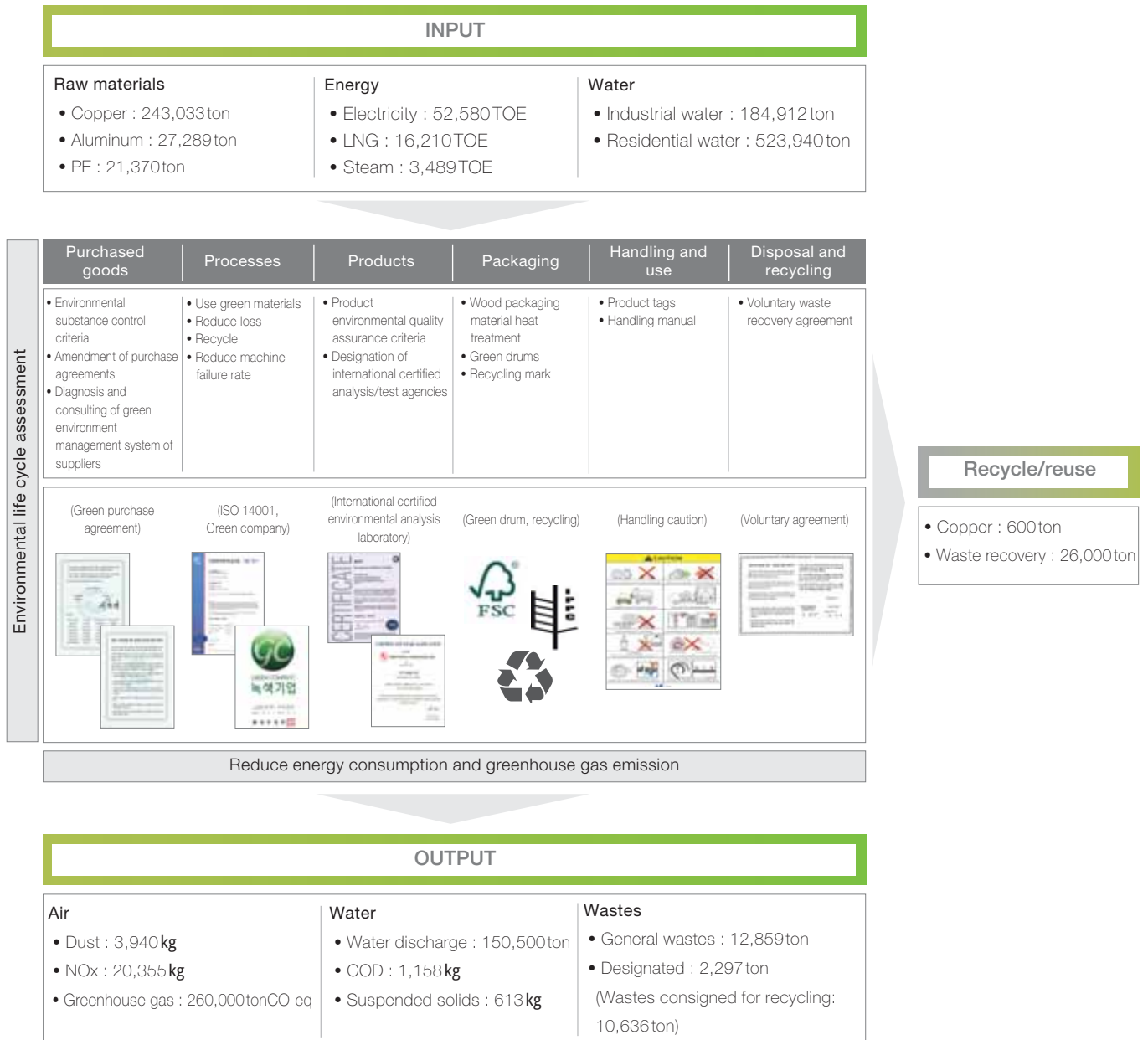
#### Green management activities

	 Green Operation	 Green Product	 Green Partnership
<b>Implementation</b>	<ul style="list-style-type: none"> <li>Enhance response to climate change</li> <li>Expand green workspaces</li> <li>Build recycling system</li> <li>Introduce clean development mechanism</li> </ul>	<ul style="list-style-type: none"> <li>Expand lineup of green products</li> <li>Enhance low-carbon products</li> <li>Build a hazardous substance management system</li> </ul>	<ul style="list-style-type: none"> <li>Enhance the green supply chain</li> <li>Expand the strategic carbon agreement</li> <li>Increase corporate social responsibility activities</li> <li>Publish a carbon management report</li> </ul>
<b>Achievements</b>	<ul style="list-style-type: none"> <li>Green company certification(Gumi, Indong, Donghae)</li> <li>Green drums for packaging and shipping</li> <li>ISO 14001 100%</li> <li>Build and verify greenhouse gas inventory</li> </ul>	<ul style="list-style-type: none"> <li>Green product certification(Greenfor models)</li> <li>Built an Eco-Design system</li> </ul>	<ul style="list-style-type: none"> <li>Won the Global Green Management Grand Prize</li> <li>Expanded CDP supply chain</li> <li>Develop green products/ technologies and suggest policies</li> <li>Build a green purchasing system</li> </ul>
<b>Risks</b>	<ul style="list-style-type: none"> <li>Carbon credit trading system</li> <li>Greenhouse gas emissions target management system</li> <li>Expansion of raw/incidental material recycling</li> </ul>	<ul style="list-style-type: none"> <li>Stronger Environment regulation(REACH, ROHS, WEEE)</li> <li>More demand for green products</li> </ul>	<ul style="list-style-type: none"> <li>Expansion of the product life cycle assessment</li> <li>More customer demands for carbon data</li> <li>Expansion of environmental conservation activities</li> </ul>
<b>Department in charge</b>	<ul style="list-style-type: none"> <li>Facility planning team, Facility management team, Environmental safety team, Production team</li> </ul>	<ul style="list-style-type: none"> <li>Technology management team, Purchase planning team, Development/Design team</li> </ul>	<ul style="list-style-type: none"> <li>Purchase planning team, PR team, Development/Design team</li> </ul>

To realize the mid-term roadmap, we analyze global regulations, international conventions, requirements of customers and stakeholders and risk factors such as depletion of natural resources. To address the identified risks, we coordinate relevant departments in each sector, achieving tangible returns.

### Life cycle assessment activities

We try to reduce environmental impacts in accordance with the mid-term roadmap by considering green purchases, green processes and eco-friendly product design all along the end-to-end product lifecycle from product design to waste treatment. In addition, such end-to-end environmental management activities will be expanded to cover the suppliers and subsidiaries at home and abroad.





## Investment in environment

We continue to make investments to reduce environmental impacts of our products, facilitate transition to green processes and improve the health and safety of employees. In 2010, we invested KRW18 billion in aggregate for environment and safety, including KRW15.2 billion for green R&D initiatives, KRW1.1 billion to transition to green processes and other environment-friendly facilities and KRW1.7 billion for improvement of health and safety of employees.

## Environmental investment & expense

(Unit: millions of KRW)

Category	2008	2009	2010
Investment <sup>①</sup>	848	3,849	1,117
Maintenance expense <sup>②</sup>	1,706	1,589	1,735
R&D expenses <sup>③</sup>	5,000	9,300	15,200
<b>Total</b>	<b>7,554</b>	<b>14,738</b>	<b>18,052</b>

Environmental investment: investment in environmental facilities, green processes, health/safety facilities

Environmental maintenance expense: labor costs for environmental safety, health administration costs, employee training costs, environmental safety facility maintenance costs

Environmental R&D expense: green product development costs, New renewable energy investment costs

## Green Operation : Efforts to Respond to Climate Change and Reduce Environmental Impacts

### Efficient Energy Use & Efforts to Alleviate Climate Change

#### Reducing climate change risks and exploring opportunities

We are exposed to both risks and opportunities associated with climate change. The key risks include a rise in yellow dust from desertification of western China, reduction of manufacturing days due to a rise in extreme weather conditions(excessive hot summer days, excessive rainy days) and a hike of commodity prices. However, such risks are expected to be outweighed by business opportunities arising from increase in demand for green products minimizing energy loss and cable products used for wind farms and electric vehicles, etc.

Given the nature of the business, our volume of green house gas emission is not great, posing little regulatory risks. However, we continue to reduce energy consumption and greenhouse gas emissions by disclosing carbon data through voluntary greenhouse gas inventory<sup>①</sup> and improving the overall energy-efficiency of all facilities.

#### Risks analysis and mitigation activities

Category	Analysis description	Key activities
Regulatory risks	<ul style="list-style-type: none"> <li>• Korean government's target to reduce greenhouse gas emissions by 30% from BAU<sup>②</sup> by 2020</li> <li>• The total volume of workplace greenhouse gas emission target management system from 2012</li> <li>• Introduction of Carbon credit trading system in 2015</li> <li>• Stronger green purchase criteria for low-carbon products</li> </ul>	<ul style="list-style-type: none"> <li>• Signed the voluntary energy reduction agreement with KEMCO (1999-2009) and carried out reduction activities</li> <li>• Built climate change response system               <ul style="list-style-type: none"> <li>- Climate Change Committee</li> <li>- Establishment and verification of greenhouse gas inventory</li> <li>- Energy saving and greenhouse gas reduction activities</li> </ul> </li> <li>• Built green purchasing system(procured energy-efficient facilities)</li> </ul>
Physical risks	<ul style="list-style-type: none"> <li>• Stability of 94m-long VCV<sup>③</sup> tower structure due to increased frequency and intensity of typhoons from climate change</li> <li>• Decreased construction-ready days due to a rise in rainy days from climate change</li> <li>• Increased yellow dust from desertification of western China increase:               <ul style="list-style-type: none"> <li>- fiber optic cable clean room maintenance costs</li> <li>- defects caused by dust</li> </ul> </li> <li>• Increased cable durability risk due to climate changes and increased number of typhoons</li> </ul>	<ul style="list-style-type: none"> <li>• Operate the crisis handling process in each workplace</li> <li>• Enhanced the clean room safety measures</li> </ul>
Other risks	<ul style="list-style-type: none"> <li>• Rise in costs due to fuel and commodity price increases resulting from climate change</li> <li>• Increase in customer demands for low-carbon products</li> <li>• Customer requirements for CDP</li> </ul>	<ul style="list-style-type: none"> <li>• Built Eco-Design system</li> <li>• Responded to CDP supply chain program</li> </ul>

<sup>①</sup>Green House Gas Inventory: a series of greenhouse gas statistical data to poll, record, estimate and control emission and absorption volumes of 6 greenhouse gas substances specified in the Kyoto Protocol

<sup>②</sup>BAU(Business As Usual): emission volume projected in BAU without mitigation activities

<sup>③</sup>VCV: Vertical Continuous Vulcanization

### Opportunity analysis and activities

Category	Opportunities	Key activities
Regulatory opportunities	<ul style="list-style-type: none"> <li>Expansion of smart grid market to secure stable power and minimize power loss</li> <li>Increase in green business opportunities relating to new renewable energy such as EV, wind farms, green buildings, LED lighting, etc.</li> <li>Expansion of energy-efficient infrastructure to reduce greenhouse gas emissions</li> </ul>	<ul style="list-style-type: none"> <li>Produce wind power cables and busducts</li> <li>Develop EV harness &amp; modules</li> <li>Produce superconductor cables and terminals</li> <li>Install EV recharging systems(EMC, Jeju)</li> </ul>
Physical opportunities	<ul style="list-style-type: none"> <li>Increased demand for submarine and wind power cables due to typhoons and rise in sea levels</li> <li>Increased demand for reliable and durable cable resistant to sudden weather change</li> </ul>	<ul style="list-style-type: none"> <li>Go into new businesses of submarine cable(Jindo-Jeju cable project underway)</li> <li>Get opportunity to prove product quality from outstanding production technology and strict in-house testing</li> </ul>
Other opportunities	<ul style="list-style-type: none"> <li>Stable commodity sources</li> <li>Increase in preference for green products and green companies</li> </ul>	<ul style="list-style-type: none"> <li>Secure stable copper source with acquisition of copper mine in Chile by LS-Nikko Copper Inc.</li> <li>Promote green supply chain through green partnership</li> <li>Expand green product certification(Greenflor flooring material, etc.)</li> <li>Expand green cable and product lineup</li> <li>Get green company certification(Gumi, Indong, Donghae)</li> </ul>

### Energy use

We have managed the use of energy sources such as LNG, electricity, steam and some LPG since 2000. The energy consumption level is managed by the facility management team of the production technology center. Total energy consumption in 2010 was 72,279 TOE<sup>9</sup>, representing an increase from 2009, due to the establishment of the Donghae plant and increased production.

Energy consumed directly by production, operation processes and company vehicles was 71,606 TOE in 2010, using LNG, electricity, steam and vehicle fuel as the main source. In addition, energy used indirectly in leased buildings such as the head office and the solution business group building was 673 TOE in 2010.

We are not making use of renewable energy resources strategically yet, but operate two solar power generators at the Gumi plant on a pilot basis. Going forward, we have a plan to increase the use of renewable energy such as solar and wind energy.

### Energy use

(Unit: TOE/Year)

Category	2008	2009	2010
LNG	12,373	13,784	16,210
Electrical power	44,342	47,877	52,580
Steam	3,532	3,268	3,489
Enterprise total	60,247	64,929	72,279

<sup>9</sup>TOE(Tonnage of Oil Equivalent): As a unit of energy, 1 TOE represents the energy produced with one ton of oil.

## Greenhouse gas management

We implemented a corporate-wide greenhouse gas management system in response to global climate change and customer requirements for carbon data disclosure. We also aim to expand our carbon partnership with suppliers, so that manage the greenhouse gases systematically in the entire supply chain. In addition, we will phase in a standardized greenhouse gas management system to cover subsidiaries at home and abroad step-by-step.

### Greenhouse gas inventory

We have built up a greenhouse inventory for 5 years from 2005 to 2009 and received a 3<sup>rd</sup> party verification from the Korea Energy Management Corporation, KEMCO in August, 2010. We managed the inventory on a monthly basis and have completed in-house reviews with the additional data of 2010.

Our greenhouse gas inventory covers 4 domestic worksites(Anyang, Gumi, Indong, Donghae), the head office, 2 training institutes and the solution business group on the basis of the World Resource Institute GHG Protocol.

As for target emission sources, we measured the Scope 1(direct emissions) and the Scope 2(indirect emissions) as defined in ISO 14064-1 and the WRI GHG Protocol first. The Scope 3(other indirect emissions) and emission of ozone-layer depleting substances(CFCs, HCFCs) subject to optional management are also managed in the inventory system.

### Total GHG emissions and basic unit of emission

(Unit: 1,000 tonCO<sub>2</sub>eq)

Category	2008	2009	2010
Emissions			
Direct emission(Scope 1) <sup>7)</sup>	108	81	130
Indirect emission(Scope 2) <sup>8)</sup>	105	113	128
Other indirect emission(Scope 3) <sup>10)</sup>	1	2	2
Total	214	196	260
Basic unit(tonCO <sub>2</sub> eq/ton of product)	0.34	0.30	0.39

### Other GHG emission

We also track R-11(CFC11), R-22(HCFC22) and R-123(HCFC123), as optional gases, which are not included in the 6 GHGs specified in the Kyoto Protocol, yet these substances have a significant impact on climate change and damage the ozone layer.

### GHG Emission<sup>7)</sup>

The total GHG emissions in 2010 was 260,000 tonCO<sub>2</sub>eq and the basic unit of in-house production was 0.39 tonCO<sub>2</sub>eq/ton. Out of this, GHG emissions attributable to energy consumption was 166,000 tons or 13% up from the previous year and the basic unit of in-house production was 0.25 tonCO<sub>2</sub>eq/ton or 8.7% up from the previous year, which resulted from an increase in production capacity following relocation of the Anyang Plant to Indong and expansion of submarine cable production capacity at the Donghae Plant.

While we managed our own vehicle fleet fuel use(gasoline, diesel) and fuel for forklifts(diesel), the energy consumed in delivery and transport operations conducted by 3<sup>rd</sup> party contractors is not an item of management of LS Cable & System. Emissions from commuter fleets and transport vehicles operated by 3<sup>rd</sup> party contractors and public transportation modes used by employees on business trips are also not included in our management system. Going forward, we are going to manage emissions by business partners and 3<sup>rd</sup> party contract fleets under our systematic system. We manage GHG emissions from heating energy used in the head office and buildings rented by the solution business group as Scope 3(other indirect emissions).

### GHG emissions from energy consumption and basic unit of emission

(Unit: 1,000 tonCO<sub>2</sub>eq)

Category	2008	2009	2010
Emission	134	147	166
Basic unit(tonCO <sub>2</sub> eq/ton of product)	0.21	0.23	0.25

They are mostly used as refrigerants in air conditioners and chillers. Total emissions in 2010 were 2,283 tonCO<sub>2</sub>eq. No remarkable fluctuation in annual emission was observed, as facilities using them are rarely replaced.

<sup>7)</sup>The emission coefficient applied to the GHG estimation is derived from the Guidelines for National Greenhouse Gas Inventories(IPCC, 2006)

<sup>8)</sup>Direct emission(Scope 1): Fixed(combustion in boilers, etc.) mobile(operational vehicles), leakage(fire extinguishers, etc.) and process emissions(production processes)

<sup>9)</sup>Indirect emission(Scope 2): Emissions by electricity and steam. GHG is emitted directly in 3<sup>rd</sup> party production and actual users count it as an indirect emission

<sup>10)</sup>Other indirect emission(Scope 3): Emissions by leased buildings, 3<sup>rd</sup> party contract fleets(commuter vehicles, transport fleet), business trips

## GHG reduction activities

Starting with the Gumi plant in 1999, the Anyang and Indong plants signed a voluntary agreement on energy saving and GHG emission reduction with Korea Energy Management Corporation, KEMCO in 2000 to press on with GHG reduction activities. Notably, we improved the investment and management framework to reduce GHG emissions from facilities using lots of energy and production processes. Thanks to such efforts, 3,916 TOE of energy was saved and 7,768 tonCO<sub>2</sub>eq per year of GHG was reduced in 2010.

### Energy saving and GHG reduction by voluntary agreement

Category	2008	2009	2010
Energy saving(TOE)	704	1,053	3,916
GHG reduction(tonCO <sub>2</sub> eq)	1,124	2,618	7,768
Investment(millions of KRW)	164	335	1,439
Energy saving value(millions of KRW)	420	1,090	1,740

### Reduction highlights

We invest in energy-efficient facilities and alternative fuels to reduce GHG emissions from major GHG sources.

Year	Reduction case	Energy saving	Saving value(millions of KRW)	Plant
2009	Modified iron melting furnace burner to improve LNG efficiency	202 km <sup>3</sup>	429	Gumi
	Changed energy source of company cafeteria/washrooms from diesel to LNG	443 km <sup>3</sup>	300	Anyang
	Recovered wasted heat from the heat storage combustion system	263 km <sup>3</sup>	156	Indong
	Reduced SF6 consumption to reduce GHG emissions	GHG 22,000 ton	20	Gumi
2010	Improved the draw heat discharging method to reduce energy consumption	Electricity 206 MW/hr, LNG 101 km <sup>3</sup>	93	Indong
	Reduced chiller energy consumption by using a natural cooling arrangement	365 kW	170	Indong
	Replaced 250W metal ramps in plants with energy efficient LED lighting	GHG 470 ton	117	Gumi

#### Best case: Iron melting furnace burner modification

We modified the iron melting furnace burner of the Gumi plant in 2009 to improve LNG efficiency, investing KRW1.4 billion to save energy worth KRW0.43 billion per year. The modification involved installation of a heat storage chamber to recover wasted heat. Combustion takes place in one burner while combustion heat is absorbed in the other, storing wasted heat in ceramic balls and causing it to be released at the time of combustion to reduce energy consumption.

#### Best case: SF6 recovery mechanism improvement

We improved the recovery mechanism in 2009 to reduce consumption of SF6 used in the power cable insulation voltage resistance test. The initiative reduced SF6 by 20 drums(48kg) and GHG by about 22,000 tons in comparison with 2008.

To be more specific, an SF6 liquefier was installed to improve recovery performance as the volume of SF6 liquid filling the recovery mechanism shrinks to 1/220<sup>th</sup> of its gaseous form under compression. In addition, causes of frequent recovery mechanism failures were eliminated and the recovery mechanism capacity was enlarged to significantly reduce the frequency of SF6 gas filling and recovery and thereby reduce overall SF6 consumption.

### Efforts to reduce GHG during logistics

We disburse over KRW40 billion per year for export/import of products. Given product characteristics, both maritime and air transport are used. Air transport, which has the larger GHG emissions footprint, is used at a minimum level to reduce environmental impacts. The share of maritime transport has increased year by year to account for 91% of the total export/import transport in 2010. Notably, 125 tons or 66% of the total of fiber optic import volume of 190 ton was switched from air transport to maritime transport, saving about KRW210 million in logistics costs. Furthermore, 53% of optical fiber and fiber optic cable exported to China(96 tons out of 181 tons in total) was switched from air transport to maritime transport, saving about KRW110 million in logistics costs. In addition, an integrated logistics team was newly organized in 2010 to press on with integrated transport and fleet management not only for cost savings but also operational efficiency.

### Efforts to develop new renewable energy technologies

We have pressed on with new renewable energy development programs for wind energy, etc.. Notably, a superconductor cable system that can serve as the backbone of a smart grid has been

developed and commercialized. Our superconductor cable, also known as the dream power cables as it features zero electrical resistance, is being supplied as a key component for the U.S. Tres Amigas project, the world's first superconductor grid commercialization project. At the same time, we continue to try to provide customers with GHG and energy reduction solutions.

### Other GHG reduction efforts

We continue to save energy and reduce GHG emission at the corporate level. We operate commuter buses to serve employees at all 4 domestic worksites to minimize GHG emissions. We have also signed a railroad fair discount agreement with Korail, Korea railroad service company, to encourage employees to use public transportation modes rather than their own vehicles on business trips. Inside offices, we save energy by controlling electrical system by turning off lights and air-conditioners in empty offices, cutting screen saver running time of PCs and installing lighting sensors in toilets. Furthermore, we try to improve the awareness of employees on the importance of energy conservation through a variety of public campaign and training program.

## Efforts to Reduce Environmental Impacts

### **Environmental management system & green worksite operation**

We announced an corporate-wide environmental health and safety policy and established the ESH(environment, safety and health) management system(ISO 14001 & OHSAS 18001) integrating the environmental management system with the health and safety management system at all worksites. Also, we identify environment and safety risks related to business activities and conduct improvement activities each year. We carry out ESH management activities involving voluntary engagement of all corporate members by enhancing ESH training for employees and suppliers, expanding the scope of ESH management to our subsidiaries and suppliers both at home and abroad.

### ESH integrated management system(ISO 14001 & OHSAS 18001)

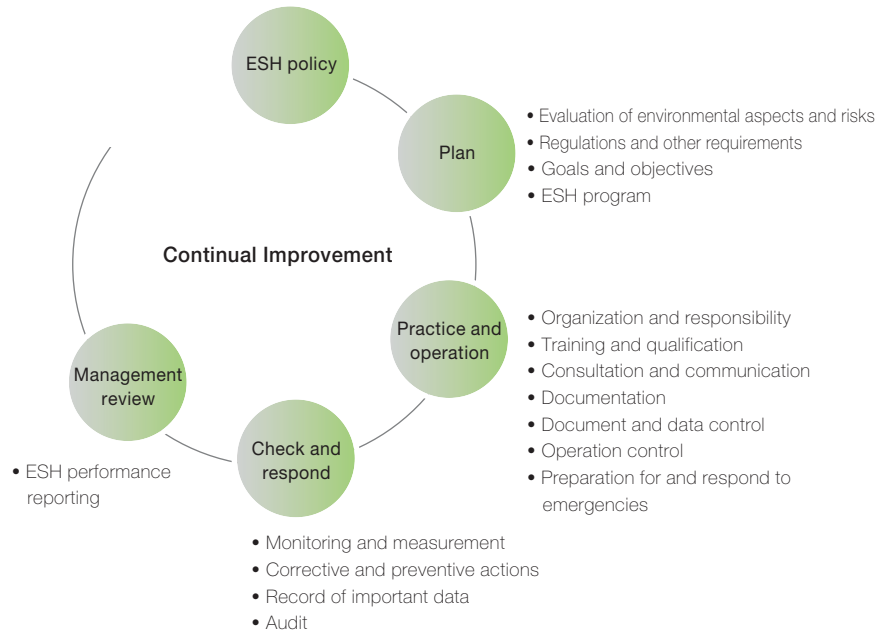
Following ISO 14001 and OHSAS 18001 certification of the Gumi, Indong and Anyang plants in 1997, we have continued to improve the system in subsequent reviews and re-certification assessments by the certification authorities each year. In 2009, the Donghae plant also obtained the certification, completing the corporate initiative to practice global standard of ESH management in all domestic plants. In addition, we plan to have our subsidiaries at home and abroad ISO14001-certified by 2013.

In recognition of integrated ESH management capability by system, the Gumi and Indong plants were designated as 'green' companies by the

Ministry of the Environment in 2002 with the Donghae plant included in 2010, indicating their self-governed focus on ESH improvement. In addition to the dedicated ESH department, we also assign dedicated ESH personnel to each department who evaluate the environmental impacts and risks of all activities of each department.

They help to develop the ESH improvement program about identified risk every year to minimize ESH risk. In addition, we implemented an ICT platform for integrated ESH management system for more efficient operation in 2007.

**Integrated ESH management system framework**



**ESH policy**



**ESH integrated management system in our business site**

Category	Description	Domestic worksites	Domestic subsidiaries	Global subsidiaries
Certification	ISO 14001	Gumi, Indong, Anyang, Donghae	JS Cable, Global Cable Inc., Pountek	LSCW, LSCL, LS-VINA, LSHQ
	OHSAS 18001	Gumi, Indong, Anyang, Donghae	JS Cable, Alutek	LSHQ
Agreement with Government	'Green Company' recognition	Gumi, Indong, Donghae		
	Self-Inspecting Company	Anyang		

**ESH ICT system**

We have operated the ESH ICT system since 2007 to maximize the efficiency of the integrated ESH management system, ensure transparency of relevant data and indicators and inform employees and suppliers of the ESH management. The system supports worksite environment pollutant control, ESH improvements, in-house training

administration, environmental impact and risk assessment management by department and development of goals and improvement program management by department. The system will be renewed to cover GHG management and environmentally hazardous substances in products as a complete portal of green management information.



ESH management system screenshots

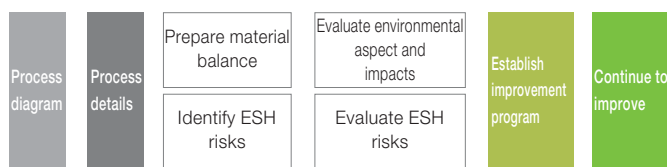


### ESH risks evaluation and continuous improvement

Every year we evaluate the environmental impacts and health and safety risks of the entire end-to-end product lifecycle from raw material purchasing, product manufacturing and transport. According to the evaluation, we mitigate significant environmental impacts and risk factors. Each department is supposed to develop, execute and monitor its ESH improvement plan to mitigate ESH impacts.

To evaluate ESH impacts and risks, all activities are broken down into processes that can be measured and evaluated, and inputs and emissions from each process, pollutant emissions and the health and safety hazards of process input materials, risks of operational processes and applicable regulatory requirements are identified and evaluated.

#### Environment impact assessment and risk evaluation process



ESH risks are quantified into 4 steps in accordance with in-house evaluation criteria. The identified risks deemed to be significant are incorporated into improvement programs in consideration of economic, regulatory and customer requirements in addition to technological conditions, etc. Major improvement programs include green process development/application to substitute Freon gas destroying ozone layer, SF6 recovery mechanism development/application to reduce GHG emission and facilitate efficient resource use, the improvement of devices processing NOx to reduce air pollutants and cadmium-free Messenger Wire<sup>1)</sup> development to reduce environmental impacts of product, etc..

#### ESH improvement program

(Unit : the number of program)

Category	2008	2009	2010
Environment improvement program	60	63	60
Safety & health improvement program	104	94	89
<b>Total</b>	<b>164</b>	<b>157</b>	<b>149</b>

### Environmental pollutants control

We comply with all domestic regulations and customer requirements on the basis of our ESH system(ISO 14001) implementation and official designation as a 'green company' at all worksites. We also operate a pre-ESH review system to evaluate and improve potential environmental impacts prior to investing in new production facilities or modifying existing processes.

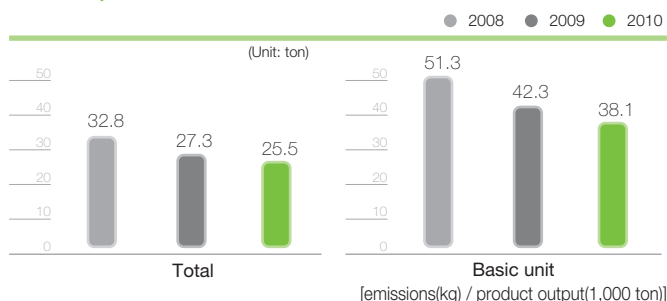
We strive continually to reduce the environmental impacts of our operations and products by facilitating transitions to more environment friendly processes, utilizing resources ever more efficiently and minimizing the emission of environmental pollutants as much as possible.

#### Air pollutants control

The major air pollutants emitted from our operation include dust and NOx. To control and eliminate air pollutants as much as possible, we operate air pollution control equipments such as a pollutant filtering and collection facility, an absorption column, an RTO(regenerative thermal oxidizer) and an SCR(selective catalytic reducer), etc..

Pollutants are monitored continuously to evaluate compliance level with applicable criteria and transitions to more environmentally friendly processes are facilitated to improve pollution prevention facilities and replace outdated facilities in order to minimize air pollutant emission. At the same time, the in-house pollutant emission tolerance limit is set at 30% of legal requirements to ensure even stricter compliance.

#### Total air pollutant emission and basic unit of emission



#### Key air pollutants emissions

(Unit: kg)

Category	2008	2009	2010
Dust	5,470	4,803	3,940
NOx	24,870	20,982	20,355
HCL	1,530	1,245	1,033
HF	346	156	142

<sup>1)</sup> Messenger Wire: wire used for supporting catenary wire and maintaining its tension

The significant air pollutants emitted from our operation include NOx emitted during the magnetic wire manufacturing processes and dust emitted from the SCR<sup>12</sup>(Southwire Continuous Rod) production system. About 20.3 tons of NOx is emitted per year, accounting for about 80% of total emissions. Dust emission is 3.9 tons per year, accounting for about 16%.

We continue to invest in RTO and SCR to further reduce NOx emissions as well as dust collectors to handle dust from the SCR furnace.



NOx removal facility(RTO+ SCR)



Dust collection facility in the melting furnace process

**Water resource management**

We use industrial water as a coolant for cable manufacturing processes and residential water for all workers. To reduce water consumption, we operate a cooling water recycling system that transfers waste cooling water discharged from the cooling process following extrusion processes to a cooling tower where it is filtered and cooled before being fed back into the extrusion process.

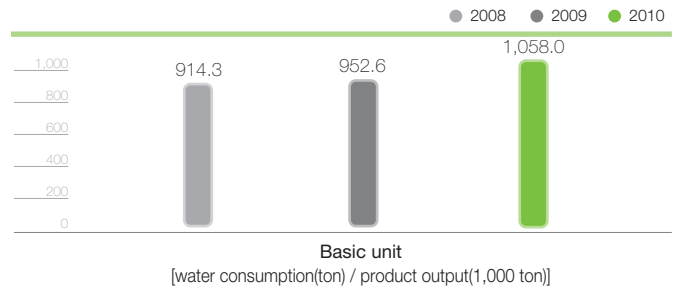
Cooling water is recycled for about 6 months before it is sent to the wastewater treatment plant. Total water consumption has risen a little over the past 3 years due to increased production throughput. Notably, in 2010, water consumption increased as a result of investment in production capacity at the Donghae plant completed in 2009 and development of new products for business diversification.

**Water consumption and basic unit of use**

(Unit: ton)

Category	2008	2009	2010
Consumption Residential water	492,897	527,094	523,940
Industrial use	91,335	88,309	184,912
Enterprise total	584,232	615,403	708,852

\* Gumi plant use only residential water



**Water use and its impact**

The Anyang plant is provided with water from Paldang reservoir, the Gumi & Indong plants from the Nakdong River and the Donghae plant from the Dalbang reservoir. We use about 2,000 tons of water per day.

The water consumption is deemed to have only a minor impact on each water source(reservoir/river).

**Water pollutant control**

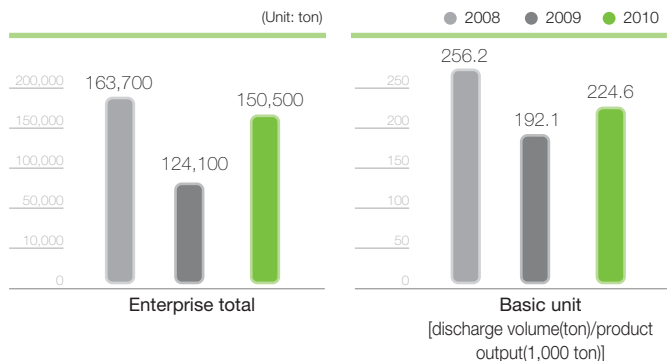
The most wastewater generated from our worksite consists of cooling water following the extrusion process for cable manufacturing. Key pollutants usually found in the cooling water are COD and SS, and poisonous substances and heavy metals detrimental to the eco system are not discharged into the environment.

To reduce wastewater, the production processes have been improved to minimize water consumption and cooling water is recycled to a cooling tank to minimize overall water consumption and wastewater

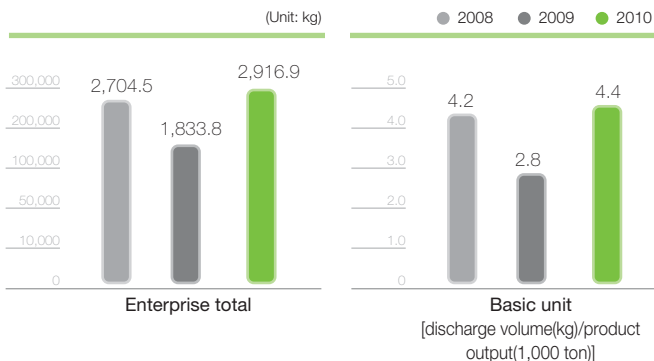
discharge. In addition, the in-house water pollutant discharge tolerance limit is set at 30% of legal requirements to ensure stricter compliance. Pollutant treatment is monitored by a 3<sup>rd</sup> party contractor at least once a month and wastewater discharged is measured by a wastewater flow meter every day. In 2010, because of investment in increased capacity of the Donghae plant and an increase in production, there was a small increase in wastewater discharge.

<sup>12</sup> SCR(Southwire Continuous Rod): Continuous copper rod production system developed and patented by U.S. Southwire(USA)

**Wastewater discharge and basic unit**



**Water pollutant discharge and basic unit**



**Key water pollutant discharge volume**

Category	2008	2009	2010
BOD	95.3	41.1	89.0
COD	940.2	863.3	1,158.2
SS	352.7	138.6	613.0
T-N	892.1	421.1	351.1

**Impact of wastewater discharge into public waters**

We do not have our plants in or near any special water protection zone, special control zone or protected area for biodiversity.

In addition, wastewater at the Gumi, Indong and Anyang plants are treated at the wastewater treatment facility after the production processes before being discharged into the local sewage treatment plants. The wastewater from the Donghae plant is discharged directly into the sewage treatment plant. The wastewater does not contain any toxic materials or heavy metals and is treated to a lower pollutant density of 30% or lower of legal requirements. To judge from our inspection, wastewater discharge from our worksite has little impact on public waters and the eco system.

**Wastewater treatment and discharge by plant**

Category	Discharged to
Anyang	Sewage treatment plant
Gumi	Sewage treatment plant
Indong	Sewage treatment plant
Donghae	Sewage treatment plant

**Waste management**

Key wastes generated in our operation include wasted oil and organic solvents from production processes, and general industrial wastes such as discarded synthetic resins, synthetic rubber, wood and other materials used in the production processes. To ensure an appropriate disposal of wastes from worksites, we monitor the entire process of treating wastes from generation to treatment in real time and transparently by the government online system(Olbaro System: [www.allbaro.or.kr](http://www.allbaro.or.kr)). Additionally, we carry out a thorough inspection and assessment on the waste disposal practices of the outside contractors regularly at least once a year.

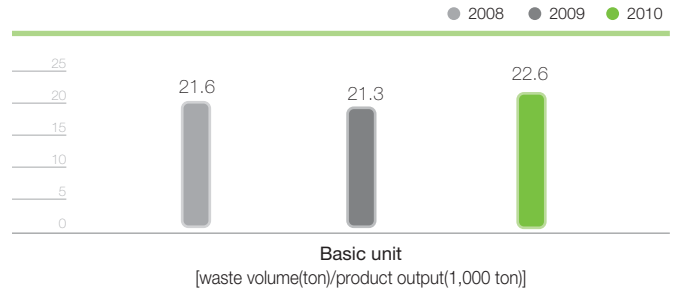
The wastes are sorted according to their type and form in compliance with relevant laws and regulations and stored in a proper waste yard or facility at each plant where they are then handed over to specialized waste disposal contractors. Wastes are incinerated, reclaimed or recycled. To expand the scope of recycling, technologies to recycle incinerated wastes are being utilized for now and new recycling contractors are being explored. In 2010, the total waste volume increased about 10% from the previous year to 15,156 tons due to increased production throughput and investment in capacity of the Donghae plant. Specifically, wastes such as wasted oil and organic solvents amounted to 2,297 tons and general wastes such as scrap wire weighed 12,859 tons.

Waste volume and basic unit

(Unit: ton)

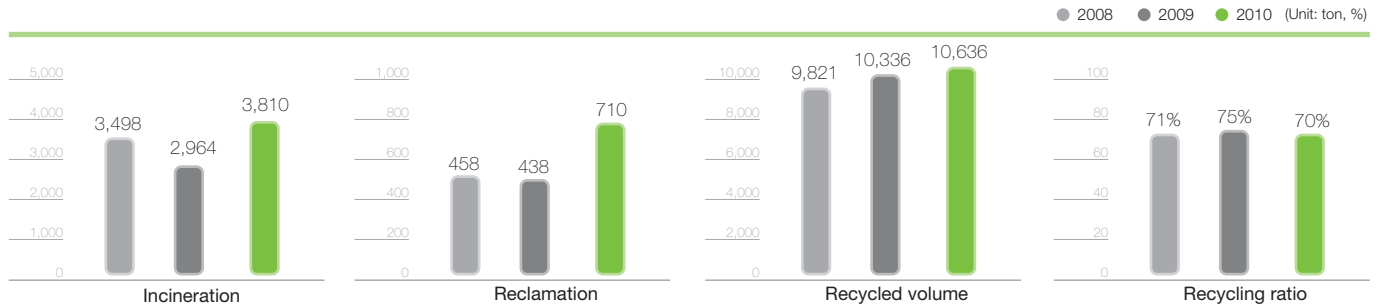
Category		2008	2009	2010
Waste volume	Designated wastes	2,109	2,033	2,297
	General wastes	11,688	11,710	12,859
	Enterprise total	13,797	13,743	15,156

- **Waste oils/chemicals:** Waste oils, organic solvents, paints, acids, etc.
- **General wastes:** Scrap wire, synthetic resins, synthetic rubber, wood, waste in office etc.



To conserve natural resources, we try to recover useful resources from wasted products as much as possible. As a result of such efforts, about 70% of wastes generated in all plants are now recycled by specialized 3<sup>rd</sup> party waste disposal contractors. A fair amount of useful Cu, PVC and PE, etc. are recovered from about 10,000 tons of waste per year.

Waste disposal



- Incinerated wastes include waste oils, waste organic solvents and sludge from wastewater treatment, etc.
- Reclaimed wastes include dust from air pollution control facilities and daily life garbage.
- Recycled wastes include scrap materials from production processes and activated carbon from air pollution control facilities, etc.
- Data of the Donghae plant is not collected, as it went into operation in the 2<sup>nd</sup> half of 2009.

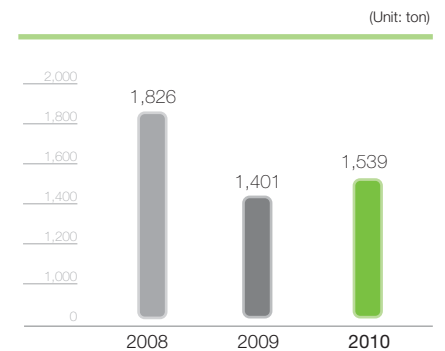
Chemical substance management

We classify materials according to their use in the manufacturing process and in consideration of their properties and by environmental hazards they potentially pose. We also operate a hazardous materials system to carefully handle and control dangerous substances to prevent any accidents related to toxic chemicals

Within every each plant, a comprehensive accident prevention system has been put into place to eliminate any risk of an occurrence of accident. The system covers storage of materials and strict guidelines for handling each substance. Employees responsible for transporting and handling hazardous chemicals are required to obtain the proper qualification to do so. In addition, for mission-critical facilities, regular emergency drills are devised around possible scenarios to train employees to respond to chemical related accident.

Hazardous chemicals used in our operation include cresol, xylene, ammonia and NaOH of which cresol and xylene used in magnetic wire manufacturing account for 73% of all hazardous materials used. We are trying to reduce our cresol consumption by developing alternative substances, etc.

Hazardous chemical use



### Efforts to reduce chemical discharge

Thanks to continuous efforts to reduce the volume of chemical substance discharge following the signing of a voluntary agreement with the Ministry of the Environment in 2005, we surpass our chemical discharge reduction goal to 50% of 2001 levels in 2009 and won the honor of being selected as a leader for chemical discharge reduction.

Investment in RTO greatly contribute to reduced discharge of organic solvents and consulting by a 3<sup>rd</sup> party expert help the development of in-house operation criteria and optimization of manufacturing processes to further reduce discharge volumes. In addition, loss reduction initiatives in the manufacturing process are also aligned with the chemical use reduction program.

### Efforts to use resources efficiently

We use Cu, Al, PE and PVC to manufacture our products as a main resource. We are expanding the scope of recycled materials to a variety of applications by aligning recycling technologies with product design in collaboration with the R&D group to ensure ever more efficient resource consumption. In addition, to reduce resource use for packaging materials, we improve a design of the wooden drums, which are main packaging material, and optimize the number and size of the drums by securing cutting edge technologies, in order to minimize resource consumption. The Wooden drums used in packaging and transporting products are recovered from major customers upon agreement and recycled after a repair and maintenance operation.

In 2010, about 13.4% of all the wooden drums were recycled. Scrap wire is also recovered from products disposed of at the end of their lifecycle as a result of a voluntary waste recovery and recycling agreement with the Ministry of the Environment. Notably, in case of scrap copper from the product manufacturing process about 50 tons of scrap copper is fed back annually into the production process to reduce resource consumption.

### Major resource consumption

Category	2008	2009	2010
Cu	195,540	249,941	243,033
Al	15,580	19,398	27,289
PE	19,181	19,490	21,370
PVC	7,986	7,720	6,467

(Unit: kg)

### Major resource consumption reduction activities

<p><b>01 Discarded Cu is recycled into Cu tape</b></p> <ul style="list-style-type: none"> <li>Scrap copper from production processes is recovered by a contractor, melted and extruded into recycled Cu tape and then delivered back to LS Cable &amp; System</li> </ul>	<p><b>02 Wooden pallets and drums are recovered and reused</b></p> <ul style="list-style-type: none"> <li>Wooden pallets and drums used in product transport are recovered and reused</li> </ul>	<p><b>03 SF6 is recovered and reused</b></p> <ul style="list-style-type: none"> <li>SF6 used during power inspection is recovered and reused</li> </ul>
<p><b>04 Discarded compounds are recycled</b></p> <ul style="list-style-type: none"> <li>To reduce resource consumption during the production process, recyclable material is reviewed and used wherever possible if they meet design/manufacturing criteria.</li> </ul>	<p><b>05 Scrap and discarded materials are recovered and recycled voluntarily</b></p> <ul style="list-style-type: none"> <li>To recover resources from products to be disposed of, a voluntary agreement was signed with the Ministry of the Environment in 2008 to recover and recycle as much scrap cable and discarded materials resulting from the manufacturing process as possible.</li> </ul>	<p><b>06 Lightweight drum design is adopted to reduce resource consumption</b></p> <ul style="list-style-type: none"> <li>The design of the wooden drums used for shipping cables was optimized to reduce the amount of wood required and the amount of wooden packaging materials so that help save costs and reduce environmental impacts.</li> </ul>



## Green product-Eco-Friendly Product Lineup Expansion

### Green product strategy and direction

To become a leader of the “green race” accelerating around the world, we developed a green business R&D strategy in 2008 for the 1<sup>st</sup> time in the cable manufacturing industry and pressed ahead with green R&D innovation and investment so that grow to a green business leader.

Our green product strategy goes beyond simple production of green products to an expansion of the green business. In other words, from the perspective of a green solution provider encompassing eco materials, green technology, eco products and eco applications/solutions, the strategic green product goals to deliver more value to customers were defined.

In reference to the following in-house green product definitions, we have developed and operated a green product management system.

1. Eco basic products: products complying with environmental regulations
2. Eco value-added products: products satisfying Eco-Design Processes
3. Eco new products: products aligned with new market needs

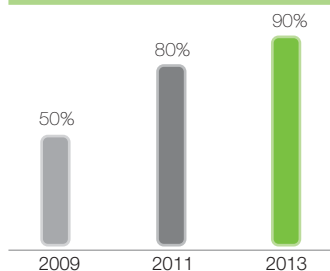
We aim to raise the share of green products satisfying the in-house definitions and criteria to 90% by 2013(51% in 2009).

To that end, about 42% of the total development project budget in 2010 was invested in green product development, with 63% of the budget to be invested in 2011.

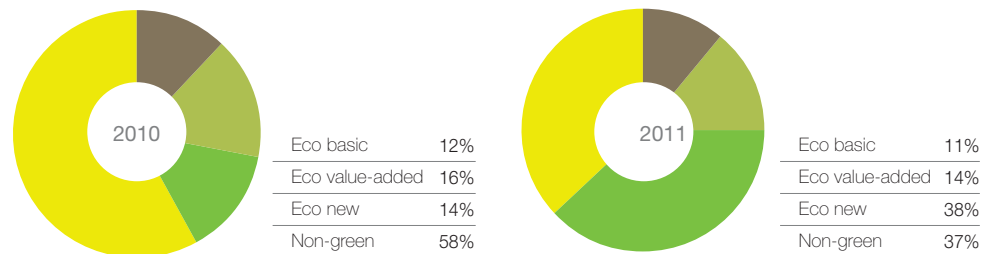
### Green product targets & achievements

With the challenging goal of raising the ratio of green products from 50% in 2009 to 90% by 2013, we have continued to invest increasingly in R&D programs for green product development. Thanks to such efforts, the ratio of green products has been raised to 70% in 2010.

LS Cable & System's green product target ratio(ratio of number of products)



Rise in R&D disbursement for green products in total R&D investment





## Implementation of the Green Product Management System

### Definition & management of green products

Our green products satisfy the generic definition of green products covering gains in energy efficiency, elimination or reduction of hazardous substances, saving of resources and improvement of recyclability. We break down our green products into 3 categories which are eco basic products that require a preemptive response to sustain business, eco value-added products that can ensure a differentiated competitive edge in markets, and eco new products. We have established a development roadmap and requisite system for each product and application to accelerate technology development.

We are leveraging the system to step up our technology development drive with a focus on DC based intelligent transmission solutions, which emerge as a new growth driver, smart grid solutions using superconductor cables and renewable energy solutions such as wind power cables and operation systems. We also focus on R&D initiatives for submarine cables, which we developed as only the 4<sup>th</sup> cable manufacturer in the world, and other maritime businesses.

As green product development has become a crucial factor in corporate competitiveness, we develop green products and technologies and has adopted a systematic ERP monitoring system, in-house green mark certification system and eco-index in an effort to build a more sophisticated management system.

#### Generic definition

Category	Item	Description
Product configuration features	Gain energy efficiency	<ul style="list-style-type: none"> <li>Reduce energy consumption/standby energy consumption</li> <li>Less GHG emission</li> <li>Use renewable energy</li> <li>Optimize service life</li> </ul>
	Elimination/reduction of hazardous substance	<ul style="list-style-type: none"> <li>Eliminate use of 6 hazardous substances (Pb, mercury, cadmium, chromium-6, PBB<sup>1)</sup>, PBDE<sup>2)</sup>)</li> <li>Halogen-free</li> <li>Less use of dangerous substances to health</li> <li>Ban use of 4 heavy metals in packaging materials (Pb, mercury, cadmium, chromium-6)</li> </ul>
	Reduction of resource consumption	<ul style="list-style-type: none"> <li>Lighter/smaller products</li> <li>Use natural materials</li> <li>Use recycled materials</li> </ul>
	Increased recyclability	<ul style="list-style-type: none"> <li>Use recyclable materials</li> <li>Reduce product components</li> <li>Improve ease of disassembly</li> </ul>



#### Strategic conditions

Category	Purpose	Description
Eco-basic product	Sustainable business	<ul style="list-style-type: none"> <li>Products complying with regulations</li> <li>Products complying with global standards/regulations such as EuP, RoHS, REACH, WEEE, ELV, etc.</li> <li>Products meeting customer requirements for eco-friendliness</li> <li>Products meeting customer requirements for eco-friendliness in the absence of regulations</li> </ul>
Eco-value added product	Ensure competitive edge	<ul style="list-style-type: none"> <li>Products offering green features, maximizing eco-friendly image</li> <li>Products with green certifications/marks at home and abroad</li> <li>Products developed with eco-friendly design and deemed to be superior to competitor products or the existing products in terms of eco-friendliness</li> <li>Products passing in-house eco index evaluation as developed in compliance with green development goals via PLEAT at the development planning stage</li> </ul>
Eco-new product	Create new business	<ul style="list-style-type: none"> <li>Products creating/promoting new markets (growth drivers)</li> <li>Products developed as sponsored by the government</li> <li>Products contributing to revenue from carbon credit trading, etc.</li> <li>Products innovating the green product business model</li> <li>Existing green products creating revenue via business model innovation</li> <li>Products finding applications in (government-designated) green industries</li> <li>Products specialized for the needs of government-designated green businesses in terms of features, development purpose and intended application</li> </ul>

<sup>1)</sup>PBB: Polybrominated biphenyl

<sup>2)</sup>PBDE: Polybrominated diphenyl ether

## Eco-Basic Product

In relation to eco-basic product development, our strategy has been to implement a monitoring system to anticipate global trends and possible development of regional regulations such as RoH<sup>3)</sup> and REACH<sup>4)</sup> regarding the use of hazardous substances, incorporate the findings into the product and technology development roadmap for each region and conduct mid-to-long-term R&D activities accordingly.

If the technology development project kicks off after enforcement of the regulation, we must have 1~2 years of lead time before commercialization of an applicable product. Hence, we judge that it would be important to develop products satisfying basic requirements in advance so that our business can be sustained and deliver values to customers without interruption. To that end, we stepped up our efforts to respond to hazardous substance regulation trends by implementing a hazmat analysis system and even won the honor of being designated as the analysis and test agency for RoHS-regulated substances by the UL<sup>5)</sup> in the U.S. and TÜV<sup>6)</sup> in Germany.

In line with this roadmap, we have developed completely lead-free indoor green cable products including ZeLos, HFCO and HFIX and applied halogen-free technology to the TPE(thermoplastic elastomer) for the first time in Korea, so to contribute to the localization of cables for the defense industry by launching products satisfying global standards both in terms of functionality and eco-friendliness.

In addition, we developed an LCD back-light power cable that emits no hazardous substances when burning and maintains elasticity of its insulation material at high temperatures, for the first time in Korea.

We also commercialized cable products for electric/electronic devices that adopted nano technology to reduce the content of flame retardants by 30% from the existing products but satisfy strict flame retardant requirements while preventing from losing strength which was one of the weaknesses of halogen-free green flame retardants. The cables deliver excellent flame retardant performance, eco-friendly features and mechanical strength.

At the same time, we continue to develop green technologies that are halogen free(HF) and satisfy RoHS and REACH requirements in all product categories covering cables for electronic, electrical, industrial, automotive, energy and data transfer applications.



### Product highlights

#### LCD back-light power cable

Maintains elasticity of insulation at high temperatures and emits no hazardous substances if on fire.



#### Cables for electronic/industrial devices

Green product development processes were adopted to satisfy RoHS and REACH requirements and facilitate green product/technology innovation.



#### Maritime NEK606/2004 cable

Maritime cables are used for power, control, instrumentation<sup>7)</sup> and telecommunication systems(in a variety of sea craft such as LNG tankers and maritime structures like FPSO<sup>8)</sup> facilities). Our NEK606 cable is manufactured with Norwegian specifications and has proven to be highly resistant to muddy environments.



#### 0.6/1kV HFCCO, 0.6/1kV HFCCO-S, 0.6/1kV HFCCO-SB

Control cables used in residential and commercial buildings and control circuits. These cables made of non-toxic materials and be flame-retardant to withstand temperatures up to 90°C to ensure superb thermal resistance and eco-friendliness.

<sup>3)</sup>RoHS(Restriction of Hazardous Substances): Directive for restrictions on hazardous substances published by EU

<sup>4)</sup>REACH(Registration, Evaluation, Authorization & Restriction of Chemicals): Chemical substance control regulations providing for registration, evaluation, authorization and restriction of all chemicals manufactured or imported in quantities of one ton or more per year, subject to their manufacturing or import volume and criticality.

<sup>5)</sup>UL(Underwriters Laboratories): Certification authority ensuring the safety of consumer goods and promoting consumer protection

<sup>6)</sup>TÜV(Technischer Überwachungsverein): German quality standards organization

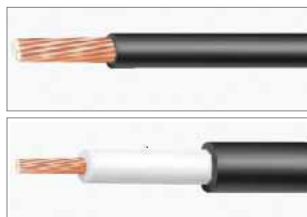
<sup>7)</sup>Instrumentation: installation of measurement instruments or control devices at a centralized location under a comprehensive plan

<sup>8)</sup>FPSO(Floating Production Storage Offloading): floating crude oil drilling and storage facility

## Compliance with global environmental regulations

We are actively trying to comply with global environmental regulations that are reinforced throughout the world, so that remain competitive in global markets.

Notably, to comply with RoHS and REACH requirements, we have stepped up our efforts to develop products free of hazardous substances and maintain a list of chemical substance data for all materials we uses including packaging materials. In addition, we intend to upgrade our analytics capability to global standards so that we are able to fully comply with global environmental regulations with ease.



Lead and halogen-free cable

### Compliance with RoHS(ELV<sup>9)</sup>, WEEE<sup>10)</sup>

We have developed technologies to use materials free of hazardous substances in production while maintaining required features and functions, to ensure compliance with legal requirements.

In addition, when products are released from the plants, they are screened using XRF<sup>11)</sup> analysis devices in advance to determine the possible content of any hazardous substance. We also request a 3<sup>rd</sup> party certification agency to conduct an analysis at least once a year and provide customers with the certified analysis reports.

Thanks to such efforts, we have developed not only lead-free PVC coating materials but also high performance halogen-free cable products using polyethylene as an alternative to PVC to comply with new, increasingly stringent RoHS requirements.

### Compliance with REACH

Our green product committee investigates Substances of Very High Concern<sup>12)</sup> specified by REACH every month. Experts in every worksite collect MSDS, MILL sheet and material ingredient analysis from the suppliers and list the chemical substance data for all materials used.

In addition, we incorporate the list of substances of very high concern specified by REACH in our environmental hazard substance control criteria and control the use of substances of very high concern specified in REACH by the suppliers by requiring certified statements of non-use of substances of very high concern and content certificates for applicable materials before going into transactions with them.

As such, chemical substance data on all products are maintained and made available promptly to customers upon request. The product containing substances of very high concern, if applicable, is notified to customers immediately and, if customers require replacement of substances of very high concern, we determine whether it is possible to meet such requirements and be supplied with alternative materials if possible. In addition, we continue to try to develop alternative materials to ultimately phase out substances of very high concern.

### Analysis Lab

We have upgraded our analysis laboratory to join the league of globally-renowned certification agencies in order to build a strategic platform for green products. Thanks to such efforts, the analysis laboratory was certified as a 'certified analysis agency' in September, 2005 by the UL (USA), the world's oldest product certification agency, and by the TÜV (Germany), as well. We also obtained the KOLAS<sup>13)</sup> certification(the official Korean agency equating to UL).

We now have industry-best analytics capabilities that fully comply with global standards and a comprehensive database that provides reliable and objective data to our corporate laboratory and supplier as well.



UL certificate



KOLAS certificate



TÜV certificate

<sup>9)</sup> ELV(European Union's End-of-Life-Vehicle Directive): These are guidelines and regulations covering how a car manufacturer recovers and recycles scrap vehicles.

<sup>10)</sup> WEEE(Waste Electrical and Electronic Equipment): System requiring producers to pay for recycling of waste electrical/electronic equipment

<sup>11)</sup> XRF(X-ray fluorescence): A non-destructive testing technology using X-ray fluorescence to analyze various aspects of metals with precision

<sup>12)</sup> Substances of Very High Concern: High Risk Hazardous Substances

<sup>13)</sup> KOLAS(Korea Laboratory Accreditation Scheme): A system for accrediting test and inspection laboratories in accordance with objective assessment criteria

## Eco-Value Added Product

Our strategy for eco-value added products is to enhance product development programs by instilling such values as reducing resource consumption and hazardous substance use and improving efficiency and recyclability into products that are not subject to mandatory regulation requirements. Furthermore, we rate the level of product value satisfying Eco-Design processes that take into account environmental factors, so to ensure a competitive edge and improve the brand image.

We have expanded the focus of our R&D from single items to application businesses in order to deliver more value to our customers. One of the strategy is to obtain green mark certifications not only from agencies at home but also from agencies abroad such as the UL and the TÜV and therefore differentiate our global competitive edge.

We want to take a high-efficiency magnetic wire for automotive application as an example. These wires are only 1/10<sup>th</sup> the thickness (cross section of 4 mm<sup>2</sup> or less) of the conventional straight angle magnetic wire and thus are ideal for small, high-power motors as they increase power output by 50% or more by eliminating empty spaces created when conventional round magnetic wire is wound over a motor.

Next-generation green shrink tubes have been developed to overcome the limitation of conventional green tube products that, though free of halogen, contained red phosphorous. As the new shrink tubes can be manufactured in various colors, they offer the added benefit of preventing confusion by being able to be color-coded.

We developed recyclable polypropylene insulated cable for the 2<sup>nd</sup> time in the world.

Furthermore, the scope of application of non-cross-linked polypropylene has been expanded to cover medium voltage distribution cables, with continuous operation temperature raised from 90°C to 110°C, power transmission capacity improved 35% from conventional products and flexibility enhanced from conventional polypropylene products, which all deliver improved values based on differentiated green properties.

In addition, we are developing a variety of solutions and applications for improving energy efficiency. For example, an electric power conduit cooling system has been developed to prevent transmission capacity from fading when heat rises resulting from an increase in electrical load and/or rise in ground/ ambient temperature.

The electric power conduit cooling system consists of a water cooling module including a freezer, pump, water tank, valve and water circulation module. The unit is expected to increase transmission efficiency by 14%~20% per year, through a temperature monitoring and control module. We have completed the project involving 345kV line construction as part of a contract awarded by the South Region Construction Division of Korea Electric Power Corporation.



### Product highlights

HEV fine rectangular magnet wire



Next-generation green heat shrinkable tube



22.9kV recyclable cable



Electric power conduit cooling system



# Eco-Design

As green product development is critical for corporate competitiveness, we strive for green product development.

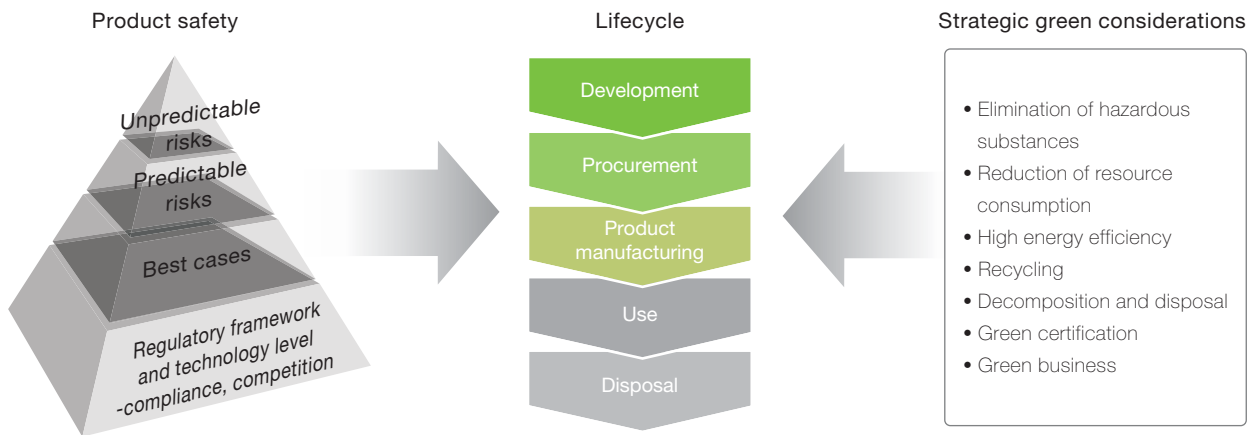
Hence, we apply our Eco-Design process and a product design methodology with a purpose of reducing environmental impacts over the entire product lifecycle and improving product functionality and quality competitiveness.

## Eco-Design System

### Direction of eco-design applications

The Eco-Design is significant in that it considers legal requirements for product safety and both predictable and unpredictable risks for the entire lifecycle of the product, from product development to disposal. Also it contributes to developing eco-friendly products with little hazardous substances and improved energy efficiency so that continue to mitigate environmental impacts.

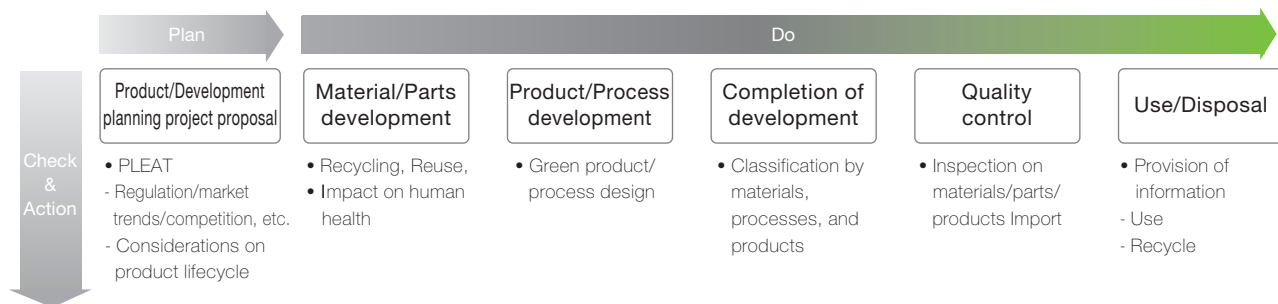
#### Direction of eco-design application



### Eco-design application process

The Eco-Design practice is implemented in accordance with the PDCA(Plan-Do-Check-Action) process. In the product planning stage, the environmental safety of the product is analyzed by using the PLEAT(Product Liability Environment Assessment Table) and is then designed in consideration of material recyclability and impact on human health. Upon completion of development, product quality is controlled throughout not only the entire manufacturing process but during delivery, installation and even while the product is in use and being maintained. During the disposal stage, which is the end of the product lifecycle, recycling information is provided.

#### Eco-Design application process



# Eco-Design



## Eco-Design Implementation Stage

### PLEAT<sup>14)</sup> Step 1: Analyze development requirements

- Applying to the environment-considered design of IEC 62430<sup>15)</sup> framework, PLEAT step 1 analyze customer/stakeholder requirements and regulatory framework governing environmental and safety concerns by the quality and environmental system and end-to-end product lifecycle.

### PLEAT Step 2: Define development goals

- ISO/TR 14062<sup>16)</sup> DfE(Design for Environment) is an analytics tool for analyzing environmental impacts across the end-to-end product lifecycle. It considers Eco-Design evaluation criteria in the development planning stage to evaluate environmental loads and define green strategy goals.

### PLEAT Stage 3: Eco-Index

- We evaluate if an Eco-Design-applied product satisfies the environmental goals developed in the planning stage in reference to answers to 20 specific questions in 5 categories. The Eco-Index quantitatively measures a level of achievement of goal and only products surpassing the prescribed Eco-Index level are awarded a value-added product rating.

Category	Description in detail
Hazardous substances	- Elimination of halogen, insulation oil, phthalate and red phosphorous, reduction of flammability and air pollution substances
Resource consumption	- Reduction of volume/weight(outer diameter/thickness), material use(insulation material, etc.) and material loss - Extension of service life(durability), Possibility of upgrade and upcycling <sup>17)</sup>
Energy efficiency	- Increase in transmission capacity, tolerable current and data transfer efficiency - Reduction of GHG emissions and standby power consumption
Recycling	- Increased use of reusable/recyclable materials - Improved recyclability
Disposal	- Use of biodegradable materials when/where possible

At the completion of development, environment goal which is set up at the beginning of development is evaluated quantitatively by each environmental impact evaluation category in accordance with DfE evaluation criteria.

In 5 evaluation categories in total, no index must be lower than the existing product and indices in at least 2 categories must be higher than the existing products. Products satisfying such requirements are assigned an EVAP rating and classified as green products.

### PLEAT Stage 4: Select and reward best cases

- We evaluate products developed through the Eco-Design agenda and classify them in 2 categories. The products developed in accordance with Eco-Design process are classified first as 'eco products' and the best ones among them are classified as 'global eco products' to provide further motivation to green product R&D efforts.



## Eco-Design Development Projects

As of 2010, eco R&D projects accounted for 86.2% of the total projects and the projects implemented in accordance with Eco-Design principles under green strategy goals amounted to 23%. For 2011, we plan to raise the ratio of Eco-Design product development projects to 30%.

<sup>14)</sup> PLEAT: product liability environment assessment table developed by LS Cable & System on its own

<sup>15)</sup> IEC 62430: Eco-Design management system application methodology specified by the IEC

<sup>16)</sup> ISO/TR 14062: Standard environmental design requirements specified by the ISO

<sup>17)</sup> Up-cycling: recycling materials without degrading their original quality/specifications



## Eco-New Product

The Eco-New business strategy is about securing first-mover advantage in the market and innovating business models by studying and developing green products in future growth driver sectors such as renewable energy. Related studies have focused on a variety of solutions including smart grids consisting of superconductor cables and intelligent transmission solutions for maximum energy efficiency and solar, wind and nuclear energy production as well as electric vehicles, etc.

The superconductor cable developed by us is an eco-friendly energy transmission technology that uses superconductors in place of copper to transmit far more energy at the same time without any loss.

We commenced superconductor cable development in 2000 and succeeded in developing distribution superconductor cable systems, rated at 22.9kV, 50MVA in 2006. We demonstrated the safety of the product in a type test and long-term reliability evaluation conducted at the Gochang Electric Power Test Center of KEPCO for 2 years.

In 2010, the superconductor cable system went into pilot operation at the Icheon Power Plant in Gyonggi Province. We have already succeeded in developing the world's most advanced 154kV level transmission superconductor cable terminal and are stepping up a superconductor business in earnest, supplying the cable products to the Tres Amigas project in the U.S., which is a large superconductor grid system commercialization project that will link three of the nation's largest grids.

The superconductor cable terminal developed in 2010 consists of an ultra-low temperature module, temperature gradient module and normal temperature module. It serves as a connector linking the conventional power grid with superconductor cables that reduce electrical resistance to zero at or below -196°C, minimizing energy loss and enabling energy transmission in large volumes.

The key solar power solutions studied and developed by us include ribbon wire for connecting photovoltaic cells and junction box kits that transfer DC current generated by crystalline/noncrystalline solar power modules -developed for the 1<sup>st</sup> time in Korea- to the power grid. All these systems are offered as the complete customizable packages with a grid connection system and operation solutions.

In addition, we provide cable products and an condition monitoring system for wind power generators, wind power solutions combining maritime wind power system interconnectivity and construction technologies, high-voltage cable components for HEV and rapid battery rechargers for EVs, and participates in government led EV development programs and smart grid test bed projects as well.



### Product highlights

#### Superconductor cable system

Next-generation large-capacity cable system capable of transmitting 5 times more energy than conventional cables, yet reducing loss by 66% and required conduits by 80%.



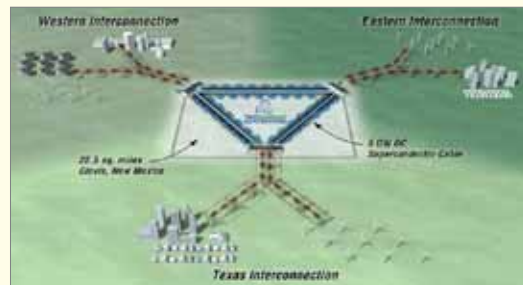
Terminal and connection box



Cooling system

#### Tres Amigas superconductor project

Supply of cable to the Tres Amigas superconductor grid project in the U.S.



### 22.9kV superconductor test bed



### HVDC MI submarine cable & 3core AC XLPE submarine cable

- Cable system used for transmitting extra high voltage between an island and a nearby mainland or across national boundaries.
- Korea's first 180kV/250kV submarine cable (official certification test completed by KERI)
- Development of technology for manufacturing cable in extended length of 50km or more at the Donghae plant.




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### Solar power solution

Power solution that converts sunlight to electric power directly




**Junction box:**  
Transmission of DC power to the load system, attached to the back of a crystalline or noncrystalline solar power module



**Ribbon wire:**  
Rectangular conductor wire used for connecting photovoltaic solar cells

### EV solutions



HV connector for EV



Coupler for EV



Rapid EV battery recharger



EV recharging station



EV recharging operation system

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### Wind power solution


Wind generators converting wind energy to rotator force to generate electricity by induction



**Maritime wind farm power cable:**  
Cables for transmitting power generated from wind farms built offshore to the mainland.



**Wind power cable:**  
Cable designed to transmit power from the wind generator to the grid. These cables must be exceptionally durable and able to withstand excessive torsion.



**Wind power monitoring system:**  
The system designed to optimize operational efficiency by making it possible to monitor the status of all the key mechanical and electrical components of the wind power system via the computer network in real time.

## Awards

We received the Chang, Young-Shil Awards, Korea's awards for achievement of outstanding science technology, in 2008, 2009 and 2010 for large-capacity overhead transmission line, European-style wind power cable and high-heat resistant eco-friendly cable for automotive applications respectively.

In 2010, we obtained green technology accreditation for an eco-friendly automotive harness<sup>18)</sup> with extended service life and new technology certification for development of flame-retardant and hazardous substance-free micro coaxial cable manufacturing technology.



Product exhibition at the 1<sup>st</sup> Green Trade Fair at KINTEX.



High-efficiency and eco-friendly products exhibition at international trade fairs.



Participation in the International Electric Power Expo, China.

<sup>18)</sup> Harness: Wire assembly that aggregates connectors attached to multiple strands of wires coded by usage and electrical characteristics.

## Green Partnership-Communication with Customers and Stakeholders

To build up green partnership with our customers, we remain committed to green communication and establish a green purchasing system in 2010 that was further enhanced with a hazardous substance management system to better manage the green supply chain jointly with suppliers.

### Green Communication

We try to disclose all possible environmental data to customers and stakeholders in a transparent manner. After publishing the environment reports in 2002, we have reported green worksite operation data to the government since 2005.

We have also participated actively in the CDP(carbon disclosure program) to disclose the GHG data verified by the Korea Energy Management Corporation to key customers via the CDP supply chain program. We also plan to disclose carbon footprint data to key customers, the government and other stakeholders in 2011, and publish green management activity data and objective information via our sustainability report and website each year. The GHG energy target management statement verified by a 3<sup>rd</sup> party will be submitted to the government on an annual basis.

Furthermore, we provide policy suggestions of the technology roadmap to the government organizations and academic societies regarding green technology and product development. We also conduct an environmental management diagnosis and a training for the suppliers regularly along with recommendations for improvements to help them upgrade their environmental management.

#### Environmental data disclosure



EHS report



Eco-friendly company implementation report



2010 CDP responses

#### Green communication with suppliers/government/local government



Environmental management training for suppliers



Green technology/product policy suggestions

### Green Purchasing System Operation

We have implemented a green purchasing system to promote production and consumption of eco-friendly products and to reduce environmental impacts of our products across the entire product lifecycle. In addition, we enforce hazardous substance control criteria with the 3 step approach of restricting, phasing out and banning the use of hazardous substances.

We are currently operating a 'Green Cooperator' certification scheme on a pilot basis involving 9 suppliers of the for key products to boost green supply chain operation even further in 2011 and plan to expand the scope of the scheme to eventually include all suppliers.

With such efforts, we are working hard to completely prevent hazardous substances from making their way into products so that customers will not be exposed to them at all.

## Definition of eco commodity

In reference to the Green Product Purchase Promotion Act and the Green Growth Framework Act promulgated by the Korean government, we break down an eco commodity into 2 categories, subject to purchase type and intended use.

**Green procurement: Green purchasing of raw materials/packaging materials, outsourced products, etc.(OEM, ODM)**

Procurement of raw materials/used as inputs for product manufacturing through a contract with suppliers

**Green purchasing: Purchasing of general goods and office supplies with consideration given to environmental criteria.**

Purchase of office supplies and general goods used in office life as a corporate MROs<sup>19</sup> according to the environmental guidelines.

The above 2 categories further divide into 6 specific codes. We provide a clear definition of the eco commodity and criteria are specified by the code.

Category	Code	Scope of acceptance
Green purchasing	EC-1	Eco-mark certified products(Green mark)
	EC-2	Products bearing the GR mark(Recycling mark)
	EC-3	Energy-saving products(Energy mark)
	EC-4	Products bearing other environmental marks, Products bearing global environmental marks
Green procurement	EC-5	Hazardous substance reduced products
	EC-6	Waste-saving products

(EC: Eco-Commodity)

## Green procurement : raw materials, packaging materials, and outsourced products

### Hazardous substance control criteria

We have established hazardous substance control criteria consisting of 3 phases in consideration of global regulatory frameworks and customer requirements. Hazardous substances are investigated according to the hazardous substance control criteria specified in LS Cable & System documents and, if any specified hazardous substance

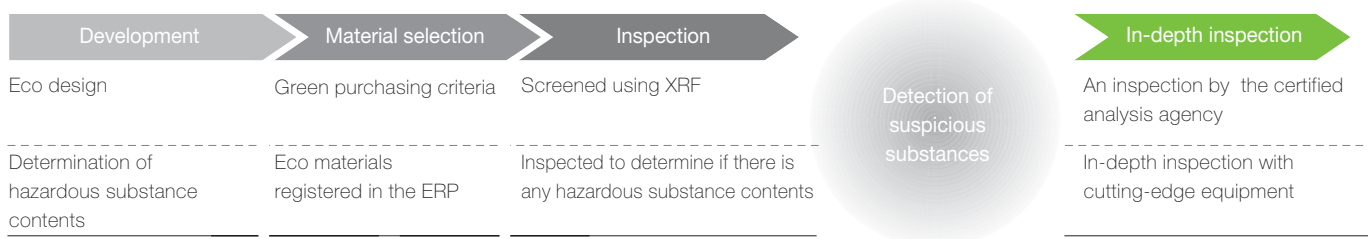
is found, the related transaction is suspended and the substitution of the concerned raw material is enforced. Such control criteria contributes to reducing overall environmental impact of products as well as complying with global environmental regulations, conventions and customer requirements.

### Hazardous substance control criteria

Phase	Substance	Method
Phase 1	6 substances regulated according to RoHS	<ul style="list-style-type: none"> <li>Analysis data by the certified agencies are collected so that eco-friendly products are safeguarded completely from adulteration by these substances</li> </ul>
Phase 2	Substances regulated by global regulatory frameworks and/or green cable criteria	<ul style="list-style-type: none"> <li>These substances are banned from being used for specific industrial products and green products specified by LS Cable &amp; System</li> </ul>
Phase 3	Substances to be controlled/reduced/eliminated voluntarily	<ul style="list-style-type: none"> <li>These substances are designated to be reduced or phased out on a voluntary basis</li> </ul>

<sup>19</sup>MRO: This stands for maintenance, repair and operation and concerns expendables and overhead items required for corporate operation, excluding raw materials directly required for product manufacturing.

### Implementation of the Hazardous Substance Control System



### Green packaging material

As global environment regulatory frameworks apply not only to products but also packaging materials, we control hazardous substances in relation to packaging materials as well, applying the same criteria as for products. We apply not only hazardous substance control criteria but also global fumigation standards such as ISPM No.15<sup>20)</sup> to the packaging materials, fumigating packaging materials for export items in advance. Since illegal logging has resulted in significant damage to precious forests around the globe, we use only FSC<sup>21)</sup>-certified wood for the wooden drums to contribute to forestry conservation efforts.



Wooden drum made of FSC-certified wood

#### Use of the FSC-certified wooden drums

In addition to efforts to develop green products, we have also been using only FSC-certified wood for the wooden drums for product packaging since March, 2011, to reduce environmental impacts of the packaging process as well. Given the availability of FSC-certified wood, such wood has been applied to export items first and will be phased in over time to cover the rest of the product lineup.

### Green purchasing: purchase of general goods and office supplies in accordance with environmentally friendly considerations

#### Preferential eco-product purchasing system

As our employee searches for products to purchase through our purchasing system, they can see eco-products displayed at the top of the search results. When the purchaser checks the product characteristics and details, green marks are displayed and applicable products are flagged as preferential purchase items automatically. Additionally, a banner that only allows search returns of eco-products is placed on the right of the screen to facilitate eco-product purchases.



Preferential eco-product purchasing system

#### Eco-product price preference system

Eco-product preference system makes it mandatory to buy eco-products if the price differential between an eco-product and a comparable conventional product is within 10%. That system encourages purchasers to favor eco-products more actively regardless of the price differential.

<sup>20)</sup> ISPM No15: International standard governing wood-based packaging materials

<sup>21)</sup> FSC(Forest Stewardship Council) certification: This indicates that a product has been manufactured or processed from wood sourced from legally-grown forests.



## Green Supply Chain Management

We require that all objective evidence data be secured for eco-friendly raw materials, packaging materials and outsourced products and that the suppliers supplying eco-friendly raw materials obtain the 'Green Cooperator' certification.

As of May, 2011, the 9 largest suppliers have been successfully certified, but this requirement will eventually be applied to all suppliers around the world. To enhance operation of the Green Cooperator certification scheme, Green Cooperator auditors are selected from each department responsible for environment, quality and procurement to provide professional trainings on the environmental and quality management system. We seek win-win growth with our suppliers by providing them with opportunities to build an environment and quality management system via the Green Cooperator certification system.

The Green Cooperator system is a supply chain management system intended to completely prevent hazardous substances from making their way into materials supplied to us, so that products containing such substances may not be delivered to any customers. The Suppliers are always encouraged to implement such an environmental management system.

To be certified as a Green Cooperator, the suppliers must pass the LS Cable & System Green Cooperator Audit which consists of 3 steps in total for a comprehensive evaluation of the environmental hazardous substance control system of each supplier. When a supplier secures an official analysis data, a substance content analysis sheet, and certification of non-use of hazardous substances from a raw material vendor and submits an environmental hazardous substance control checklist, we evaluate the submitted data and samples to determine whether the applicant is qualified for Green Cooperator certification.

Once certified, Green Cooperators are entitled to continuous trainings and management so that they may maintain the quality of their green management system at or above specified levels. In addition, we select Q-Partners among suppliers certified as Green Cooperators for additional benefits.



Green Cooperator Auditor Training Program

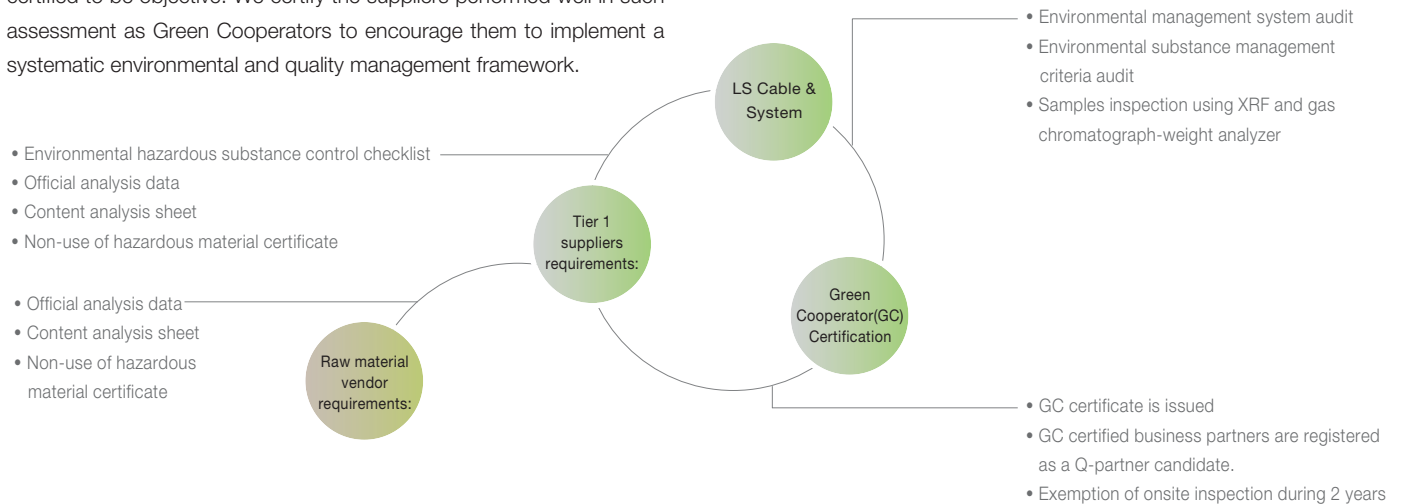
### Green cooperator certification audit phases

Green Cooperator certification process: we audit the supplier's ability to supply green materials in 3 steps.



### Green cooperator certification assessment process

We control hazardous substances by assessing the environmental management system of the suppliers on the basis of the analysis data certified to be objective. We certify the suppliers performed well in such assessment as Green Cooperators to encourage them to implement a systematic environmental and quality management framework.







# ECONOMY





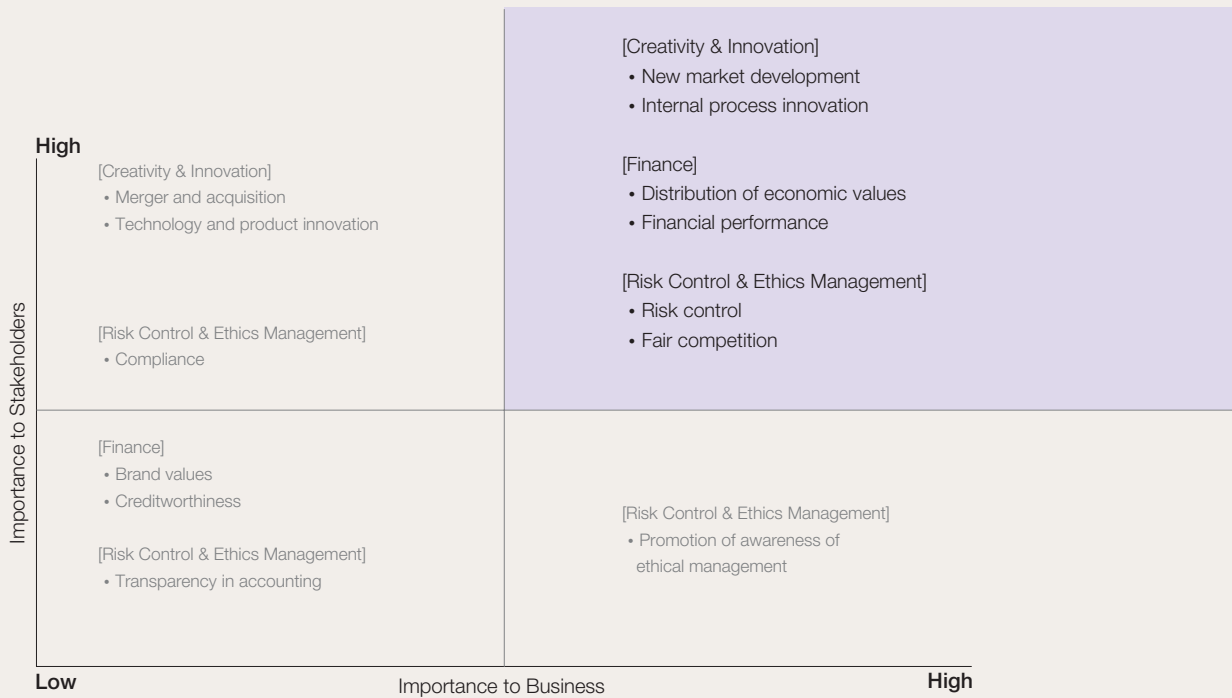
**Ensuring sound financial integrity and ethical compliance in management, we are venturing into a greater world and a brighter future.**

We are going for brighter future of the global cable industry. With strong financial performance and principle-oriented ethics management, we are growing to join the league of global leaders in both appearance and performance. We are doing our best to be a global leading company by diversifying our business, expanding our product and services portfolio and localizing operations worldwide.



# Economic DMA Disclosure on Management Approach

Division	Policy	Objectives	Department in Charge	2010 Achievements	2011 plan
Financial performance	<ul style="list-style-type: none"> <li>Be global No.1 by 2015</li> </ul>	<ul style="list-style-type: none"> <li>Enhance global presence</li> <li>Innovate business model</li> <li>Strengthen global management capabilities</li> <li>Improve financial structure</li> </ul>	<ul style="list-style-type: none"> <li>Management Planning Team</li> <li>Business group Planning Team</li> </ul>	<ul style="list-style-type: none"> <li>Global No.3 in cable manufacturing industry</li> <li>(Sales) KRW3.10 trillion in 2009 KRW3.87 trillion in 2010</li> </ul>	<ul style="list-style-type: none"> <li>Improve performance</li> <li>Strengthen global competitiveness</li> <li>Innovate business model</li> </ul>
Risk control	<ul style="list-style-type: none"> <li>Promote 'fair trade' culture</li> </ul>	<ul style="list-style-type: none"> <li>Introduce and operate a fair trade self compliance program</li> </ul>	<ul style="list-style-type: none"> <li>Legal affairs team</li> </ul>	<ul style="list-style-type: none"> <li>Make CEO's declaration of self-compliance commitment</li> <li>Provide self compliance training sessions for employees in all plants</li> <li>Publish self compliance manual</li> </ul>	<ul style="list-style-type: none"> <li>Carry out in-house auditing and corrective actions</li> <li>Distribute document management guidelines</li> </ul>



# TOPIC 07. Financial Performance

## Financial Performance Highlights

On July 1<sup>st</sup>, 2008, we were spun off with the cable business division of LS Cable Ltd. separating from LS Mtron and being a daughter company of LS Group. In the same year, we jumped to the global No.3 cable manufacturer, with a merger with Superior Essex, the largest cable manufacturer in North America. We aim at achieving our vision of the global No.1 in the cable industry by 2015 through diversification of the global market, business model innovation and investment in R&D.

### Key financial performance

In 2010, we posted KRW3.87 trillion in sales with KRW130.2 billion in operating income and KRW59.4 billion in net current profit. In terms of consolidated profits including our subsidiaries, we reported KRW7.77 trillion in sales, KRW208.9 billion in operating income and KRW57.4 billion in net current profit. While the world economy remained sluggish from 2008 as a result of the fallout of the global financial crisis, our sales actually increased year over year both at home and abroad, by 25% in 2010, from KRW3.1 trillion of 2009. However, due to rises in the price of copper and petrochemical products(resulting from hikes in the price of oil), the operating income slipped from the previous year.

#### Growth

In 2010, our revenue jumped by 24.5% from the previous year and consolidated revenue including our subsidiaries rose by 20.8% thanks to the focus on business model innovation, new green product launches, global market presence extension, synergies from mergers and acquisitions and our commitments to win-win growth with the suppliers.

#### Profitability

Throughout 2010, competition in the electrical power and telecommunication markets became even more intense and costs continued to elevate in the wake of rising commodity prices of which copper was certainly not an exception. Never the less, we managed to maintain profitability by promoting our 6-sigma program at the corporate level, improving productivity via on-site innovation, saving costs and launching new environment friendly products.

#### Stability

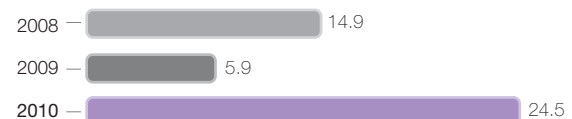
While our debt to equity ratio jumped to 406% due to the acquisition of Superior Essex in August, 2008, we have been improving the ratio continuously by enhancing our financial structure and posting an earnings surplus by making profit following the acquisition.

#### Activeness

Total asset turnover ratio continues to improve each year.

#### Sales growth ratio

(Unit: %)



\* As LS Cable Ltd. was divided into LS, LS Cable & System and LS Mtron on July 1, figures posted in 2007 and 2008 are the performance of the LS Cable Ltd.'s corresponding business unit.

#### Operating income ratio

(Unit: %)



\* As LS Cable Ltd. was divided into LS, LS Cable & System and LS Mtron on July 1, figures posted in 2008 are the performance of the LS Cable Ltd.'s corresponding business unit.

#### Debt to equity ratio

(Unit: %)



#### Total asset turnover ratio

(Unit: times)



\* As LS Cable Ltd. was divided into LS, LS Cable & System and LS Mtron on July 1, figures posted in 2008 are the performance of the LS Cable Ltd.'s corresponding business unit.

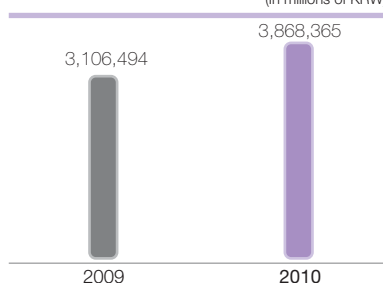
## Statement of income

(In millions of KRW)

Account	3 <sup>rd</sup> Period (2010.1.1~12.31)	2 <sup>nd</sup> Period (2009.1.1~12.31)
Sales	3,868,365	3,106,494
Cost of sales	3,521,282	2,753,502
Gross profit	347,083	352,992
Selling & administrative expenses	216,893	189,327
Operating income	130,190	163,665
Non-operating income	269,113	528,080
Non-operating expenses	329,498	601,781
Income before income taxes	69,805	89,964
Income tax expenses	10,423	17,345
Net income	59,382	72,619

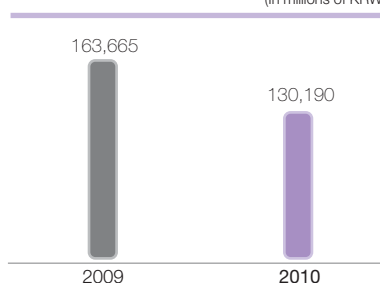
## Sales

(In millions of KRW)



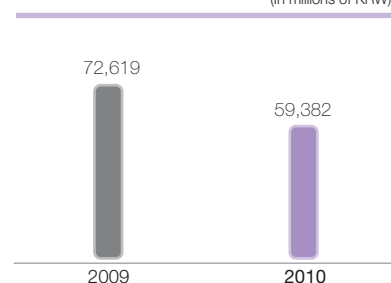
## Operating income

(In millions of KRW)



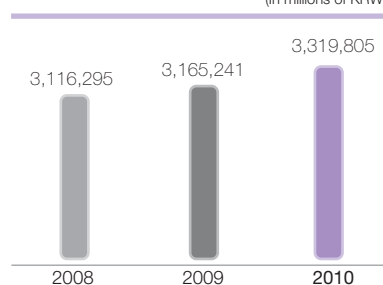
## Net income

(In millions of KRW)



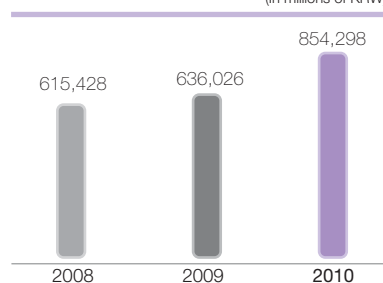
## Total assets

(In millions of KRW)



## Total shareholder's equity

(In millions of KRW)



## Statement of financial position

(In millions of KRW)

Account	3 <sup>rd</sup> Period (2010.1.1~12.31)	2 <sup>nd</sup> Period (2009.1.1~12.31)	1 <sup>st</sup> period (2008.7.1~12.31)
Current assets	1,392,538	1,260,186	1,324,559
Quick assets	1,106,284	1,055,888	1,145,357
Inventories	286,254	204,298	179,202
Non-current assets	1,927,267	1,905,055	1,791,736
Investments	679,523	678,012	523,042
Tangible assets	1,145,282	1,102,435	987,553
Intangible assets	33,427	33,506	37,827
Other non-current assets	69,035	91,102	243,314
<b>Total assets</b>	<b>3,319,805</b>	<b>3,165,241</b>	<b>3,116,295</b>
Current liabilities	1,528,119	1,566,005	1,357,836
Non-current liabilities	937,388	963,210	1,143,031
<b>Total liabilities</b>	<b>2,465,507</b>	<b>2,529,215</b>	<b>2,500,867</b>
Capital stock	115,000	100,000	100,000
Capital surplus	797,922	644,257	642,598
Capital adjustments	(11,406)	(11,406)	1,274
Accumulated other comprehensive income	(23,902)	(14,127)	24,650
Accumulated deficit before disposition	23,316	82,698	153,094
<b>Total shareholder's equity</b>	<b>854,298</b>	<b>636,026</b>	<b>615,428</b>

### Consolidated statement of income

(In millions of KRW)

Account	3 <sup>rd</sup> Period		2 <sup>nd</sup> Period	
	(2010.1.1~12.31)		(2009.1.1~12.31)	
Sales revenue	7,771,138		6,433,306	
Cost of sales	7,016,141		5,649,482	
Gross profit	754,997		783,824	
Selling & administrative expenses	546,108		505,245	
Operating income	208,889		278,579	
Non-operating income	350,591		628,685	
Non-operating expenses	522,024		765,496	
Income before income taxes	37,456		141,768	
Income tax expenses(Income)	(19,903)		56,601	
Net income	57,359		84,214	

In terms of performance by the business group, the electrical power, cable and telecommunication business group all posted year-of-year revenue gains in 2010. However, operating incomes of the electrical power and telecommunication business groups declined due not only to an increase in costs but also a decrease in orders from the Middle East and Europe in the wake of the economic slowdown.

### Performance by business group

(In millions of KRW)

Category	Cable		Electrical power		Telecommunication		Total	
	2010	2009	2010	2009	2010	2009	2010	2009
	Sales	2,802,642	2,227,942	739,582	572,461	326,141	306,091	3,868,365
Operating income	43,972	32,677	84,936	117,269	1,282	13,719	130,190	163,665

## Efforts to Improve Financial Performance

We continue to try to diversify our market presence and product lineup in order to improve overall financial performance and to achieve the vision of the Global No.1 in the cable manufacturing industry by 2015.

### Global market presence diversification

As demand for cable is closely related to the construction of infrastructure of city or nation, our business in a certain region have a close relation with economic condition in that region. Therefore, we try to secure stability in business by minimizing a fluctuation of performance through improved global presence portfolio.

We are able to establish a foothold in North America and Europe by merging Superior Essex(U.S) and have advanced into the Chinese electrical power market by acquiring HongQi Electricity. We are also planning to break ground for an electrical power cable business in India with a focus on existing production bases. Going forward, we are going to promote a localization policy in promising emerging markets for a market presence diversification.



### Business model innovation

We are going to bolster our customer-oriented solution/application business provider through a business model innovation, from a simple cable product manufacturer to a solution provider.

The applications business is a customer-centric business combining cable-related all products and services needed in entire project, including electrical power, railroad and telecommunication, etc.

The solutions business is a turnkey-based business that provides not only cable products but also management services, support, integration systems, necessary ancillary equipments and even construction service to customers. We remain committed to enhancing our business and product competitiveness and improving business performance by innovating business model.

### R&D investment for sustainable growth

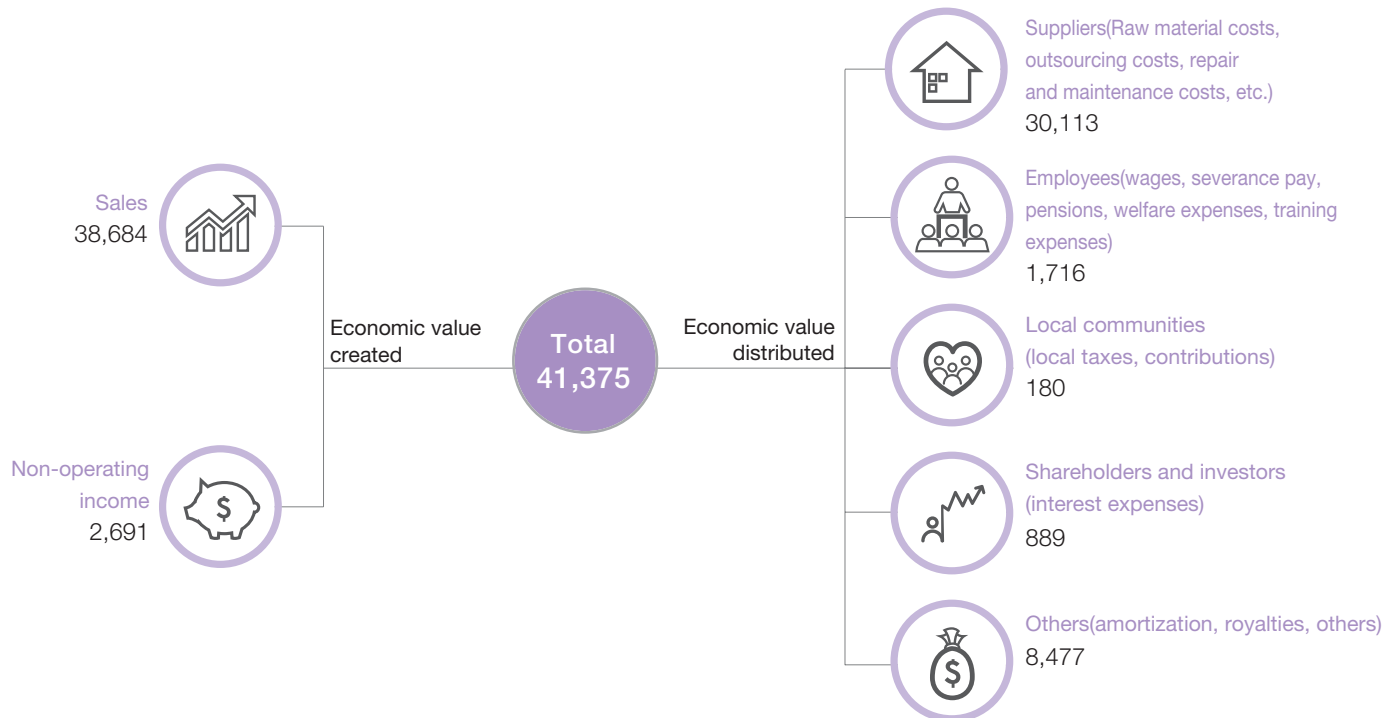
Since 2009, we have invested over KRW100 billion in R&D programs to develop high-value-added products such as submarine cables, alternative 'green' materials and future technologies. Notably, we are implementing our 'Green Business R&D Strategy' to raise the ratio of green products in the product portfolio from 50% as of 2009 to 90% by 2013 in an effort to become a 'green business leader'.

### Commodity risk management

During 2010, the average price of copper, which accounts for the highest portion of our raw material costs, jumped by about 46% from 2009. To minimize the impact of the commodity price, we have a "Copper Operation Council" meeting in a regular basis, to seek ways to hedge raw material related risks. Besides, we try to manage the risks through a variety of preventive programs including copper futures contracts.

## Values Distributed to Stakeholders

(Unit: millions of KRW)



# TOPIC 08. Risk Control & Ethical Management

## Corporate Compliance System for Fair Trade

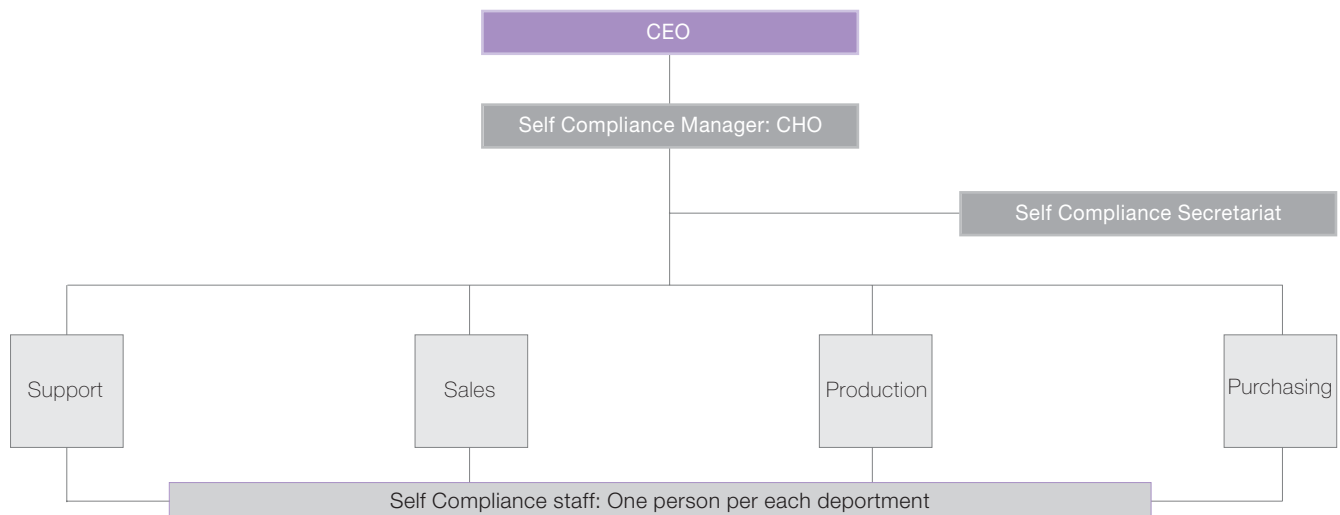
### Adoption of the fair trade self compliance program

Not only in Korea but also in other overseas countries including U.S. and E.U. member states, the regulations on unfair trade practices such as cartel are more tightened. International society imposes heavy fines on those who violate fair trade regulations, to the extent the violators may be endangered. In August of 2009, we were subject to just such an order for corrective action from the Korea Fair Trade Commission(KFTC) for engaging in unfair trade practices with regards to a cable<sup>1)</sup> purchase tendering process of the public organizations. Taking this opportunity, we have adopted a comprehensive fair trade self compliance program as a preventative measure to ensure fairness and transparency in all business trade as a global company.

### History

The fair trade self compliance program is a corporate compliance management program that aims at complying with laws and regulations. The KFTC provides a benefit such as a reduction in fines and other incentives to the companies with great performance in the fair trade self compliance system. In August 2010, we received a consulting from the KFCF for more effective implementation of the program. In September, 2010, the board of directors voted for the adoption of comprehensive self compliance program and appointed a "self compliance manager" responsible for overseeing and managing the program. In addition, we established a corporate self compliance organization headed by the CEO(see the organization chart below), published a self compliance manual. In line with these efforts, we provided the guidelines that employees are able to refer to, as necessary.

### Fair trade self compliance management organization



<sup>1)</sup>It refers to OPGW(Optical fiber Ground Wire)

## Programs

We are working to implement action plans for all 7 key items which required being included for enhancing the effectiveness of the fair trade self program. The 7 items include (1) an open “declaration of commitment to self compliance” promulgated by the top level managers, (2) an appointment of the self-compliance manager and his/her actions, (3) a publication of a comprehensive self compliance manual, (4) a provision of a training program, (5) an implementation of internal controls, (6) a punishment system for violating any of the fair trade laws/regulations and (7) a deployment of the document control system. Among them, we are in the implementation process of 4 items as of end of 2010 and have a plan to complete an implementation of diagnosis and an establishment of document control system by June, 2011.



CP Training(Head Office)

To explain in detail, the board of directors appointed Managing Director Wonhyung Ahn(Director of the Corporate Services Group/CHO) as the Self-Compliance Manager in September, 2010, and the CEO declared the company’s commitment to self compliance in the morning meeting of employees in December 2009. Furthermore, all employees signed off their commitment to self compliance with fair trade and the self compliance secretariat distributed ‘the note of ethics and fair trade’ which specifies the action principles for fair trade to all the workplaces.

In addition, we invited professional 3<sup>rd</sup> party instructors to provide the five rounds of a “self compliance training sessions” on the overview of the program, employee’s action principles and future plan, etc. Going forward, we will fulfill our responsibilities for fairness and transparency as an industry leader, placing the self compliance secretariat at the center, enhancing in-house auditing and examination of unfair trade practices, and imposing strict penalties for violations based on the regulations.

### 7 Core items of the fair trade self compliance program

Items	Our plan	Implementation status
Declaration of self compliance commitment	<ul style="list-style-type: none"> <li>• The CEO declared the program adoption at the morning meeting of employees</li> <li>• Presentation of the program</li> </ul>	Completed in 13 December, 2010
Appointment of the self compliance manager & organizational preparation	<ul style="list-style-type: none"> <li>• Appointed a self compliance manager</li> <li>• Designated one(1) self compliance staff in each department               <ul style="list-style-type: none"> <li>- Fair trade self compliance secretariat(legal affairs team)</li> </ul> </li> </ul>	Completed in 12 December, 2010
Registration of a self compliance manual & regulations	<ul style="list-style-type: none"> <li>• Distributed the self compliance manual</li> <li>• Registered the operating regulations(containing penalty provisions for employees upon violation)</li> </ul>	Completed in 12 December, 2010
Regular training program	<ul style="list-style-type: none"> <li>• Conducted the fair trade self compliance training programs at all workplaces(5 times in total)</li> <li>• Launched an online training program requiring all employees to sign off for the mandatory courses</li> </ul>	Completed in 12 November, 2010
Diagnosis & auditing	<ul style="list-style-type: none"> <li>• In-house diagnosis               <ul style="list-style-type: none"> <li>- Inspection by the legal affairs team/management diagnosis team once a quarter</li> <li>Organize the Review Committee upon violation, Disciplinary &amp; corrective action</li> </ul> </li> <li>• 3<sup>rd</sup> party expert diagnosis</li> </ul>	Planned by June 2011
General operation (document control system)	<ul style="list-style-type: none"> <li>• Launched a knowledge-sharing community(intranet)</li> <li>• Distributed the document control guidelines</li> </ul>	Planned by June 2011

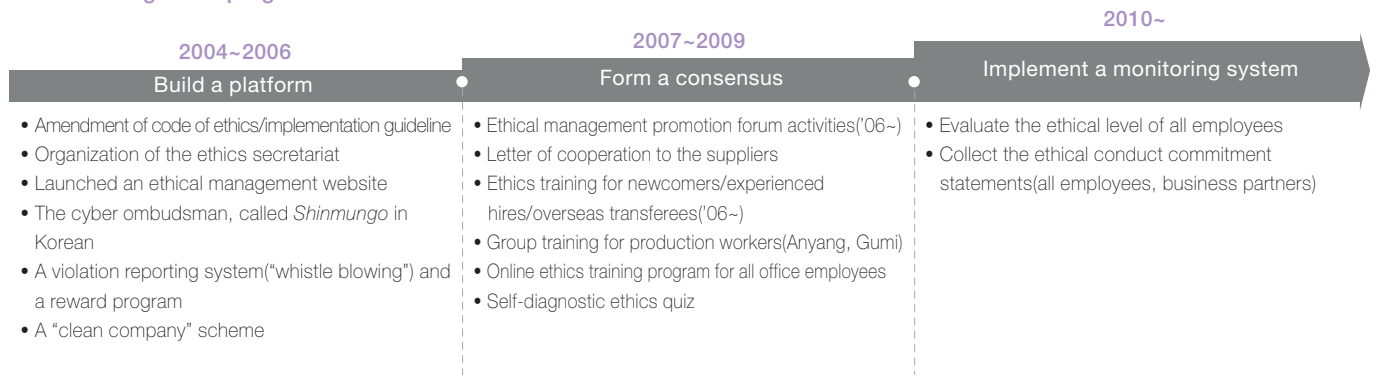
## Ethics Management as our Citizenship Obligations

We recognize the importance of 'integrity'(meaning a behavior of honesty and rational thinking) as the most fundamental driver of performance. We established the ethical management system based on the principle of 'integrity' and put a great deal of effort to promote an ethical culture, across the company. We try to earn the ethical legitimacy beyond mere legal compliance by enforcing a strict code of ethics and guidelines so that become an esteemed company.

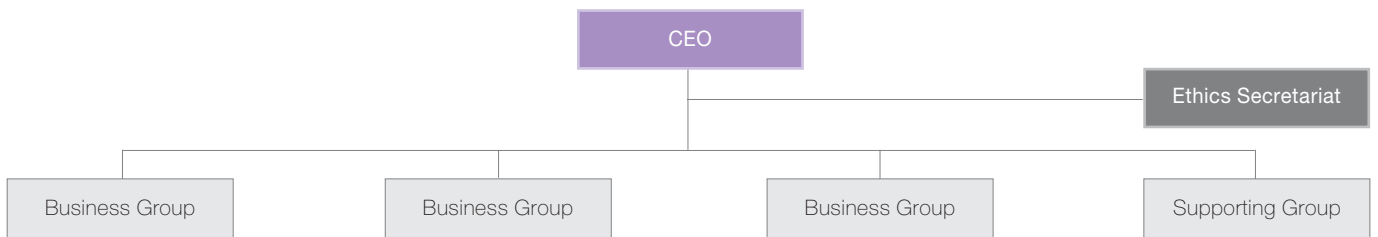
### History

Beginning with the implementation of ethical management in 2004 in earnest, we built a supporting infrastructure through the introduction of ethics regulations and programs to 2006. Since then, we have focused on raising the awareness level of the ethics management and forming a consensus among employees with a continuous provision of training programs and campaigns. Recently, we conducted the ethics level survey of the employees and identified the areas for improvements from the survey findings.

#### Ethical management program



#### Ethical management organization



### Ethical management promotion activities

We have posted a variety of articles on ethical management updates, the corporate code of ethics and ethical management schemes on the intranet board since 2006. We also send a letter of corporation under the President's name that asks suppliers for cooperating with the anti-bribery campaign, reporting violation case of the code of ethics by our employees, and joining in the fair trade system, in holidays such as lunar Calendar New Year's day and thanks giving day.

We continue to encourage employees and our suppliers to internalize ethical management with ethical management promotion activities.

#### 2008~2010 Ethical management articles & letter of cooperation

(Unit: the number of case)

Articles	the letter of cooperation
174	6

## Ethical management training program for all employees

We require newcomers and experienced career hires to complete a corporate ethics training program as a mandatory course, with a purpose of improving their awareness of corporate ethics. We also provide the case-study programs for overseas transferees to improve their ability to resolve ethical dilemmas.

In addition, since 2009 we have provided online training for both our office staffs and staffs of subsidiaries and onsite training programs by external professionals for production workers.

### Ethical management training

(Unit: number of hour(s))

Year	Newcomers	Experienced hires	Overseas transferees	Production workers	Office employees
2008	1 (2)	2 (4)	2 (4)	-	-
2009	1 (2)	3 (3)	1 (2)	1 (2)	1 (14)
2010	-	-	3 (6)	-	-

## Clean company program

We encourage employees to report the acceptance of financial favor from 3<sup>rd</sup> parties at the voluntary manner to promote a clean corporate culture. The items collected from the self-reporting scheme that are not returnable are donated to social welfare facilities of local communities.

### Reported financial favor acceptance

	2008	2009	2010
Number of case	-	3	3

## Reporting system

We have a cyber reporting channel, called *Sinmungo* in Korean and a counseling office for resolving ethical problems and guarantee (1) confidentiality (2) job security and (3) waiver of liability for the reporters in reporting channels. We also reward the reports up to 5 times of the sum received (up to KRW5 million). The case reported to date have all been handled and concluded properly.

### Reporting type

(Unit: number of case)

Category	2007	2008	2009	2010	Total
Unfair trade	3	1	2	4	10
Inappropriate work behavior	-	2	2	7	11
Corruption	1	1	1	2	5
Product defect/AS	-	1	3	-	4
Others	5	5	5	4	19
Total	9	10	13	17	49

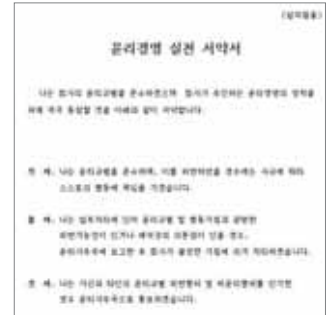
### Type of reporters

(Unit: number of case)

Category	2007	2008	2009	2010	Total
Customer	5	2	6	-	13
Business partner	2	2	2	10	16
employee	1	1	2	1	5
Others	1	5	3	6	15
Total	9	10	13	17	49

### Statement of ethical management commitment

We require all employees and even suppliers to sign a statement of ethical management commitment.



Statement of ethical management commitment form

### Ethics level evaluation

In November of 2010, we conducted an 'Ethics Level Evaluation' survey of the all employees in an attempt to measure the corporate ethical level as perceived by the employees and identify a direction for improvement. The evaluation metrics were designed in reference to diagnostic models used by international and domestic organizations and the LS Cable & System's code of ethics as well. The evaluation covers the 3 main categories, (1) an ethical management framework (2) a corporate ethics implementation and (3) ethics implementation in works. The average evaluation score was 78.2 points, with 74.6 points for ethical management framework, 75.3 points for corporate ethics implementation, and 84.6 points for occupational ethics implementation.

The relatively low score in the ethical management framework category was deemed attributable to the slow development of the system in comparison with the ethical management commitment of individuals and organizations. We plan to develop proactive countermeasures including, among others, enhanced promotion of the ethical management system, establishment and amendment of the code of ethics, and preparation of the implementation manual.

### Ethical level evaluation results in 2010



### Policy on political lobbying & donations

Although our Code of Conduct does not stipulate a restrictions on political lobbying, we neither engaged in political lobbying practices nor made any contributions to any political party or organization sponsoring a political party between 2008 and 2010.



# APPENDIX



Environmental Performance Index by Plant

Green Mark-Certified Products

Awards & Accreditations

Membership in Industry & Business Associations, Domestic & Global

ISO 26000, International Standard on Social Responsibility

Third Party's Assurance Report

GRI Guideline Index

## Environmental Performance Index by Plant

### Total air emission

Category	(Unit: ton)		
	2008	2009	2010
Gumi	14.3	17.2	16.5
Indong	5.6	5.6	5.4
Anyang	12.9	4.3	3.0
Donghae	-	0.2	0.6

### Hazardous chemical substance use

Category	(Unit: ton)		
	2008	2009	2010
Gumi	1,126	1,149	1,317
Indong	116	108	211
Anyang	584	144	11
Donghae	0	0	0

### Water use

Category	(Unit: ton)			
	2008	2009	2010	
Gumi	Residential water	294,758	317,111	296,381
	Industrial water	-	0	0
Indong	Residential water	38,897	61,440	79,775
	Industrial water	937	73	26,068
Anyang	Residential water	159,242	118,371	103,963
	Industrial water	90,398	61,164	80,128
Donghae	Residential water	-	30,172	43,821
	Industrial water	-	27,072	78,716

\* Gumi Plant uses only residential water

### Wastewater discharge

Category	(Unit: ton)		
	2008	2009	2010
Gumi	31,900	35,300	29,200
Indong	63,700	45,700	61,300
Anyang	68,100	30,900	35,600
Donghae	-	12,200	24,400

### Water pollutant discharge

Category	(Unit: kg)		
	2008	2009	2010
Gumi	157	204.8	249
Indong	659.8	569.1	1049.2
Anyang	1,887.7	685.3	1,054.0
Donghae	-	374.6	564.7

### Waste volume

Category	(Unit: ton)			
	2008	2009	2010	
Gumi	Designated wastes	1,764	1,674	1,918
	Ordinary wastes	6,974	6,418	6,900
Indong	Designated wastes	176	187	263
	Ordinary wastes	1,850	1,779	2,508
Anyang	Designated wastes	169	136	59
	Ordinary wastes	2,864	2,769	2,198
Donghae	Designated wastes	0	36	57
	Ordinary wastes	0	744	1,253

### Waste disposal

Category	(Unit: ton, %)			Category	(Unit: ton, %)				
	2008	2009	2010		2008	2009	2010		
Gumi	Incinerated	1,572	1,375	1,763	Anyang	Incinerated	1,104	978	952
	Reclaimed	262	208	241		Reclaimed	110	95	146
	Recycled	6,884	6,509	6,814		Recycled	1,819	1,827	1,159
	Recycling ratio	79	80	77		Recycling ratio	60	63	51
Indong	Incinerated	822	508	594	Donghae	Incinerated	-	103	501
	Reclaimed	86	135	323		Reclaimed	-	0	0
	Recycled	1,118	1,323	1,854		Recycled	-	677	809
	Recycling ratio	55	67	67		Recycling ratio	-	87	62

## Green Mark-Certified Products

Biz. Group	Prod. Line	Prod. Name	Certificate	Cert. Body	Date of Cert.
Power Cable Business Group	MV Cable	450/750V HFX	Green Mark Certificate (No.3235)	KEITI	2005.8.18. (renewable biannually)
		0.6/1kV NFR-8			
		NFR-3			
		0.6/1kV HFCCO			
		0.6/1kV LS-HFCCO			
		6/10kV HFCO			
		6/10kV LS-HFCO			
		0.6/1kV HFCO			
0.6/1kV LS-HFCO					
Industrial Business Group	Greenflor	Soft long green(tiles/steps) 3mm	Green Mark Certificate (No.7669)	KEITI	2010.5.17
		Soft long green(tiles/steps) 4mm			
		Soft long green(tiles/steps) 5mm			
		Soft long green(rolls) 2mm			
		Soft long green(rolls) 3mm			



## Awards & Accreditations

- Apr. 2008** : 2008 16<sup>th</sup> Week 'IR52 Chang, Young-Shil Award' for Overhead Transmission Line with Increased Capacity / organized by the Maeil Economic Daily, Korea Industrial Technology Association(KITA) and sponsored by the Ministry of Education, Science & Technology
- Aug. 2008** : 2008 34<sup>th</sup> Week 'IR52 Chang, Young-Shil Award' for a compact busduct
- Oct. 2008** : A Bronze Award for the English brochure at the US ARC(Annual Report Competition) / hosted by US MerComm Inc.
- Feb. 2009** : A Commendation for Contributing to Local Industry / the Governor of Gyeonggi Province
- Apr. 2009** : The 'Gold Tower Order of Industrial Service Merit' at the '44<sup>th</sup> Day of Electricity Celebration Ceremony'(received by Chairman Koo)
- Jul. 2009** : The 'Most Admired Workplace in the Cable Manufacturing Sector' through a survey of 4,400 senior year college students / Korea Management Association(KMA)
- Jul. 2009** : 2008 30<sup>th</sup> week 'IR52 Chang, Young-Shil Award' for an environmentally friendly cable for wind turbines
- Sep. 2009** : 'Global Leader Award' in the Global Strategic Management Category / organized by the Korea Economic Daily and managed by the Korea Sustainability Management Evaluation(KSME)
- Oct. 2009** : Chairman Koo's designation as an honorary citizen of Anyang at the '36<sup>th</sup> Anyang Citizens' Day Celebration Ceremony'
- Nov. 2009** : Presidential Commendation at the 'New Technology Commercialization Promotion Contest,' / hosted by the Korean Agency for Technology & Standards, Ministry of Knowledge Economy and organized by the Korea New Excellent Product Certification Association(Dongwook Kim, Principal Research engineer)
- Dec. 2009** : 'Silver Prize' at the 'Korea Sharing Service Awards' / co-organized by the Hankookilbo and Good Neighbors and sponsored by the Ministry of Health, Welfare & Family Affairs and the Federation of Korean Industries.
- Jan. 2010** : 2010 4<sup>th</sup> week 'IR52 Chang, Young-Shil Award' for an environmentally friendly thermal-resistant electrical cable for automotive applications
- Feb. 2010** : Grand Prize in the Knowledge Management category / managed by the FKI International Management Institute, Sponsored by the Ministry of Knowledge Economy
- Apr. 2010** : A commendation by the Prime Minister and Minister of Education, Science & Technology at the '43<sup>rd</sup> Science Day Celebration Ceremony' / Youngil Kwon, Managing Director and Daegi Kim, Principal Research engineer
- Jul. 2010** : Prize for encouragement at the '28<sup>th</sup> Jeong Jin-Ki Journalism Culture Awards' /sponsored by the Jeong Jin-Ki Journalism Culture Foundation
- Sep. 2010** : Korea Quality Management Grand Prize awarded to President Jongho Son by the Korean Society for Quality Management(KSQM)
- Oct. 2010** : 'Grand Prize' at the '9<sup>th</sup> Global Green Management Awards' / the KMA Certification Board
- Oct. 2010** : '2010 Green Energy Award' at the Energy Leaders Integration Forum / organized by the MKE, managed by the Korea Institute of Energy Technology Evaluation and Planning(KETEP)
- Nov. 2010** : A Commendation from the Prime Minister at the 'New Technology Commercialization Facilitation Contest' /organized by the Korean Agency for Technology & Standards(KATS) and managed by the Korea New Excellent Product Certification Association(KNEP) (Kjjoon Nam, Principal Research engineer)
- Nov. 2010** : 'National Quality 6-Sigma Innovation Award' and 'Presidential Commendation' at the '36<sup>th</sup> National Quality Management Contest' /organized by the Korean Agency for Technology & Standards(KATS) and managed by the Korean Standards Association(KSA)

## Membership in Industry & Business Associations, Domestic & Global

Association & Organization Membership		
Gyeonggi Employers Federation	Korea Management Institute	Korea Electric Wire Industry Cooperative
Gyeonggi Province Conference of Environmental Engineers	Korea Employers Federation	Korea Radio Promotion Association
Conseil International des Grands Reseaux Electriques(CIGRE)	Korea Fair Competition Federation(KFCF)	Korea Information & Communication Contractors Association
International Wrought Copper Council(IWCC)	Korea Customs Logistics Association	Korea Telecommunication Technology Association(TTA)
Korea Industrial Safety Association	Korea Network Research Association(KNRA)	Korea Association of Information & Telecommunication(KAIT)
Korean Institute of Electrical Engineers	Korea Management Association(KMA)	Korea CFO Association
Korea Electric Association	Korea International Trade Association	Korea HRD Center
Seoul Economist Club	Korea Invention Promotion Association	FTTH Council Asia-Pacific
Anyang Chamber of Commerce	Korea Industrial Technology Association(KOITA)	FTTH Industry Council
Anyang Green Technology Council	Korea Productivity Center(KPC)	IBS Korea
Korea Association of Energy Service Companies	Korea Fire Safety Association Gyonggi Chapter	ITS Korea
Reserve Forces Officers Council	Korea Software Industry Association	KIMPA(Korea Intellectual Property Association)
Federation of Korean Industries	Korea Engineering Services Association	SERICEO
Korea Securities Depository	Korean Personnel Improvement Association(KPI)	
MKE Emergency Planning Council	Korea Electrical Contractors Association	
	Korea Electrical Manufacturers Association	
	Korea Railroad Electricity Technology Association	

## Global ISO26000 Standard Compliance in relation to Social Responsibilities

### ISO 26000, International Standard on Social Responsibility

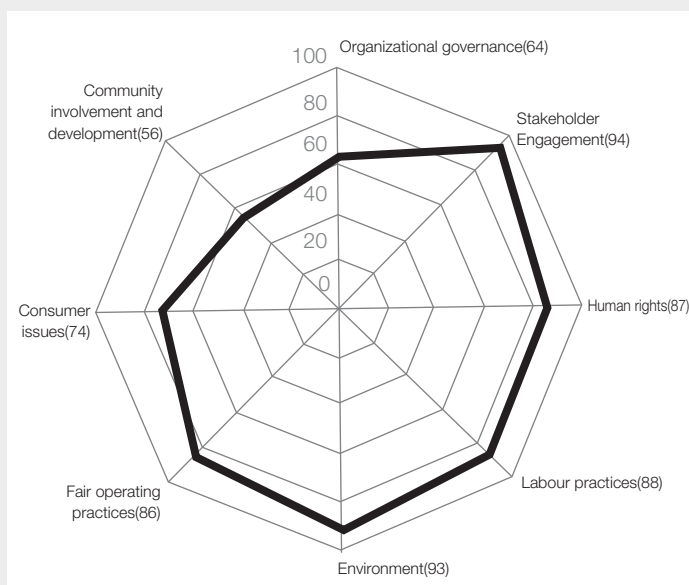
With the November 2010 launch of ISO 26000<sup>1)</sup>, the international standard providing guidance on social responsibility, LS Cable & System realized that it had to respond quickly in order to become a responsible player on the global market and remain competitive. Consequently, it embarked on a self-diagnostic assessment to take stock of its strengths and weaknesses relative to the core subjects, issues, and recommendations outlined in the ISO 26000 to improve upon its shortfall areas as part of a response that was on par with global standards.

By using the BIDS-IPS SR self-diagnostic index that was developed for industrial application, the Company was able to obtain a frank assessment of its internal operations.

According to the self-assessment, although the Company was found to be providing a certain level of responsiveness in the dimensions of stakeholder engagement and environment, findings indicated a weakness in community involvement and development as well as governance.

The Company intends to address the shortfalls as key task areas for the Company, with plans to incorporate them into the future work plans of the responsible organization.

- Integrating social responsibility throughout the organization: Fulfilling its social responsibilities with participation from all management and employees.
- Community involvement and development: Contributing to the advancement of the local community-social, cultural, and environmental-including economic development.
- Human rights and labor practices: Upgrading the Company's human rights and labor practices, given that the geographic scope of its social responsibilities are becoming more global while its business partnerships are expanding into the second and third tier levels.



(Scores that converted into points out of 100)

<sup>1)</sup>ISO 26000: The international standard on social responsibility launched by the International Organization for Standards, which has a network of 159 member countries, that provides guidance for all organizations on SR in the seven core subject areas of governance, human rights, labor practices, fair operating practices, consumer issues, and community involvement and development.

## Third Party's Assurance Report

### To the Management of the LS Cable & System Sustainability Report 2010

Upon request of LS Cable & System, the Institute for Industrial Policy Studies as a "third party assurance provider"(hereinafter referred to as the "Assurance Provider") presents the following third party's assurance report on the "LS Cable & System 2010 Sustainability Report(hereinafter referred to as the "Report")".

#### Accountability and Objective

LS Cable & System is held accountable for all information and claims contained in the Report including sustainability management goal setting, performance management, data collection and report preparation. The objective of this assurance report is to check whether the Report is free of material misstatement or bias and whether the data collection systems used are robust, and to offer advice on improving the quality of the Report through identifying sustainability management issues and reviewing its reporting process.

#### Independence

The Assurance Provider has no relations with LS Cable & System regarding any of its forprofit operations and activities. In addition, the Assurance Provider has carried out its assurance process with independence and autonomy as it was not involved in the preparation of the Report except for offering comments in the process.

#### Criteria for Assurance

The Assurance Provider assessed the Report against the following guidelines:

- AA1000 Assurance Standard(2008)<sup>1)</sup>
- BEST Guideline<sup>2)</sup>
- Global Reporting Initiative(GRI) G3 Sustainability Reporting Guidelines<sup>3)</sup>

#### Type and Level of Assurance

The Assurance Provider conducted assurance process for the Report in accordance with Type 1 and Moderate Level of AA1000AS(2008).

- The Assurance Provider evaluated the reliability of the data compiled in the Report for Type 1 assurance, and assessed publicly disclosed information, reporting system and performance management process based on the three core principles of AA1000AS(2008), namely Inclusivity, Materiality and Responsiveness. However, this assurance engagement does not provide the evaluation of the credibility of the offered data.
- The Assurance Provider pursued moderate level of assurance where sufficient evidence has been obtained and limited sampling has been conducted at each performance sector to support its assurance report such that the risk of its conclusion being in error is reduced but not reduced to very low or not zero.

#### Scope and Methodology

The Assurance Provider carried out the following activities in order to (1) review the extent to which The Report applies the principles of Inclusivity, Materiality and Responsiveness and (2) assess the Report's application level of the GRI/BEST Sustainability Reporting Guidelines.

- Evaluating the sources of publicly disclosed information and internal parties involved
- Verifying the performance data collection systems and processes
- Ensuring the financial data in the Report and LS Cable & System's audited financial reports correspond
- Data sampling and a review on stakeholder's participation process
- Reviewing the LS Cable & System's response system for material issues
- Conducting interviews with managers and staffs responsible for dimension-specific performance
- Completing on-site due diligence focusing on the head office(April 28, 2011)
- Evaluating the Report for the extent of adherence to the GRI/BEST Guidelines

#### Limitations

- A review of the accuracy and reliability of data and interviews with persons in charge of data collection and performance-related information at management levels
- Verifying the data and inquiries into each functional manager and information collection manager
- On-site validation focused on the Seoul office
- Assurance engagement based on data and publicly available information only during the current reporting period
- Evaluation of the reliability of the performance data being excluded

#### Conclusions

The Assurance Provider did not find the Report to contain any material misstatements or bias on the basis of the scope, methodology and criteria described above. All material findings of the Assurance Provider are provided herein, and detailed findings and follow-up recommendations have been submitted to the LS Cable & System.

#### [Inclusivity]: Is LS Cable & System's strategy-setting and engagement process for stakeholder participation adequate?

It is the Assurance Provider's view that LS Cable & System is committed to strengthening its engagement with stakeholders based on the recognition that stakeholder participation is essential in pursuing sustainability management. The Company has implemented a stakeholder-specific engagement process after defining and categorizing its key stakeholders, to identify their areas of high-interest and has engaged them to be a part of the Company's sustainability management program and responsible counter-response. The following points were found to be particularly commendable.

- Implemented a regular channel of communication with stakeholders.
- Incorporated stakeholder views in its materiality test while reflecting key material issues into the Company's targets for the following year.

Going forward, the Assurance Provider suggests providing a fuller account of its strategies and program for strengthening stakeholder engagement, while explaining how stakeholder views are being reflected in LS Cable & System's management activities.

<sup>1)</sup>AA1000 AS(Assurance Standard) is a sustainability reporting standard developed by Accountability in its pursuit to promote overall organizational performance and accountability by improving the quality of social and ethical accounting. As a U.K. based not-for-profit organization focusing on corporate social responsibility and business ethics, Accountability first developed AA1000AS in 1999 and amended the standards in 2008 for application in 2010.

<sup>2)</sup>BEST Guideline or BEST Sustainability Reporting Guideline is a guideline for the preparation and assurance of sustainability reporting and offers five levels of reporting quality assessment. It was jointly developed by the Ministry of Knowledge Economy(MKE), the Institute for Industrial Policy Studies(IPS), and the Korea Chamber of Commerce and Industry (KCCI) in the Business Ethics Sustainability Management for Top Performers(BEST) forum in their endeavor to promote sustainability reporting among local companies.

<sup>3)</sup>GRI Sustainability Reporting Guidelines were jointly convened by the Coalition for Environmentally Responsible Economies(CERES) and UNEP in 1997. GRI announced the G3 Guideline, the third edition of its sustainability reporting guidelines, in October 2006.

**[Materiality]: Does the Report contain information of the highest material importance to LS Cable & System's stakeholders?**

It is the Assurance Provider's view that the Report neither omits nor excludes issues of material importance to the stakeholders of LS Cable & System. We verified the company's efforts to identify and report on key material issues through its systematic 6-level materiality test process, which covers company policies, key performance indicators, laws and regulations, stakeholder surveys, peer industry benchmarking, and news reports, to provide its stakeholders with performance data necessary in forming a judgment, decision, and action plan. The following points were found to be particularly commendable.

- Identifies key sustainability management issues through a systematic materiality test method that incorporates diverse assessment factors.
- Provides a cross reference between material issues and the Report's top eight themes so that readers can look up performance outcomes easily.

In future reports, however, the Assurance Provider recommends that greater emphasis be placed on key material issues as well as any negative performance outcomes as well as relevant countermeasures for improvement.

**[Responsiveness]: Does the Report provide an adequate response to stakeholder demands and areas of interest?**

It is the Assurance Provider's view that LS Cable & System has been responsive to stakeholder expectations by implementing a dedicated organization, as well as formulating policies and programs. Recognizing the key role of stakeholder communication in underlying a company's responsiveness, LS Cable & System has been identifying stakeholder demands and areas of interest through round-table meetings, consultative forums, satisfaction surveys, etc. while reporting on various programs designed to respond to stakeholder requirements as well as their outcomes. The following points were found to be particularly commendable.

- The Report provides information on the company policies, performance outcomes, and future plans for issues identified to be of material importance through the Disclosure on Management Approach (DMA).
- The Report presents stakeholder survey findings and provides a format where readers can look up performance outcomes for key issues with ease.

Going forward, the Assurance Provider will suggest providing more detailed coverage on stakeholder-specific areas of interest as well LS Cable & System's relevant policies and future plans for response.

**[GRI Application Levels]**

The Assurance Provider found the Report to apply to GRI G3 Reporting Framework at the level of A+.

**[BEST Fulfillment Levels]**

Relative to the BEST Guidelines, which provides for 5 levels of reporting rigor, the Assurance Provider finds the Report to fulfill 96.04% of the reporting requirements necessary to qualify for a Level 3 report (expansion phase) in view of the rate of compliance against reporting standards and the depth of information provided.

<Trend of the LS Cable & System Sustainability Report Fulfillment>

Reporting Year	2011
Publications	1st
Level	Level 3
Fulfillment	96.04%

**Recommendations**

The Assurance Provider found "LS Cable & System 2010 Sustainability Report," the Company's first Report, commendable on the following counts. The Report 1) identifies issues of material importance through a materiality test process; 2) presents the Company's strategies and goals for sustainability management; and; 3) reflects efforts to present stakeholder views.

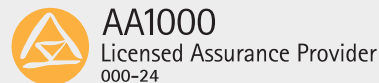
For future reports, the Assurance Provider suggests the following considerations.

- Present company-wide sustainability management performance indicators.
- Provide stronger linkage between management strategies and goals, material issues, and performance indicators.
- Provide additional emphasis on material issues by strengthening linkage with reported contents.
- Provide greater coverage of negative issues and weak performance results.

Based on the findings of this assurance report as well as the recommendation letter that was submitted separately, the Assurance Provider recommends that LS Cable & System establish a more systematic system for sustainability management and reporting.

**Eligibility of IPS as an Assurance Provider**

Established in 1993, the Institute for Industrial Policy Studies (IPS) has accumulated broad expertise in the areas of ethics management, corporate social responsibility and sustainability management since 2002, and serves as a third party assurance provider for the sustainability reports published by local companies. IPS has conducted the assurance engagement upon request of LS Cable & System, and assembled a team of five assurance providers who are professors at Korea's top universities or professionals with accreditation and extensive experience in sustainability management after majoring in business management, accounting or environmental science.



June 09, 2011  
Jae-eun Kim

President, The Institute for Industrial Policy Studies





## GRI Guideline Index

GRI Index	Indicators	fully covered	partially covered	N/A	not covered
		Reporting Status	Page	BEST Index	
<b>1. Strategy and Analysis</b>					
1.1	Statement from the most senior decision-maker of the organization		4~5, 6~7		A_1
1.2	Description of key impacts, risks, and opportunities		5, 20, 72~73		A_2
<b>2. Organizational Profile</b>					
2.1	Name of the organization		Cover, 8		A_3
2.2	Primary brands, products, and/or services		12~17		A_4
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures		8, 9, 10		A_5
2.4	Location of organization's headquarters		8		A_7
2.5	Number of countries in operation		8~9		A_7
2.6	Nature of ownership and legal form		Annual Report, 10		A_8
2.7	Markets served(including geographic breakdown, sectors served, and types of customers/beneficiaries)		Annual Report, 8-9		A_9
2.8	Scale of the reporting organization		10		A_10
2.9	Significant changes during the reporting period regarding size, structure, or ownership				B_8
2.10	Awards received in the reporting period		Appendix		CO8
<b>3. Report Parameters</b>					
3.1	Reporting period(e.g., fiscal/calendar year) for information provided		2		B_3
3.2	Date of most recent previous report(if any)				B_8
3.3	Reporting cycle(annual, biennial, etc.)		2		B_6
3.4	Contact point for questions regarding the report or its contents		2		B_9
3.5	Process for defining report content		22		B_4
3.6	Boundary of the report		2		B_1
3.7	State any specific limitations on the scope or boundary of the report("see completeness principle for explanation of scope")		2		B_2
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations		8~9		A_6
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report. Explain any decisions not to apply, or to substantially diverge from, the GRI Indicator Protocols		2, 50, 58, 72		-
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement				-
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report				B_5
3.12	Table identifying the location of the Standard Disclosures in the report		Appendix		B_10
3.13	Policy and current practice with regard to seeking external assurance for the report		Appendix, 2		B_7

GRI Index	Indicators	fully covered	partially covered	N/A	not covered
		Reporting Status	Page	BEST Index	
<b>4. Governance, Commitments, and Engagement</b>					
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight		10~11		GR1
4.2	Indicate whether the Chair of the highest governance body is also an executive officer		11		GR1 GR3
4.3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members				GR2
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body		23, 60~61		GR12
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives		11, 52		GR7
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided		11		GR13
4.7	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics		11		GR4
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation		Web Site		-
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance		11, 21		GR5
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance		11, 52		GR6
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization		102, 103~107		GR11
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses		Web Site		GR10
4.13	Memberships in associations(such as industry associations) and/or national/international advocacy organizations		Appendix		A_11
4.14	List of stakeholder groups engaged by the organization		23		C_1 C_2
4.15	Basis for identification and selection of stakeholders with whom to engage		23		C_1
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group		23		C_2
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting		23		C_3
<b>Economic Performance</b>					
<b>Disclosure on Management Approach</b>					
EC1	Direct economic value generated and distributed		102		EC1
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change		72~73		EC2
EC3	Coverage of the organization's defined benefit plan obligations		Annual Report		EC3
EC4	Significant financial assistance received from government		Annual Report		EC5
EC5	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation		52		EM4
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation				EC4
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation		48~49, 50, 51		EC4
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement				EC6
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts		51		EC7

GRI Index	Indicators	fully covered	partially covered	N/A	not covered
		Reporting Status	Page	BEST Index	
<b>Environmental Performance</b>					
<b>Disclosure on Management Approach</b>					
			68		
EC1	Materials used by weight or volume		82		EV10
EC2	Percentage of materials used that are recycled input materials		82		EV11
EC3	Direct energy consumption by primary energy source		73		EV7
EN4	Indirect energy consumption by primary source		73		EV8
EN5	Energy saved due to conservation and efficiency improvements		73, 75-76		EV5
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives		83-91		EV5
EN7	Initiatives to reduce indirect energy consumption and reductions achieved		75-76		EV5 EV25
EN8	Total water withdrawal by source		79		EV9
EN9	Water sources significantly affected by withdrawal of water		79		EV20
EN10	Percentage and total volume of water recycled and reused		79		EV18
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas				EV22
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas				EV22 EV26
EN13	Habitats protected or restored				EV27
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity				EV6/EV26
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk				EV28
EN16	Total direct and indirect greenhouse gas emissions by weight		74		EV12
EN17	Other relevant indirect greenhouse gas emissions by weight		74		EV13
EN18	Initiatives to reduce greenhouse gas emissions and reductions		72-76		EV4
EN19	Emissions of ozone-depleting substances by weight		74		EV14
EN20	NOx, SOx, and other significant air emissions by type and weight		71, 78		EV15
EN21	Total water discharge by quality and destination		80		EV17
EN22	Total weight of waste by type and disposal method		71, 80-81		EV16
EN23	Total number and volume of significant spills		Supplementary Explanation		EV21
EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped				EV29
EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff		80		EV19
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation		70-71		EV23
EN27	Percentage of products sold and their packaging materials that are reclaimed by category		81		EV24
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations		Supplementary Explanation		EV31
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce		76		EV30
EN30	Total environmental protection expenditures and investments by type		72		EV1

GRI Index	Indicators	fully covered	partially covered	N/A	not covered
		Reporting Status	Page	BEST Index	
<b>Social: Labor Practices and Decent Work Performance</b>					
<b>Disclosure on Management Approach</b>					
LA1	Total workforce by employment type, employment contract, and region		48~49		EM1
LA2	Total number and rate of employee turnover by age group, gender, and region		48		EM5
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations		55		EM20
LA4	Percentage of employees covered by collective bargaining agreements		59		EM12
LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements		60		EM13
LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs		57		EM14
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region		58		EM19
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases		56~58		EM18
LA9	Health and safety topics covered in formal agreements with trade unions		56~57		EM15
LA10	Average hours of training per year per employee by employee category		54		EM27
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings		51, 53~54		EM28
LA12	Percentage of employees receiving regular performance and career development reviews		54		EM29
LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity		48, 50		EM2
LA14	Ratio of basic salary of men to women by employee category		52		EM3
<b>Human Rights Performance</b>					
<b>Disclosure on Management Approach</b>					
HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening				PN2
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken		42		PN2/PN3
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained		51, 106		EM30
HR4	Total number of incidents of discrimination and actions taken		51		EM7
HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights		59~60		EM8
HR6	Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor		60		EM9
HR7	Operations that are likely to have forced labor and measures taken		60		EM10
HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations				EM31
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken				CO2

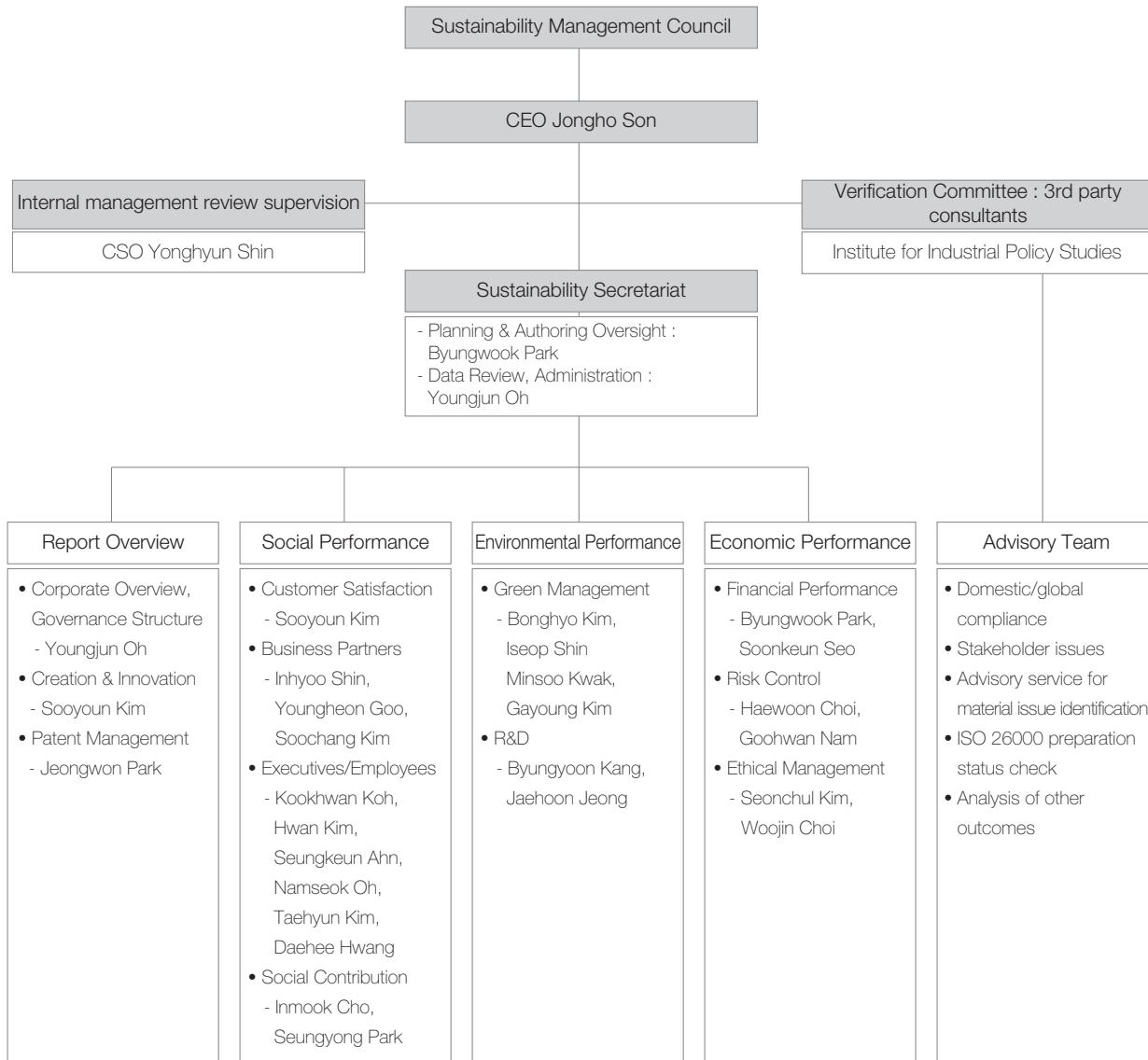
GRI Index	Indicators	fully covered	partially covered	N/A	not covered
		Reporting Status	Page	BEST Index	
<b>Social Performance</b>					
<b>Disclosure on Management Approach</b>					
			34		
SO1	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting		23, 34, 62		CO2
SO2	Percentage and total number of business units analyzed for risks related to corruption		104, 105~106		CO5
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures		51, 106		EM30
SO4	Actions taken in response to incidents of corruption		105~106		CO5
SO5	Public policy positions and participation in public policy development and lobbying		107		CO6
SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country		107		CO7
SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes		103-104		CS3
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations		Supplementary Explanation		CO9
<b>Product Responsibility Performance</b>					
<b>Disclosure on Management Approach</b>					
			34		
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures		37~38		CS4
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes		Supplementary Explanation		CS11
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements		36~37		CS5
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes		Supplementary Explanation		CS12
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction		36~38		CS9
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship				CS13
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes		Supplementary Explanation		CS14
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data				CS15
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services		Supplementary Explanation		CS12

## Supplementary Explanation

	GRI Index	Indicators	Reporting Status
Environmental Performance	EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	We do not own, lease or manage land in, or adjacent to, protected areas and areas of high biodiversity value.
	EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	
	EN13	Habitats protected or restored	There has been no indication that our activities have had a negative impact on biodiversity in adjacent areas. Moving forward, we continue to make a close investigation into the impacts on an ecosystem and manage them.
	EN14	Strategies, current actions, and future plans for managing impacts on biodiversity	
	EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	
	EN23	Total number and volume of significant spills	
	EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	There was no case of significant spills and cross-border transactions of hazardous wastes during the reporting period.
	EN28	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations	There was no violation of environmental law and regulations during the reporting period.
Social Performance	HR9	Total number of incidents of violations involving rights of indigenous people and action taken	No business activities were identified that violated the rights of indigenous populations.
	SO8	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations	We were subjected to neither violation nor penalties in 2010.
	PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes	We comply with all legal and regulatory requirements including health and safety regulations in the markets in which it operates.
	PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	Regarding information provision and marketing communication activities including advertisement, sales promotions, and sponsorship requests, we are abiding by the voluntary guidelines and regulations on product and service provision. We were not subjected to any penalty due to violation of the relevant rules and regulations.
	PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes	
	PR9	Monetary value of significant fines for noncompliance with laws and regulations concerning the provision and use of products and services	
	PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	No complaints about customer information security were made in 2010.



## Participants who helped prepare the LS Cable & System 2010 Sustainability Report



\* Titles are skipped. We would also like to thank all other participants who contributed to the Sustainability Report.

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# LS Cable & System will create a more beautiful future through sustainability management

LS Cable & System will take the lead in protecting the environment and achieving harmonious coexistence with nature through sustainability management.

We will ceaselessly innovate and improve ourselves.

LS Cable & System invites you to keep an eye on us as we advance into the bright future.





This report has been printed using soy bean ink on recyclable paper.