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LSIS is a leader of the electric power and automation industry. Through ongoing innovation, LSIS strives for top quality and groundbreaking products, so that it can become the global leader the world of tomorrow requires.

Leading you toward a greater future than you imagine

LSIS is unveiling a new era with leading solutions to create a more convenient, and more advanced world than you can imagine. The company provides more solutions achieving the highest customer satisfaction.

CLOSER THAN YOU IMAGINE

Where there is light to brighten the planet
and energy to move the world,
behind every place with a power supply,
from homes and offices to factories and airports,
LSIS is there.

More ubiquitous than you think,
LSIS always stands by you.



Electric Power Business

LSIS is a leader in the field of electric power solutions, facilitating a stable supply of power through a wide range of electric equipment & systems, from low voltage to ultra-high voltage.

Based on technology and know-how that the company has accumulated since 1974, LSIS has grown to become one of Korea's largest heavy electric equipment manufacturers. Through total solutions connected to power infrastructure, the company offers top products and services to its customers in its dealings with power plants, power transmission & supply, equipment for electricity users, and power IT.

While actively expanding the ultra-high voltage electric equipment market with the world's leading technology, LSIS is also a trailblazer that makes the existing electric power industry more intelligent by fostering the power IT field as a new growth engine.



MORE ADVANCED THAN YOU IMAGINE

LSIS has the power to move industries.

With advanced technological prowess and competitiveness,
we are leaders in industrial infrastructure.

Leading global trends one step ahead of the others,

LSIS guarantees strengthening our customer's
competitiveness, while guiding their business into a bright new future.

LSIS is leading

advanced infrastructure beyond anything you imagine.

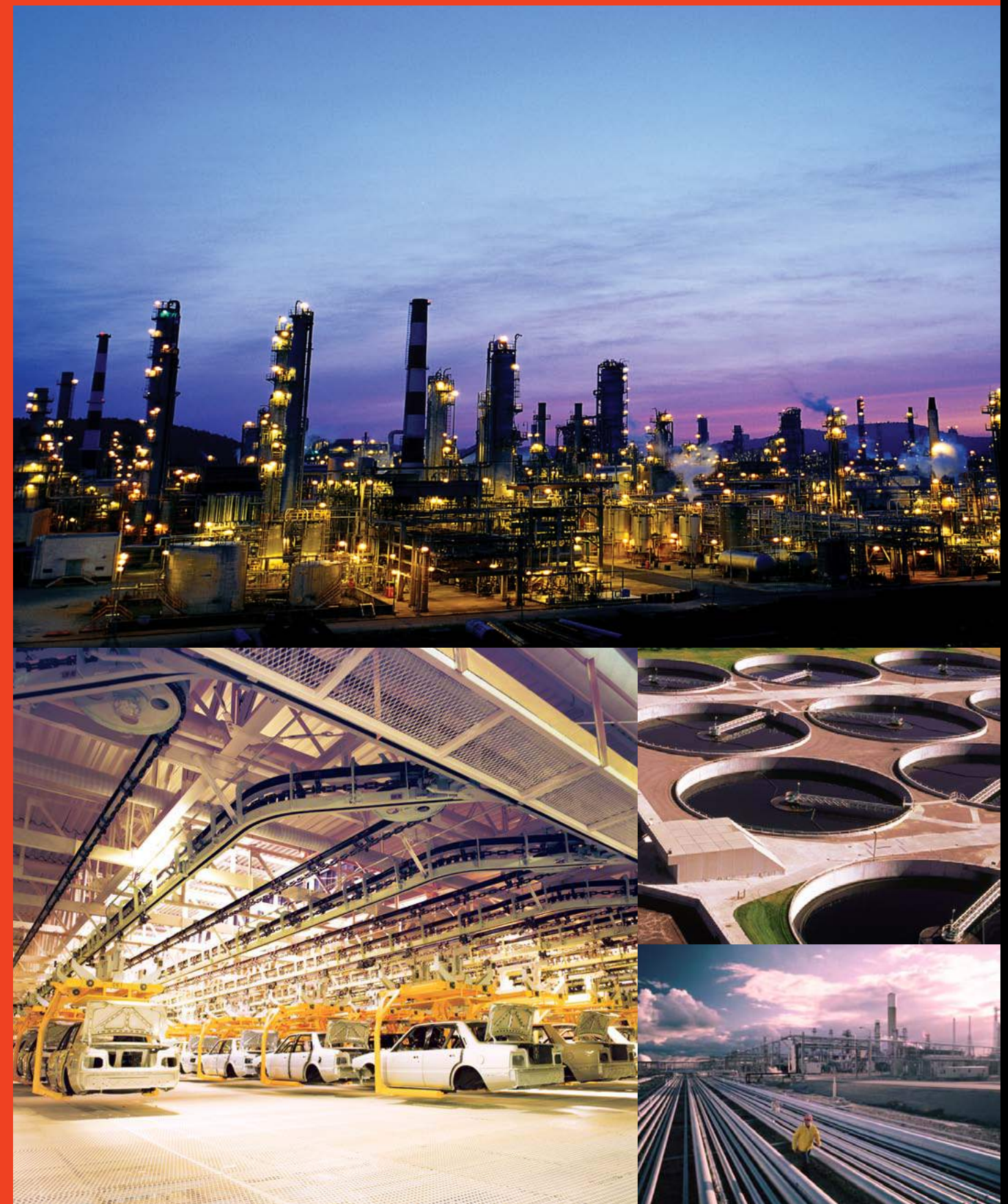


Automation & Drive Business

LSIS was the first in Korea to produce and supply PLCs, drives, and DCSs required for industrial automation. It is a leader and historical paradigm of the automation and drive solutions industry.

With the most advanced business network and technology in Korea, LSIS provides optimum automated environments made up of components ranging from unit machinery to large-scale processes. In addition to having acquired a number of international certifications such as the CE and UL, LSIS operates technology centers in foreign locales for the local production and supply activities.

LSIS develops power semiconductor components that have been optimized for application in various industries, including the automotive, renewable energy, and appliances industry. Future industries will be revolutionized by LSIS for creating ways of living never thought were possible.

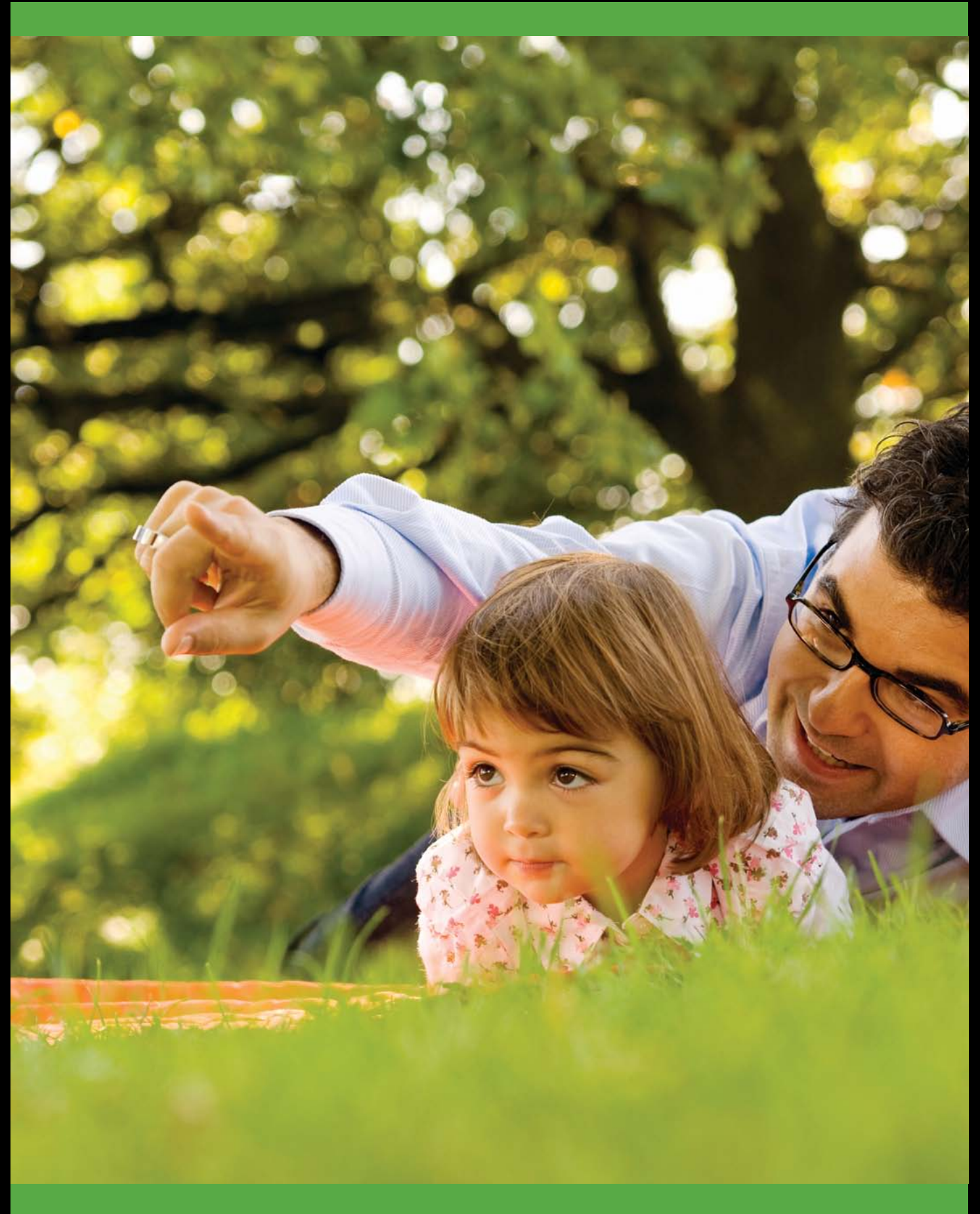


MORE INNOVATIVE THAN YOU IMAGINE

LSIS creates a green lifestyle by addressing environmental pollution and energy shortage with technology that functions like the nature. Wherever you go, you will find the green technology of LSIS designed to protect the nature and maximize energy efficiency.

-

LSIS cares for you and the nature.



Convergence Business

LSIS' mission is to use its technology to overcome global warming and protect the nature. It is the driving force behind the green business sector in Korea.

Since the commencement of its photovoltaic System for the first time in Korea in 1986, LSIS has been developing advanced technology to protect the earth. Utilizing electric power, electronic, and automation technology, LSIS has created a smart grid for maximizing electric power generation and efficiency.

In the railway sector, LSIS provides advanced control facilities required for railway safety and efficiency. It is the railway solutions provider with the largest portfolio of clients in Korea.

LSIS represents the future of the industries that will change the way we live. By providing advanced solutions that have been tailored for different industries, a green way of living is realized by managing environmental pollution and energy shortage.



You have our promise
that LSIS will always
be a company that
grows alongside
its customers.

Dear customers who helped us build today's LSIS!

I am Ja-Kyun Koo, the Chairman and CEO of LSIS. LSIS was able to grow into the established company it is today only due to the interest and support of its customers. On behalf of all employees at LSIS, I would like to express my deepest thanks to our customers.

LSIS represents Korea's power and automation industries, and it spun off from the LG Group in 2005, making a new start as the LS Group for the second takeoff.

LSIS's mission is "Futuring Smart Energy." It reflects our will to become the 'global leader for smart energy solutions providing unparalleled efficiency and convenience' based on advanced ICT/Convergence and Combination energy technologies in the electric power field, which covers power, automation, smart grids, and Convergence and Combination, as well as the solution business field, which covers the transfer, use, and saving of energy.

It also indicates our will to provide a happier future for all by continuously creating new values for everyone to enjoy a safer and richer life through the innovative products and technologies of LSIS.

To create new values with customers, LSIS will take steps toward the status of becoming an 'Excellent global leader for heavy electric equipment' by strengthening future-oriented business portfolios, covering from power to automation, and convergence businesses further through management activities that place the highest priority on the customer and the market.

LSIS's promise to customers is to become the company that secures the highest in quality and the most outstanding product development capacity, the company that provides customer-oriented total solutions, the global company that stands shoulder-to-shoulder with the world's leading companies, and the company that always serves customers and builds the future of smart energy with them.

I would like to ask you for your continued support and interest so that LSIS stands at the heart of the world and the future.

Thank you.

Chairman & CEO
Ja-Kyun Koo



Our Values

Values Management
Human Resources
Organizational Culture

OUR VALUES

To continue playing a leading role
in all of our customers' innovation,
we stay one step ahead of the
rest of the world.



Futuring 

We are leading the way
towards a new future through
innovations that exceed
our customers' expectations

Smart 

We are creating an efficient
convenient future
through ICT convergence
and the integration of
sophisticated
technologies.

Energy 

We are creating an
abundant future
by delivering safe
clean energy.

Values Management

We are building the 'Future of Smart Energy' through 'Value Based Management', which concentrates all the ideas and strengths of the company in one place, based on the value system comprising the company's mission, vision, and core values.

FUTURING SMART ENERGY

• Vision 2020



• Strategy

- Boosting Our Market Position as a Power Solutions Provider
- Leading New Markets through Convergence and Combination
- Expansion of Global Markets
- Securing Operational Excellence

• Core Value



Collaboration



Execution



Creativity



Integrity

Futuring Smart Energy!

This is the future that

LSIS is creating.

Mission

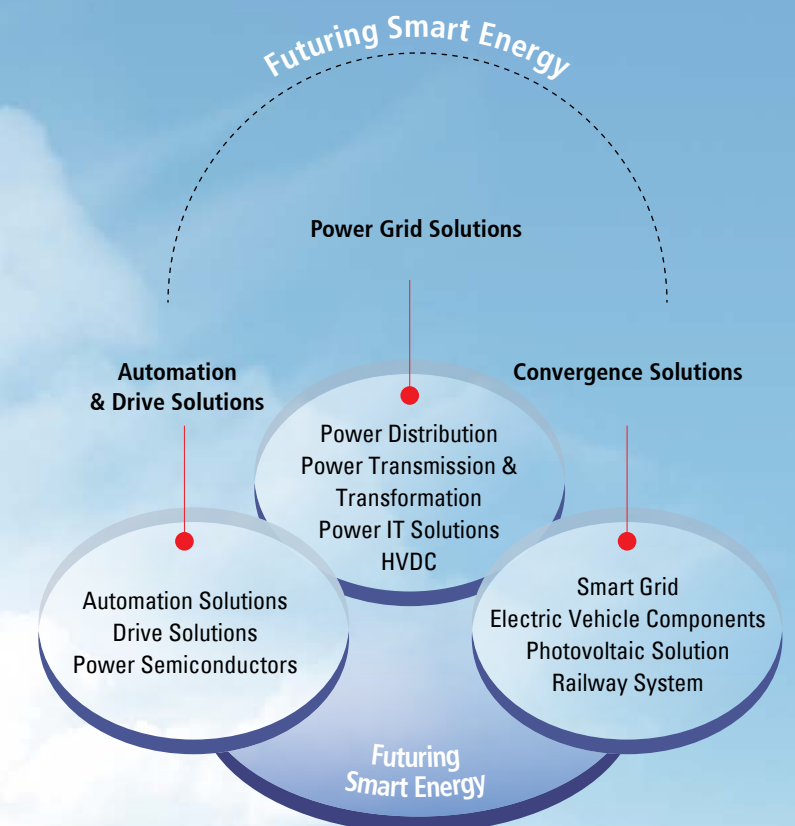
LSIS aims to become a 'company that builds happiness for the future by providing a safe and affluent life through efficient and convenient smart energy, based on the management philosophy of LS Partnership.'

Vision

The essence of the new vision of LSIS is 'G365.' This new vision reflects the company's will to become a G3, a Great Company providing Green Solutions in the Global Market, in order to achieve the goal of 6 trillion won in sales as of 2020 and 500 billion won in operating profit.

Core Value

LSIS's key values are collaboration, execution, creativity, and integrity. These four values are the core principles governing all our work activities.



LSIS wishes to become the 'global leader for smart energy solutions providing unparalleled efficiency and convenience' based on advanced ICT/Convergence and Combination energy technologies in the electric power field, which covers power, automation, smart grids, and Convergence and Combination, as well as the solution business field, which covers the transfer, use, and saving of energy.

Human Resources

Our goal is to find and foster individuals with positive thinking, creative ideas, and distinguished professionalism. With a sophisticated personnel management system and various programs to foster talented individuals, all employees at LSIS are able to become true innovators of innovation with a keen understanding of the world around them.

Model Human Resource

The ideal employee of LSIS is a positive, creative, and professional person who shares the core values, 'Collaboration', 'Execution', 'Creativity', and 'Integrity', based on the management philosophy of 'LS Partnership.'

Performance Assessment System

LSIS' human resources system ensures that outstanding performance is met with an outstanding reward. This performance-driven culture is instilled in employees through a transparent human resources management system that includes a pay increase, promotion, individual assessment, and the "World Class Performer Incentive." LSIS' multi-faceted human resources management provides employees with the drive needed to achieve.

Human Resources Development

LSIS believes competent human resources are its core strength, and develops the finest human resources it can. Specialists and global human resources are developed through education programs in Korea and abroad; overseas specialist training, and an LS MBA program.

| | |
|------------------------------|---|
| University Education | Core technology and R&D education |
| Overseas Specialist Training | Personnel dispatched overseas for development into local specialists |
| Overseas Specialist Training | Future executives developed through renowned international MBA programs |
| Globalization Program | Language training at all levels at LSIS language institutes |
| Duty Training | Training in Korea and overseas for specialist development |

Positive People

Energetic individuals with a positive mindset that cooperate with colleagues for success and adherence to ethical codes

Creative People

Creative individuals that seek innovation and value to develop LSIS into a global company

Professional People

Knowledgeable and passionate individuals who persevere to become the best in their fields and compete on the global stage



Organizational Culture

LSIS is building a value based organizational culture that upholds the mission, 'Futuring Smart Energy' and the vision, 'G365' and takes collaboration, execution, creativity, and integrity as its core values through value based management.

LSIS's value based culture will raise the confidence of the employees and strengthen the basis of the company further, by suggesting a clear mission and vision, becoming the driving force of LSIS, which aims to become a leading global company.

Corporate Culture

Corporate culture is the driving force that helps corporate growth. LSIS realized the need for a new corporate culture in order to cope with a rapidly changing management environment, and has been building an organizational culture unique to it. Such efforts in building an organizational culture are leading to higher customer values and shared values.

Core Values

Core values refer to the 'standards for thinking and behavior about how work needs to be handled within the organization.' The core values of LSIS are collaboration (people who work together), execution (people who act boldly), creativity (people who innovate), and integrity (people who are trustworthy), and all four qualities become the standards for all business activities.

Pursuit of an Open Culture

LSIS decided to implement various activities with which its employees would agree and actually practice the existing value system (mission, vision, and core values) instead of only being aware of it. LSIS seeks to foster individual competences further, based on the examples set by the leader, to raise individual values and corporate values and expand shared values to grow into a stronger organization. Meanwhile, LSIS is also bringing changes to the organizational culture in overseas establishments as success in the new growth era depends on overseas markets. These efforts in building a value based culture will become the driving force for securing global talent and key products and processes and for building the new growth era.

people who work together! Collaboration

Communicate and get along with each other based on respect and care for others and achieve mutual growth

people who act boldly! Execution

Build a strong organization that produces outcomes by carrying out a given task until the end based on expertise and a spirit of challenge

people who innovate! Creativity

Create a new value by searching and combining different methods based on a positive and open mind

people who are trustworthy! Integrity

Engage in duties based on transparency, fairness, and honesty, and make all-out efforts in the development of themselves and the company by observing all related laws



An open culture makes
a healthy and happy workplace.

“LS” stands for “Leading Solution”.

LSIS strives for world-class technology in the field of electric power solutions and automation solutions to provide customers with leading solutions.

Without growing complacent with its achievements, LSIS is branching its focus into convergence solutions, a new growth engine for the future.

Our Solution

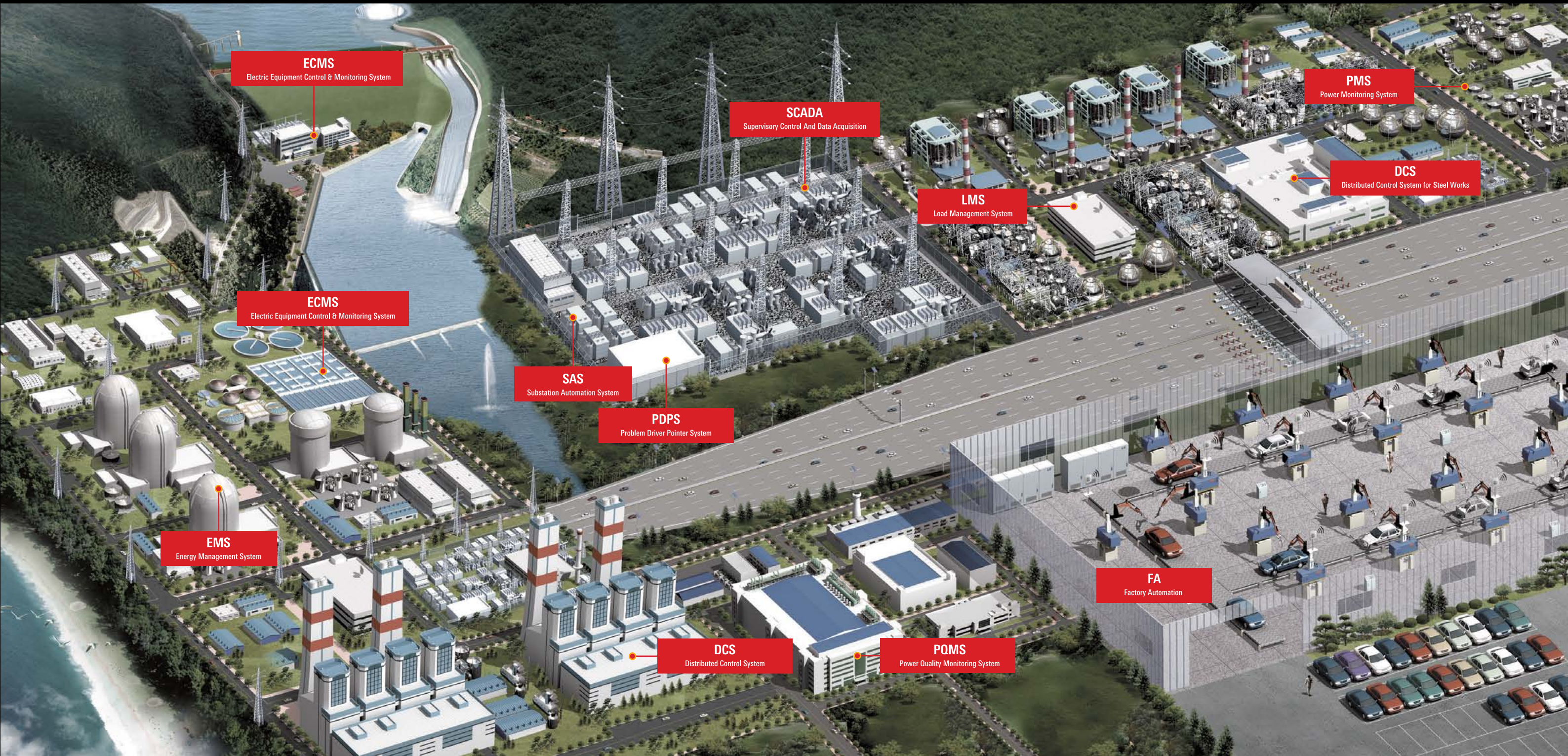
Business Overview
Power Grid Solutions
Automation Solutions
Drive Solutions
Convergence Solutions

OUR SOLUTION

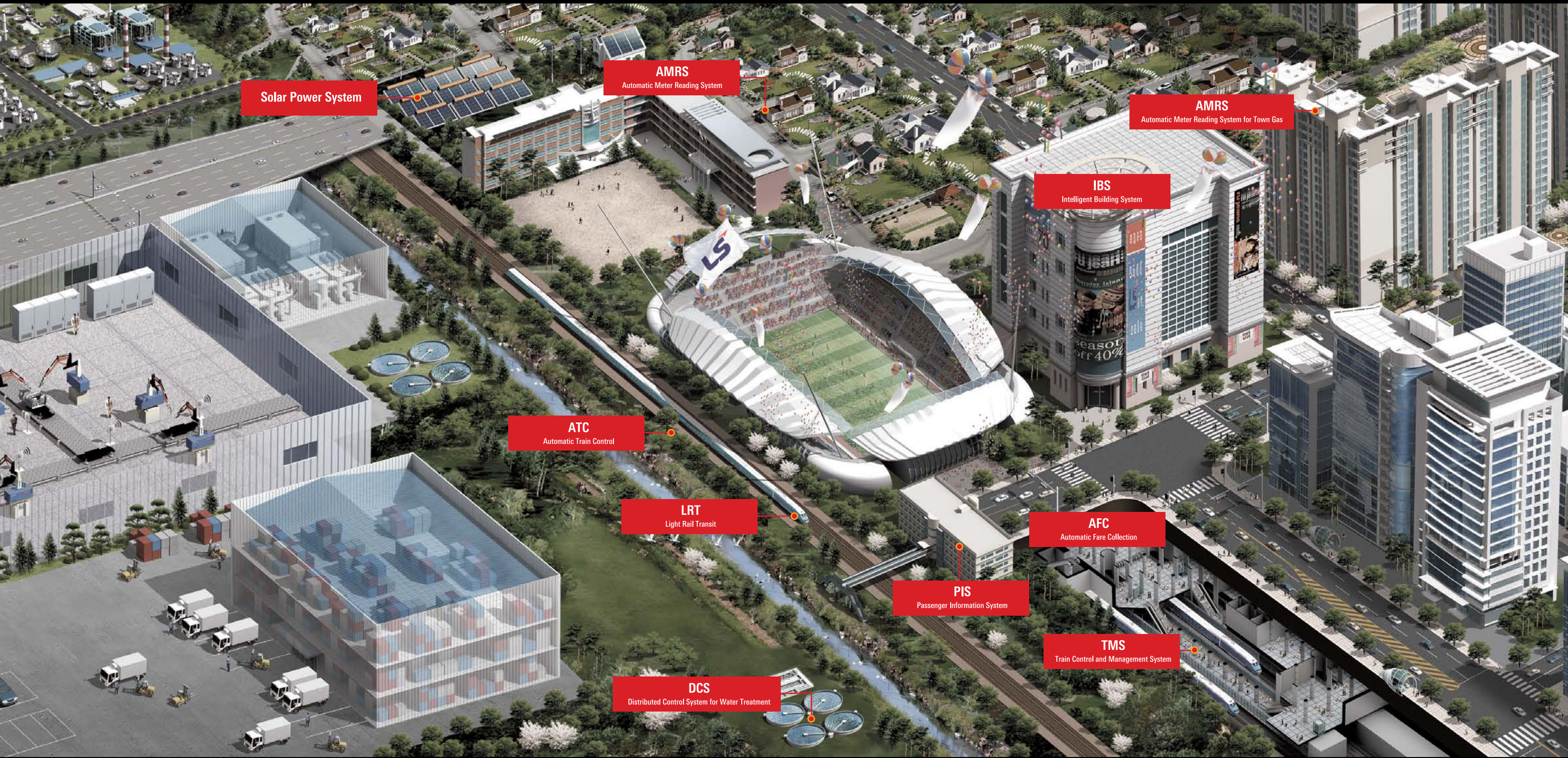
Even as we expand all of our business areas, we continue to provide more advanced leading solutions than ever before.



Our business is carried out in every corner of the world.



From industrial sites to homes, LSIS' advanced technology and solutions can be found everywhere.





Power Grid Solutions

Based on the advanced electric power solutions that maximize efficiency and stability in power supply, LSIS increases the global competitiveness required to stand shoulder to shoulder with the world's top businesses.

Power Generation The range of power generation equipment LSIS produces includes photovoltaic systems, electric equipment monitoring systems, and isolated phase bus (an ultra-high-voltage current transmission system). The increasing importance of alternative energy led LSIS to begin a photovoltaic system project for the first time in Korea in 1996. Now the leader of the field, LSIS has installed a photovoltaic system at Incheon International Airport, built a photovoltaic power plant in Gwangyang, and is supplying photovoltaic power to remote regions in Korea.

Power Transmission & Transformation LSIS develops and produces ultra-high-voltage gas insulated switchgears (GIS) and Power Transformer. For the first time in the world, LSIS developed a hybrid superconducting fault current limiter, an environment-friendly switchgear, for which it acquired domestic & international patents. A vacuum circuit breaker featuring a vacuum interrupter produced using LSIS' technology has been developed. Other power transmission & transformation devices LSIS manufactures include

RMU(Ring main unit), ALTS(Automatic load transfer switch), Cast resin transformer.

Power Distribution Compact incoming panels that meet various international standards (IEC, ANSI, JEM) and accommodate a wide range of voltages (600V to 36Kv) have a wide range of applications, from power generation/conversion equipment to power collection/distribution equipment. Susol, LSIS' premium brand, provides world-class performance in power system protection, device protection, and various other functions.

Equipment for Electricity Users Electric power equipment produced for electricity users includes circuit breakers, electronic switches, relays, and power meters. World-class technology has been acquired by focusing on high-performance, compact, and digital products. LSIS' power meters have met the requirements of the Zigbee standard (two-way wireless communication) used in advanced inspection infrastructures in the US.

Power IT Solutions Power IT solutions provide intelligent electric power equipment. The latest digital network system integration technology is implemented in both industrial and consumer electric power systems.

HVDC High Voltage Direct Current transmission systems convert alternating currents generated at power plants into direct currents for supply. The converted currents are reconverted into alternating currents in the target location to minimize loss of power in the process of supply. In 2009, LSIS commenced joint research with KEPCO, LS Cable & System, and Taihan Electric Wire for domestic development of HVDC technology. As of 2011, a HVDC plant has been constructed in the Hwajeon Industrial Complex of Busan-Jinhae Free Economic Zone for the warehousing, assembly, and testing of HVDC parts.





Automation Solutions

Based on the advanced electric power solutions that maximize efficiency and stability in power supply, LSIS increases the global competitiveness required to stand shoulder to shoulder with the world's top businesses.

PLCs Programmable Logic Controllers (PLCs) automatically controls machinery and processing/assembly lines based on entered programs. A leader in the field, LSIS develops and produces a wide range of PLCs, including those of the highest processing speed and smallest size. LSIS' PLCs are applied in a wide variety of fields, including automotive, electric & electronics, unit machinery, and water treatment, enabling the manufacture of core production equipment in Korea. The XGT Series developed in 2005 was selected as one of the Top Ten New Korean Technologies of 2005. Released in 2008, the XGR is a next-generation duplex PLC embodying all of the new technologies of LSIS. It is truly a product of global standards suitable for application in power generation, plant, steel manufacture, petrol, and chemical processes.

HMIs Human Machine Interfaces (HMIs) refer to equipment and software that enables monitoring and control of automated equipment on a user-designed display. The XGT Panel, developed on the Windows CE platform, provides user convenience, realistic display, and fast data transfer/processing. The HMI software XGT InfoU accounts for a large share of the HMI market as it is able to meet diverse customer needs for user interface, graphics technology, and performance.

Automation System A distributed process control system (DCS), the core of any automation system, controls and monitors all systems throughout many plants today, minimizing any risks by distributing control tasks to a wide array of control computers with automatic control programs according to the particular functions of each computer. It also enables employees in the central control room to concentrate on supervising the whole

process. This is a pivotal system of process automation that is based on an interdependent relationship among computers, telecommunications, and control technologies. LSIS developed DCS in-house in 1989 for the first time in Korea, and has led the DCS age in Korea in the field of process control. Based on core process knowledge in the fields of power plant, water treatment, oil & gas plants and remote supervisory control, the company has continuously supplied top quality automation system products. LSIS's automation systems always allow for an optimum working environment, as they can be linked to a whole range of multi-media software that are offered by the latest computing environment and consist of products designed for every user's convenience at work.





Drive Solutions

LSIS provides drive solutions that are environmentally-friendly and optimized for the maximization of energy efficiency, providing innovative alternatives to environmental and energy problems that are now serious global issues.

Drives A drive is a control device that saves energy consumption by controlling motor rotation through power supply frequency variation. LSIS was the first to release a universal drive to the Korean market. Not only does it have the largest number of high-efficiency drive certifications, it is responsible for over 60% of all drives supplied in Korea. LSIS' next-generation drives provide energy saving, space efficiency and diverse user-oriented functions. Different products from low voltage drive including high performance standard drive S100, HVAC drive H100, compact drive C100 to medium voltage drive M1000/M1000A are developed and recognized as advanced industrial solutions with high efficiency of energy saving in various industries. With these solutions, LSIS is making an indelible mark in the high value-added industries of power generation, shipbuilding, marine, cement, metal and plants. In 2014, it was awarded the KS-QEI (Korean Standard-Quality Excellence Index) as 1st place for two years in a row. A Korean market leader of yesterday and

a global market leader of tomorrow, LSIS is expanding its foreign markets with products and marketing strategies aimed at specific countries and applications.

Power Semiconductors LSIS is developing a broad range of optimal power semiconductor modules for specific fields within the electric & electronic industries that include automotive, new & renewable energy sources, and electronics, and has established production & test lines for power semiconductor modules at its Cheonan Factory as well. At present, it is developing and manufacturing general-use IGBT modules (600V to 1,700V), MOSFET modules (100V to 900V) and Diode modules as it further expands its product range. LSIS is strengthening its position as a leader in the field of power semiconductors by carrying out in-house development of application specific power module (ASPM). LSIS has intelligent power modules (ASIPM) project that has received backing from Korea's federal government.

Photovoltaic Inverters With the rapid rise in the public's interest and understanding about new & renewable energy sources, a lot of interest and research has been carried out in solar energy, an alternative, unlimited energy source that leads to less environmental pollution. Photovoltaic inverters developed by LSIS are grid-connected and have the world's highest level of input voltage (800V), while boasting 92.5 percent energy efficiency. Embedded with EMC filters that shield others from the noise, LSIS' photovoltaic inverters implement phase balance control when three units are used on three respective tracks. The company's photovoltaic inverters are the main components in solar housing projects currently being built by the Korean government, and demand is only expected to increase in the future. In addition, exports are expected to take off with the activation of solar energy business in Europe and the Americas.





Convergence Solutions

Convergence of electric power, electronics, and automation gives birth to electric vehicle, smart grid, and anti-global-warming technology. LSIS' world-class technology is a new growth engine for the green business.

Smart Grid A smart grid is an intelligent power grid that exchanges bi-direction information in real time. Power consumption efficiency is maximized by optimal power grid operation, self-restoration

of electric power systems in the event of failure, and power distribution control in densely populated areas. Smart grids are recognized as an innovative technology for their ability to uniformly supply power even at a reduced power generation rate (due to enhanced production efficiency), which dramatically reduces environmental pollution caused by power generation. Smart cabinet panels have been installed for a trial operation in larger buildings, and an AMI (Advanced Metering Infrastructure) system capable of power demand estimation, remote control, and demand response for the green energy market. LSIS is dedicated to the development of "smart green town" technologies, such as a smart green home, smart green building, smart green factory, and smart green school technology, which are all based on the smart grid.)

Photovoltaic Solution After entering the photovoltaic industry in 1986, LSIS has accumulated experience in a wide range of photovoltaic systems and electric power systems to become

Korea's leading photovoltaic solutions provider. It is the only Korean company to provide a total photovoltaic solution that includes modules, inverters, connection panels, monitoring, engineering, and maintenance. LSIS' photovoltaic products that were installed in Pyeongsado some 20 years ago are showing a minimal level of output drop, prompting the quality of LSIS products to be recognized in a number of foreign markets, including Japan, in which LSIS' market share continues to rise.

Railway System As a developer and manufacturer of advanced railway control equipment designed for safety and efficiency, LSIS has the most extensive supply history in Korea. The automated high-speed railway car control system LSIS developed for the first time in Korea was installed in section 1 (Seoul-Daegu) and section 2 (Daegu-Busan) of Gyeongbu High Speed Railway. A contract for its installation on Honam High Speed Railway (Osong-Gwangju) was also signed in 2012. LSIS formed a consortium with foreign railway car manufacturers to install Korea's first unmanned light rail transit

system at Incheon International Airport. In foreign markets, railway signal control systems were supplied to the Thailand railway authority, and signaling and communication equipment was supplied to the railway authority in Bangladesh and Taiwan.

Electric Vehicle Components One of the areas LSIS focuses on is environment-friendly automotive electronics. Active R&D is taking place on PCUs (Power Control Unit) that run on electricity; high-voltage relays that connect power between a battery and PCU; OBCs (On-Board Chargers) installed in plug-in hybrid cars and full electric cars; and mobile electric car chargers (cordsets). The technology and reliability of LSIS' future automotive electronics are widely recognized in the global market and being referenced by major carmakers.



A future unprepared for and a society not repaid will not support a company's sustainable growth.

LSIS is developing its capacity as a global leader through ongoing R&D and global market activity. It fulfills its social responsibility in sustainable management that supports the environment, customers, and society.

Our Strength

Global Management

Research & Development

Quality & Service

Sustainable Management

OUR STRENGTH

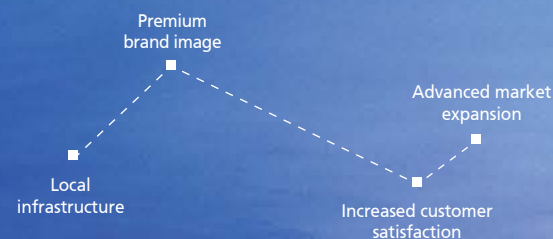
As our corporate competitiveness grows,
it will ensure our success in the future
as a true global leader.



GLOBAL MANAGEMENT

LSIS:

A leading global company where
the future has already begun.



LSIS in the World

LSIS is engaged in business all over the world. Currently, LSIS' global network includes 9 overseas corporations and 11 foreign branches. With 224 clients in 77 countries, the volume of LSIS' export is increasing by the day. This enables an average annual growth rate of 27% and prepares LSIS to become a global leader of tomorrow.

Rise of a Global Leading Company

LSIS' future growth engine is the global market. To transcend the Korean market and start anew in the global market, LSIS is focusing on the development of its global competitiveness for a new era of growth. Needless to say, new businesses are at the center of such endeavors. New high-tech businesses of future automotive electronics, smart grids, photovoltaic power generation, and electric power semiconductor modules will be developed into LSIS' future growth engines.

Consolidated Global Business Infrastructure

To achieve its global business goals, LSIS has selected China, Russia, the Middle East, and North America as the five target regions for an increased presence. An aggregate corporation, production corporation, marketing corporation, and research center have been established in each of the five target regions to create an independent overseas business infrastructure.

Local Infrastructure

A local infrastructure supportive of regional features have been created for an optimal delivery and demand response capacity. As the local infrastructure establishment in China is nearing completion, focus will now be shifted to the Middle East.

Premium Brand Image

The LSIS brand will be revamped into a premium brand by entering the premium market with high-performance products and supplying products designed to support local characteristics.

Advanced Market Expansion

LSIS has its sight set on the advanced markets of the US, Europe, and Japan. It will be increasing its sales by offering UL product lineups, establishing an extensive distribution network, and engaging in strategic partnerships.

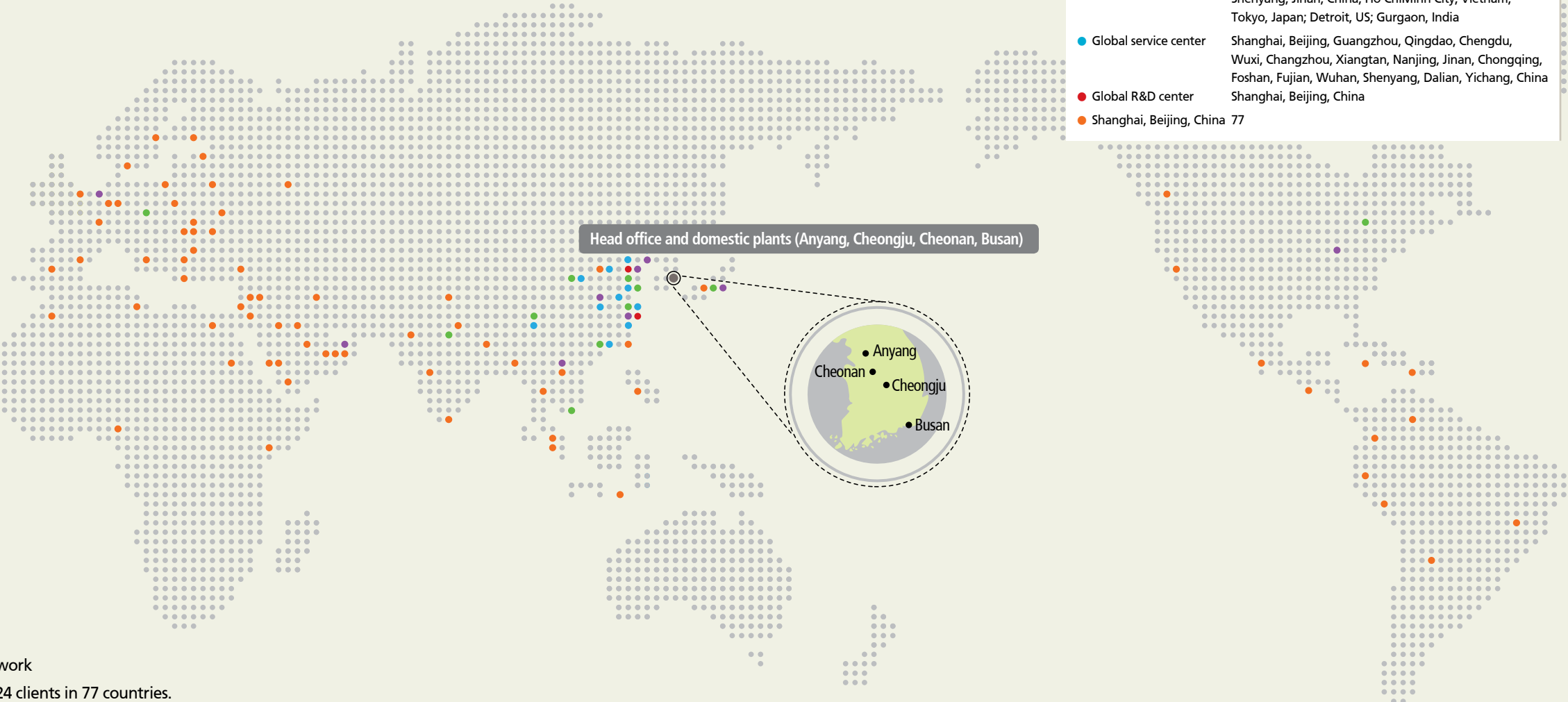
Increased Customer Satisfaction

The highest level of customer satisfaction will be achieved by providing sales materials, application guides, online technical support, and exhibitions in the official language of target regions.



GLOBAL MANAGEMENT

LSIS is engaged in business all over the world. LSIS' global network includes 9 overseas corporations, 11 overseas branches, and 224 clients in 77 countries.



CHINA

LSIS has four production/sales corporations and seven branches in China for strategizing the gigantic Chinese market. A new research center (SEARI) has been established to develop and produce products designed to meet local demands, so that LSIS can enter the Chinese high-end market.

EUROPE

A bridgehead for advancing into the European market has been created. Points of operation within Europe will be connected to provide customers with competitive products in a timely manner and continuously pioneer new markets.

CIS

Having entered the Russian market for the first time in 2004, LSIS is aggressively expanding its business activities to enter the CIS market.

MIDDLE EAST

LSIS moved into the Middle Eastern market with the goal of becoming one of the top five players in the region. Panel solutions and products optimized for the Middle Eastern market will lead LSIS into its high-end market.

AMERICAS

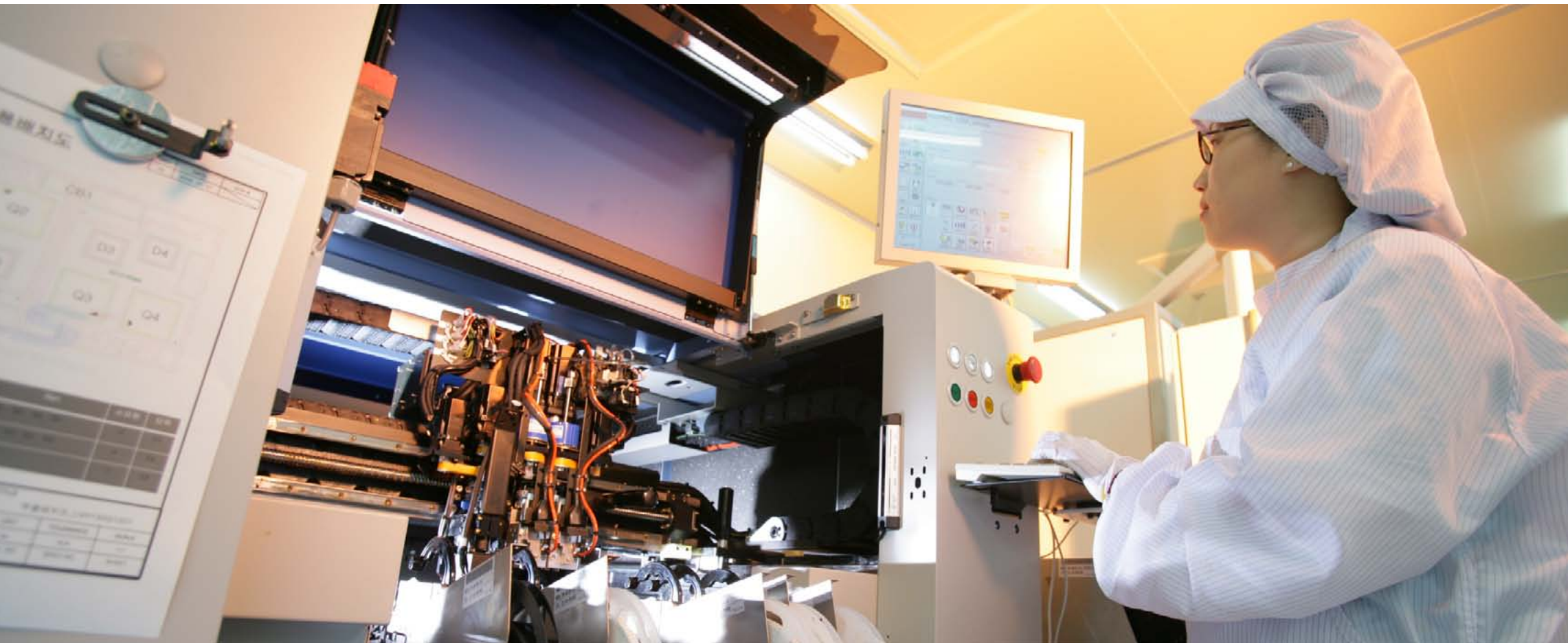
An extensive range of sales references, experience and regional logistics networks in the Americas allows LSIS to create a readily identifiable brand image.

ASIA

Sales points in various regions of Asia are linked with the Vietnamese production corporation to expand target markets and localize emerging markets in Asia.

SUPPLY HISTORY

- LPL Plant, Wroclaw, Poland: Ultra-high-voltage incoming panels
- Substation, Shomal Park, KREC, Khorasan, Iran: GIS
- 10 Stations PJT, Railway Authority, Bangladesh: Signaling & Communication System
- Substation, IWPP, Shuaibah, Saudi Arabia: Incoming panels
- ST1 PJT, Railway Authority, Thailand: Signaling & Communication System
- Substation, IWPP, Sohar, Oman: Incoming panels
- Nanjing Kumho Tire Plant, China: GLOFA PLC
- Nanjing Plant, LPL, Nanjing, China: Ultra-high-voltage incoming panels
- Substation Iraq : GIS incoming panels, transformer, and circuit-breaker
- Bryan Texas Utilities, US : Transformer
- 145Kv GIS supplied to substations of Sudanese electric power authority
- 145Kv GIS supplied to Russian HVS Mobile
- Transformers supplied to Malaysian CJ Engineering & Construction
- Ultra-high-voltage GIS supplied to Iraq MOE
- Ultra-high-voltage GIS and transformers supplied to Syrian PEDEEE
- Incoming panels supplied to Kangwon Land
- Incoming panels supplied to Yeongheung thermoelectric power plant
- 362Kv 50kA GIS supplied to Shinulsan/Yeonggwang substation of KEPCO
- 170Kv GIS supplied to Korea Gas Corporation Incheon base
- 170Kv GIS supplied to Korea Rail Network Authority
- 72.5Kv GIS supplied to Daewoo E&C central railway car depot
- 170Kv GIS and 154 transformer supplied to Woongjin polysilicon plant
- PJT and XGR installed in Sri Lankan waterworks
- Oxidation neutralization device and XGT installed for STX
- M2 environmental equipment and XGI installed for LGD Paju
- Metropolitan Integrated Operating System supplied to K-Water
- Main control system of power generator's boiler in #1~4Unit supplied to Pyeongtaek Thermal Power Plant
- Main control system of power generator's boiler/turbine supplied to Ilsan Combined Cycle Power Plant
- Main control system of desulfurization utility in #1~4Unit to Dangjin Thermal Power Plant



RESEARCH & DEVELOPMENT

We are leading the way
in technological innovation
with unrivaled
competitiveness in R&D.

Cradle of Innovative Technology

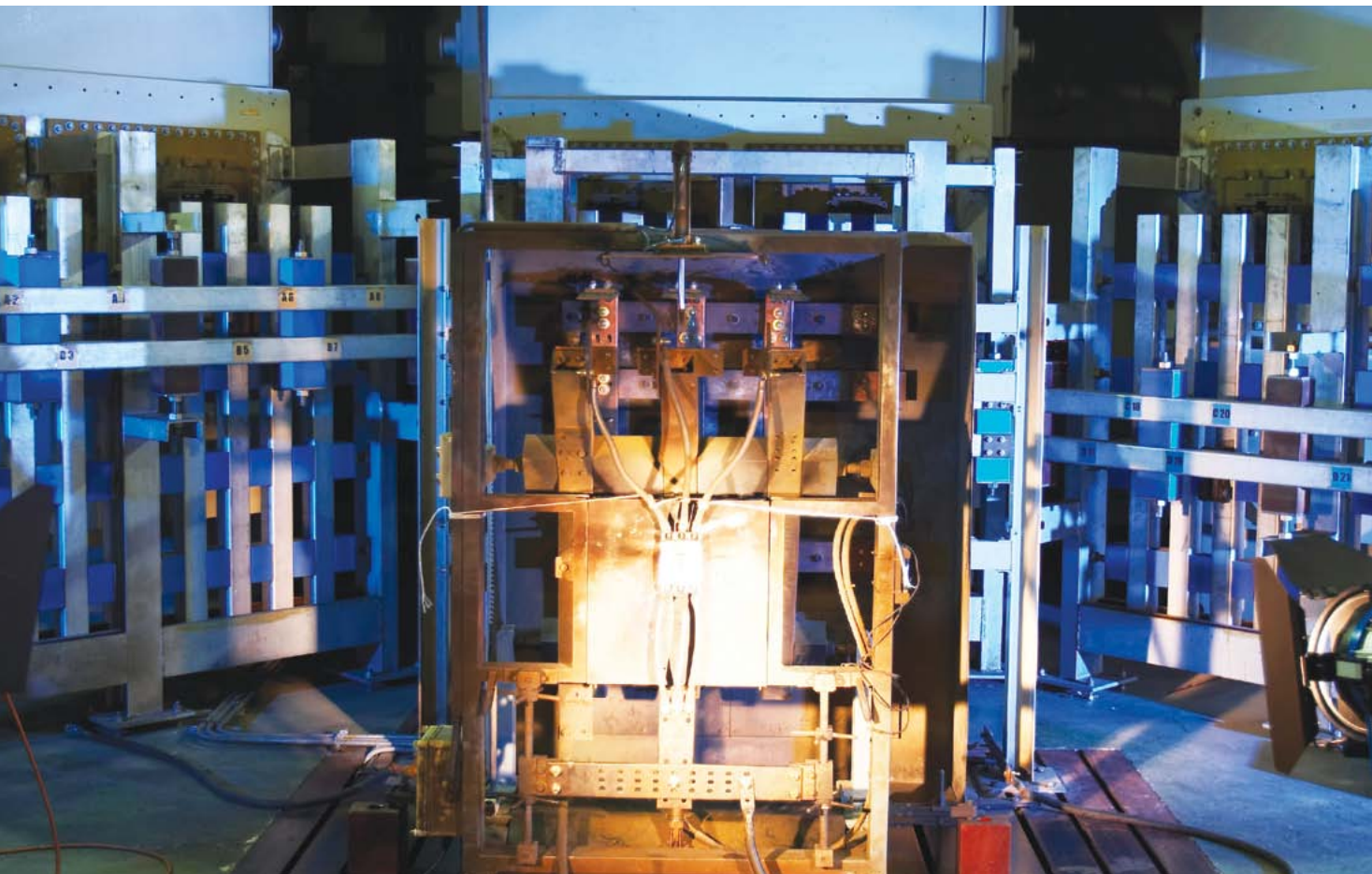
LSIS has some 700 R&D personnel at its research, design, and electric power testing center. With three research centers in Korea and one overseas research center currently, more will be established in the US, Europe, and Japan. **Automation & Advanced Technology R&D Center, Anyang** | A developer of next-generation platforms and new advanced technologies, the Automation & Advanced Technology R&D Center is a key player in the LSIS R&D network. Here, research and development takes place on automation equipment technologies/algorithms, PCUs for renewable energy power generation, electric power IT, and IT solutions for process/transportation control. Innovation and collective performance of existing products are maximized through semiconductor, communication, and software module research. Relatively new areas of research and development include high-voltage direct current, future automotive electronics, and electric power semiconductors. **Electrotechnology R&D Center, Cheongju** | Electric power solutions, one of LSIS' main business areas, are researched and developed at Electrotechnology R&D Center. New growth engines are continuously being discovered through technological limit breaks, next-generation product development, and seed technologies. **Automation R&D Center, Cheonan** | New automation equipment is developed at the Automation R&D Center through an expansion of the platforms and functions of PLC (Programmable Logic Controller) and drive series. **China R&D Center, Shanghai/Beijing** | A research center has been established within the Shanghai Electrical Apparatus Research Institute, one of the top three Chinese research centers, for the development of low-voltage electric power equipment and automation equipment for the local market.

Top-class R&D Infrastructure

While other Korean heavy electric power equipment manufacturers invest an average of 2.8% of sales in R&D, LSIS invests 6% of its sales in R&D. It is also the first private company in Korea to operate its own electric power testing center. LSIS is continuously discovering seeds and human resources of new market activities to secure growth potential.

R&D Milestones

Premium product development | Development of the "World's Best VCB" with a full VCB lineup and distribution panel solution; the world's first development and commercialization of a distributed control technology that places a built-in control unit in individual cells of high-voltage inverters. **Selected as one of the world's 100 innovative companies for 3 consecutive years** | Selected as an innovative company in 2011 and 2012 for patents acquired in electric power, automation and green technology as well as an updated domestic/international IP portfolio. **Recognition as a green industry leader** | First Korean company to acquire the Korean government's Green Certification; included in the Global Top 3 Photovoltaic Power Modules in the PVeye magazine of Japan (2013); EV relay awarded the Gold Award at the Korea Invention Patent Exhibition (2012); HVDC thyristor valve awarded the Product of the Year award by the KPIE (2012) **Initiative in international standardization of industrial communication** | Real-time industrial Ethernet RAPIenet standardized by the IEC **Industrial product design innovation** | Space/environment-friendly designs created at a design research center within R&D organization; awarded the Good Design Award by the KIDP; awarded the International Forum Design Award.



QUALITY & SERVICE

World-class quality

and service!

Satisfaction is guaranteed

around the world.

Quality Management of Global Standards

Quality management at production sites is the key to becoming a business of merit. LSIS operates development testing centers to ensure a high product quality through production environment inspection and competitor comparison tests. Such quality management efforts made by LSIS are being recognized by a number of certifications and awards, and forming the basis of the global standards required to compete at a global scale.

National Quality Program Grand Award for Quality Management

LSIS' advanced quality management system underwent an assessment in accordance with the Malcolm Baldrige Standards and it became the first Korean company to be awarded the National Quality Program Grand Award two times (2006 and 2013). The award is synonymous with the highest level of achievement in quality management in Korea. A number of other awards, including a quality management grand award, industrial standardization award, production innovation award, and environmental management award, attest to the quality management endeavors of LSIS.

In-depth Customer Support

Customer technology training | LSIS is the first industrial solutions company to run an institute dedicated to providing customer training. Training in industrial electric, electronic, and automation processes is provided using practical training materials, and advanced technical support is provided. **Online customer service** | LSIS provides online customer service around the world. The highest-quality customer service is provided through in-depth technical information, quick Q&A, and accurate service history management. Moreover, a supply chain management system for integrated management of purchases, production, and sales makes LSIS an e-business leader in industrial electric power and automation.

◀ The KOLAS-approved Power Testing & Technology Institute of LSIS conducts UL and CE tests, and performs joint assessments with international testing organizations such as the KEMA and CESI.

▲ The LSIS Training Institute provides training in industrial electric, electronic, and automation processes using practical training equipment, and provides advanced technical support.

Power Testing & Technology Institute

Power Testing & Technology Institute

The Power Testing & Technology Institute has been approved by the KOLAS and is the first privately-owned testing center to have 2,000MVA short-circuit testing equipment, high-voltage testing equipment, and reliability testing equipment. It is an internationally-renowned testing center that has formed partnerships with the UL, CE, KEMA, and CESI for carrying out joint assessments.

Types of Tests

Short-circuit test/Switching test/High voltage test/Electromechanical test/
Electromagnetic compatibility test/Mechanical life test/Environmental test

Testing Capacity

Short-Circuit Generator

- 2-pole, 3 ϕ , 18Kv (Y) - Rated capacity: 85MVA
- Rated short-circuit capacity: 1,603MVA at t=0
- Frequency: 50Hz/60Hz - RPM: 3,000rpm/3,600rpm

LV Short-Circuit Testing Capacity

- 230kA at 250V-866V

MV Short-Circuit Testing Capacity

- 63kA at 7.2Kv - 25kA at 25.8Kv - 16kA at 38Kv



- High-voltage test
- Lightning impulse test



- Electromechanical test
- VCB switching test



- Short-circuit test
- ACB breaking capacity test



- Environmental test
- Continuous high temperature test

Acquired Quality Certifications





SUSTAINABLE MANAGEMENT

LSIS' corporate ethics and responsibility enable its sustainable development far into the future.

Giving Back to Society

LSIS actively practices social responsibility to give back to society. Volunteer work is performed by the company as a whole or by individual offices. It is rigorously engaged in contributing to regional development through various activities of contribution. Moreover, sponsorships and donations are made to provide support to the needy.

Volunteer work

Donation of a portion of monthly salaries to the needy, volunteer work at a village for the mentally handicapped, providing assistance to the elderly living alone, helping mentally-handicapped children, helping the disabled with serious illnesses, helping orphans, environmental preservation activities

Contribution to regional communities

Sisterhood relationships, power supply in flood-damaged areas, Children's Day events, regional environment improvement, regional cultural event support, blood donation

Donations and sponsorships

Various donations and funds, installation of facilities for the disabled free of charge, bazaars

Sustainable Environmental Management

Environmental management is a key aspect of modern corporate management and a prerequisite for a company's sustainable development. LSIS recognizes environmental preservation as a top priority and minimizes wasting of resources and waste production, while producing environment-friendly products. Following the formation of the Environment-friendly Green Buy Policy in 2005, an agreement was formed with partner companies to prohibit the use of the six most hazardous substances. In April 2006, an environment-friendly management system was established to produce items free of hazardous substances in accordance with the European RoHS* standards.

▲▼ LSIS takes the lead in sharing and giving back to society by helping the needy, providing assistance in disaster-stricken areas, and cleaning up oil spills.



Ethical Management

LSIS' ethical management advocates fairness, integrity, and diligence to create a clean and healthy corporate culture. A code of ethics, reporting system, ethical committee, ethics training, and ethical management campaigns make LSIS trusted by customers, partners, stockholders, and society. Following a second ethical management campaign in 2007, LSIS has been further strengthening its system of ethical management for the advanced new business environments of the future.

Transparent Management

Transparency is maintained in LSIS' management through a number of systems and policies, including a board of directors with outside members and an internal certification system for voluntary fair trade. Key information regarding management activities is made public through notices and investor relations. Accounting is handled by independent auditors and through objective procedures for consistent transparency.

Win-Win Management

LSIS understands the need for win-win management in increasing its competitiveness and achieving growth together with its partners. To create a win-win relationship with partners, LSIS supports their management innovation, performs joint R&D on core technologies, reduces cost, and builds lasting partnerships through long-term support.

*RoHS : Directive on the Restriction of Hazardous Substances in the electrical and electronic equipment

GLOBAL NETWORK

Domestic

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Cheonan Factory 56, Samseong 4-gil, Mokcheon-eup, Dongnam-gu, Cheonan-si, Chungcheongnam-do, 330-840, Korea
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Busan Factory 35, Hwajeonsandan 5-ro 117beon-gil, Gangseo-gu, Busan, 618-280, Korea
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HVDC Busan Factory 9, Hwajeonsandan 2-ro Gangseo-gu, Busan, 618-280, Korea
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R&D Campus 40, LS-ro 116beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do, 431-831, Korea
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Power Testing & Technology Institute 95, Baekbong-ro, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do, 361-720, Korea
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Cheongju Training Institute 95, Baekbong-ro, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do, 361-720, Korea
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MILESTONES

2014's

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|-----------|--|
| Nov. 2014 | Included in the Thomson Reuters Top 100 Global Innovators for 4 consecutive years |
| Sep. 2014 | Selected as the No. 1 Company for Automation by the Korea Standard Quality Excellence Index for 2 straight years |
| Jul. 2014 | 40th anniversary of the foundation of LSIS |
| Jun. 2014 | Selected as the Top Company of Korea by the Korea Association of CEOs for 7 years in a row |
| May. 2014 | Won orders for the world’s largest AMI in Iraq in the smart grid area |

2010's

| | |
|-----------|--|
| Nov. 2013 | Awarded the Korea National Quality Grand Award |
| Dec. 2012 | US and Chinese patent acquired for smart meter technology |
| Nov. 2012 | EV Relay awarded the Minister of Education, Science and Technology Award |
| May 2012 | Cheongju EV Relay factory completion ceremony |
| Dec. 2011 | Awarded the Prime Minister’s Award for New Growth Management by Maeil Business Newspaper |
| Nov. 2011 | Included in the Fortune 500 Fastest Growing Companies |
| Oct. 2011 | Busan HVDC factory completion ceremony |
| Sep. 2010 | Awarded the Trusted Consumer Brand Grand Award for Smart grid |
| Aug. 2010 | Passed the greenhouse gas inventory check at Cheongju and Cheonan plants |
| Jul. 2010 | Beijing R&D Center opened |
| May. 2010 | Green Technology Certification acquired for the first time in Korea and in the largest number |
| Apr. 2010 | Construction of Busan plant completed / LS Metal established / LS Hogae Electricity established in China |

2000's

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|-----------|--|
| Sep. 2009 | Establishment of Sales Subsidies in Europe |
| Oct. 2008 | Opening of China R&D Center in Shanghai |
| Sep. 2008 | Awarded the Best Korean Company Award (selected as the best company in the industry) |
| Nov. 2007 | Awarded the Quality Grand Award |
| Feb. 2007 | Founding of LSIS (ME) FZE in Dubai, UAE |
| Nov. 2006 | Awarded the Korean Quality Grand Award |
| Sep. 2005 | Establishment of Electric & Automation Equipment Factory in Wuxi, China |
| Mar. 2005 | Company name changed to LSIS, Co., Ltd |
| Dec. 2001 | Establishment of a trading company in Shanghai, China Establishment of company-wide ERP System |
| Aug. 2000 | Power Testing & Technology Institute (PT&T) accredited as a testing and Calibration Laboratory by the Korea Laboratory Accreditation Scheme (KOLAS), a government agency |
| Jun. 2000 | Completion of factory in Dalian, China |

1990's~1970's

| | |
|-----------|--|
| Dec. 1999 | Transfer of building equipment business to LG-OTIS |
| Nov. 1999 | Transfer of vending machine business to Carrier LG Co., Ltd. Completion of electricity power plant in Vietnam |
| Aug. 1999 | Transfer of copper refining business to LG Nikko Copper Inc. |
| Apr. 1999 | Merger with LG Metal Co., Ltd |
| Jun. 1997 | Establishment of a joint venture in Vietnam |
| Sep. 1995 | Merger with Goldstar Instrument & Electric Co., Ltd. and Goldstar Electric Machinery Co., Ltd. |
| Feb. 1995 | Company name changed to LG Industrial Systems |
| Jul. 1994 | LG Industrial Systems Co., Ltd. goes public with its stock |
| Mar. 1987 | Company name changed to Goldstar Industrial Systems Co., Ltd. |
| Jul. 1974 | Establishment of Lucky Packing Co., Ltd. |



LS

A PROVIDER OF LEADING SOLUTIONS TO THE WORLD

Since its spin-off from the LG Group in 2003, aiming to intensify the specialty of each group, LSIS has accelerated its speed of growth and become a model for a successful spin-off. The LS Group is currently composed of 51 affiliates centering on 7 flagship companies that have secured the top competitive strengths in their fields in Korea.

The LS Group will continue to pursue the management philosophy of the LS partnership to support each affiliate to grow into a global leader by creating greater value.



We guarantee all our customers a safe and affluent life and a happy future by supplying them with convenient smart energy.