About LS C&S

Overview

1. Customer First
   New Technology and Products
   Quality and Product Responsibility

2. One LS C&S
   Social Contribution
   Shared Growth
   Respect for Human Rights and Diversity

3. Rule & Responsibility
   Compliance Management
   Ethical Management
   Workplace Safety

4. Expertise
   Talent Management
   Advanced Green Management

LS (Leading Solution)

For LS Cable & System, sustainable management means our belief in the value of going forward together. It is not simply a resolution, but something that must be put into action on a daily basis. We resolutely believe in and act upon our vision ‘Enable the Cabled World’ to enhance the quality of life of our stakeholders, including suppliers, customers, investors, and local communities. Our goal for sustainable management is to create a society defined by coexistence and a prosperous future.

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E-mail: csr@lscns.com
Tel: +82-2-2189-9104
Chairman’s Message

LS C&S has been striving to achieve sustainable growth through proactive communication with our shareholders, customers, employees, suppliers, and local communities and through the promotion of an organizational culture with work-life balance.

Distinguished stakeholders,

On the occasion of the publication of our ninth sustainability report, I would like to take this opportunity to express my gratitude to all the stakeholders in our enterprise for your continued interest and support.

Over the last half-century, LS C&S has contributed to a solid foundation for the development of the international cable industry and fueled the global economy through the construction of telecommunications and power-distribution networks. Utilizing our hard-earned experience and expertise, we are aiming for a world where everyone has access to energy and information without any constraints of time and space.

Rapidly changing market environments at home and abroad have increased uncertainty. In response, we have been proactively addressing challenges through refinements and innovations targeting sustainable and high-quality growth since 2016.

We have devised and implemented strategies tailored to the needs of respective markets, which has allowed us to identify new business opportunities around the world. Our efforts at developing an innovative business model will keep us prepared for shifting business environments and future uncertainty.

Meanwhile, in order to ensure our sustainable growth, we have focused on proactively communicating with our shareholders, customers, employees, suppliers, and local communities while promoting an organizational culture of work-life balance.

In 2018, numerous strategies, including our ‘leaving the office on time’ campaign and ‘PC-Off’ (automatic shutting off of office computers) system, were pursued in an effort to enhance productivity and performance by concentrating work and ensuring work-life balance.

Success in our endeavors is the key to preserving our company’s growth. To keep our business sustainable, it is essential to maintain a positive corporate culture. We will do our utmost to uphold a culture that encourages employees to be proactive at work, heighten their competitiveness while supporting a healthy work-life balance that allows them a greater sense of control and ownership over their lives.

Moving forward, we will continue our efforts at promoting the growth of both the company and our employees and lock in future competitiveness. By thoroughly communicating with our stakeholders and fulfilling our corporate social responsibility, we will offer the best possible service to customers and become a trustworthy partner creating ever-greater value.

Thank you.

Chairman

Koo Cha-Yub
President’s Message

LS C&S will continue its efforts to promote communication and cooperation with its stakeholders and fulfill its social responsibility, contributing to improving quality of life and building a brighter future.

Distinguished stakeholders,

The 2018-2019 LS C&S Sustainability Report is published to transparently share with our stakeholders the achievements and future directions of our economic, social, and environmental activities in support of sustainable management.

Over the last year, the global economy experienced turbulence stemming from the trade war between the US and China and sluggish economic growth in the EU. Despite unfavorable global market conditions, we dedicated ourselves to expanding sales and winning additional contracts by identifying emerging markets and securing new customers. As a result, total order volume for 2018 reached a record high for the second consecutive year and sales broke the USD 3,577 million level for the first time in five years.

Meanwhile, in order to support a corporate culture that promotes work-life balance, a wide range of programs have been operated to help our employees gain both enhanced productivity at work and improved quality of life.

Over the course of this coming year, we will continue our efforts to meet the expectations of our customers, employees, and local communities by achieving robust business performance while promoting sustainability through activities for ethical and quality management and shared growth.

In particular, we will focus on quality management to attract additional customers since product quality is the key in the manufacturing industry to win the trust of customers. To ensure quality, we will do our utmost to heighten our technological capacity and reach our goal of ‘zero failures’ for product quality and customer requirements.

Our focus will also be on nurturing talent. Long-term company policies will be formulated to strengthen employee competitiveness and solidify the fundamentals that determine the survival of a company.

In order to fulfill our corporate social responsibility, we are conducting a wide range of local social contribution activities in the areas around our subsidiaries. To achieve shared growth, we are also providing financial and training support to our suppliers.

LS C&S will sustain its efforts to promote communication and cooperation with its stakeholders and fulfill its social responsibility, contributing to improving quality of life and building a brighter future.

We look forward to your support and appreciate your interest in our efforts.

Thank you.

President Myung Roe-Hyun
About LS C&S and its Business

Company profile

LS C&S, a global leader in industrial electricity, electronics and materials, is providing state-of-the-art products, including HV/EHV, superconducting, submarine and telecommunication cables to energy agencies and telecommunication companies. In addition, our focus is also on identifying new growth engines such as HVDC cables and components of electric vehicles to become a leading company in the global energy and IT industries.

Company information

* as of Dec. 31, 2018

<table>
<thead>
<tr>
<th>Capital</th>
<th>Sales</th>
<th>Employees</th>
<th>Subsidiaries</th>
<th>Corporate tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>USD 992 million</td>
<td>USD 3,756 million</td>
<td>4,497</td>
<td>21</td>
<td>USD 24 million</td>
</tr>
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History

- Established as the Korea Cable Industry
- Opened an Anyang plant
- Opened a Gumi plant
- Opened an Anyang R&D center
- Opened a FTTH/VOCU tower at a Gumi plant

Qualitative growth 2004-2018

- Changed the company name to LS C&S / Opened the LS Industrial Complex in Naju, China
- Opened LSVC, the 2nd plant in Vietnam
- Launched LS Holdings Co. Ltd
- Opened the 1st submarine cable plant in Korea (Donghae) / Acquired HongQ Electricity of China (current LSHQ-HongQ Cable & System)
- Declared the new company vision LS C&S Way / Founded LS C&S Asia (a holding company of Vietnam subsidiaries)
- LS C&S Asia listed on KOSDAQ
- Acquired the power business of SPIEK (establishment of LSCUS)
- LS C&S Asia started the construction of a cable plant in Myanmar
- Established LS EV Poland, and launched LS-EV Korea incorporated GADON CABLE as a subsidiary / Established G&P (merger between GCI and Pountek)
- Built a subsidiary in Poland for optical cable production / Established LS Axios

Financial results

Consolidated sales for 2018 was recorded at USD 3,756 million, a year-on-year increase of USD 582 million, surpassing the USD 3,174 million mark for the first time in five years. Operating profit rose to USD 99 million similar to that of the previous year and earnings before tax increased by USD 26 million to USD 108 million since total order volume for 2018 reached a record high through proactive investment and strategies tailored to customer needs. As of the end of 2018, the total amount of assets stood at USD 3,329 million, a rise of USD 703 million on year on year mainly due to increased tangible assets and trade receivable from expanded sales. Our financial structure has improved from the previous year with USD 2,337 million for debt, USD 992 million for equity, and 235% for debt-equity ratio.

Sales

| Separate | Consolidated (unit: USD million) |
|----------|---------------------------------
| 2016     | 2,257                           |
|          | 2,727                           |
| 2017     | 2,709                           |
|          | 3,174                           |
| 2018     | 2,060                           |
|          | 3,756                           |

Operating profit

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<thead>
<tr>
<th>Separate</th>
<th>Consolidated (unit: USD million)</th>
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<tr>
<td>2016</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>75</td>
</tr>
<tr>
<td>2017</td>
<td>90</td>
</tr>
<tr>
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<tr>
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<td>94</td>
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<td></td>
<td>99</td>
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Financial structure

<table>
<thead>
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<tr>
<td>2016</td>
<td>1,966</td>
</tr>
<tr>
<td></td>
<td>2,433</td>
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<tr>
<td>2017</td>
<td>2,236</td>
</tr>
<tr>
<td></td>
<td>2,671</td>
</tr>
<tr>
<td>2018</td>
<td>2,385</td>
</tr>
<tr>
<td></td>
<td>3,329</td>
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Debt-equity ratio

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<tr>
<th>Separate</th>
<th>Consolidated (unit %)</th>
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<tr>
<td>2016</td>
<td>275%</td>
</tr>
<tr>
<td></td>
<td>261%</td>
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<tr>
<td>2017</td>
<td>214%</td>
</tr>
<tr>
<td></td>
<td>235%</td>
</tr>
<tr>
<td>2018</td>
<td>156%</td>
</tr>
<tr>
<td></td>
<td>220%</td>
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Our Products

Energy

Overhead transmission line
This is mainly installed in steel towers for long-distance power transmission. OPGW (optical ground wire) is over- head ground wire to which telecommunications features have been added.

HV/EHV cable
This efficiently transmits large-capacity power with a voltage of 154 kV or higher.

Busduct system
This has the advantage of distributing power efficiently in confined spaces with a high demand for electricity, such as factories or apartment buildings.

Submarine cable system
This can be installed along the ocean floor to allow electric power transmission and communications between islands or between the mainland and an island.

Power distribution cable
This supplies power at 0.6/1 kV to 22.9 kV to residential and commercial buildings and industrial distribution circuits.

Superconducting cable system
This transmits and distributes large quantities of energy with little loss since there is minimal electrical resistance.

HVDC cable
This supports long-distance transmission with reduced power loss by converting AC to DC.

Submarine cable system
This can be installed along the ocean floor to allow electric power transmission and communications between islands or between the mainland and an island.

Industries

Industrial cable
These are used to supply signals and power to electric and electronic devices and industrial robots.

Automotive cables and harnesses and modules for electric vehicles
These are used to provide power to all devices required in a vehicle.
*Products of LS EV Korea (LSEVK)

Military cable
This is used for signaling and powering military vehicles, including tanks, aircraft, and naval vessels.

Rolling stock cable
This is used to power and control various rail vehicles, such as subway cars and high-speed electric trains (KTX).

Wind power cable
This is used to transmit to transformers the electricity generated from onshore and offshore wind power generators.

Marine and offshore cables
These are used to power and control ships (such as an oil tanker or container ship) and oil-drilling facilities, and also for telecommunications on such ships and facilities.

Telecommunications

FTTA (Fiber to the Antenna)
This is installed in wireless base stations to efficiently send electric power and optical signals to an antenna.

Optical fiber /Optical cable
This delivers large-capacity data rapidly and accurately by sending communication signals using light.

LAN (Local Area Network)
This allows high-speed telecommunications networking within limited geographic areas.

Structured cabling system
This supports the planned installation and operation of cables used for communications equipment and personal computers within buildings.

Coaxial cable
This stably transmits a high frequency signal from base stations to antennas using broadband.

Materials

Copper wire
This is high-purity copper wire made exclusively with electrolytic copper to minimize the loss of electricity.

Aluminum
This is made of lightweight, high-strength aluminum with elevated conductivity.

Magnet wire
This is used to convert back and forth between electric and mechanical energy in electrical or electronic devices.

Other products

FTTH (Fiber to the Home)
This provides high-speed internet service to homes using optical fiber cables.
Company Vision and Philosophy

LS C&S is striving to fulfill its responsibility to meet the unique needs of its customers as a cable system manufacturer and provider while offering the best possible value to stakeholders as a trusted partner making life more convenient and prosperous. To this end, we will continue our efforts to devise innovative business models and implement management strategies based on willing winning the respect of our stakeholders.

LS C&S Way

Our LS C&S Way ideal provides a future direction and value system for LS C&S. It consists of the company’s vision and core values that inspire the principles on which employees act.

Vision

Our products, which bring to mind concepts such as connection, line, and light, are found in every aspect of people’s lives, and they connect the world through power and telecommunication technologies. In our vision of Enable the Cabled World, we dream of a world where everyone has access to energy and information without any constraints of time and space. To realize this dream, we aim to become a leading global company as a total cable solution provider.

Core Values

C.O.R.E

Customer First

One LS C&S

Rule & Responsibility

Expertise

Maximizing synergies

• Understanding changing customer needs

• Providing best values

• Implementing different strategies in competition

Ethical management

• A sense of ownership

• Sticking to the basics at work

• Sharing failure cases and working on improvement

Strengthening basic competence at work

• Concentrating on work to produce results

• Broad and in-depth technologies and knowledge

• Pursuing innovation

Corporation - LSpartnership

LS Group affiliates are joining forces to become globally competitive by sharing and practicing the corporate philosophy of Greater Value Together. Despite increasing uncertainties and sluggish growth in the global economy, we will continue our efforts to become a global leader in the industry based on LSpartnership.

LSpartnership means employees are armed with a sense of ownership achieve superior performance through mutual respect, care, and trust. They cooperate based on open-mindedness and grow together with our stakeholders. LSpartnership was created with the participation of all members of LS Group and provides the philosophy upon which employees should act. It serves as a driving force that will bring about a new future. By practicing LSpartnership, we will create greater value with our stakeholders at home and abroad.

Management policy in 2019

Top priorities for 2019 will include operating businesses for profitable growth, promoting quality, and strengthening the capacities of our employees as our efforts at encouraging all employees to contribute to increasing sales and operating profits, strengthening our business portfolio, and promoting an organizational culture of work-life balance produce results in the second phase of our business management.

Direction

Strengthening business capacity based on the results of innovating our organizational culture in the first and second phases of business management

Proﬁ t-oriented management

• Securing competitiveness by improving business structures and product portfolios

• Promoting cooperation with overseas subsidiaries (production/sales)

• Optimizing our resources (human resources, inventory, receivables, tangible assets)

Achieving proﬁ table growth through competitive products and sales

Quality management

• Enhancing value from customers and addressing quality risks with the goal of making Q-costs to zero

• Preventing the re-occurrence of the same or similar failure in a product or in service quality

Maintaining a performance-oriented corporate culture by securing product quality and streamlining internal processes

Nurturing talent

• Encouraging our employees to act on the core principles of the LS C&S Way at work

• Supporting our employees to become globally competitive and achieve their goals at work

Upgrading the organizational culture and the individual performance of employees based on the LS C&S Way

Greater Value Together!

Global Perspective

LS employees are trusted partners.

Care

Integrity

Trust

LS employees respect diversity and work together with partners to produce best results.

LS employees are ethical and work with diligence by complying with principles, standards, and procedures.

LS employees provide equal opportunities to partners to help them reach their full potential and achieve growth and success.

LS employees achieve greater results through cooperation.

LS employees give trust to stakeholders based on the expertise in and responsibility for what they do.
Key Achievements

We would like to share our achievements in 2018 in product development, new contracts, and investment with LS C&S stakeholders. Based on the results, we will continue our efforts to become a top-tier player in the industry as a total cable solution provider.

01 Facility investment in Europe
We invested USD 12.521 thousand to build an optical cable manufacturing facility at our subsidiary in Poland in order to compress the delivery process and prepare for economic regionalization in Europe. Through this new facility, we aim to increase our European market share that has hovered in the 1-2% range to 10%.

April 2018

02 Winning an MV cable supply contract from Singapore’s Energy Market Authority (EMA)
We signed a 67 million-dollar (72 billion won) two-year exclusive contract with Singapore’s EMA to supply 22kV cables. This achievement was possible due to our price competitiveness and the good reputation we have built through previous contracts. This contract is meaningful since it indicates that our technology is recognized in the Singapore market for its high quality standards.

April 2018

03 Achieving the world’s first HVDC cable certification
We recently became the first producer in the world to acquire HVDC cable certification. A pre-qualification (PQ) test for 500kV DC cables was conducted at the Donghae plant over six months with observers from the Korea Electro-technology Research Institute (KERI) in attendance. The technology applied to the product was awarded official certification. This technology is held by only five companies worldwide.

May 2018

04 Signing a preferred supplier contract with Western Power
We recently concluded a five-year contract with Western Power. As a preferred supplier, we will provide 60% of Western Power’s low- and medium-voltage cable orders for five years. This is the largest achievement in the two years since the establishment of our sales subsidiary in 2016. Seizing this opportunity, we will step up our efforts to increase our market share in Australia.

June 2018

05 HV/EHV cable supply for Hornsea Project Two
Our tube products were placed on the Quality Products List of the US Defense Logistics Agency. Prior to registration on the QPL, the tubes underwent rigorous testing in thirty categories over the course of two years, including for tensile strength and thermal shock. Leading global chemical companies such as 3M are also on the list in the same product category. As only products on the QPL can be used for tanks, armored vehicles, and fighters starting from the second half of 2019, the sales of our tube product are expected to rise.

September 2018

06 LS C&S tube products listed on the QPL by the US Defense Logistics Agency
We signed a USD 35.775 thousand contract with Ørsted, a Denmark-based power company. We will be supplying HV/EHV cables for Hornsea Project Two, helping build the world’s largest offshore wind farms in the seas off of the UK.

September 2018

07 Winning a bid to supply HV/EHV cables to the EWA of Bahrain
We signed a 125.55 million dollar (142.4 billion won) turnkey contract with the Electricity & Water Authority of Bahrain. LS C&S will be responsible for the supply of 400kV HV/EHV cables as well as electric and engineering work on a project to construct new electrical grids across the nation.

September 2018

We would like to share our achievements in 2018 in product development, new contracts, and investment with LS C&S stakeholders. Based on the results, we will continue our efforts to become a top-tier player in the industry as a total cable solution provider.
Achievements in the LS C&S Way

Since the declaration of LS C&S Way in 2015, a wide range of activities have been conducted to encourage employees to understand the meaning and importance of its core values and act on them. We will concentrate our efforts to reduce the inefficiency at work so that employees can take the initiative and concentrate on their works to produce results.

Concentrating on working during office hours and leaving the office on time

To establish a work environment in which employees can concentrate on their work during office hours and leave the office on time, announcements with background music have been made on an in-house broadcast station at the start and end of office hours since March 2018. This has helped minimize confusion from the PC OFF (automatic powering down of office computers) system implemented in July, and employees have begun feeling comfortable with leaving work on time. Meanwhile, a weekly in-house broadcast program called Happy Wednesday Evening is being operated to deliver thank-you and encouragement messages from employees and their family members.

Work Diet workshop for teams

To reflect the resolute commitment of management to a corporate culture promoting work-life balance and to respond to changes stemming from a transition in generations within the organization, it is essential to eliminate inefficiencies at work. As a response, Work Diet workshops were held for diverse work teams. From May to July, a total of 82 teams individually conducted a two-day workshop at the LS Group training institute or at their workplaces. At these workshops, a total of 240 inefficiencies were identified at the head-office level and 640 at the enterprise level. In addition, 1,000 requests or expectations for cooperation among teams were raised. We have categorized these into eight areas and have begun work with the pertinent teams on improvement measures.

Healthy and vital organization

To help employees concentrate on their work by relieving stress at work and at home, we have instituted counseling offices across all of our domestic worksites. Employees can receive support for job stress, interpersonal relationships, marital concerns, and childcare issues. To help employees better understand their state of mind and promote mutual understanding, we are operating programs including blood pressure tests, stress diagnosis, psychological examination using drawings, dreamcatcher making, ‘chemistry between you and me’ couples counseling, diffuser making using natural aroma oils, and yoga lessons. For employees with examination or test results that require attention, the offices help them learn to deal with stress. In addition, smoking cessation programs are being run at worksites to raise awareness of employee health. Starting from 2016, sandwich days falling between holidays are designated as company holidays. We are also encouraging people to use all of their assigned annual vacation days so that they can fully refresh themselves and restore their energy. Meanwhile, a system that powers down workplace computers outside of office hours was implemented to encourage employees to concentrate on their work during business hours and leave the office on time.

Efficiency at work

We have conducted improvement activities for work efficiency. Rather than simply reducing working hours, these activities are designed to help employees concentrate on their work and maximize their performance by eliminating inefficiencies at work.

For the success of these activities, the role of team leaders is critical. In response, each team made a list of consensus under the title of “Leaders, Promise Us the Following” and put it on the wall of the offices to encourage team leaders keep their promise. In addition, activities to adjust the frequency and duration of meetings were conducted at the business Group level.

Corporate culture promotion activities and organizational diagnosis for subsidiaries

As the role of our subsidiaries has become increasingly important in our business, activities are conducted to help them understand and promote the vision and core values of LS C&S. Core Communicators representing each domestic subsidiary are selected and they participate in our C&C meeting to share our corporate culture while making and implementing their own annual plan.

Meanwhile, a survey aimed for diagnosing their organizational competence and vitality was conducted for three domestic (G&P, LS Buildin and LS EV-Korea) and five overseas (LS-VINA, LSCV, LSCI, LSHQ and LSCW) subsidiaries. Based on the result, improvement activities will be implemented at the subsidiary level.

Other programs for organizational vitality

Following the previous year’s activities, “Core-up” activities were conducted and led by the Core Communicators of each Business Group according to its particular needs. At the team level, a variety of activities, including birthday parties, ‘lunch together’, ‘let’s compliment each other’, and team-based learning were conducted. LS Homeparty programs were also provided at the company level with the aim of strengthening employee loyalty, such as Family Happiness Camp, Dream Camp (for children), Go Camp (for adolescents), and Camp with Daddies. At these activities, LS C&S employees and their families joined in and gained a chance to come to further understand each other and strengthen their family bonds.

In addition, overseas training for organizational vitality has provided for model employees since 2014. In 2018, a total of 81 employees participated in international exhibitions and conferences held in 16 countries in Europe, North and South America, and Asia. Participants reported that the training program gave them an opportunity to observe global trends and refresh themselves through new cultural experiences and hoped this program will be extended to benefit more employees.
Corporate Governance
Promoting management efficiency and transparency

Auditor
We have one auditor in compliance with the related laws and articles of association in order to secure management transparency and legality. To inspect and verify internal accounting and affairs, the auditor investigates overall financial status or requests accounting manager or subsidiaries to immediately submit their sales reports as needed. In the general meeting of shareholders, auditor is selected and appointed among those who have no reason for disqualification under the commercial law.

Auditor profile: the profile details and background information of the auditor are specified in the published sales and business reports.

Enhancing shareholder value
Shareholder composition (As of the end of Dec. 31, 2018)

<table>
<thead>
<tr>
<th>Shareholder composition</th>
<th>LS</th>
<th>Minority shareholders</th>
<th>Affiliated persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>LS</td>
<td>10.4</td>
<td>0.4</td>
<td>89.19</td>
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</table>

Dividends
Dividends are determined from within available profit by considering the management environment, investment needs for the sustained growth of the company, and shareholder interests. They are paid by the resolution of the board of directors and the general meeting of shareholders. In 2018, USD 8,407 thousand worth of cash dividends were paid, and the company’s cash payout ratio based on consolidated financial statements stood at 11%.

BOD composition
Directors are appointed at the general meeting of shareholders. Candidates are selected by the board based on their experience and expertise in industrial environments, finance, and law. As of the end of 2018, the BOD features four internal directors. Chairman Koo Cha-Yub was appointed chair considering his crisis responsiveness skills, expertise, and responsibility. President Myung Roe-Hyun is serving as a director.

Integrated Risk Management
As an ever-wider variety of business is being conducted to provide products and services that meet different customer needs and the global market rapidly evolves, unpredictable risks impacting business performance are on the rise. In response, we define key risks and pertinent management procedures. By proactively managing risks, we aim to maintain management stability and soundness, promote corporate value, and create a friendly relationship with stakeholders, ensuring our foundation for sustainable growth.

Risk management system
Risk Management Committee
The company-wide Risk Management Committee is the highest decision-making body that reviews the risk status and makes a decision on response measures. The committee is led by the President as the chairperson and the head of the Strategy and Planning Division as the Chief Risk Officer (CRO). Meanwhile, project bidding cases are deliberated on in the Bidding Review Committee, the Copper Futures Committee for copper management, and the Working-level Investment Review Meeting and Investment Risk Review Committee for major investments.

Risk Management Committee meetings
Meetings are held to review the risk status in detail, evaluate potential losses and establish response measures on a quarterly basis (January, April, July, November). If necessary, special committee meetings are convened for which the monitoring team is required to immediately provide the general management team with the report on the risk and its impact on the business.

Risk management organizations
Our risk management activities are conducted by three groups: an execution team, monitoring team, and general management team. The execution team implements action plans and takes response measures when risks occur. The monitoring team makes a risk prevention plan at the Division or Group level and examines risks for prevention. When abnormal signals are detected, the team reports them to the general management team. The general management team establishes a risk management plan at the enterprise level, oversees its status, and operates the company-wide risk management committee.
Integrated Risk Management

Risk management activities by type

**Definition**
For LS C&S, risk refers to events that could degrade corporate value and uncertainties that will or could impact our achievement of business targets.

**Disaster risk**
To prevent disasters and occupational accidents and minimize the damage when they do occur, we are conducting management activities including response policy formulation, inspection and diagnosis, and implementation of improvement measures. For accident prevention at plants and construction sites, safety inspections are carried out on a regular basis, and at the same time, we have established a management system and are maintaining a dedicated organization to prevent and respond to emergency situations to prevent unexpected accidents such as earthquakes by negating our impacts efforts to provide value to employees and customers. Even when production is disrupted by a disaster, we are still able to supply products from our overseas subsidiaries through cross-selling. In order to ensure that overseas subsidiaries provide comparable products, we operate an integrated Control Tower to support and manage the R&D, quality, and production technologies at our subsidiaries in a comprehensive manner.

**Operational risk**
In order to maintain the stability of the IT system, daily data backup for the entire system is conducted and the backup systems and data are stored in a vault to prepare for disasters or accidents. Measures in place to prevent the leakage of corporate and personal information include document encryption, authentication of external storage media, an approval process for exporting PCs, encryption systems, and firewalls. In regards to production, regular equipment inspections are being conducted and a response manual has been established for any case of the disruption of equipment operation. I System for personal information and corporate security I

**Financial risk**
We strictly prohibit currency and derivatives trading for speculative purposes beyond essential risk management. Since price fluctuations in raw materials heavily affect our profit structure, such risks are mitigated through futures trading. In particular, the Copper Futures Committee regularly reviews related risks by sharing information, including copper commodity and future related issues, operational performance, and market conditions by period. In addition, to minimize risks stemming from fluctuations in foreign exchange rates, we implement a 100 percent foreign currency hedge policy when bidding on international projects. Our debt-to-capital ratio is reviewed on a monthly basis and improvement measures are taken as necessary to maintain capital structure soundness.

**Other risks**
Strategy risks are the chances that a company’s strategy will result in losses due to changes in competitive environment or strategic partners or to a damaged reputation. Regulation risks could occur by violating laws and regulations related to sales, environment, safety and health. We are proactively managing such risks through legal compliance activities since incoherence could have a serious impact on our business, such as business suspension and closing orders.

**Refining risk management criteria**
In March 2018, under a policy to refine risk management measures, specific guidelines and examples were provided to help identify risks. Classifications such as disaster, operational, and financial risks can feature room for subjective interpretation. To minimize subjectivity, we devised six new categories: collusion/litigation, debt, quality, withdrawal of business, subsidiaries, and miscellaneous. In addition, examples of cases identified as risks were provided to improve the efficiency of risk management and increase accuracy in profit and loss estimations.

**Risk management process**

**Risk Identification**
At this phase, potential cases that may affect the company are identified and then defined as opportunities or risks. Responsible teams host meetings to identify risks of each business process from quotation to contract, production and delivery.

**Risk Assessment**
This is a phase of determining how much impact identified potential risks will have on our efforts to achieve goals. Qualitative or quantitative methods are used in assessing risks. In the qualitative evaluation method, the likelihood of risk occurrence is indicated as high, moderate, and low while the results using a quantitative method is indicated in the form of frequency, percentage, and numerical value (amount).

**Risk Response**
Risk response is a phase of establishing and implementing appropriate responses to eliminate or reduce identified risks. Risk responses are largely classified into three steps: setting a goal and strategy, devising measures and management index; and implementing them.

**Risk Monitoring**
Risk monitoring is a phase of conducting a series of activities from review to supervision, observation, and management in order to identify abnormal signs for the defined risks. Monitoring and general management teams check the status of risk cases and response plans and share the results.

**Risk report and closing**
Risks are reported to management through the Risk Management Committee for their closing. Based on the three criteria, importance, urgency, new occurrence, decisions are made on whether pertinent risks are reported to the committee. Once the risk case is closed, results and completion data are documented.
Opportunities in the Cable Industry

Cable business environment

Increasing European investment in telecommunications infrastructure

Led by France and Italy, investment in 5G network infrastructure in Europe has recently been growing. Telecommunications facilities in many European countries are outdated, and the speed of wireless internet is slower than in other regions. High-speed telecommunications networks with 5G wireless are essential to prepare for the Fourth Industrial Revolution. In response, the French government has announced a plan to invest in high-speed networks prior to the 2024 Olympics in Paris. Investment is actively proceeding under this plan, with a goal of securing 8.5 million subscribers nationwide by 2022. The Italian government has also disclosed a plan to expand telecommunications infrastructure nationwide, which should boost the European optical cable market.

Growing global demand for electricity

Growth in the global cable market is expected to be driven by the power cables needed to meet the forecast rising demand for new and renewable energy and related equipment in the Middle East and Asia. Despite sluggish economic growth in China and anxieties over financial markets in emerging nations, demand for power cables is expected to steadily increase with the upgrade of power transmission facilities in the ASEAN countries and the construction of offshore wind farms in the US, UK, and Northern European countries. According to research by our global support team, global power cable demand is projected to reach an annual growth rate of 3%, with ASEAN countries expected to record the highest rate.

In 2018, LS C&S achieved a record volume of orders received based on businesses restructuring focusing on key products, including HV/ EHV and submarine cables and global market strategies tailored to customer needs. In June 2018, we established a joint-venture subsidiary with the Artha Graha Group in Indonesia, allowing us to expand our presence in the largest ASEAN cable market. Meanwhile, in November 2018, our power cable plant in Myanmar started operations manufacturing overhead transmission lines and cables for buildings. With our technological prowess, on-hand facilities, and production capacity, we intend to become a leading company in the ASEAN market.

In 2018, LS C&S established a sales subsidiary in France in April 2017. A manu-
ufacturing subsidiary for optical cables was added to our Polish operations in November, which should boost the European optical cable market. France has disclosed a plan to expand telecommunications infrastructure proceeding under this plan, with a goal of securing 8.5 million subscribers nationwide by 2022. The Italian government has also disclosed a plan to expand telecommunications infrastructure nationwide, which should boost the European optical cable market.

I Wireless internet speed (Paris vs. Seoul)

Source: Korea Telecommunications Operators Association (KTDA)

I Cable demand forecast

<table>
<thead>
<tr>
<th>Country</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>1,273</td>
<td>1,246</td>
<td>1,277</td>
<td>1,350</td>
</tr>
<tr>
<td>GCC*1</td>
<td>775</td>
<td>757</td>
<td>780</td>
<td>780</td>
</tr>
<tr>
<td>China</td>
<td>2,571</td>
<td>2,643</td>
<td>2,740</td>
<td>2,888</td>
</tr>
<tr>
<td>Global demand</td>
<td>6,811</td>
<td>7,042</td>
<td>7,398</td>
<td>7,739</td>
</tr>
</tbody>
</table>

*Source: Korea Telecommunications Operators Association (KTDA)

Mega trends

Increasing demand for new and renewable energy

With global environmental issues such as greenhouse gas emissions and pollution becoming increasing pressing, a variety of eco-friendly energy policies are being formulated by the governments of many countries. Germany has accelerated its nuclear phase-out efforts since the Fukushima Daiichi nuclear disaster in 2011. In France, former president Hollande made a commitment to cutting the share of nuclear power by 50% and increasing the share of new and renewable energy. In addition as countries such as the UK, China, and Japan leading the trend toward green energy by implementing energy transition policies, the supply volume of new and renewable energy, in particular solar and wind power, is growing significantly.

We feel a great responsibility to address environmental issues and participate in a wide range of related activities, including GHG emissions reduction and eco-friendly cable development, as part of the response to climate change. In particular, offshore wind power generation has caught our eye due to the relative ease of securing power generation sites and their capacity for scale. LS C&S will supply 66 kV submarine cables for installation at offshore wind farms in Yunlin County on the west coast of Taiwan by 2020. Careful attention is being paid to growing business opportunities as Japan, China, and the US work on the revision of legal structures and improvement of related systems along with increasing investment in offshore power generation.

I Forecast of wind and solar power generation

<table>
<thead>
<tr>
<th>Country</th>
<th>2016</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>333</td>
<td>47</td>
<td>147</td>
<td>253</td>
</tr>
<tr>
<td>EU</td>
<td>520</td>
<td>107</td>
<td>197</td>
<td>376</td>
</tr>
<tr>
<td>China</td>
<td>242</td>
<td>68</td>
<td>436</td>
<td>615</td>
</tr>
<tr>
<td>Japan</td>
<td>6</td>
<td>46</td>
<td>14</td>
<td>205</td>
</tr>
<tr>
<td>India</td>
<td>153</td>
<td>7</td>
<td>183</td>
<td>200</td>
</tr>
<tr>
<td>Others</td>
<td>135</td>
<td>30</td>
<td>212</td>
<td>213</td>
</tr>
<tr>
<td>Total(TWh)</td>
<td>781</td>
<td>302</td>
<td>2,192</td>
<td>2,837</td>
</tr>
</tbody>
</table>

*Source: IEA (International Energy Agency)
Sustainable Management System

Sustainable management

Strategy

In 2010, we established a mid-to-long-term strategy and roadmap for sustainable management, focusing on 7 key topics, including customer satisfaction, green management, social contribution, employee wellbeing, shared growth, compliance and fair competition, and ethical management. Next, a system to respond to ISO 26000 was implemented and roles and responsibilities were defined for seven working committees. In addition, the 2018 sustainable management activities of subsidiaries are included in this report. Starting from 2019, localized strategies to promote sustainability at the global level will be formulated for activities tailored to the needs of respective regions.

Roadmap for system implementation

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Foundation building (2010-2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establishing and implementing a system for CSR strategies and expanding governance</td>
<td></td>
</tr>
<tr>
<td>- Establishing an organizational foundation at the enterprise level</td>
<td></td>
</tr>
<tr>
<td>- Setting up a consultative body, and defining roles and responsibilities for missions/key tasks of seven working committees</td>
<td></td>
</tr>
<tr>
<td>- Implementing the system to respond to ISO 26000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 2</th>
<th>Internalization and promotion (2015-2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhancing CSR operation, management and monitoring capabilities and promoting strategies at the enterprise level</td>
<td></td>
</tr>
<tr>
<td>- Strengthening a plan-implementation-check process</td>
<td></td>
</tr>
<tr>
<td>- Promoting the strategies to domestic and overseas subsidiaries</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 3</th>
<th>Integration and Differentiation (2019)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementing global CSR strategies</td>
<td></td>
</tr>
<tr>
<td>- Integrating sustainability and management strategies</td>
<td></td>
</tr>
<tr>
<td>- Developing localized strategies at the global level</td>
<td></td>
</tr>
</tbody>
</table>

Organization

The Sustainable Management Secretariat is in overall charge of this effort, and its seven working committees are carrying out tasks aimed at increasing stakeholder value, such as discussion of CSR activities by working committees and response to CSR issues at home and abroad. In addition, one-to-one meetings between the Secretariat and the working committees are being held to discuss the challenges they are facing in conducting pertinent activities. Key issues and achievements are reported to the executive meeting, where decisions are made on implementation measures to effectively respond to stakeholder needs.

Direction

Establishing action plans for seven working committees in accordance with the enterprise-wide CSR roadmap

Planning

Implementing plans and sharing issues with the Secretariat (working committees);
Monitoring the progress and results of activities (Secretariat)

Sharing and monitoring

Establishing a system and developing evaluation indexes for effective performance management

Performance management system

Customers

We pay a close attention to win the trust of customers through quality management of our products and services and strive to provide unique value. In 2018, sales generated by customers amounted to USD 1,756 million.

Communication channels: Corporate disclosure system / Seminars for customers and meetings / Business reports

Shareholders and investors

We will do our utmost to improve profitability by securing sales competitiveness and enhance shareholder values by achieving robust business performance. Our management direction and business performance are disclosed through public announcement, general meetings of shareholders, business reports, and company website. In 2018, USD 11 million was distributed to shareholders in the form of dividends, and USD 45 million to investors in the form of interest.

Communication channels: Corporate IR activities / Business reports / BOD Meetings / General shareholders’ meetings / Corporate disclosure system

Employees

We strive to create an environment in which our 1,944 employees are given equal opportunities according to their abilities and contribute to our goal of becoming a global leading company. As part of these efforts, their performance evaluation and promotion are conducted in a fair manner, and a variety of online and offline training programs are provided to employees to strengthen their capacity. In 2018, USD 160 million was distributed to them for wages, employee benefits, and training. (non-consolidated)

Communication channels: Monthly morning assembly / Intranet / Cyber Reporting Channel / In-house training / Counseling office

Suppliers

Achieving shared growth is not an option but a must for laying a foundation for sustainability management. We will promote cooperation with our suppliers based on the perception that their competitiveness is a starting point to strengthen ours. In 2018, USD 1,986 million was paid to suppliers for raw materials, energy, water, and repair and other services (non-consolidated).

Communication channels: Supplier satisfaction survey / Open discussion meetings / Shared Growth Council

Local Communities

We provide educational support and talent donation and participate in sharing activities to promote the prosperity of local communities. A variety of activities are conducted in four domestic production sites in Anyang, Gumi, Indong, and Donghee, and overseas subsidiaries. In 2018, we donated USD 447 thousand to local communities.

Communication channels: Social contribution activities / Sharing activities by employees / Cooperation between industry and academia

Government

The government establishes laws and systems to ensure companies stably conduct business activities. We are making every effort to fulfill our responsibility by complying with laws and regulations in good faith. In 2018, we paid USD 12 million worth of taxes and utility bills.
Sustainable Management System

Activities and responsibilities to promote stakeholder value

Throughout the production value chain, we closely communicate with stakeholders and reflect their requirements in our business management activities. By considering raw material procurement from suppliers, pollutants generated during production, and the range of value that our products bring to customers, we are striving to lay a foundation for sustainable management for both our stakeholders and our businesses.
Materiality Assessment

2018-2019 Key topics

We conduct a materiality assessment on an annual basis to identify topics of greatest importance impacting our businesses and stakeholders at home and abroad. In 2018, a pool of topics was created utilizing our internal process, GRI Standards Index, ISO 26000, and Sustainable Development Goals. Assessment results are reflected in the next year’s sustainability plan and report. Our 2018-2019 activities related to ten topics identified as highest priority are included in this report.

Topic selection process

STEP 1 Identifying
Selecting 30 topics by analyzing the company’s policies and strategies, benchmarking other companies, and checking press reports

STEP 2 Prioritizing
Considering employee survey results, interviews of nine working committees, and press reports

STEP 3 Finalizing
Finalizing the topics selected as key issues through the material assessment results.

Shareholder interest

The topics have been identified based on company policy items, considering the agendas discussed at the company-wide meetings, pending issues, and the 2018 management policy and management opinions regarding the policy, as well as on interviews with nine working committees and sales and support teams. For company policy items, new technology and products, ethical management, and securing and nurturing talent were considered most important, while higher priority was given to topics including workplace safety, and respect for human rights and diversity in the interview.

Business impact

We analyzed and benchmarked the material assessment results of domestic and international companies in the areas of cables and energy. In addition, press report items were scored based on their frequency of being reported in Korea in major newspapers, broadcast news, and business magazines. The analysis indicates that other companies paid close attention to topics such as shared growth with suppliers and ethical management. Meanwhile the domestic press placed greater importance on achieving financial performance and developing new products.

A total of 10 out of the 30 topics identified through the material assessment have been selected as key issues. As we pursue our target of enhancing shareholder value as a top priority, topics related to business management, such as strengthening quality competitiveness and developing new technology and products were selected as key topics. In addition, ethical management and shared growth with suppliers were also selected as they are key to our business activities in order to achieve the goal of becoming a global leader in the cable industry.
Materiality Assessment

LS C&S and SDGs

The Sustainable Development Goals (SDGs) were set by the United Nations General Assembly in September 2015 as an effort to promote sustainability in the areas of economy, society, and the environment. SDGs consist of 17 goals and 169 targets. We have set targets for achieving SDGs considering our business environment and strategic goals and have conducted a wide range of related activities. We will actively join efforts to address global challenges and do our utmost to identify efforts that can contribute to meeting SDGs.

1. End poverty in all its forms everywhere
2. End hunger
3. Ensure healthy lives and promote well-being
4. Ensure quality education
5. Achieve gender equality
6. Ensure quality management of clean water and sanitation
7. Ensure access to affordable and clean energy
8. Promote sustainable economic growth, full employment and decent work
9. Build infrastructure
10. Reduce inequality
11. Make cities and human settlements sustainable
12. Ensure sustainable consumption and production patterns
13. Combat climate change
14. Conserve the oceans, seas and marine resources
15. Protect terrestrial ecosystems
16. Provide access to justice for all
17. Strengthen the means of implementation and revitalize the global partnership

**SDG targets**

- Promote sustained, inclusive and sustainable economic growth, full employment and decent work for all.
- Ensuring availability and sustainability of clean energy.
- Promoting sustainable production and consumption patterns.
- Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
- Make cities and human settlements inclusive, safe, resilient and sustainable.
- Ensure healthy lives and promote well-being for all at all ages.
- Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
- Achieve gender equality and empower all women and girls.
- End poverty in all its forms everywhere.
- Promote sustainable consumption and production patterns.
- Ensure access to affordable and clean energy.
- Promote sustained, inclusive and sustainable economic growth, full employment and decent work for all.
- Ensure healthy lives and promote well-being for all at all ages.
- Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
- Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.
- Ensure sustainable consumption and production patterns.
- Ensure sustainable consumption and production patterns.
- Promote peace, justice and strong institutions.
- Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
- Make cities and human settlements inclusive, safe, resilient and sustainable.
- Ensure healthy lives and promote well-being for all at all ages.
- Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
- Achieve gender equality and empower all women and girls.
- End poverty in all its forms everywhere.
- Promote sustainable consumption and production patterns.
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- Achieve gender equality and empower all women and girls.
- End poverty in all its forms everywhere.
- Promote sustainable consumption and production patterns.
Ten Key Topics on C.O.R.E

One LS C&S
- Promoting social contribution to achieve shared and sustainable growth
- Establishing a system to achieve shared growth in a sustainable manner
- Respecting the human rights and diversity of our employees and pursuing global standards

Customer First
- Strengthening competitiveness and securing future growth engines by developing new products and technologies
- Providing products and services that meet customer expectations and needs anytime, anywhere and under any circumstances

Rule & Responsibility
- Setting a vision for the compliance working committee: spearheading the efforts for promoting compliance management and reducing risks to zero
- Strengthening the foundation for ethical management and raising employee awareness
- Ensuring a healthy workplace and achieving the goal of zero accidents by strengthening safety activities

Expertise
- Supporting employees with a sense of ownership in their jobs to make a great achievement together
- Strengthening environmental management for zero accidents and pleasant work environment and contributing to a green society by reducing greenhouse gas emissions
Customer First

New Technology and Products

1. Strategic direction
   Strengthening competitiveness and securing future growth engines by developing new products and technologies

2. Key tasks
   Enhancing technological competitiveness
   Enhancing technologies in HV/EHV systems
   Strengthening the portfolio of submarine cable products
   Promoting customer value with customized and differentiated products
   Developing high value-added cable systems for telecommunication
   Securing product groups to respond to new and renewable energy

3. Performance in 2018
   - Passed long-term reliability tests for DC 500kV (MI) submarine cable
   - Developed inter-array cables for offshore wind power
   - Developed multiple-conductor cables and connection materials for 5G networks
   - Expanded the scope of FA (Factory Automation), railway and military related products
   - Secured onshore and offshore cables
   - Established a R&D project management system
   - Built a platform to formulate and develop cable compounds
   - Developed a cable information monitoring system utilizing IoT

4. Targets in 2019
   - Develop new products and technologies to enhance global competitiveness
   - Implement strategic tasks for digital transformation at the enterprise level
   - Secure future growth engines by developing new products and expanding businesses

VSC-type DC 320kV XLPE submarine cables

Product overview
With green technologies gaining ground as now mass impregnated, photovoltaic and wind power generation is on the rise. However, these types of electrical generation require long-distance transmission due to their geographical limitations. AC alternation current transmission presents advantages such as higher power conversion and lower initial investment. Unfortunately, it results in ever-greater power losses with transmission distance. On the other hand, higher initial investment is required for DC (direct current) transmission due to the need for inverters and converters, but less power loss is incurred. As a result, more people are turning to DC over AC, and DC cable systems are being actively developed worldwide.

In line with this trend, LS C&S initiated its VSC DC 320kV XLPE cable systems project in 2015. In February 2017, the company became the first company in Korea to acquire a KEMA Type Test certificate in accordance with CIGRE (International Council on Large Electric System) recommendations. In addition, a PQ test was conducted at the KEMA Laboratory facility in the Netherlands from August 2017 to November 2018. This product is expected to be applied to the building of cross-border power grids and super grids.

Product concept
What is a VSC-type DC XLPE cable?
VSC and LCC types are used for DC transmission, depending on the power conversion method and XLPE materials. Polarity reversal is required for LCC DC transmission, but not for VSC. Depending on the polarity reversal, different electrical properties are required for VSC and LCC DC XLPE and different approaches must be taken in material development. If AC XLPE insulating materials are used as is in DC cables, by-products from cross-linking agent decomposition can serve as carriers, causing space charge accumulation in an insulator. This leads to a higher electric field, reducing insulating properties.

In this regard, our VSC-type DC 320kV XLPE cables are formulated with a base resin, and agents and antioxidants are cross-linked by cross-linking PE molecules in long chains in order to withstand high temperatures. Moreover, existing AC XLPE additives and organic additives are optimized to minimize space charge, providing XLPE with enhanced electrical properties and excellent dielectric characteristics.

Product advantages
As the size of this product 10% of that of AC, less insulating materials are required. Its power transmission efficiency is also higher than with AC due to reduced power loss. In AC transmission, a minimum of three lines of cables are needed. Just a single line of cable can be used for DC transmission, meaning fewer cables and less space for transmission lines are required. As DC cables are unlimited in terms of transmission distance, hundreds of kilometers of land or dozens of kilometers of submarine power transmission cable can be installed, and construction costs are less compared to when using AC products. Furthermore, its electromagnetic waves are generated, reducing the potential for interference with telecommunications lines and devices.
**DC 500kV MI underground cable systems**

**Product overview**

DC transmission has become an important topic with the recent trend toward large-capacity and HV/EHV cables. It results in less power loss and shows advantages over AC for long distance transmission in cross-border grids and new and renewable energy. In particular, as HVDC (High Voltage Direct Current) allows the transmission of a large volume of electricity over great distances, it is considered a core technology for a planned Asian Super Grid potentially connecting power networks in the two Koreas, Mongolia, China, Japan, and Russia.

LS C&S became the first company in Korea to develop a DC 500kV MI underground cable system insulated with polypropylene laminated paper. In the first domestic HVDC project, this product has been implemented along the 35-km span between the North Dangjin Converter and the Goduk Converter to facilitate the supply of three GW of power. The reliability of the product has been assured through certification (Type Test) by the Korea Electrotechnology Research Institute. In addition, a PQ test over six months was completed in March 2018 to guarantee a 40-year product life.

**Product concept**

Depending on the insulating materials, HVDC cables are classified as MI cables (mass impregnated paper cables) or XLPE cables (cross-linked polyethylene). MI cables have traditionally been used for DC transmission since long drum-length cables can be manufactured and they show stable insulating performance. Manufacturing MI cables requires a high level of process technology, including in winding and impregnation. In particular, the winding process must be conducted manually and is heavily dependent on the proficiency of the workers involved.

The kraft paper previously used in our polypropylene-laminated-paper MI cables has been replaced with polypropylene-laminated paper with a triple structure of kraft paper-polypropylene film-kraft paper in order to increase transmission capacity and better withstand voltage.

**Product advantages**

This product can be used at a higher maximum temperature (90℃) than kraft cables (55℃) and possesses a higher power transmission capacity. To minimize the environmental impact, the size of the electric power conduit pipes has been minimized.

**66kV inter-array cables**

**Product overview**

Recently, new and renewable energy has been increasingly emphasized as global attention has turned to environmental policy. In this regard, offshore wind power has been taking center stage due to the relative ease of securing such power generation sites and their capacity for scale. As part of its phase-out of nuclear technologies, the government of Taiwan has been investing heavily in new and renewable energy, including plans to build 5,480MW of offshore wind farms by 2025.

For this project, LS C&S will supply 170 kilometers of 66kV submarine cables for installation at offshore wind farms in Yunlin County on the west coast of Taiwan. In the past, 33kV cables have commonly been used for wind power, but the application of 66kV cables is on the rise with the growth of large-capacity power generation. As LS C&S becomes the first in Asia to provide 66kV inter-array cables, it is expected to gain an advantage in the next-generation wind power market.

**Product concept**

Offshore wind power cables are used with fixed platforms in water of less than 50 meters and with floating platforms in depths exceeding 50 meters. Since fixed-type wind farms are generally 600MW or higher, 66kV cables are an appropriate response to this increased capacity. Floating-type wind farms are expected to be validated by 2021 through a pilot project being conducted. In addition, dynamic properties are required of cables for connecting floating bodies and they must be carefully designed and tested. Our products supplied to the offshore wind farm project in Taiwan are intended for fixed-type platforms and have increased voltage.

**Product advantages**

As the scale of wind farms has grown, the capacity of inter-array cables has increased from 33kV to 66kV. The efforts at developing 66kV cables have been mainly undertaken by European companies. Our product allows the stable operation of cables: compounds that inhibit water treeing are used so that the insulative properties remain robust even when seawater penetrates the surface of an insulated cable core.
High-performance HV/EHV cables

**Product overview**
As transmission capacity grows in an environment of demand for cable systems with a compact, cost-saving structure, we must actively respond with differentiated strategies. Improved electrical properties in materials and advanced process technology are allowing us to develop HV/EHV underground cables able to withstand a high level of electrical stress.

Our high-performance cables are designed to maintain optimal insulation properties at line voltage. Any void or foreign substances that could cause serious defects in insulators are minimized. These cables have been proven to function stably at operating temperatures. State-of-the-art cross-linking technology and materials that do not cause protusions in the semiconductor layers are used to keep residual insulator stress to a minimum level. In particular, insulators have become thinner and now allow our product to withstand a high level of electrical stress. At the same time, fewer materials can be used in cable manufacturing to improve environmental friendliness.

**Product concept**
In our product, insulators have become thinner compared to previous HV/EHV cables through the application of specially-prepared materials and advanced manufacturing technology. For example, our 220kV HV/EHV underground cables have insulators 25% thinner than others of the same degree of insulation. This was mainly made possible through established statistical analysis theory and validation methods that allow us to predict and confirm the reliability and service life of the product.

Above all, this product is the outcome of our efforts to meet market demands for reducing the volume required for insulation.

**Product advantages**
- Thinner insulators create a more compact cable structure that allows an increase in power transmission due to reduced transmission loss. In addition, the smaller external diameter reduces product weight, allowing long drum-lengths cables, and ultimately leads to drastic cuts in construction costs and durations.

Wireless and remote PD monitoring systems

**Product overview**
There has been growing demand for systems to monitor power transmission lines and ensure stable operation. In this regard, efforts are being made to apply PD (partial discharge) monitoring systems on-site so that operators can plan cable replacement by observing PD signals before failures occur. However, in order to implement such systems, additional optical communications cables need to be installed along the power transmission lines and operators must independently conduct detailed analyses on the signals. Moreover, they cannot currently obtain and store the signal data.

To resolve these difficulties, LS C&S has developed wireless and remote PD monitoring systems and provides services ranging from installation to monitoring. Our experts remotely analyze and report any abnormal signals, and the data can be accumulated to produce more accurate analyses for the next diagnosis.

**Product concept**
Its signal detection device is powered by photovoltaic or energy harvesting modules and the data is transmitted to a cloud server using 4G networks. Our PD experts analyze the data stored in the cloud server and provide customers with analysis results and device operation status.

**Product advantages**
- Since this product is wireless, there is no need to install telecommunications and power cables. High-maintenance servers do not need to be installed on-site and can be carefully managed by LS C&S. As our experts with pertinent skills and experience conduct data analyses, customers can be provided detailed and accurate monitoring results.
Multiple Fiber Cables

Product overview

5G networks, the telecommunications infrastructure to support the Fourth Industrial Revolution through ultra-high-speed connections and minimal latency, demand multiple high-density conductor cables. 5G networks provide up to 20-times faster speeds, 10-times higher connectivity, and 10-times lower latency compared to 4G. The sophistication of the networks is the key to 5G technologies. As societies around the world experience a digital transformation, the demand for high-density multiple fiber cables is on the rise to meet the storage, processing, and operation needs of big data.

In response to this trend, LS C&S has developed advanced optical cables, including Max 864F with a micro-unit structure and Micro ABC, ADSS, and 396F with a loose-tube cable structure. Furthermore, connective materials have been developed to offer comprehensive solutions.

Product concept

What is a micro air-blown cable?

Micro air-blown cables are laid inside micro ducts using air-blowing installation equipment. The cable laying cost is significantly lower than with hand installation. In addition, enhanced utilization of existing ducts makes it easier to expand access networks.

What is an ADSS cable?

ADSS stands for all-dielectric self-support, which is used for overhead cable laying. It is nonmetallic and requires no sheathing, so it costs less when laying cables and earthing is not required. No additional tension materials are needed, which makes it lightweight and compact. As a result, we were able to develop cables that are easy to lay and cost-competitive.

What is a micro unit cable?

Low-smoke zero-halogen or PVC is applied to a micro unit tube protecting optical fibers. The resulting cable is easy to handle since no additional tools are required for cutting the tube.

Product overview

40 41

40 41

40 41

EV products

HV/EHV cables

Due to the rapid expansion of environmentally-friendly vehicles, the automotive market is expected to grow steadily. As some European car makers have shifted focus from cars with internal combustion engines to eco-friendly or hybrid electric vehicles, the demand for related products is rising. In this regard, LS C&S has developed and launched a HV/EHV product line-up and cables with enhanced oil resistance that meet the requirements of automakers and automotive electrical parts manufacturers.

Product concept

With the spread of hybrid electric vehicles, the market for HV/EHV cables for such vehicles is also expanding. This product designed to ensure the safe transmission of high-capacity voltage can be used in hybrid electric, plug-in hybrid electric, and electric-only vehicles.

Charging cables

Product overview

With the increasing number of electric vehicles on the market, it is expected that the scope of charging-related business will continue to expand. Conventionally, people must go to charging stations to charge their cars. In response, LS C&S has launched standardized charging cable products that can connect to general electrical outlets and allow users to conveniently charge their cars without a dedicated charging station.

Product concept

This allows going from a discharged to a fully charged state in 4 to 5 hours. The 6 or 7kW cable can connect to any 220V outlet, allowing users to conveniently charge their EVs.

EV products

HV/EHV cables

Product advantages

Our multiple conductor cables with enhanced fiber integration precisely meet customer needs. Their lightweight and easy-to-lay cables with a reduced external diameter ensure ease of handling. All-dry micro unit technology allows us to significantly reduce cable laying time compared to using existing jelly-filling micro unit products. As for connection materials, rental costs are set according to the volume of connecting materials. To help our customers reduce operation costs, we have developed materials with a smaller volume utilizing gel-block technology for waterproofing.

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Ring wire for solar modules

*Product overview*

Eco-friendly and renewable energy is quickly replacing coal and oil as one element of the response to greenhouse gas emissions and the climate change they could cause. Great attention has been focused on developing technologies and manufacturing products that minimize carbon dioxide. In this regard, we have been focused on new and renewable energy as a growth engine, and the sales of this product should only continue to grow.

*Product concept*

Usage

This product sends the electricity generated by connecting solar cells to a junction box, the power collector for solar modules.

Composition

Solar wire comes in two types: ribbon and round. Its conductor is made from copper plated with SnPb solder.

Main characteristics

As solar cells grow increasingly thinner, it is necessary to use solar wire with low-yield strength and uniform plating thickness to prevent cracking and ensure a stable connection between the cells and wire.

RING WIRE FOR SOLAR MODULES

Product advantages

- The product’s excellent straightness has reduced the rate of defects due to misalignment. Since this product has improved low-yield strength and uniform plating thickness, it has greatly contributed to improving workability and product reliability for customers. In addition, technological cooperation with tabbing machine manufacturers has allowed us to develop customized products and offer optimal specifications tailored to the needs of the production system of each customer.

Underwater cables for floating solar modules

*Product overview*

Electricity demand has been increasing worldwide due to economic development and rising standards of living. As a result, environmental concerns are growing and the importance of new and renewable energy has become greater than ever. Since this product is installed underwater, there is no need for trenching or for damaging wilderness or farmlands. Power generation efficiency using floating solar modules is 1.4 times greater than on land due to the cooling effect of the water. Idle reservoirs can be utilized to create power generation facilities.

As electricity generated from floating solar modules needs to be sent to electrical rooms, underwater cables are run from below the modules to the shore. These cables are exposed to water for long periods and they shift along with the movement of solar modules. Therefore, it is essential that this product possesses the durability demanded by the dynamic underwater environment. Our product has passed durability tests that apply reliability evaluation technology designed for mobile and underssea cables, and its use is expected to grow both at home and abroad.

*Product concept*

What is an underwater cable for floating solar modules?

F-CV cables are commonly used in solar modules installed on land. However, issues such as water treeing can occur if they are applied to floating solar modules. Considering that water treeing hampers the long-term performance of cable products, our underwater cables make use of rubber insulators. To minimize water infiltration, water-resisting sheath materials commonly used in submarine cables are applied. Eco-friendly materials are used in accordance with related laws and regulations for resource protection, which has allowed us to have this product certified.

Product advantages

- We offer structural designs according to the intended environment for floating solar modules (such as in reservoirs or the sea). The durability of our products has been tested to ensure long-term reliability. In addition, this product can be supplied in the form of optical-metal composite cables containing optical or signal cables, which facilitates their installation. We provide customers with tailored products for their specific environmental conditions, including with customized flexibility and armoring materials.
Quality and Product Responsibility

As our cable products are used for power and telecommunication transmission for industrial infrastructure and people’s lives and applied to a variety of power devices, we are proactively conducting quality management activities to increase reliability and meet the need for eco-friendly products. In addition, considering the impact of our products has on local communities and the country, we establish a risk management system across the entire processes and implement a QC Patrol function by product; secure outsourcing quality and implementing the system in overseas subsidiaries. Activities are conducted to meet requirements on risk assessment and disaster recovery as for optical communications products. In 2018, we obtained TL 9000 R6.0.

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1) Strategic direction
Providing products and services that meet customer expectations and needs anytime, anywhere and under any circumstances

2) Key tasks
Focusing on computerizing our quality management system to meet the requirements of global customers, we are proactively conducting real-time quality risk management. Activities have been conducted to ensure product safety in line with the IATF16949 certification, the Product Liability Act and the end-of-life vehicle directive by the German Automotive Industry Association. In 2018, we acquired the IATF16949 certification (wire, tubes and magnet wire for automobiles).

3) Performance in 2018
- Obtained additional quality system certification (two cases)
  - Established a QMS IT system
- Managed quality risks and VoCs in real-time
  - 176 cases for quality circles
- Quality School
  - 33 cases for evaluation technology
- Conducting quality monitoring activities for overseas subsidiaries
  - Compared quality by product group among the head office and subsidiaries
- Establishing standards for quality index management

4) Targets in 2019
- Satisfying the needs of global customers
  - Review the feasibility of upgrading the QMS IT system and implementing the system in overseas subsidiaries
- Promoting proactive quality management: manage product group, meet CTQ 2019;
  - Strengthen 4M control; implement a QC Patrol function by product; secure outsourcing quality and monitoring process; secure outsourcing quality

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### 1. QMS IT system

**Key improvements made through the system**

- **Shop floor**
  - Real-time analysis and utilization
  - Interface
  - Big Data

- **QMS IT System**
  - Inspection Data
  - Faulty product management
  - Audit management
  - Standards management

- **Standards**
  - Q Cost
  - CTQ
  - NCR
  - Risks of customer claims
  - Correction measures

The scope of the QMS IT system is: 1) development/before-production quality; 2) material quality; 3) production quality; 4) test and management; and 5) customer quality management. Data is being accumulated for enterprise-wide quality data management.

Key improvements have been made during the implementation of the system. Data monitoring and statistical analyses allow us to track and quickly respond to any quality issues. Root-cause analysis and follow-up processes have been strengthened. In addition, up-to-date company standards, enhanced search features, and an audit pool are significantly helping our employees to better respond to our customers.

### Activity 3

**Real-time quality risk and VoC management**

Since our products serve as a basis for industrial infrastructure and people’s lives, addressing any product quality risks is critical. As is ensuring that there is a response system to swiftly deal with any possible issues. In this regard, we implement preventive risk management processes through which potential issues can be identified in the design review phase to minimize risks throughout the entire process. In addition, a risk tracking management system has been implemented to mitigate losses if pertinent risks pass through into quality issues.

### Grade Criteria Examples of risks

<table>
<thead>
<tr>
<th>Grade</th>
<th>Examples of risks</th>
<th>Examples of risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>Risks that could cause a serious problem for customers, the company, and the society.</td>
<td>Risks that could cause a serious problem for customers, the company, and the society.</td>
</tr>
<tr>
<td>A</td>
<td>Product quality issues that could cost USD 8,944 and more.</td>
<td>Product quality issues that could cost USD 8,944 and more.</td>
</tr>
<tr>
<td>B</td>
<td>Risk that could cost less than USD 8,944.</td>
<td>Risk that could cost less than USD 8,944.</td>
</tr>
</tbody>
</table>

### 2. Preventive risk management

- **Risk identification and analysis management plan**
  - Process identification
  - Process risk identification
  - Risk analysis plan

- **Occurrence of issues**
  - Risk analysis
  - Monthly inspection
  - Group risk

- **Real-time check (QMS)**
  - Monthly inspection
  - Group risk

- **Scheduling lessons learned and preventive improvement tasks**
  - Use of risk management plans

### Quality risk classification

- **S**
  - S-grade risks are classified as S, A, B, or C grade in consideration of their impact and urgency. S-grade risks are immediately reported in the form of a SWWH report to the management and to stakeholders.

- **A**
  - A-grade risks are immediately reported to number their status in real-time. Under the supervision of the quality division, those risks can be tracked and managed until a resolution is achieved.

- **B**
  - B-grade risks, ideas, and feedback from customers and stakeholders are being instantly shared on the VoC and issue management pages within the system.

- **C**
  - C-grade risks, ideas, and feedback from customers and stakeholders are being instantly shared on the VoC and issue management pages within the system.

### 3. Customer claim risks and VoC management

- **Customer claim risks and VoC management**
  - Details of VoCs from customers of the QA, sales, and development teams are registered with the QMS IT system and considered when identifying improvement tasks.
  - The links of pertinent issues provided for a customer claim occurred.

- **Issue raised**
  - Issues raised by customers are received and registered with the QMS IT system for history management.

- **Issue resolved**
  - The links of pertinent issues provided for a customer claim occurred.
Strengthening efforts for quality management

For product quality management, CTQ and CTP tasks by product/process are identified. The tasks are incorporated into improvement tasks for Six Sigma, quality circle activities and engineers.

Activity 1

Innovation activities on site in 2018 (Speed Up! 2018)

"Speed Up!" was the 2018 theme under which activities in terms of quality, cost and delivery were conducted devised based on the results of the last three years to achieve the management targets of the year. Our motto for 2019 is "Clean Factory!" as we work to achieve the goals of reducing product losses and internal failure costs and ensuring an accident-free workplace through safety promotion. To support the innovation activities of LSHQ, our subsidiary in China, employees from the head office were dispatched to check the state of progress and provide training. In the second half of 2019, LSHQ will visit the head office to present their achievements at a performance-sharing meeting.

| Activity 2 | Securing evaluation technology for product quality |

To prevent the potential impact of product defects on industries and people’s lives, we continue our efforts to develop evaluation technologies. In response, we have secured technologies related to long-term reliability, electrical and material tests to ensure high product quality and win the trust of customers. Meanwhile, we are developing available substitutes for technologies.

1 Evaluation technology secured in 2018:

- HV/EHV: PQ test monitoring system
- HVT/MT: Quality evaluation system for superconducting cables
- Submarine: Integrated management system for DC, cable test voltage, current and temperature
- Distribution: Long-term service life diagnosis system
- Overhead: Composite core bending tests
- Optical fibers: Data processing software for optical fiber inspection equipment
- Automotive wire: Evaluation of cycling tests under complex environment conditions (temperature, humidity, current, voltage)
- Industrial / Specialty: Evaluation of fire-resistance properties of HCF
- Magnetic wire: Evaluation of PDV in a low air-pressure environment
- Busduct: Long-haul-length sample PQ test

Quality training

To resolve any potential quality issues through risk management, in-house or external programs, on-the-job training, and task force activities are all provided. In particular, employees directly responsible for QA, development, and production all attend annual Quality School events.

In 2018, we focused on improving our quality process in line with the revision of IATF 16949 and on operating a Quality School that provides key personnel in each function with consultation and training. In particular, a course providing qualifications for supplier inspectors was operated and four employees from the procurement and production management teams were qualified in supplier evaluation.

A total of 109 employees are currently serving as quality examiners, internal inspectors and supplier inspectors. Considering that their actions can directly impact our product and process quality, their qualifications are re-evaluated every year through the QMS IT system.

QMS IT inspector and examiner management

| Purpose and action plan |

| Activity 3 | Quality training |

Target

- All employees
- Engineers (QA and development)
- (Mandatory) Internal inspectors, and
  - (Optional) Engineers responsible for development and R&D
- Engineers (QA and production)
- (Mandatory) Internal inspectors, and
  - (Optional) Engineers responsible for production
- Employees responsible for certifying automotive part QM
- (LS C&S/Subsidiaries) Persons in charge for each team

Curriculum

- Global quality management
  - Risk Thinking, development quality, improvement at workplaces, preventive management, and processes
- Quality management in development
  - Changing global trend in quality management systems
  - Quality management in product design (APQP, CP)
  - Failure mode and effects analysis (FMEA), and production part approval process (PPAP)
- Quality management in production
  - Changing global trend in quality management systems
  - Production process development and management (CP)
  - Statistical analysis and SPC measurement system (SQA)
- Understanding of IATF
  - Understanding of IATF standards and GAP diagnoses
  - Risk analysis and measure
  - Inspector qualifications
  - Internal inspectors and supplier inspectors
  - Strengthening processes
  - Strengthening processes and reviewing the results

Data & Venue

- July morning assembly
  - Head office and auditoriums at the Donghae and Gumi plants
- Jul. 4, Jul. 18-19
  - Gumi training center
- Jul. 26-27
  - Gumi training center

- Gumi training center
  - Oct. 14-20
  - Gumi training center
- Oct. 26-27
  - Gumi training center
- Nov. 10, Nov. 26
  - Gumi training center
Quality Control Tower

The Quality Control Tower aims to cut Q-costs by comparing rates of defects or losses within a given product group between the head office and eight overseas subsidiaries and devising and implementing benchmarking and support tasks. In 2018, the volumes of production scrap were compared. In 2019, an index will be developed as a tool to allow more accurate comparisons.

Activity 1

Establishment of Q-cost management standards for overseas subsidiaries

I Q-cost management

<table>
<thead>
<tr>
<th>Item</th>
<th>ERP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer claim loss</td>
<td>ERP</td>
</tr>
<tr>
<td>Disposal of defective products</td>
<td>ERP</td>
</tr>
<tr>
<td>Loss compensation, defect repair</td>
<td>ERP</td>
</tr>
<tr>
<td>Shipment of returned products</td>
<td>ERP</td>
</tr>
<tr>
<td>Business travel</td>
<td>ERP</td>
</tr>
<tr>
<td>Delayed shipment (delayed repayment)</td>
<td>ERP</td>
</tr>
<tr>
<td>Back claim (negative adjustment)</td>
<td>ERP</td>
</tr>
<tr>
<td>Internal failure</td>
<td>ERP</td>
</tr>
<tr>
<td>Discarded defective products (finished products)</td>
<td>ERP</td>
</tr>
<tr>
<td>Discarded defective products (semi-finished products)</td>
<td>ERP</td>
</tr>
<tr>
<td>Repair and rework</td>
<td>ERP</td>
</tr>
<tr>
<td>Disposal of long-term inventory</td>
<td>ERP</td>
</tr>
<tr>
<td>Design change</td>
<td>ERP</td>
</tr>
<tr>
<td>Back claim</td>
<td>ERP</td>
</tr>
<tr>
<td>Production scrap</td>
<td>ERP</td>
</tr>
<tr>
<td>Execution loss for start and stop</td>
<td>ERP</td>
</tr>
<tr>
<td>Remaining PP</td>
<td>ERP</td>
</tr>
<tr>
<td>Remaining LES</td>
<td>ERP</td>
</tr>
<tr>
<td>Disposal of inspection samples</td>
<td>ERP</td>
</tr>
<tr>
<td>Trial samples</td>
<td>ERP</td>
</tr>
<tr>
<td>Material loss</td>
<td>ERP</td>
</tr>
<tr>
<td>Over-thickness</td>
<td>ERP</td>
</tr>
<tr>
<td>Over-length</td>
<td>ERP</td>
</tr>
</tbody>
</table>

I Definition of scrap and loss

Total Loss = total loss + scrap + over thickness + over length

\[ \text{Total Loss} = \text{Scrap} + \text{Over-thickness} + \text{Over-length} \]

Future plans

Upgrading the QMS IT system and phasing the system in across overseas subsidiaries

With the upgrade of the QMS IT system, a framework for quality accident prevention using big-data analyses will be established. This system will be gradually phased in across our overseas subsidiaries to create a quality management system operating at the global level.

Promoting proactive quality management

- To prevent potential quality risks, real-time monitoring and history management of any changes in the process stream will be conducted so that stable production quality can be maintained.
- On-site inspection (QC Patrol) will be conducted without a prior notice to check the status of quality management. According to the result, the pertinent plants will be requested to take measures for identified issues and devise plans to prevent their re-occurrence. This process will be reflected in the QMS IT system, allowing us to monitor and follow up on the state of progress.
- CTQ by Group and by product will be identified utilizing the QMS IT system. In order to minimize failure costs, test results will be analyzed through control charts and Cpk (Process Capability Index) in real-time. Chronic issues will be addressed by operating a company-wide Skill Team and the state of progress will be regularly monitored.

Implementing a 5WH report system in overseas subsidiaries

The scope of our 5WH report system will be expanded to overseas subsidiaries so that they can quickly report in the event of quality-related emergency situations. Once a report is made, the head office will support them in identifying the cause, taking preventive measures and minimizing loss.

Activity 2

‘Level-up’ activities for suppliers

We developed and implemented a module for supplier within the QMS IT system in order to strengthen quality management of raw materials and products from suppliers. Briefing sessions were held not only to inform them of the purpose of the system but also to provide training on product specifications check, quality checklist creation, and inspection result management. Despite many trials and errors, active cooperation from suppliers has helped the system take root. Furthermore, their raised awareness allowed them to be able to supply materials with better quality.

Establishment of Q-cost management standards for overseas subsidiaries
ONE LS C&S
Social Contribution

We strive to realize the vision Enable the Cabled World which allows everyone to have access to energy and information. As part of the efforts, activities such as donation of talent and sharing events with local communities at home and abroad are conducted to fulfill our social responsibility. By promoting social contribution, we would like to create opportunities for shared and sustainable growth.

① Strategic direction
Promoting social contribution to achieve shared and sustainable growth

② Key tasks

Local community support
Designated donation to Donghae Employee activities
Donation of talent
Electrical safety checks in traditional markets
Nurturing future talent
LS Dream Science Class (science class for children)
Industry-academia cooperation
Global sharing activities
LS overseas volunteer group
Local community support by overseas subsidiaries

Similar activities conducted in Busan, Daejeon and Gwangju.

③ Performance in 2018
Conducted electrical safety checks in traditional markets
Operated on-site training programs for industry-academia cooperation
Sharing activities by employees: visit to social welfare centers and children's welfare facilities, kimchi- and coal briquette-sharing events
LS overseas volunteer group: support for facility repairs and equipment purchase for social welfare centers on a regular basis
LS Dream Science Class: science class for children
Nurturing future talent: employee participation in construction projects
Made a designated donation to Donghae (USD 89,437 per year)

④ Targets in 2019
- Expand the scope of electrical safety checks in traditional markets
- Make a designated donation to Donghae (USD 89,437 per year)
- Promote the participation of employees at plants in supporting their local communities
- Conduct national projects through industry-academia cooperation, and provide on-site training programs for college students
- Upgrade the LS Dream Science Class to increase the satisfaction of participants
- Operate the LS overseas volunteer group program

Local community support
Designated donation to Donghae
LS C&S has been making an annual donation of USD 89,437 to the city of Donghae to support people with disabilities. On October 17, 2018, a donation ceremony was held at which the Donghae City Hall provided five welfare centers in the city with two passenger vans (Dream Cars) and support for facility repairs and equipment purchase through the Community Chest of Korea.

Since our submarine cable worksite was built in the city in 2009, a special bond has been formed between LS C&S and Donghae. We are striving to sustain our efforts to contribute to local communities through designated donation and sharing activities by employees.

Sharing activities by employees
All employees of LS C&S have voluntarily donated up to USD 1 from their monthly salary, and the company matches its employees' charitable contributions. The funds collected through employee donation is used to support children living with their grandparents, people with disabilities, and senior citizens living alone. In 2018, we donated USD 40,247.

Our employee volunteer groups have supported people in need to help them stand on their feet. These groups cooperate with public agencies and the local governments to meet the needs of local communities.

Chamsarang Society, a volunteer group established in 1999 at the Gumi and Indong plants consists of 600 employees, while 200 employees at the Donghae worksite are working as volunteers of Jeongnamun Society that was started in 2009. They visit local social welfare centers on a regular basis and conduct a variety of activities, including cleaning, repairs, birthday parties, sports events, free meals, and free haircut services.

In addition, fuel and food support, scholarships to child breadwinners, and cultural heritage protection are provided. At the end of the year, coal briquette delivery and kimchi making events for the elderly living alone are held.

Donation of talent
Electrical safety checks in traditional markets
We have been providing monthly electrical safety checks in traditional markets since September 2017. Employees with cable inspection expertise visit shops to check cable insulation performance, sheathing, and possible short-circuits. They offer education on the risks posed by cable misuse.

As of March 2019, such activities had been conducted at 200 shops in thirteen traditional markets not only in Anyang, Gumi, and Donghae where our worksites are located but also in Busan, Daejeon and Gwangju.

It was rewarding to see that our activities were so helpful to vendors who had been worried about outdated electric installations. We are going to continue working to bring such meaningful results to more vendors.

Choi Jeong-woo, a Research Engineer of the Energy Research Group

I feel grateful to all of the LS C&S employees who visited our market, checked our outdated lines, and replaced electrical installations to help reduce the risk of fire. I feel relieved now, and I can more fully focus on my work!

Cho Myeong-Gu, Yangseon butcher shop owner at the Daepyeon Yangseon Market
Nurturing future talent
LS Dream Science Class

The LS Dream Science Class has served as a program helping children to increase their interest in basic science since 2013. College students majoring in science and engineering participate as teachers during summer and winter vacations and teach science classes to the elementary school students in Anyang, Gumi and Donghae where our headquarters and worksites are located. In addition, a variety of cultural activities and a ‘vision’ camp are conducted to help children think about their ambitions and how to make them come true.

Our researchers with master’s and doctoral degrees also take part in as one-day lecturers to provide in-depth classes. This program helps children to raise their interest in science by making magnetic levitation trains, transformers and optical fiber photo frames for themselves and learning about scientific principles.

Industry-academia cooperation

We are actively promoting cooperation between industry and academia in order to develop basic science and nurture talent. Technological information regarding our power transmission and telecommunication projects is shared with universities. Our employees with expertise serve as mentors, which allows college students to have chances to learn on-the-job skills.

The Job Schooling, an internship program started in 2012, provides the students of Kangwon National University majoring in electricity and electronics and IT engineering with education and employment opportunities. We signed MoUs with Kangwon National University to provide training programs. In particular, our research-al University to provide training programs. We signed MoUs with Kangwon National University majoring in electricity and electronics and IT engineering and organized the LS Dream Science Class for children.

Global sharing activities

LS overseas volunteer group

We have participated in the LS overseas volunteer group program and elementary school construction projects in developing countries, including Vietnam, India, Bangladesh, and Cambodia, to improve their educational environment. Since 2007, 21 teams consisting of 900 college students and employees have joined these programs for 12 years. Volunteer activities include outdated classroom renovation, vakwondo demonstrations and kite-flying contests.

In addition, as part of LS overseas volunteer group activities, the construction of LS Dream School buildings is underway near the location of our subsidiary to provide students with better educational environments in Vietnam.

Local community support by overseas subsidiaries

LS-VINA and LSCLC, our subsidiaries in Vietnam raise funds to support the socially vulnerable. Employees regularly make a visit to schools for the blind and orphanages for volunteer activities and donate PCs to rural schools. Moreover, they also support the LS-VINA national go competition and the Hại Phòng fireworks festival, contributing to promoting cultural exchanges with Vietnam.

For subsidiaries in China, LCSW provides a support fund for the local Korean vendor association and visits nursing homes as a volunteer activity. It also donates to low-income families and sponsors the LS-VINA national go competition and the Hải Phòng fireworks festival, contributing to promoting cultural exchanges with Vietnam.

Social contribution in 2018 (domestic)

Volunteer and sharing activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Beneficiary / Organization</th>
<th>Frequency</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donation</td>
<td>Community Chest of Korea</td>
<td>Annually</td>
<td>25</td>
</tr>
<tr>
<td>Support for employees in need</td>
<td>As needed</td>
<td>Annually</td>
<td>152</td>
</tr>
<tr>
<td>Sponsorship for the LS-Vietnam national go competition</td>
<td>As needed</td>
<td>Annually</td>
<td>9</td>
</tr>
</tbody>
</table>
| Social contribution in 2018 (overseas)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Beneficiary / Organization</th>
<th>Frequency</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donation for the needy</td>
<td>The needy, Hải Phòng Federation of Labor</td>
<td>Annually</td>
<td>7,602</td>
</tr>
<tr>
<td>Support for the flood victims in Hu'o'ng Khê-Hà Tĩnh</td>
<td>Orphanages in Hu'o'ng Khê-Hà Tĩnh</td>
<td>Annually</td>
<td>1,073</td>
</tr>
<tr>
<td>Sponsorship for events by the Consulate General of Korea in Wuhan</td>
<td>An annually</td>
<td>2,448</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>339,471</td>
</tr>
</tbody>
</table>

Donation and sponsorship

<table>
<thead>
<tr>
<th>Activity</th>
<th>Beneficiary / Organization</th>
<th>Frequency</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support for employees in need</td>
<td>Employees</td>
<td>Annually</td>
<td>80</td>
</tr>
<tr>
<td>Support for the flood victims in Hu'o'ng Khê-Hà Tĩnh</td>
<td>Orphanages in Hu'o'ng Khê-Hà Tĩnh</td>
<td>Annually</td>
<td>9,394</td>
</tr>
<tr>
<td>Sponsorship for the LS-Vietnam national go competition</td>
<td>Go players, the Vietnam go association</td>
<td>Annually</td>
<td>7,155</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>16,188</td>
</tr>
</tbody>
</table>
Supplier selection
In order to select suppliers in a fair and transparent manner, the entire process from registration to final selection is managed through our e-Procurement system. In principle, competitive bidding is always conducted except in special cases such as the application of new technologies or customer requests. Applicants are evaluated through both paper screening and on-site inspections. The results based on production capability, quality, price, worksite stability and other evaluation criteria are announced to individual applicants in writing within 15 days of the final selection.

Contract
We use a standard form of contract that includes the following information: payment amount; payment methods; and price adjustment conditions for raw material price fluctuations. In principle, contracting parties’ signatures should be included on the contract.

Pricing
We set a reasonable price by considering product quality, quantity, and delivery as well as market price. Unjustly lowering the unit price without sufficient reason is disallowed. Suppliers can file for a purchase price adjustment at any time. If a valid reason exists, a contract price can be adjusted based on mutual agreement between within 30 days from the date of request.

Delivery/Inspection
After delivery and service are completed, an inspection is performed in accordance with the pre-agreed standards and procedures. We strictly comply with pertinent rules and inspectors’ duties and due diligence to prevent the return of supplied goods without sufficient cause.

Payment
Payment criteria set according to transaction type and payment amount are available through the e-Procurement system in an effort to promote transparency. For suppliers that have signed subcontracting contracts, payment is made on 15th day of the following month after delivery. In addition, we made early payments to suppliers who faced financial difficulties ahead of the New Year and Chuseok holidays.

Shared growth and fair trade

Shared Growth

In our rapidly changing global environment, shared growth is emerging as one of the key elements for determining a company’s competitiveness. Based on the LS C&S Way, we will support and cooperate with our suppliers as we grow together in this Fourth Industrial Revolution era.

Strategic direction
Establishing a system to achieve shared growth in a sustainable manner

Key tasks
Shared growth and fair trade
Transparent procurement processes
Awareness-raising of shared growth
Supplier support
Finance, technology and training, sales channel, local economy
Supplier management system
AVL (Approved Vendor List) program
Evaluation on environmental performance
Credit rating system

Performance in 2018
Provided USD 894 thousand of direct loan support to suppliers and utilised the win-win cooperation fund worth USD 35,775 thousand
Helped suppliers achieve sales worth USD 38,190 thousand through programs for supporting them in expanding overseas and domestic sales
Offered free training programs to strengthen job competency of suppliers (73 employees from 17 suppliers)

Targets in 2019
- Expand programs for supporting suppliers in increasing overseas sales
- Review the feasibility of a Win-Win Payment System
- Strengthen efforts for shared growth with secondary suppliers

Shared growth and fair trade
Transparent procurement processes

Payment criteria by supplier type


<table>
<thead>
<tr>
<th>Supplier selection</th>
<th>Contract</th>
<th>Pricing</th>
<th>Delivery/Inspection</th>
<th>Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>USD 268,312 or less</td>
<td>Cash (paid on 15th of the following month)</td>
<td>More than USD 268,312</td>
<td>45-day maturity cash from the delivery date or the end of the delivery month</td>
<td></td>
</tr>
<tr>
<td>USD 4,472 or less</td>
<td>Cash (paid on 24th of the following month)</td>
<td>More than USD 4,472 or USD 17,887</td>
<td>60-day maturity cash from the delivery date or the end of the delivery month</td>
<td></td>
</tr>
<tr>
<td>More than USD 17,887</td>
<td>90-day maturity cash from the delivery date or the end of the delivery month</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Large-sized companies
USD 4,472 or less
Cash (paid on 24th of the following month)
More than USD 4,472
USD 17,887 or less
90-day maturity cash from the delivery date or the end of the delivery month

Non-subcontracting SMEs
USD 4,472 or less
Cash (paid on 24th of the following month)
More than USD 4,472
USD 17,887 or less
90-day maturity cash from the delivery date or the end of the delivery month
Information sharing

Fair trade issues and best practices of other companies are shared at the company level on a monthly basis in order to prevent any potential risks of unfair trade. In addition, related information and news from the Korean Fair Trade Commission and Korea Commission for Corporate Social Responsibility are shared. Our internal standard form of contract, detailed rules for work, and subcontracting training materials are updated accordingly based on the information.

Training on purchasing and subcontracting

Our purchasing and logistics division has its own subcontracting training manual for each process. The manual covers potential subcontracting issues that employees may face due to the lack of knowledge or misunderstanding. A quarterly training is being provided to those employees responsible for purchasing, quality, development and production.

A quarterly training is being provided to those employees responsible for purchasing, quality, development and production. If employees face any issues during the process, a Preliminary reviewing and approval of subcontracting cases worth USD 894 thousand or more is conducted to check fairness in contract and pricing processes and compliance of pertinent laws.

Examples of preliminary review items related to subcontracting laws:
- Compliance with the obligation of issuing written contracts
- Violation of the prohibition of unfair pricing
- Compliance with the obligation of operating a domestic L/C and providing payment guarantee
- Violation of the prohibition of forced purchasing of goods
- Review of the criteria and procedures of cancelling registered suppliers
- Review of appeal cases against supplier selection or registration/cancellation

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We have also provided a win-win cooperation fund worth USD 35,775 thousand that was created in partnership with KEB Hana bank, as well as account receivable loan programs. These allow our primary and secondary suppliers (who signed contracts with primary suppliers) to secure loans at lower-than-market interest rates. In addition, we and the IBK (Industrial Bank of Korea) have operated a network loan worth USD 44,719 thousand since 2009 to support our primary and secondary suppliers using internal funds. In 2018, we offer a program of extending loans to primary suppliers to secure loans at lower-than-market interest rates. In addition, we and the IBK (Industrial Bank of Korea) have operated a network loan worth USD 44,719 thousand since 2009 to support our primary and secondary suppliers using internal funds.

Indirect support

We provide technical support to promote cooperation and help our suppliers enhance their competitiveness. Product purchase agreements have been made for the technologies we co-developed and government projects have been conducted together. In 2018, we have completed two national projects and have been working on three co-development projects targeting new customers from the Americas and Oceania, allowing our suppliers to increase sales and secure additional customers. Meanwhile, in annual due diligence for suppliers, our employees with expertise in production processes and quality are dispatched to support them in resolving production process and quality issues.

Training support

To support employees from primary and secondary suppliers to strengthen their job competency, free training programs tailored to their needs are provided in partnership with external institutions. In 2018, 73 employees took part in 17 programs. We will plan to expand the scope of training to all suppliers.

Supplier support

Financial support

To help suppliers improve their cash flow, we operate financial support systems, including direct loans, a win-win cooperation fund, and a network loan. We will further strengthen promotional activities to benefit more suppliers.

Direct support

We offer a program of extending loans to suppliers using internal funds. In 2018, the amount of direct loans totaled USD 894 thousand. A total of 10 suppliers were provided with unsecured interest-free one-year loans of USD 89,437 each.

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Support of suppliers in expanding their overseas sales
Not only do we help our suppliers operate their businesses in a stable manner through financial and technological support, but we also provide opportunities for them to achieve growth by supporting them in expanding their overseas sales. As part of these efforts, we share information with domestic suppliers on demand for raw and subsidiary materials by our overseas subsidiaries in China, Vietnam, and India. Moreover, selected suppliers with superior performance are given an opportunity to supply products to our overseas subsidiaries and increase their overseas sales.

Promoting local economy
To promote the local economies in our international locations, overseas subsidiaries in China, Vietnam, and India have created a supply chain worth USD 215 million, focusing on their respective local markets. Starting from 2019, our efforts will be expanded to Myanmar and Poland where our new subsidiaries are located.

Supplier management system
Approved Vendor List (AVL) system
Since the introduction of the AVL system in 2016, we have been working to enhance the competitiveness of key suppliers and manage risks together. Companies selected as key suppliers under the AVL system are guaranteed one year of supply to LS C&S, allowing them to minimize uncertainties in sales. In addition, along with financial benefits, they receive support for conducting improvement activities that are identified together with LS C&S. In 2018, 331 companies were selected as AVL suppliers.

Evaluation of environmental performance
To provide services in accordance with domestic and international market standards, newly registered suppliers are subject to the evaluation of not only their overall management, quality management, and production management, but also their environmental and safety management. In addition, the results are updated in an annual evaluation of suppliers.

Credit rating system
We operate an annual credit rating system for our suppliers with high transaction volumes. The results are utilized as AVL supplier selection criteria. In addition, we monitor their financial risks in order to proactively respond to any signals of bankruptcy. In 2018, the credit of 143 suppliers was evaluated by two credit rating agencies.

<table>
<thead>
<tr>
<th>Product group classification criteria</th>
<th>Strategic importance</th>
<th>Impact on Q.C.D.</th>
<th>Purchase volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business area</td>
<td>Supply market</td>
<td>Product group</td>
<td>Supplier list</td>
</tr>
<tr>
<td></td>
<td>Evaluation</td>
<td>classification</td>
<td>criteria</td>
</tr>
<tr>
<td></td>
<td>Impact</td>
<td>criteria</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total</th>
<th>Excluded</th>
<th>New</th>
<th>Existing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>331</td>
<td>104</td>
<td>227</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credit rating results in 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total company</td>
</tr>
<tr>
<td>Credit rating</td>
</tr>
<tr>
<td>A or higher</td>
</tr>
<tr>
<td>B or higher</td>
</tr>
<tr>
<td>C or lower</td>
</tr>
</tbody>
</table>
Respect for Human Rights and Diversity

Employee satisfaction is a starting point that allows us to meet the needs of customers, suppliers, and local communities. Respect for employees is essential to their satisfaction. We respect our employees and treat them fairly. We nurture and secure talent and ensure that employees and pursuing global standards.

Key tasks
- Respect for employee rights
  - No discrimination / Education on human rights
  - No child/forced labor
- Labor-management relationship for shared growth
  - Operating a labor union
  - Facilitating communication
  - Joint Social Contribution
  - On-site satisfaction survey
- Respect for diversity
  - Support for female employees
  - Employment of the disabled

Performance in 2018
- For employee rights, and no discrimination
  - Promoted diversities
  - Implemented no-discrimination policies
- No child/forced labor and ensuring labor-union activities of employees
  - Implemented no child/forced labor policies
  - Promoted labor-management relationships for value creation
- Support for female employees, and employment of the disabled
  - Took support measures for female employees
  - Signed an employment contract with a company for employees with disabilities

Targets in 2019
- Encourage employees to take more vacation time (e.g. by using ‘sandwich’ days or annual ‘refresh’)
- Promote measures to support female employees
- Maintain employment policies for people with disabilities

Respect for employee right
- No discrimination
  - According to the Article 6 (Equal Treatment) of the Labor Standards Acts, no employer should not discriminate against workers on the basis of gender, or give discriminatory treatment in relation to the working conditions on the basis of nationality, religion or social status. Our Code of Ethics clearly states discrimination against employees. In the Chapter 5, we prohibit unfair discrimination for reasons of gender, academic background, age, nationality, religion and birthplace in regard to recruiting, promotion, compensation, and education opportunity. All employees are given equal opportunities, and reward is made based on their performance. To prevent any unfair act, we operate support systems, such as the help center, grievance channel, cyber reporting channel and appeal against employee performance evaluation results where anyone can freely get counseling and report in anonymity.

Education on human rights protection
- In order to raise employee awareness of human rights based on the understanding of social and cultural diversity, we conducted related educational sessions. In addition, annual training on the prevention of sexual harassment is provided. In 2018, a total of 1,955 employees participated in the program. Ethical management, including sexual harassment prevention is covered in the introductory training programs for newly recruited employees and in the development programs for overseas employees.

No child/forced labor
- We strictly prohibit any labor by children under 15 years old and by adolescents who are currently attending school in accordance with the Labor Standards Act of Korea and the labor principles of the UN Global Compact. As for forced labor, our employees work only based on their free will. We do not force our employees to work at night or on holidays. Working hours are eight hours per day and 40 hours per week. If anyone works at night or on holidays with prior consent, overtime payments are made.

Labor-management relationships for shared growth
- Labor union
  - Our labor union was launched as the Anyang branch of the Goldstar chapter of the Federation of Korean Metal Workers Trade Unions in 1976, and has celebrated its 20th anniversary with 872 members as of the end of 2018. “Those who work at LS C&S workplaces” are eligible for union members and have a right to freely join or discontinue membership at any time. Both the labor and the management are working hard to establish a sound and harmonious relationship. The management strives to ensure employment stability and compensation based on business performance while the labor union actively conducts task and activities to achieve the company’s business goals. Based on these relationships, we agreed on the extension of retirement age and introduced a wage peak system in 2007. We have cooperated to address critical issues related to internal and external labor environments. As a result, there have been no labor disputes for the last 30 years since 1989.

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Labor union membership in 2018
- 872 employees
  - *All of 872 production workers are labor union members.

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Facilitating communication

To share corporate management information with our employees, including a labor union, on a regular basis, a variety of communication channels are utilized. We listen to the voices of our employee and work together in order to improve a working environment and welfare benefits.

Joint Social Contribution activities

Since the labor-management agreement was made in 2007, we have operated a program that all employees of LS C&S donate up to USD 1 from their monthly salary and the company matches its employees’ charitable contributions. In addition, volunteer activities, such as living expense support for the underprivileged, and kimchi- and coal briquette-sharing events are conducted. Employees also participate in environmental cleanup activities, including the One Company One Stream campaign, to fulfill corporate responsibility.

On-site satisfaction survey

An annual on-site satisfaction survey is jointly conducted by the labor and management to diagnose and improve a working environment and organizational culture at our plants. The survey consists of the following items: 1) manager; 2) supervisor; 3) communication; 4) organizational culture; 5) labor-management relationships; 6) labor union; 7) working environment; 8) job management; and 9) welfare benefits. Based on the survey results, we take improvement measures for issues identified to raise employee satisfaction level at work. At the same time, a grievance system is implemented by plant to deal with employee complaints regarding their jobs and working environment.

Respect for diversity

Support for female employees

We put major efforts into creating a women-friendly workplace where everyone can reach their full potential. As of 2018, female employees accounted for 15.1% of all employees and female managers for 5.1% of all managerial positions, but this has been rising for three consecutive years. To nurture more female managers, we plan to provide leadership training programs for female employees and actively support them through applicable welfare benefits, including parental leave and flexible work hours.

LS daycare center

An LS daycare center that was established in Anyang at the end of 2014 helps employees reduce the burden of childcare and concentrate on their work. Currently, a total of 70 employees from LS Group subsidiaries are utilizing this daycare center.

Space for female employees

There are nursing rooms and lounges for female employees at our worksites. The female employee club Arom Society is operated to provide counseling and promote good fellowship among female employees.

Parental leave

Employees with children aged eight (second graders) or younger can take parental leave up to one year and their return to work is guaranteed. In 2018, a total of 20 employees took the leave, and three of them were male employees. In addition, our working hour reduction system for childcare allows employees subject to parental leave to reduce their working hours over one year rather than taking a leave of absence. A working hour reduction system for pregnant employees is also implemented to help reduce their physical stress with less working hours.

Employment of the disabled

Consideration for employees with physical disabilities

In accordance with the Act on Employment Promotion and Vocational Rehabilitation for Disabled Persons, we hire those who have physical disabilities at our plants. As of 2018, a total of 36 employees with physical disabilities are working in our worksite, which is an increase from 35 of the previous year. We actively support and help them successfully adjust to and do their jobs through guidance and preparatory training so that they can stand on their feet.

Increasing the number of employees with disabilities through indirect employment

An indirect employment contract was signed with Buty in April 2017 and it has been renewed on an annual basis ever since. The company was established to provide stable jobs to the socially vulnerable, including the disabled, according to the ‘subsidiary-type standard business system’ of the Korea Employment Agency for the Disabled and the Act on Employment Promotion and Vocational Rehabilitation for Disabled Persons. Buty helps people with disabilities have jobs and provides related support. Employees are selected from the day hospital center named Haeddeulnal within the Yongin Mental Hospital, the only WHO psychosocial rehabilitation cooperation organization in Korea. They receive training prior to starting work, and all cases of trainees are managed to provide them with continuing education.

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Consideration for employees with physical disabilities

In accordance with the Act on Employment Promotion and Vocational Rehabilitation for Disabled Persons, we hire those who have physical disabilities at our plants. As of 2018, a total of 36 employees with physical disabilities are working in our worksite, which is an increase from 35 of the previous year. We actively support and help them successfully adjust to and do their jobs through guidance and preparatory training so that they can stand on their feet.

Increasing the number of employees with disabilities through indirect employment

An indirect employment contract was signed with Buty in April 2017 and it has been renewed on an annual basis ever since. The company was established to provide stable jobs to the socially vulnerable, including the disabled, according to the ‘subsidiary-type standard business system’ of the Korea Employment Agency for the Disabled and the Act on Employment Promotion and Vocational Rehabilitation for Disabled Persons. Buty helps people with disabilities have jobs and provides related support. Employees are selected from the day hospital center named Haeddeulnal within the Yongin Mental Hospital, the only WHO psychosocial rehabilitation cooperation organization in Korea. They receive training prior to starting work, and all cases of trainees are managed to provide them with continuing education.

Support for child-care

There are nursing rooms and lounges for female employees at our worksites. The female employee club Arom Society is operated to provide counseling and promote good fellowship among female employees.

Parental leave

Employees with children aged eight (second graders) or younger can take parental leave up to one year and their return to work is guaranteed. In 2018, a total of 20 employees took the leave, and three of them were male employees. In addition, our working hour reduction system for childcare allows employees subject to parental leave to reduce their working hours over one year rather than taking a leave of absence. A working hour reduction system for pregnant employees is also implemented to help reduce their physical stress with less working hours.
We announced the LS C&S Way and four core values that inspire the principles on which employees act. Under the value of ‘rules and responsibility’ we are pursuing compliance management to fulfill our corporate responsibility and win the trust of our stakeholders. Heightened employee awareness of compliance will lead to a reduction in both internal and external risks. This in turn will bring us closer to our ultimate goal of ‘zero risks’ and lay a foundation for corporate social responsibility.

**Strategic direction**
Setting a vision for the compliance working committee: spearheading the efforts for promoting compliance management and reducing risks to zero

**Key tasks**
Strengthening compliance activities
Compliance training
Facilitating the operation of an in-house bulletin board
Analyzing the potential impact of revision and enactment of laws and sharing analysis results
Conducting risk prevention activities on international projects
Reviewing checklists for each step of bidding process
Providing support for bids on large-scale project
Upgrading the standard form of contract and providing legal consultation
Reviewing contracts and the related laws

**Performance in 2018**
- No risks related to competition laws occurred
- Provided seven sessions of ad-hoc compliance training targeting small groups of employees
- Conducted activities to prevent potential risks in bidding on international projects
- Minimized cash outlays due to lawsuits or damages

**Targets for 2019**
- Provide task force team support to minimize risks in overseas business
- Refine checklists for each step of bidding
- Minimize cash outlays due to lawsuits or damages
- Strengthening activities with an increased number of CP1 officers

**Compliance bulletin board**
- ‘One-strike out’ system (subcontracting), and anti-corruption laws

**Compliance training**
To help our employees internalize the value of compliance management, we provide regular training targeting newly-hired career and non-career employees. This training aims to provide guidance on the standards for conduct at work. In addition, we operate regular sessions on competition and anti-corruption laws. To prevent risks associated with expanding overseas sales, we are also working on practical programs that can be utilized on-site.

- Fair business transactions (career employees)
  - LS Miraewon (Feb. 6) and Gunpo research center (Feb. 27)
- The Agency Act and the Fair Trade Act (career/non-career): LS Tower (Jul. 25)
- Introductory legal course (career): LS Miraewon (Sept. 13)
- Receivables management: LS Miraewon (May 31)
- International project contract and claim management: LS Tower (Aug. 28)
- The Subcontracting Act: LS Tower (Aug. 28)

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1) Compliance Program
Conducting risk prevention activities on international projects

To prepare for saturation in the domestic cable market and to become a leading company on the global stage, we are focusing on expanding overseas sales. As our management views elevated customer requirements and market entry barriers to be the risk factors involved, activities are being conducted to address these challenges. From 2018, efforts are being made to support bidding on large-scale projects through a variety of tools applicable to work and with legal assistance.

<table>
<thead>
<tr>
<th>Focus</th>
<th>Contract terms</th>
<th>From the perspective of construction management</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Conducting a thorough analysis of contract/ construction terms</td>
<td>Limitation of liability</td>
</tr>
<tr>
<td>2</td>
<td>Identifying advantages/ disadvantages and receiving a quotation</td>
<td>Data provided from the owner</td>
</tr>
<tr>
<td>3</td>
<td>Preparing a plan A and plan B for negotiations</td>
<td>Making the owner responsible for the data</td>
</tr>
<tr>
<td>4</td>
<td>Increasing the odds of winning future contracts with the owner</td>
<td>Receiving whether it is possible to extend construction duration and charge additional construction cost if geological features are different from the data provided</td>
</tr>
</tbody>
</table>

**Bidding document structure**
- Checking which information in bidding documents will be used for a contract
- Variation / Change Order
  - Identifying what is subject to variation, and checking whether it is possible to make a proposal for the variation and what are the compensation procedures
- Terms on construction impracticability
  - Standby rate criteria and payment
  - Force Majeure

**Consequential and indirect damages**
- Limitation of liability
  - Applying reasonable endeavors rather than best endeavors
  - Specifying the criteria for achieving laying depth
- Method of construction
  - Checking owner’s requirements of construction methods
  - Simultaneous cable pulling and laying, and pre-trenching
  - Route clearing (PLGR)
  - Back-fill engineering (natural back-filling)
- Cable laying, dredging, and HSD (Y/N)
- Construction for cable protection (Y/N)
- Deep sea: cable pulling (Y/N)

**Soil data check**
- Analyzing data provided by the owner and reviewing the need of an additional survey
- Determining the construction method based on the analysis

Upgrading the standard form of contract and providing legal consultation

We review contracts from the perspectives of risk identification, customers, suppliers, fair competition, and CSR. This approach is reflected in the compliance guidelines upon which our employees act. These guidelines will help our employees remain fully in compliance with laws and regulations and serve as a basis for us to prevent economic loss to the company and to society.

<table>
<thead>
<tr>
<th>Focus</th>
<th>Contract review and legal consultation</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>Contract review</td>
<td>127</td>
<td>130</td>
<td>170</td>
</tr>
<tr>
<td>Legal consultation</td>
<td>1,840</td>
<td>2,200</td>
<td>2,050</td>
<td></td>
</tr>
<tr>
<td>Overseas</td>
<td>Contract review</td>
<td>127</td>
<td>223</td>
<td>233</td>
</tr>
<tr>
<td>Legal consultation</td>
<td>2,389</td>
<td>2,389</td>
<td>2,389</td>
<td></td>
</tr>
</tbody>
</table>

*Subcontracting contract: strengthening bargaining power in negotiations by bringing multiple subcontractors to the table.

Ethical management means conducting business activities in a transparent and fair manner by putting ethical values on top priorities. It allows companies to give trust and confidence to their customers, employees, competitors, suppliers and shareholders. Our management philosophy is that we should fully abide by principles, laws, and regulations and be ethically responsible while doing business. Based on our philosophy, we would like to achieve our goal of becoming “Your No. 1 Creative Partners”.

**Strategic direction**
- Strengthening the foundation for ethical management and raising employee awareness

**Key tasks**
- Strengthening the foundation for ethical management
- Raising awareness of stakeholders
- Providing guidance on ethical values through ethical management guidelines
- Implementing ethical values through the Code of Conduct
- Operating an organization and systems
  - Ethical management website
  - Cyber Reporting Channel
  - Reporter protection program
  - Reward for reporting
- Clean Company
- Raising awareness of stakeholders
- Ethical management training / Promotion / Official document for cooperation to suppliers / Evaluation of ethics

**Performance in 2018**
- The evaluation result of ethics was utilized to review the need of the revision of the Code of Conduct.
- A total of eleven reporting cases from Cyber Reporting Channel and in writing were received, investigated and addressed.

**Targets in 2019**
- LS C&S Code of Conduct and implementation guidelines: refining the Code of Conduct and guidelines for implementation
- Promotion activities: introducing programs for implementation and diversifying promotional content
- Intensive training: for employees of the head office and subsidiaries to be dispatched overseas
Strengthening the foundation for ethical management

Implementation of the Code of Conduct

We established our Code of Conduct to provide a framework in which employees perform their work ethically and in compliance with laws and regulations and fulfill our corporate social responsibility. This is applied to LS C&S and all of its subsidiaries. The Code of Conduct consists of six categories: responsibilities and obligations toward customers; basic ethics for employees; fair competition; fair business transactions; corporate responsibilities for employees; and responsibilities toward the country and society.

In addition, implementation guidelines help our employees understand our Code of Conduct and act upon it. The guidelines serve as criteria for making decisions and taking actions in ethically challenging situations at work. Meanwhile, an ethics evaluation has been conducted on an annual basis to assess the utilization of the Code by employees and review the need for revisions or refinements to it and related guidelines.

Operating organization and systems

Counseling center

The Ethics Secretariat is operating a counseling center for employees who face ethical issues. They can not only have counseling on ethical conflicts at work but also get general information on ethical management and advice on how to interpret and apply the Code through the Cyber Reporting Channel, phones or emails. Reports are received and handled confidentially, and the secretariat does not disclose the personal information of anyone reporting and the reported details without their consent.

Ethical management website

To introduce ethics management and promote the implementation of its values, a dedicated website is being maintained. Information, including a full text of the Code of Conduct and the pertinent programs for its implementation, can be found on the website. It also features a Cyber Reporting Channel that allows employees as well as stakeholders, including customers and suppliers, to report any unethical activities they witness or disadvantages they suffer.

Cyber Reporting Channel

The Cyber Reporting Channel allows employees as well as stakeholders, including customers and suppliers, to report any unethical activities they witness or disadvantages they suffer.

In addition, an Ethics Merit Award Program was established to promote employee participation in the Code of Conduct. The program is intended to motivate the implementation of its values, and to promote the ethical behavior of all employees.

Cyber Reporting Channel

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Raising awareness of stakeholders

Ethical management training

To prevent any possible violation cases of the Code of Conduct, ethics training is provided to employees from the head office and subsidiaries to be dispatched overseas. Since 2010, an ethics evaluation has been conducted for 86 employees. The results are reflected in the next year’s activities.

Training programs

Before the Chuseok and Lunar New Year’s holidays, we send an official document asking suppliers for cooperation in eradicating practices of giving and receiving gifts, entertainment, and money and informing them of our Code of Conduct and reporting channels. After the document is sent, it is also posted on the company intranet. In 2018, articles on whistleblowing systems, win-win management, and inclusive organizational culture were provided to employees from the head office and subsidiaries to be dispatched overseas. Since 2010, an ethics evaluation has been conducted for 86 employees. The results are reflected in the next year’s activities.

Method of evaluation:

We evaluate the effectiveness of ethics management training by the number of trainees and the number of training hours. The number of trainees is 86, and the number of training hours is 7.5 hours.

Raising awareness of stakeholders

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Evaluation of ethics

Since 2010, an ethics evaluation has been conducted for all employees on an annual basis to identify improvement areas for our ethical management activities. The evaluation survey consists of 25 questions in three categories: the basis of ethical management, implementation of corporate ethics, and ethics being practiced in our workplaces. The results are reflected in the next year’s activities.

2018 trainees

86

Mts of promotional materials posted

2,764
To ensure the right of employees to a healthy, safe, and pleasant environment, we make employee safety and health our top priority. To this end, an occupational safety and health management system is operated in accordance with the safety and health management system OHSAS 18001 to ensure a disaster-free workplace. In addition, labor and management are working together to strengthen the management of accident and disaster prevention.

1. Strategic direction
Ensuring a healthy workplace and achieving the goal of zero-accidents by strengthening safety activities

2. Key tasks
Conducting activities to promote safety
- Five safety rules at worksites / Workplace safety / Zero-accident campaigns / Safety passage for pedestrians
- Eliminating risks of potentially dangerous equipment
- Risk evaluation of all processes
- Safety diagnoses of cranes and forklifts
- PSM evaluation at the Gumi and Indong plants

Creating a healthy workplace
- Occupational disease / lifestyle disease prevention activities
- Safety promotion activities
- Occupational Safety and Health Committee / OHSAS 18001

3. Performance in 2018

- Established five safety rules at worksites for compliance
- Provided safety training: offline for managers/supervisors (16 hours) and online for office workers (12 hours), and revision of daily report format
- Conducted risk evaluation of all processes
- Examined the safety of cranes and forklifts
- Provided the PSM evaluation at the Gumi and Indong plants

4. Targets in 2019

- Conducting activities focusing the prevention of four critical risks
- Cranes, forklifts, rotating equipment, and fires/explosions
- Create and promote risk prevention rules, and revise safety rules of each process
- Strengthening the safe management of suppliers
- Promoting safety activities of suppliers
- Manage and supervise the safety-related tasks of each process
- Strengthening the right management of operators
- Develop and promote a healthy workplace
- Integrated MSDS management, work environment measurement, and special examinations
- Responding to internal and external safety issues
- Review the enforcement decree of the revised Industrial Safety and Health Act

Safety promotion activities

Establishing five safety rules at worksites
To create a workplace that emphasizes safety as its top priority, five safety rules were established. We are conducting promotion activities, including handouts to employees and visitors, postings on our intranet, campaigns, and in-house broadcasting. To strengthen compliance, employees who frequently violate the rules are subject to penalties.

<table>
<thead>
<tr>
<th>Five safety rules at worksites</th>
<th>(head of labor relations and environment division)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety means saving lives.</td>
<td>• No one is exempt from safety accidents</td>
</tr>
<tr>
<td></td>
<td>• Always identify risk factors and stick to the rules to protect yourself and your colleagues</td>
</tr>
<tr>
<td></td>
<td>• Always use safety passages and crosswalks while walking. Do not enter working areas outside your own designated areas!</td>
</tr>
<tr>
<td></td>
<td>• Do not use cell phones or earphones while on the move. Always remain aware of your surroundings while walking.</td>
</tr>
<tr>
<td></td>
<td>• Operate forklifts at 10km/h or slower. Slow clear of areas where forklifts are working.</td>
</tr>
<tr>
<td></td>
<td>• Do not jeopardize yourself with risky behaviors! Alert colleagues of any unsafe acts.</td>
</tr>
<tr>
<td></td>
<td>• Always report issues and act as directed.</td>
</tr>
</tbody>
</table>

Strengthening a workplace safety
Safety management system at worksites
We have refined the safety management system to ensure the safety of our employees and suppliers. Managers and supervisors are given certificates of responsibility for safety to encourage them to take greater responsibility for these roles.

Strengthening safety training
For a total of 221 employees, on-the-job training focusing on practical exercises was provided to managers and supervisors (16 hours), while quarterly three-hour online programs were operated for office workers, including researchers. In addition, the daily report format was revised to improve the effectiveness of group training.

Promoting safety communication
Safety communication activities are conducted to identify potential risks and raise awareness. Monthly meetings with supplier representatives are held to discuss pertinent issues and improvements. A safety reporting channel is maintained so that employees can present suggestions and ideas. Communication regarding external safety issues takes place through text messages sent within teams/divisions/plants.
**Zero-accident campaign**

A zero-accident campaign is launched every February and employees write a safety pledge to raise awareness of safety. In the winter, each team conducts fire prevention activities, including elimination of fire risks and a slogan contest.

**Repair of exterior pedestrian passages**

To ensure employee safety, we repaired a 1,360-meter pedestrian passage: sidewalk blocks were installed and painted; safety fences were erected to separate the paths for forklifts and trucks from pedestrian passageways; and a door was installed at the access road to a crosswalk.

**Eliminating risks of potentially dangerous equipment**

**Risk evaluation of all processes**

Regarding the potential risks in each process, we have continued to evaluate their frequency and degree, identify critical risks, and devise related improvement measures. The pertinent company rules have been revised to more systematically re-examine our full range of improvement measures spanning from risk elimination to safety gear.

**Conducting safety diagnoses of cranes and forklifts**

Safety examinations are regularly performed on potentially dangerous machines and devices. Monthly safety checks of cranes are provided by an on-site subcontractor. For six cranes and 66 hoisting accessories identified for their potential high risk, detailed examinations were conducted by external specialists. A total of 43 issues were found and addressed, and one crane will be replaced in 2019.

Forklifts are being managed by an on-site subcontractor. In a non-destructive inspection of 54 high-load forklifts, a minor crack was found in one forklift and improvement measures were taken.

**PSM evaluation at the Gumi and Indong plants**

We implement process safety management (PSM) to prevent fires and explosions at copper smelting furnaces and boilers that use LNG. This covers twelve categories, including process safety material management, emergency measures, and internal audits, according to which our PSM status is evaluated by the Ministry of Labor every four years. We have so far maintained an acceptable S rating.

**Creating a healthy workplace**

**Occupational disease prevention activities**

Working environment measurement and general/special health checkups

Work environment measurement is conducted biannually for all processes (233 sites) to create a pleasant working environment. The results are monitored to determine whether harmful factors are exceeding set limits or abnormal phenomena are occurring. In addition, general and special health checkups are provided for all employees (980 and 314 employees respectively) on an annual basis.

**Lifestyle disease prevention activities**

Smoking cessation programs

As part of the efforts to promote employee health, smoking cessation programs were operated for six months from February to July. Ten employees at the Gumi and Indong plants successfully completed the programs and were able to quit smoking.

**Employee health management**

Employees who receive abnormal findings in their health checkups are provided with consultations with doctors and drug prescription benefits. In addition, flu vaccinations are offered to employees and their families in partnership with local clinics to promote their health.

**Safety and health management activities**

**Occupational Safety and Health Committee**

The Occupational Safety and Health Committee is operated under the labor relations and environment division/CLO. Key health and safety issues are jointly reviewed and decided by representatives of labor and management through this committee.

It is composed of 15 members from management, including a person responsible for safety management, and 15 labor representatives, including the head of the labor union. Key considerations include making a plan to prevent industrial accidents; establishing and revising pertinent regulations; providing training to workers; checking and improving the working environment; managing employee health; and collecting statistics on industrial accidents.

The committee meets on a quarterly basis to consider and vote on key issues. Approved items are announced to all employees. In 2018, a total of 65 items were considered and decided, and actions have been taken in response.

**OHSAS 18001**

We have been carefully maintaining OHSAS 18001, an international standard for safety and health management.

Every year, management reviews the performance over the previous year, sets goals for the current year, and operates programs for improvement. Each team internally analyzes implementation status, identifies issues, and conducts independent improvement activities.

Our OHSAS 18001 compliance status is evaluated by the certification organization UL on an annual basis to ensure we are meeting global standards for safety and health management.

1. **OHSAS 18001 certification**

   - President/CEO
   - Labor relations and environment division/CLO
   - Occupational Safety and Health Committee
   - General/HSQ

2. **Oversea work

   - General and special health checkups for all employees
   - Smoking cessation program

3. **OHSAS 18001 projects (13 teams)**

   - General projects (10 teams)
   - Indong plant (10 teams)
   - Donghae plant (10 teams)

4. **Plant projects (13 teams)**

   - LSHQ
   - Power transmission line laying, and submarine cable installation (underway)
Based on our belief that sustainable performance can be achieved only through the efforts of the people involved, we strive to secure and nurture creative talent. The talent we seek includes: professionals with outstanding job competence; members leading the development of the organizational culture by implementing its core values; and global leaders actively responding in an ever-changing environment. We aim to create an environment in which the company and its employees grow together, thereby creating greater value.

**Strategic direction**
Supporting employees with a sense of ownership in their jobs to make a great achievement together

**Key tasks**
Improving employee satisfaction
Organizational competence and vitality / Worksite satisfaction
Securing talent and ensuring fair HR management
Employment / Performance management / Fair evaluation / Appropriate compensation

Employ welfare benefits
C.O.R.E. Prize
Nurturing talent
Launching a mobile app training program (Touch Class) / Offering leadership training / Strengthening job competence / Promoting One LS C&S for suppliers / Supporting overseas subsidiaries

**Performance in 2018**
Securing talent and ensuring fair HR management

- **C.O.R.E. Prize**
- **Nurturing talent**

**Operated a performance management system**
- **Appropriate rewards: Customer First and R&R prizes**

**Targets in 2019**
- Improving employee satisfaction
  - Enhance organizational vitality index
  - Increase worksite satisfaction index
  - Securing talent and ensuring fair HR management
  - Optimize HR management
  - Enhance employee competitiveness
  - Nurturing talent
  - Focus on the training of Korean and local employees in overseas subsidiaries (local team leaders, and dispatched employees)
  - Operate programs for job competence

**Improving employee satisfaction**

**Organizational competence/vitality indexes**
Organizational competence recently recorded 54/100 points, the same as in the previous year, while organizational vitality rose two points from 2017 to reach 72 points. Among the five elements on the organizational competence index, the score for team member capacity rose slightly (two points). Organizational vitality, an element of organizational effectiveness showed a significant increase of four points.

<table>
<thead>
<tr>
<th>Organizational competence index</th>
<th>Organizational vitality index</th>
</tr>
</thead>
<tbody>
<tr>
<td>(three-year trend)</td>
<td>(three-year trend)</td>
</tr>
<tr>
<td>2016 54</td>
<td>2016 72</td>
</tr>
<tr>
<td>2017 54</td>
<td>2017 70</td>
</tr>
<tr>
<td>2018 54 (unit point)</td>
<td>2018 72 (unit point)</td>
</tr>
</tbody>
</table>

**Worksite satisfaction level**
The company-wide composite satisfaction level increased 0.9 points from the previous year. For the worksite satisfaction level, it has improved at all worksites except the Gumi plant. We will continue in our efforts to improve the working environment at all our facilities.

<table>
<thead>
<tr>
<th>Company-wide composite satisfaction level</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013 72.8</td>
</tr>
<tr>
<td>2014 72.3</td>
</tr>
<tr>
<td>2015 74.6</td>
</tr>
<tr>
<td>2016 73.2</td>
</tr>
<tr>
<td>2017 73.6</td>
</tr>
<tr>
<td>2018 74.5</td>
</tr>
</tbody>
</table>
Securing talent and ensuring fair HR management

Employment

We strive to find the right people for the company who are positive, creative, and professional. We employ people for non-career, career, and job-type tracks through the process of paper screening → personality and aptitude tests → working level interview → executive interview.

In order to strengthen our competitiveness, we also hire international professionals through an overseas recruitment network.

Performance management

We operate the SPCM (Strategic Performance & Competency Management) system to achieve outcomes that align the company’s goals with individual goals.

Once key tasks are set to ensure each functional organization and team achieves its management goals, employees establish a development plan for the competencies required for reaching performance targets for the defined key tasks. The advantages of SPCM are as follows: employees feel more responsible for their work when they take part in the setting of performance targets. They are motivated to determine a direction for their career development in a systematic manner by analyzing their strengths and identifying what needs to be improved and developed.

Fair evaluation

In order to evaluate performance in a fair and objective manner, we disclose our evaluation criteria and follow a pre-defined process. Coaching and progress check are provided to help employees produce results and develop capacity. The results are released to the pertinent employees, teams, or divisions to ensure transparency and they are allowed to raise their objections to the results. While doing so, employees become more receptive to evaluation results.

We also make a variety of efforts, including self-development planning and coaching, to efficiently link the evaluation of employees to nurturing talent.

Appropriate compensation

Based on our HR policy, we operated a compensation system reflecting employee performance. Compensation is provided based on the evaluation results of group and individual performances in the form of annual base salary, management incentives, and individual incentives. Employees with outstanding performance are provided with overseas training and awards as well.

Employment welfare system

We operate a welfare system that covers six areas crucial to employee health and economic stability, thus allowing them to take pride in the company and concentrate on their work. In addition, we are offering programs to promote family-friendly management so that a positive working environment can be created.

In 2018, as part of these efforts, we invited the family members of employees to an event named “Homeplay.” This helped lessen the barriers between them and the company. In 2019, we will encourage employees to take their vacation days on sandwich days falling between two holidays in March, April, May, October, and December so that they can refresh themselves and restore their energy.

Healthy life

Medical expense reimbursement for employees
Medical expense reimbursement for family members of employees by using a company welfare fund
Free medical checkups for employees and their spouses
Sports facilities for employees
Healthcare rooms or clinics at workplaces
Counseling programs at the head office and R&D center

Cultural life

Support for in-house club activities
Gift cards for anniversaries, including birthdays and wedding anniversaries
Cultural events such as the provision of sports game tickets and lectures for family members of employees

Energetic life

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

Stable life

Family occasion support: money gift or condolences money for family occasions of employees such as weddings or funerals
Dormitories or employee apartments at local workplaces
Group life and health insurances for employees
Commuting support: commuting bus services

Hopeful life

Monthly in-house online training programs on job skills, leadership, foreign languages
Mid-/long-term educational support for graduate schools, MBA, and intensive foreign language programs
Outside training programs on job skills and foreign languages

Prosperous life

Financial aid of middle school, high school and college tuitions for the children of employees
Housing loan support
Discount for our sister company products (LS Networks)
Retirement gifts

Employee welfare fund

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-house welfare fund provided</td>
<td>322 thousand</td>
<td>440 thousand</td>
<td>361 thousand</td>
</tr>
<tr>
<td>School expense support</td>
<td>398 thousand</td>
<td>350 thousand</td>
<td>2,302 thousand</td>
</tr>
</tbody>
</table>

Retirement pension system

Since 2011, the retirement pension system has been operated for all employees. They can choose between DB (defined benefit) and DC (defined contribution) plans.
Leadership training by job position

We provide leadership training to promotion-track employees, newly promoted employees, and team leaders to help them define the leadership required by their job position and fulfill their roles as leaders.

Group coaching programs for team leaders

These programs aim to help team leaders strengthen the ability to guide their teams and produce results. In 2018, CORE coaching programs were conducted for newly-promoted team leaders at headquarters and the Gumi plant. They were provided in four three-hour sessions (three hours per session) from mid-August to early December. On the theme of performance management from establishing targets to evaluation and follow-up, a variety of methodologies including scenario practices and video toolkit were applied to enhance their implementation. Participants reported that they will apply what they learned during the training to running their teams and it will be useful in carrying out their roles as team leaders.

Nurturing talent

Launching a mobile app for employee training

As part of the efforts to proactively respond to changes in IT stemming from the Fourth Industrial Revolution, we launched a mobile app for employee training. To enhance productivity and performance by concentrating working efforts and ensuring work-life balance, ‘LS C&S Workfit’ mobile-based programs were put into operation on June 1, 2018.

Employees can take courses on our products using this app, including ‘LS Biz Master’ and Unwire ‘WorkWay’ mobile-based programs were put into operation on June 1, 2018. To enhance productivity and performance by concentrating working efforts and ensuring work-life balance, ‘LS C&S Workfit’ mobile-based programs were put into operation on June 1, 2018.

Offering leadership training

Assimilation workshop

We provide an assimilation workshop early in each year to help newly-promoted or transferred executives and heads of Groups or teams to win the trust of their team members and ensure continuity in the work environment and the results of their Groups or teams. For this three-hour program, the management principles and directions of Groups and questions and requests from members are shared with their leaders.

Lectures for executives

We invite renowned experts from different fields to give quarterly lectures to executives and the leaders of teams, divisions and Groups. These lectures on topics ranging from AI to technology trends to leadership as seen through the lens of psychology, literature, and classical music serve as opportunities for them to learn more about current trends and issues and respond more positively to changes.
I Five programs for strengthening job competence I

Technology sales training

Our technology sales training consists of 41 programs, with job competence tracks for general sales and technology sales, targeting assistant managers and rank-and-file employees. We plan to operate these programs on a regular basis.

Understanding DT and DT Academy programs

Understanding DT is a program to help executives and division heads understand digital transformation (DT) to recognize the direction of social changes and prepare for the future. Meanwhile, working-level employees join a DT Academy, a four-day program with five sessions covering the background of DT, utilization of big data, and programming with R and Python.

DT course for team leaders and members

In this program, team leaders learn the process of understanding DT, big data utilization, and analysis and planning. Designated team members identify tasks related to their work for analysis and planning using big data and implement the results. This program is provided to the production group and will be expanded into other areas, including sales, R&D, and support.

Capacity-strengthening program

Following a similar program for managers in 2017, the scope has been expanded to include assistant managers and rank-and-file employees and support them in achieving performance targets.

Growth facilitator program

This Core Communicators program aims to enhance communication and facilitation skills for cooperative work, discussion, and decision-making and promote the use of these skills on teams.

Promoting One LS C&S for suppliers

For our suppliers in the power distribution area, lectures on the roles and responsibilities of leaders were given to CEOs. We also provided sales employees with training programs, including on understanding LS C&S and raising loyalty, sales capacity building for new products, bond management and marketing and promoting networking and cooperation between LS C&S and its suppliers. Participants from 20 suppliers showed a positive response.

Supporting overseas subsidiaries

Leadership training at LSHQ China

We provided leadership training to team leaders at our Chinese subsidiary LSHQ. This ac-
tion-learning based program is aimed to help them proactively seize the initiative by recogn-
ing changes in the role of leadership. They learned not only about prioritizing tasks for their teams and conducting tasks through performance management, but also identifying the roles of leaders in contributing to interactions with team members and achieving results throughout the process. We plan to phase in this program across other overseas subsidiaries.

Dispatch programs for exemplary local employees

Local employees of overseas subsidiaries who show exceptional performance at work were given opportunities to gain experience at our domestic production worksites and receive LS C&S Hay training. These programs are aimed at motivating them to take pride in the company and contribute to producing results by learning our management philosophy and culture. Local employees from Vietnam, China, and India took part and reported that the programs were highly useful and satisfactory. In addition, they received positive evaluation results from their mentors and team leaders at the head office and domestic workites. We will continue to devise increasingly effective programs through a continuous program of improvement.

HR development system

Our HR development system is classified into five tracks and six development stages. They include programs for newly recruited career/non-career employees, the SLP (Solution Leader Program) course, leadership programs, common/specialized training courses, and foreign language programs. There are also programs on sexual harassment prevention, awareness-raising on people with disabilities, workplace quality, and environment safety and that are compulsory for all employees.

I Our HR development system I

<table>
<thead>
<tr>
<th>A. Business management and leadership</th>
<th>B. Solutions (LS-KMU) technology management</th>
<th>C. Job competence</th>
<th>D. Global</th>
<th>E. Misc.</th>
</tr>
</thead>
</table>
| New Entry (career)                   | New Entry (non-career)                   | Training leadership (external) | Korea
| LS MBA                               | LS-SKKU evening course                   | Senior-level training (online) | Vietnam |
| LS MBA                               | S-ELP1) Management Development Program   | Leadership training (in-person) | Vietnam |
| S-ELP2) Leadership Management Program | S-ELP3) Management Development Program   | In-house/external foreign language programs | China |
| New Entry (career)                   | New Entry (non-career)                   | Short-term English programs | China |
| New Entry (career)                   | New Entry (non-career)                   | Intensive-Chinese/English/China Biz-Academy | China |
| New Entry (career)                   | New Entry (non-career)                   | | | |
| Average training hours per employee (including production worker) | | | | |
10 SPECIAL THEMES

Advanced Green Management

1. Strategic direction
   Strengthening environmental management for zero accidents and pleasant work environment and contributing to a green society by reducing greenhouse gas emissions.

2. Key tasks
   - Operation of an environment management system
     - HSE system / Investment in environmental facilities
   - Efficient use of resources
     - Usage of key resources / Water resource at plants / Plastic collection and recycling
   - Use of green materials
     - Product lifecycle management / Chemical management at plants / Chemical management of products
   - Response to climate change
     - Climate change response system / Energy use and GHG emission management / Reduction of GHG emissions
   - Emissions and waste discharge management
     - Air management / Waste water management / Waste management

3. Performance in 2018
   - Operation of an environment management system
     - Conducted the certification transition to ISO 14001:2015, established a company-wide HSE database, and supported subsidiaries in HSE
     - Strengthened the efforts to implement the agreements on product plastic collection and recycling
   - Efficient use of resources
     - Built a system to manage harmful chemicals, and complied with the Act on the Registration and Evaluation of Chemicals in regards to imported chemical substances
   - Use of green materials
     - Established GHG inventories for domestic and overseas subsidiaries
   - Response to climate change
     - Conducted activities to reduce risks of harmful materials, and responded to laws on fugitive dust emissions
   - Emissions and waste discharge management
     - Conducted activities to reduce risks of harmful materials, and responded to laws on fugitive dust emissions

4. Targets in 2019
   - Operation of an environment management system: strengthen the role of HSE Control Tower enhance HSE management; and upgrade the HSE certification version.
   - Efficient use of resources: make a plan for facilitating product resource recycling
   - Use of green materials: strengthen chemical management conduct Clean Factory activities, and build inventories of imported chemicals.
   - Response to climate change: provide training on company-wide response to climate change
   - Emissions and waste discharge management: proactively respond to the pertinent laws and regulations

Operation of an environment management system

HSE System

Certification transition to ISO 14001:2015

Since we announced our HSE policy for the sustainable development of the surrounding environment and local communities, we have been pursuing environmental management that enables both business growth and environmental conservation. In 2018, we contracted with a professional consulting firm and worked together on an ISO 14001:2015 transition plan. A gap analysis was conducted based on the changed requirements. Internal review by the company and verification by an external agency were performed for new specifications, including ‘opportunities and crises in an organization’, and ‘cycle-thinking in environmental risk assessment.’

In September, we completed the transition following the Stage 1 and primary evaluations performed respectively in July and August. We have been maintaining OHSAS 18001 through an annual evaluation. For the transition to ISO 45001 by 2020, we have initiated working-level training and a contract with a professional consulting firm. We will systematically continue these sustainable development efforts.

HSE support activities for overseas and domestic subsidiaries

To support our domestic and overseas subsidiaries and perform health, safety, and environmental management at the global level, we conduct diagnoses on their HSE processes. From 2016 to 2017, all of our domestic overseas subsidiaries were examined in the areas of environment, safety, health, and firefighting. We confirmed the actions to be taken for identified issues and the state of progress of established improvement plans.

We regularly met with subsidiaries to discuss issues and response measures regarding their HSE activities. For new subsidiaries, we provided support for environmental facilities and the approval process.

In addition, our HSE rules were translated into English to build an enterprise-wide database, and disaster and environmental management indexes for HSE were analyzed. In 2019, we will launch an HSE planning team to improve our support for domestic and overseas subsidiaries as they reduce their risks.

LS & S is pursuing the goal of becoming a leading company in the areas of health, safety, and environment (HSE). To this end, we have promoted green management to perform our business in an eco-friendly manner. We are striving to minimize the environmental impact of every aspect of our business by applying standards that surpass the legal requirements for pollutant management. Considerable efforts are being made at our domestic plants and overseas subsidiaries to manage HSE on behalf of our employees and local communities.
Securing transparency in HSE Report and disclosure of a chemical release survey
A chemical release survey aims to encourage companies to voluntarily reduce their release of chemical substances by reporting to the government on the release and transfer of chemical substances in their business operations. We will commission an external agency to conduct a survey on the chemicals used by our plants (15 types of chemicals including copper for Gumi, ten including aluminum for Indong, and three including copper for Donghwa). This annual survey is conducted in April. The survey results will be submitted to the Ministry of Environment and disclosed in its PRTR (pollutant release and transfer register) system.

Disclosure of corporate environment information
To fulfill our corporate social responsibility, we disclose the environment information of all of our worksites, including headquarters and plants, in accordance with the Act on the Support for Environmental Technology and Industry. The information includes green management, resource and energy conservation, GHG emissions and environment pollution.

Purchase of pollution insurance policies
To compensate for any environmental and pollution accidents that could occur in our business operations, we have environmental pollution liability insurance in line with the guidelines of the Ministry of Environment.

Investment in environment facilities
Improvement of treatment facilities for harmful chemicals
We repaired two harmful chemical treatment facilities for the magnet wire production process through the replacement of leakage protection walls and firewalls and the installation of forced exhaust systems in accordance with the Toxic Chemicals Control Act.

Installation of chemical leakage sensors
Chemical leakage sensors and gas leak detectors were installed at chemical treatment facilities, along with related processes allowing an immediate response to any possible chemical or gas leakage.

Efficient use of resources
Usage of primary resources
We conduct a variety of activities to efficiently use resources, such as metals and plastics, to establish a resource recycling system. Our development and production teams review and develop ways for efficient use of primary resources, including electrolytic copper and aluminum used for conductors, and polyethylene and polyvinyl chloride for insulators, and identify measures to recycle raw materials and products. In addition, we successfully completed the resource recycling performance management system projects with the Ministry of Environment to further promote the recycling of wastes.

I Usage of primary resources

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrolytic copper (Cu)</td>
<td>222,609</td>
<td>229,930</td>
<td>208,993</td>
</tr>
<tr>
<td>Aluminum (Al)</td>
<td>15,194</td>
<td>15,213</td>
<td>22,502</td>
</tr>
<tr>
<td>Polyethylene (PE)</td>
<td>12,807</td>
<td>13,474</td>
<td>13,926</td>
</tr>
<tr>
<td>Polyvinyl (chloride)</td>
<td>7,060</td>
<td>4,163</td>
<td>5,629</td>
</tr>
</tbody>
</table>

Water resources at our plants

Use and management of water resources
To address global water resource issues, we are engaging in activities to minimize risk related to water supply needed for our business operations. Water resources use at plants includes cooling water for both the cable extruding process and for the melting furnace for electrolytic copper and aluminum. Water is also required for human uses such as drinking and sanitation. As a result of water conservation activities in 2018, total water consumption dropped by 27,000 tons from the previous year. Due to an 10.1% decrease in production volume, water use intensity rose by 3.1%. Going forward, we will continue our efforts to conserve water resources based on our medium / and long term plans.

I Water usage and water use intensity

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>For human uses</td>
<td>493,678</td>
<td>514,951</td>
<td>441,964</td>
</tr>
<tr>
<td>For industrial uses</td>
<td>12,127</td>
<td>12,126</td>
<td>15,996</td>
</tr>
<tr>
<td>Underground water</td>
<td>6,538</td>
<td>7,986</td>
<td>0</td>
</tr>
<tr>
<td>Company total</td>
<td>513,343</td>
<td>532,093</td>
<td>503,970</td>
</tr>
</tbody>
</table>

Plastic collection and recycling

Collection and recycling of plastic from power/communication cable wastes
As our power and communications cables have long-term durability, products that were sold decades ago are now generating wastes. To promote the recycle of plastic from power/communication cable wastes, we signed a voluntary agreement on plastic waste collection and recycling with the Ministry of Environment. Since then, we have collected and recycled plastic from power/communication cable wastes. We are providing support to recycling companies who also signed the voluntary agreement in order to explore new markets through increasing the volume of recycled plastic and enhancing the quality of recycled compound.

I Voluntary collection and recycling of plastic from power/communication cable wastes in Korea *1

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastic used (ton)</td>
<td>20,966</td>
<td>21,705</td>
<td>22,799</td>
</tr>
<tr>
<td>Plastic collected and recycled (ton)</td>
<td>3,877</td>
<td>3,718</td>
<td>4,193</td>
</tr>
<tr>
<td>Plastic collected and recycled (%)</td>
<td>18.26</td>
<td>17.61</td>
<td>18.20</td>
</tr>
</tbody>
</table>

*1) Products for collection and recycling are limited to finished products sold to end-customers. This 2018 recycling volume will be confirmed after June 2019.
Extended Producer Responsibility for plastic packaging materials
The EPR (Extended Producer Responsibility) is being implemented in which domestic producers using plastic packaging materials are required to collect and recycle wastes. To fulfill our obligations for recycling plastic packaging materials, we have joined the Recycling business mutual aid cooperative and are proactively reporting on the volume of packaging materials delivered, including OEM products. We are regularly paying our recycling contributions.

Use of eco-friendly materials
Product lifecycle management
The goal of our product lifecycle management is to bring value to customers by manufacturing products that efficiently transmit energy and information with a minimal impact on the environment. In response, we are concentrating our efforts on developing products that meet a variety of user environments, allow the transmission of large volumes of electricity, and can be utilized for new and renewable energy. Meanwhile, we are operating a chemical management system, promoting the recycling of collected wastes, supporting the recycling industry, and conducting activities for energy conservation in production and for reducing GHG emissions.

Chemical management at plants
Chemical management
The use of toxic chemicals in our plants has steadily decreased as a result of efforts to minimize such substances. However, with the solid lead used in the lead sheathing process being placed on the list of toxic chemicals under the revised Toxic Chemicals Control Act, our designated use of harmful chemicals significantly increased. In response, we took necessary measures in accordance with this revision, including gaining approval for our processes using lead, conducting off-site risk assessment, and supplying all employees handling chemicals with pertinent training and personal protective gear. We are also maintaining an emergency response system for any possible chemical leakage, fire, or explosions. Since detailed diagnoses were conducted in 2017, facility improvements have been made. In 2018, we replaced firewalls and lights, repaired leakage protection walls, applied corrosion-resistant paint, and installed forced-air exhaust systems. Strengthening harmful chemical management process
To promote the safe management of harmful chemicals and prevent accidents, we launched chemical safety communities in cooperation with the Ministry of Environment. Workshops joining the communities share information on pertinent laws and regulations and on measures to safely manage chemicals. They also benchmark best practices of others. In addition, mock exercises are practiced to respond to any potential accidents. Joint emergency rescue drills are being conducted with the Ministry of Environment and local governments. As part of the efforts to reduce the use of harmful substances, we are testing chemicals to replace currently-used methyl ethyl ketone in printing. When the tests are completed, the findings will be applied to production.

Moreover, the introduction of the CMS (Chemical Management System) is being reviewed. After the decision-making process is complete, the findings will be implemented for more efficient and systematic management.

Product chemical management
We monitor trends in domestic and international environment regulations through various channels and reflect them in our in-house chemical substance management rules. Seminars on environmental laws are provided to our employees and suppliers, allowing them to proactively manage any risks related to the enactment or revision of laws and fulfill their legal obligations.

Compliance with the Act on the Registration and Evaluation of Chemicals
Domestic companies importing or manufacturing more than one ton of phase-in chemical substances or 100 kilograms of non-phase-in are subject to conducting hazard evaluations and submitting the report to the Ministry of Environment. We annually report to the government the volume and purpose of imported chemical substances and fulfill the obligation of registration of the pertinent chemicals in consultation with their suppliers.

<table>
<thead>
<tr>
<th>Plastic packaging materials recycling</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastic packaging delivered</td>
<td>225</td>
<td>221</td>
<td>2019</td>
</tr>
<tr>
<td>Required volume of recycling</td>
<td>173</td>
<td>159</td>
<td></td>
</tr>
<tr>
<td>Recycling volume</td>
<td>225</td>
<td>222</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Recycling volume</th>
<th>Required volume of recycling</th>
<th>Plastic packaging delivered</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>235</td>
<td>201</td>
<td>211</td>
</tr>
<tr>
<td>2017</td>
<td>173</td>
<td>159</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>225</td>
<td>222</td>
<td></td>
</tr>
</tbody>
</table>
Response to climate change

Climate change response system

Strategies for climate change response

To respond to climate change at the company level, different teams from HSE, facilities, production, finance, and legal affairs are working closely together. They are required to report on trends and their performance to management. We provide customers with information on our response to climate change through the CDP (Carbon Disclosure Project) supply chain. Internal experts monitor trends in the carbon market and international climate change agreements and share them at the company level in order to refine the understanding of the pertinent laws and customer requirements.

Management of energy use and GHG emissions

Energy use

We set a target for energy use by worksite and production team and follow up with tasks to meet them. The state of progress is monitored on monthly energy use and cost data. A variety of activities to reduce energy use are being conducted and best practices are shared and benchmarked among worksites through technology exchanges.

GHG emissions

We have been monitoring and managing the Scope 1 and 2 GHG emissions of our worksites on a regular basis, and independently calculating Scope 3 emissions, indirect emissions regarding waste disposal, use of fuel, energy production, and leased assets.

Scope 1

The replaced fuel economizers were replaced by high-efficiency versions, allowing us to reduce their use of electricity and minimize their impact on the ozone layer through a new refrigerant.

Scope 2

As part of the effort to find opportunities to reduce GHG emissions, we identified the sources of GHG emissions at four domestic and overseas subsidiaries and established an inventory. Our GHG emissions calculations and management activities will be expanded to all of our subsidiaries.

Reduction of GHG emissions

Energy conservation and GHG emissions reduction at worksites

We have continued with investment in energy conservation and GHG emissions reduction. Energy conservation activities worth USD 1,342 thousand were conducted focusing on UT optimization, facilities and UT efficiency, and improvement of energy-consuming processes (facilities). As a result, GHG emissions were successfully reduced by 1,511 tCO₂eq.

Solar farms construction plan by LS Buildwin

LS Buildwin will construct 2.5MW solar farms utilizing rooftop at an industrial cable building within the Indong plant to respond to growing energy transition requirements and the government’s “Renewable Energy 3050” policy.

Emissions and waste discharge management

Air pollutants management

To address PM2.5 issues and comply with the Clean Air Conservation Act, we have continued our efforts to reduce air pollutants. We have upgraded outdated facilities, and operated air pollution control facilities in an optimal manner to reduce pollutants.

The air pollutants we produce are mainly dust, NOx, HCl, and HF. In 2018, due to a decrease in facility investment and production volumes and facility operation hours, NOx, accounting for over 90% of our air pollutants, was drastically reduced. As a result, the intensity dropped 46%. Meanwhile, in order to efficiently reduce NOx, known as substances causing PM10, we plan to invest in RTD (regenerative thermal oxidizer) and SCR (selective catalytic reduction) systems and introduce low-NOx burners.
I Waste disposal I

Resource recycling performance management system

Resource recycling performance management refers to activities for increasing recycling and decreasing disposal across the processes from the generation of wastes to their final disposal. In other words, it is a system to minimize incinerated or landfill wastes and maximize recycling rates.

I Work process of the resource recycling performance management system I

Continuous analyses of air and water pollutants

We continuously measure and analyze both raw materials and emissions to identify air/water pollutants generated during business operations. Analyses are made regarding substances defined as harmful materials under the pertinent laws. Reasons are recognized and improvement actions are performed. In 2018, an overall inspection was conducted for newly-added air pollutgants and periodic analyses of water pollutants were made to minimize any risk.

Activities for dioxin reduction, including checking dust collectors, reduction catalyst replacement, and facilities upgrades, were conducted to operate facilities and equipment in an optimal condition. In addition, an environmental facility management system consisting of internal experts is in place to provide regular repairs and maintenance and prevent environment-related risks and accidents.

Response to laws on fugitive dust emission facilities

Fugitive dust (HAPs) emission facilities management

We manage fugitive dust emission facilities through which hazardous air pollutants (HAPs) are directly released to the air in accordance with pertinent laws. Since a new law was enacted in 2016 upon the enforcement of a new law, we have conducted annual examinations and submitted the results to the Ministry of Environment. In addition, with a plan to invest in emissions facilities for the magnet wire production processes in place, facilities upgrades will contribute to reducing environment risks.

Violation of laws and regulations

To comply with laws, our management standards are set at levels 20% to 30% stricter than the legal limits. We disclosed compliance with environment and safety laws and regulations while monitoring their status. Revised laws and regulations are applied to our management standards and pertinent risks are reviewed. In addition, to prevent such risks we identify potential violations that could occur during our business operations.
## Consolidated Statements of Financial Position  
'December 31, 2018, 2017 and 2016'

(Units: USD million)

<table>
<thead>
<tr>
<th>Assets</th>
<th>2018</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and cash equivalents</td>
<td>1,129</td>
<td>788</td>
<td>349</td>
</tr>
<tr>
<td>Available for sale financial assets</td>
<td>54</td>
<td>34</td>
<td>33</td>
</tr>
<tr>
<td>Financial assets at fair value through profit or loss</td>
<td>32</td>
<td>25</td>
<td>24</td>
</tr>
<tr>
<td>Financial assets at fair value through other comprehensive income</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Financial assets at fair value through other comprehensive income</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Financial liabilities</td>
<td>1,557</td>
<td>1,077</td>
<td>992</td>
</tr>
<tr>
<td>Total assets</td>
<td>3,329</td>
<td>2,671</td>
<td>2,433</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>2018</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total current liabilities</td>
<td>1,279</td>
<td>1,222</td>
<td>1,267</td>
</tr>
<tr>
<td>Total non-current liabilities</td>
<td>1,077</td>
<td>849</td>
<td>625</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>2,337</td>
<td>2,071</td>
<td>1,901</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Equity</th>
<th>2018</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity attributable to owners of the Parent Company</td>
<td>1,785</td>
<td>1,391</td>
<td>1,237</td>
</tr>
<tr>
<td>Total equity</td>
<td>2,433</td>
<td>2,071</td>
<td>1,901</td>
</tr>
<tr>
<td>Total liabilities and equity</td>
<td>3,220</td>
<td>3,071</td>
<td>2,901</td>
</tr>
</tbody>
</table>
## Consolidated Statements of Comprehensive Income

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Continuing operations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue</td>
<td>2,727</td>
<td>3,518</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>2,462</td>
<td>3,413</td>
</tr>
<tr>
<td>Gross profit</td>
<td>265</td>
<td>305</td>
</tr>
<tr>
<td>Selling and administrative expenses</td>
<td>180</td>
<td>200</td>
</tr>
<tr>
<td>Operating profit</td>
<td>79</td>
<td>94</td>
</tr>
<tr>
<td>Other income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other expenses</td>
<td>234</td>
<td>234</td>
</tr>
<tr>
<td>Financial income</td>
<td>5</td>
<td>6</td>
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<tr>
<td>Other financial income</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Finance costs</td>
<td>33</td>
<td>37</td>
</tr>
<tr>
<td>Shares of equity-method earnings, net</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other non-operating income</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Profit before income tax</td>
<td>34</td>
<td>129</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>9</td>
<td>31</td>
</tr>
<tr>
<td>Profit from continuing operations</td>
<td>25</td>
<td>94</td>
</tr>
<tr>
<td><strong>Discontinued operations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss from discontinued operations, net of tax</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td><strong>Profit for the year</strong></td>
<td>32</td>
<td>85</td>
</tr>
<tr>
<td>Profit attributable to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parent Company</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit from continuing operations</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Profit from discontinued operations</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Profit attributable to Non-controlling interests</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Other comprehensive income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Items that will not be reclassified to profit or loss</td>
<td>0.3</td>
<td>(0.1)</td>
</tr>
<tr>
<td>Retirements of post-employment benefit obligations</td>
<td>0.3</td>
<td>(0.1)</td>
</tr>
<tr>
<td>Items that may be subsequently reclassified to profit or loss</td>
<td>1.3</td>
<td>(0.1)</td>
</tr>
<tr>
<td>Gross (loss) on valuation of available-for-sale financial assets, net</td>
<td>(0.04)</td>
<td>(0.1)</td>
</tr>
<tr>
<td>Cash (loss) on valuation of financial assets at fair value through other comprehensive income, net</td>
<td>0.07</td>
<td>0.07</td>
</tr>
<tr>
<td>Exchange differences</td>
<td>1.4</td>
<td>1.7</td>
</tr>
<tr>
<td><strong>Other comprehensive income (loss) for the year, net of tax</strong></td>
<td>2</td>
<td>(18)</td>
</tr>
<tr>
<td><strong>Total comprehensive income for the year attributable to</strong></td>
<td>34</td>
<td>116</td>
</tr>
<tr>
<td>Non-controlling interests</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Earnings per share from continuing operations</td>
<td>5.1</td>
<td>5.4</td>
</tr>
<tr>
<td>Losses per share from discontinued operations</td>
<td>(0.9)</td>
<td>(0.7)</td>
</tr>
<tr>
<td>Basic earnings per share</td>
<td>4.2</td>
<td>4.7</td>
</tr>
</tbody>
</table>

## Consolidated Statements of Cash Flows

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net cash outflows from operating activities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash generated from operations</td>
<td>(16)</td>
<td>(19)</td>
</tr>
<tr>
<td>Interest received</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Dividends received</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Interest paid</td>
<td>(25)</td>
<td>(40)</td>
</tr>
<tr>
<td>Income taxes paid</td>
<td>(17)</td>
<td>(22)</td>
</tr>
<tr>
<td><strong>Net cash outflows from investing activities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decrease (increases) in financial deposits</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Decrease (increase) in other receivables</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Proceeds from disposal of available-for-sale financial assets</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Proceeds from disposal of financial assets at fair value through profit or loss</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>Proceeds from disposal of property, plant and equipment</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Proceeds from disposal of intangible assets</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Proceeds from disposal of other investment assets</td>
<td>0.01</td>
<td>0</td>
</tr>
<tr>
<td>Payments for acquisition of property, plant and equipment</td>
<td>(130)</td>
<td>(135)</td>
</tr>
<tr>
<td>Payments for acquisition of intangible assets</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Payments for acquisition of available-for-sale financial assets</td>
<td>(0.1)</td>
<td>(0.1)</td>
</tr>
<tr>
<td>Payments for acquisition of financial assets at fair value through profit or loss</td>
<td>135</td>
<td>(97)</td>
</tr>
<tr>
<td>Loss of control over subsidiaries</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Payments for acquisition of investments in subsidiaries, associates and joint ventures</td>
<td>(36)</td>
<td>(2)</td>
</tr>
<tr>
<td>Payments for acquisition of businesses</td>
<td>(107)</td>
<td>(107)</td>
</tr>
<tr>
<td><strong>Net cash inflows from financing activities</strong></td>
<td>(172)</td>
<td>215</td>
</tr>
<tr>
<td>Proceeds from borrowings</td>
<td>45</td>
<td>163</td>
</tr>
<tr>
<td>Repayments of borrowings</td>
<td>(140)</td>
<td>(49)</td>
</tr>
<tr>
<td>Proceeds from issuance of debentures</td>
<td>(14)</td>
<td>(10)</td>
</tr>
<tr>
<td>Repayments of debentures</td>
<td>(25)</td>
<td>(25)</td>
</tr>
<tr>
<td>Cash inflows from consolidated equity transactions</td>
<td>41</td>
<td>32</td>
</tr>
<tr>
<td>Cash inflows from consolidated equity transactions</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>Dividends paid</td>
<td>0.4</td>
<td>0.03</td>
</tr>
<tr>
<td>Issuance of shares</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Others</td>
<td>(0.5)</td>
<td>(0.3)</td>
</tr>
<tr>
<td><strong>Net increase (decrease) in cash and cash equivalents</strong></td>
<td>(97)</td>
<td>84</td>
</tr>
<tr>
<td>Cash and cash equivalents at beginning of the year</td>
<td>229</td>
<td>204</td>
</tr>
<tr>
<td><strong>Net increase (decrease) in cash and cash equivalents</strong></td>
<td>(97)</td>
<td>84</td>
</tr>
<tr>
<td>Cash and cash equivalents at end of the year</td>
<td>144</td>
<td>288</td>
</tr>
</tbody>
</table>

(Unit: USD million)
### Separate Statements of Financial Position  'December 31, 2018, 2017 and 2016'  (Unit: USD million)

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-current assets for sale</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total non-current assets</td>
<td>796</td>
<td>820</td>
<td>982</td>
</tr>
<tr>
<td>Property plant and equipment, net</td>
<td>446</td>
<td>455</td>
<td>412</td>
</tr>
<tr>
<td>Intangible assets, net</td>
<td>29</td>
<td>29</td>
<td>10</td>
</tr>
<tr>
<td>Investment properties, net</td>
<td>7</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>Financial debt, net</td>
<td>1,010</td>
<td>973</td>
<td>900</td>
</tr>
<tr>
<td>Trade receivables</td>
<td>24</td>
<td>23</td>
<td>14</td>
</tr>
<tr>
<td>Other receivables</td>
<td>24</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Available for sale financial assets</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Financial assets at fair value/through profit or loss</td>
<td>-</td>
<td>-</td>
<td>0.5</td>
</tr>
<tr>
<td>Financial assets at fair value/through other comprehensive income</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Derivative financial assets</td>
<td>2</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Firm commitment assets</td>
<td>0.4</td>
<td>0.4</td>
<td>0.8</td>
</tr>
<tr>
<td>Investments in subsidiaries</td>
<td>233</td>
<td>245</td>
<td>158</td>
</tr>
<tr>
<td>Investments in joint ventures</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Deferred tax assets</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Other assets</td>
<td>0</td>
<td>0</td>
<td>0.001</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>1,966</td>
<td>2,230</td>
<td>2,387</td>
</tr>
</tbody>
</table>

| **Liabilities**             |            |            |            |
| Total current liabilities   | 889        | 1,038      | 1,049      |
| Trade payables              | 412        | 458        | 401        |
| Borrowings                  | 137        | 143        | 167        |
| Derivative financial liabilities | 37       | 15         | 18         |
| Firm commitment liabilities | 31         | 30         | 14         |
| Other payables              | 526        | 367        | 54         |
| Current income tax liabilities | 37        | 38         | 37         |
| Provisions                  | 96         | 104        | 94         |
| Other liabilities           | 96         | 104        | 94         |
| Non-current liabilities     | 550        | 519        | 605        |
| Borrowings                  | 412        | 435        | 506        |
| Derivative financial liabilities | 0        | 0          | 1.1        |
| Firm commitment liabilities | 1          | 0          | 0.7        |
| Other payables              | 526        | 367        | 54         |
| Net defined benefit liabilities | 0        | 0          | 0.1        |
| **Total liabilities**       | 1,172      | 1,377      | 1,653      |

| **Equity**                  |            |            |            |
| Share capital               | 88         | 84         | 84         |
| Share premium               | 410        | 415        | 416        |
| Reserves                    | 0          | 0          | 0          |
| Accumulated other comprehensive income | 12.1    | 12.1      | 12.1       |
| Other components of equity   | (0.1)      | (0.1)      | (0.1)      |
| Retained earnings           | 25         | 25         | 180        |
| **Total equity**            | 594        | 535        | 717        |
| **Total liabilities and equity** | 1,566     | 2,230      | 2,387      |

### Separate Statements of Comprehensive Income  (Unit: USD million)

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Continuing operations</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Items that will not be reclassified to profit or loss</td>
<td>0.2</td>
<td>(1.1)</td>
<td>(4)</td>
</tr>
<tr>
<td>Remeasurements of post-employment benefit obligation</td>
<td>-</td>
<td>(0.1)</td>
<td>(0.2)</td>
</tr>
<tr>
<td>Items that may be subsequently reclassified to profit or loss</td>
<td>(0.01)</td>
<td>(14)</td>
<td>1.3</td>
</tr>
<tr>
<td>Gain/loss on revaluation of available-for-sale financial assets</td>
<td>0.2</td>
<td>(0.01)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Gain/loss on revaluation of financial assets at fair value/through other comprehensive income</td>
<td>0.2</td>
<td>(0.01)</td>
<td>(14)</td>
</tr>
<tr>
<td>Cash flow hedges</td>
<td>0.1</td>
<td>(14)</td>
<td>1.3</td>
</tr>
<tr>
<td>Share of other comprehensive income (loss) of equity method investments</td>
<td>0</td>
<td>(14)</td>
<td>1.3</td>
</tr>
<tr>
<td><strong>Other comprehensive income</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total comprehensive income</strong></td>
<td>0.2</td>
<td>(14)</td>
<td>13.3</td>
</tr>
<tr>
<td><strong>Total comprehensive income for the year</strong></td>
<td>0.2</td>
<td>(14)</td>
<td>13.3</td>
</tr>
<tr>
<td><strong>Earnings per share</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic earnings per share</td>
<td>0.8</td>
<td>0.6</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Total liabilities and equity</strong></td>
<td>1,566</td>
<td>2,230</td>
<td>2,387</td>
</tr>
</tbody>
</table>
Separate Statements of Cash Flows

<table>
<thead>
<tr>
<th>Year</th>
<th>Net cash outflows from operating activities</th>
<th>Net cash inflows from financing activities</th>
<th>Net cash outflows from investing activities</th>
<th>Net cash outflows from others</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>155 (46)</td>
<td>206 (112)</td>
<td>4 (6)</td>
<td>4 (6)</td>
</tr>
<tr>
<td>2019</td>
<td>89 (46)</td>
<td>112 (112)</td>
<td>6 (6)</td>
<td>2 (2)</td>
</tr>
</tbody>
</table>

**Net cash outflows from operating activities**
- Cost incurred in operations
- Interest received
- Gross dividend and interest
- Interest paid
- Income taxes paid

**Net cash inflows from financing activities**
- Repayments of debentures
- Proceeds from issuance of debentures
- Repayments of borrowings
- Dividends paid
- Others

**Net cash outflows from investing activities**
- Proceeds from disposal of property, plant and equipment
- Payments for acquisition of intangible assets
- Payments for acquisition of investments in subsidiaries
- Proceeds from disposal of investments in subsidiaries
- Proceeds from disposal of property, plant and equipment
- Proceeds from disposal of investments in subsidiaries
- Proceeds from disposal of intangible assets
- Payments for acquisition of available-for-sale financial assets

**Net cash outflows from others**
- Decrease (increase) in financial deposits
- Decrease (increase) in other receivables
- Others

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**Third Party’s Assurance Statement**

To the Readers of 2018-2019 LS C&S Sustainability Report:

**Foreword**

Korea Management Registrar Inc. (hereinafter “KMR”) has been requested by LS Cable & System (hereinafter “LS C&S”) to verify the contents of its 2018-2019 Sustainability Report (hereinafter “the Report”). LS C&S is responsible for the collection and presentation of information included in the Report. KMR’s responsibility is to carry out assurance engagement on specific data and information in the assurance scope stipulated below.

**Scope and standard**

LS C&S describes its efforts and achievements of the corporate social responsibility activities in the Report. KMR performed a type2, moderate level of assurance using AA1000AS (2008) and SRV1000 from KMR Global Sustainability Committee as assurance standards. KMR’s assurance team (hereinafter “the team”) evaluated the adherence to Principles of Inclusivity, Materiality and Responsibility, and the reliability of the selected GRI Standard indices as below, where professional judgment of the team was exercised as materiality criteria.

The team checked whether the Report has been prepared in accordance with the ‘Core Option’ of GRI Standards which covers the following:

- **GRI Reporting Principles**
- **Universal Standards**
- **Topic Specific Standards**
  - **Management approach of Topic Specific Standards**
  - **Economic Performance: 201-1, 201-3, 201-4**
  - **Market Presence: 202-1**
  - **Indirect Economic Impacts: 203-1, 203-2**
  - **Procurement Practices: 204-1**
  - **Anti-corruption: 205-1, 205-2, 205-3**
  - **Anti-competitive Behavior: 206-1**
  - **Materials: 301-1, 301-2, 301-3**
  - **Energy: 302-1, 302-2, 302-3, 302-4**
  - **Water: 303-1, 303-2**
  - **Emissions: 305-1, 305-2, 305-3, 305-5, 305-7**
  - **Environmental Compliance: 307-1**
  - **Employment: 401-2, 401-3**
  - **Labor/Management Relations: 402-1**
  - **Occupational Health and Safety: 403-1, 403-2, 403-4**
  - **Training and Education: 404-1, 404-2, 404-3**
  - **Diversity and Equal Opportunity: 405-1, 405-2**
  - **Child Labor: 408-1**
  - **Forced or Compulsory Labor: 409-1**
  - **Security Practices: 410-1**
  - **Rights of Indigenous Peoples: 411-1**
  - **Human Rights Assessment: 412-2, 412-3**
  - **Local Communities: 413-1**
  - **Supplier Social Assessment: 414-2**
  - **Socioeconomic Compliance: 415-1**

This Report excludes a data sand information of joint corporate, contractor etc. which is outside of the organization, i.e. LS C&S, among report boundaries.

Our approach

In order to verify the contents of the Report within an agreed scope of assurance in accordance with the assurance standard, the team has carried out an assurance engagement as follows:

- Reviewed overall report
- Reviewed materiality test process and methodology
- Reviewed sustainability management strategies and targets
- Reviewed stakeholder engagement activities
- Interviewed people in charge of preparing the Report
Our conclusion

Based on the results we have obtained from material reviews and interviews, we have had several discussions with LS C&S on the revision of the Report. We reviewed the Report’s final version in order to confirm that our recommendations for improvement and the revisions that were made have been reflected. During the verification of the report, the assurance team could not find any inappropriate contents in the Report to the compliance with the principles stipulated below. Nothing has come to our attention that causes us to believe that the data included in the verification scope are not presented appropriately.

- Indulgence: Indulgence is the participation of stakeholders in developing and achieving an accountable and strategic response to sustainability.

  LS C&S is developing and maintaining stakeholder communication channels in various forms and levels in order to make a commitment to be responsible for the stakeholders. The assurance team could not find any critical stakeholder LS C&S left out during this process.

- Materiality: Materiality is determining the relevance and significance of an issue to an organization and its stakeholders. A material issue is an issue that will influence the decisions, actions, and performance of an organization or its stakeholders.

  LS C&S is determining the materiality of issues found out through stakeholder communication channels through its own materiality evaluation process, and the assurance team could not find any critical issues left out in this process.

- Responsiveness: Responsiveness is an organization’s response to stakeholder issues that affect its sustainability performance and is realized through decisions, actions, and performance, as well as communication with stakeholders.

  The assurance team could not find any evidence that LS C&S’s counter measures to critical stakeholder issues were inappropriately recorded in the Report.

  We could not find any evidence the Report was not prepared in accordance with the ‘Core Option’ of GRI standard.

Recommendation for improvement

We hope the Report is actively used as a communication tool for stakeholders and recommendation for improvements.

- LS C&S publishes an annual sustainability report to share both financial and non-financial performances with transparency. The organization is advised to improve intuitiveness (understandability and credibility) of the sustainability achievements by using quantitative data and hire outside directors for greater transparency, thereby establishing the culture of sustainability in the organization.

- LS C&S is determining the materiality of issues found out through stakeholder communication channels through its own materiality evaluation process, and the assurance team could not find any critical issues left out in this process.

- LS C&S is developing and maintaining stakeholder communication channels in various forms and levels in order to make a commitment to be responsible for the stakeholders. The assurance team could not find any critical stakeholder LS C&S left out during this process.

Our independence

With the exception of providing third party assurance services, KMR is not involved in any other LS C&S’s business operations that are aimed at making profit in order to avoid any conflicts of interest and to maintain independence.

- LS C&S is determining the materiality of issues found out through stakeholder communication channels through its own materiality evaluation process, and the assurance team could not find any critical issues left out in this process.

- LS C&S is developing and maintaining stakeholder communication channels in various forms and levels in order to make a commitment to be responsible for the stakeholders. The assurance team could not find any critical stakeholder LS C&S left out during this process.

- LS C&S is determining the materiality of issues found out through stakeholder communication channels through its own materiality evaluation process, and the assurance team could not find any critical issues left out in this process.
GRI Standards

<table>
<thead>
<tr>
<th>GRI Number</th>
<th>Disclosure</th>
<th>Page</th>
<th>Assurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRI 401:</td>
<td>Child Labor</td>
<td>401-1</td>
<td>63 O</td>
</tr>
<tr>
<td>GRI 409:</td>
<td>Forced or Compulsory Labor</td>
<td>409-1</td>
<td>63 O</td>
</tr>
<tr>
<td>GRI 410:</td>
<td>Security Practices</td>
<td>410-1</td>
<td>65 O</td>
</tr>
<tr>
<td>GRI 411:</td>
<td>Rights of Indigenous Peoples</td>
<td>411-1</td>
<td>105 O</td>
</tr>
<tr>
<td>GRI 412:</td>
<td>Human Rights Assessment</td>
<td>412-1</td>
<td>63 O</td>
</tr>
<tr>
<td>GRI 413:</td>
<td>Local Communities</td>
<td>413-1</td>
<td>55 O</td>
</tr>
<tr>
<td>GRI 414:</td>
<td>Supplier Social Assurance</td>
<td>414-1</td>
<td>59 O</td>
</tr>
<tr>
<td>GRI 415:</td>
<td>Socioeconomic Compliance</td>
<td>415-1</td>
<td>105 O</td>
</tr>
</tbody>
</table>

Additional Information

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>201-1</td>
<td>The ratio of entry level wage to legal minimum wage is 150%.</td>
</tr>
<tr>
<td>201-2</td>
<td>None of our workers were found to have any corruption cases according to the analysis results.</td>
</tr>
</tbody>
</table>

GRI 403: Social Impact

<table>
<thead>
<tr>
<th>GRI Number</th>
<th>Disclosure</th>
<th>Page</th>
<th>Assurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRI 411:</td>
<td>Social Impacts</td>
<td>411-1</td>
<td>105 O</td>
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</tbody>
</table>

GRI 404: Personal Development

<table>
<thead>
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<th>GRI Number</th>
<th>Disclosure</th>
<th>Page</th>
<th>Assurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRI 412:</td>
<td>Training and Education</td>
<td>412-1</td>
<td>63 O</td>
</tr>
<tr>
<td>GRI 413:</td>
<td>Diversity and Equal Opportunity</td>
<td>413-1</td>
<td>105 O</td>
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</table>

GRI 405: Management Approach

<table>
<thead>
<tr>
<th>GRI Number</th>
<th>Disclosure</th>
<th>Page</th>
<th>Assurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRI 414:</td>
<td>Supplier Social Assurance</td>
<td>414-1</td>
<td>59 O</td>
</tr>
<tr>
<td>GRI 415:</td>
<td>Socioeconomic Compliance</td>
<td>415-1</td>
<td>105 O</td>
</tr>
</tbody>
</table>