



STORY

A journey to the future, together

LS Mtron Sustainability Report 2012 Vol. 04



We at LS Mtron create a greener world through the warmth felt between the hands that are held together. Our corporate value does not originate from the mere drive to make a profit. Rather, we journey together with our stakeholders to paint a bigger picture for a better world.

This year’s M-Story aims to take a second look at what sustainability truly means so as to look back on our 2012 sustainability management achievements and start anew to plan for 2013. Meanwhile, we never cease to communicate with all those stakeholders who journey beside us.

Let us begin our M-Story, LS Mtron’s story of utmost honesty and greenness.



Cover Story

This represents our commitment for a brighter future through a total value convergence—ranging from career issues to the potential that is being realized within LS Mtron. All of it is in conjunction with all the stakeholders who are with us every step of the way.

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This is LS Mtron’s fourth sustainability report that outlines the company’s endeavors and plans for sustainable growth.

Since the launching of the integrated sustainability management system in 2009 under the management vision of ‘Innovative Technology Partner to Create a Comfortable and Convenient World’, LS Mtron has issued its sustainability reports annually starting from 2010 to present its sustainability initiatives undertaken and plans for the following year.

Reporting Scope and Period

This report focuses on our Head Office and domestic business sites (Anyang/Jeonju/Jeongeup/Indong) and includes a portion of China where our overseas sites are concentrated. The reporting period spans the fiscal year 2012 (Jan. 1, 2012 ~ Dec.31, 2012) and covers the last three years when trends should be identified and comparability should be ensured. Furthermore, a portion of the normal data includes achievements made in 2013.

Reporting Standards and Principles

This report was prepared in accordance with the ‘LS Mtron Sustainability Management Steering Wheel’ that describes the interest of our stakeholders and their business impact. The 2012 Sustainability Management Steering Wheel consists of seven focus areas and 10 management issues. Furthermore, the GRI(Global Reporting Initiative) G3.1 guidelines were presented together to help readers better understand this report.

Feature of This Report

As the 2nd-term sustainability management is launched at LS Mtron, this report reviewed our sustainability management initiatives undertaken over the last three years and outlined future directions for sustainability management by 2015. This was further complemented by the establishment of DMAs(Disclosure on Management Approach) in each focus area so as to describe stakeholder expectations and key performance indicators as well as 2012 achievements and 2013 plans by management issue. The Special Issue sections also allow us to offer more detailed explanations of the outstanding achievements made over the past year.

Assurance

This report was assured by an independent external assurance provider to ensure the reliability of the data contained in this report as well as the report content. The conclusions appear in the third-party assurance statement.

Report Publication Schedule(Published Annually)

Previous Report: July 2012
This Report: May 2013
Next Report: May 2014

For More Information about This Report

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As a global company in the industrial machinery
and cutting-edge component business –
**LS Mtron pioneers uncharted territory
in sustainability management.**
**As it uniquely innovates, the whole world
watches with keen interest.**

LS Mtron’s vision is to become an Innovative Technology Partner that contributes to a convenient, comfortable and flourishing world for its customers through its products and services. While we have continued to grow substantially through our ceaseless efforts, we are now ready to make a lengthened stride toward sustainability management to reach even greater goals. In 2012, our commitment was further strengthened to develop global top-notch products and technology. Through sustainable innovation across the entire business spectrum, and the breakdown of limitations (by way of unshakable confidence and enthusiasm in attaining the goal of becoming and the No. 1 company, No. 1 talent and No. 1 corporate culture), such a commitment was readily apparent. As a result, our Tractor Division became Korea’s first in market share and the CF division laid the foundation for future growth through the development of remarkable technology. Thanks to its stable quality, the Electronic Component Division also made significant achievements in generating sales from large global customers and tapping into the export market. It is quite impressive that such sustainable growth and the creation of economic value was possible, even in the face of challenging business conditions. At LS Mtron, sustainability management is recognized as the most important business principle that enables us to deliver new customer value and stakeholder satisfaction while preventing and managing both financial and non-financial risks. Specifically, 2012 was a year when tremendous endeavors were put into establishing integrated sustainability management. This was done to ingrain sustainability seamlessly into the entire business spectrum, which includes daily operations and decision-making.

Innovation Initiatives

In 2012, the 2nd-term innovation initiatives were launched under the goal of “performance-driven innovation” and customized innovation initiatives produced substantial outcomes. This translated into the financial results of KRW 19 billion (KRW 18.7 billion in 2011) through the fostering of 44 additional innovation talents (41 in 2011) and the completion of 198 innovation tasks (176 in 2011).

Win-win Partnership

We believe that our competitive edge in sustainable development originates from strengthened communication with our suppliers and endeavors for shared growth on the basis of a culture of fair transactions. The private-public joint investment technology development project, which constitutes LS Mtron’s representative shared growth program, was undertaken consistently with a total of KRW 13.2 billion in investments made in 18 projects under progress in 2012 (9 projects in 2011).

Quality and Customer Satisfaction

Our commitment to retaining quality talent, in an aim to deliver the products and services that our customers truly need, led to a 6% increase in the retainment of quality expert qualifications from 9% in 2011 to 15% in 2012 while the retainment of ISO 9001 certification examiners reached 46%. The fact that we do everything in our power for enhanced customer trust and convenience is demonstrated through the strengthened management of customer communication and customer contact points, including the operation of the integrated call center.

Social Contribution

As a company committed to the joint growth and development of local communities, we strove to ensure the systemized operation of the 2nd-term “Global Happy Village” campaign over the past year. Under this representative social contribution program, employee volunteerism was expanded and local volunteer activities were facilitated at respective business sites.

Green Management and Stronger Technological Competitive Edge

At LS Mtron, we address climate change through the reduction of GHG emissions, the operation of a safe, healthy and eco-friendly workplace and through the expansion of eco-friendly products and green business. We are fully committed to developing technological capabilities in eco-friendly product technology that spans the development of hybrid tractors, UC modules for hybrid vehicles and high-capacity battery packs for mobile devices.

Employee Value Enhancement

Our initiatives for enhanced employee value include the development of fair and systemic HR systems, consistent support for building employee capacity and work/life balance, the establishment of a trust-based labor-management culture and respect for human rights and diversity. Furthermore, HR regulations were devised for our overseas subsidiaries while training programs, the intensive leave program and the Happy Family Day program, were all improved.

In 2012, the 1st-term sustainability management initiatives that were fully launched in 2010 were completed. Over the past three years, we have built a company-wide infrastructure and a broader consensus for sustainability management, while developing communication systems to build closer ties with and bring satisfaction to stakeholders. Furthermore, we defined the requirements for eco-friendly products and integrated them in our R&D processing while developing the company-wide risk management system. All of these accomplishments were made possible through the company-wide Sustainability Management Steering Group, which faithfully played a pivotal role through the 20 plus group meetings that were consistently held. As 2012 marks a year for launching the 2nd-term sustainability management at LS Mtron, we have set the goal to strengthen our leadership in global standards on the basis of our stakeholder communication capabilities that were built over the years and on the development of a competitive edge to focus on the overseas market more intensively. Furthermore, we will further integrate the respective functions of sustainability management and elevate the level of implemented tasks in order to generate substantial stakeholder values while establishing a more detailed risk management system. Everyone at LS Mtron is committed to sincerely advancing sustainability management through the deeper understanding of all our stakeholders that is based on proactive communication. We are determined to lead our industry peers through best practices in business innovation in the global machinery and component industry. I would like to ask for your continued interest in our fourth M-Story and your honest feedback will be greatly appreciated.

Thank you.

Jae-Seol Shim _ President & CEO

Company Profile

LS Mtron was established in 2008 as a manufacturer of industrial machinery and state-of-the-art components with a world-class competitive edge and strengthened expertise under the LS Group. We have overseas business sites in China, Brazil and the U.S. and employ 3,600 people across the world.

Company Overview

Company Name	LS Mtron Co., Ltd.	Gross Sales (K-IFRS consolidated basis)	KRW 923.8 billion (KRW 1.6322 trillion)
Address	LS Tower, 127 LS-ro, Dongan-gu, Anyang City, Gyeonggi Province, Korea	Operating Profit (K-IFRS consolidated basis)	KRW 40.5 billion (KRW 46.8 billion)
Date of Establishment	July 1, 2008	Total Asset	KRW 1.1519 trillion
CEO	Cha-Yol Koo, Jae-Seol Shim	Debt(Debt ratio)	KRW 555.7 billion(93.2%)
Type of Business	Manufacturing	Capital(Capital adequacy ratio)	KRW 596.2 billion(51.8%)
Main Products	Tractor, Injection Molding, Caterpillar, Copper Foil, Antenna, Connector, Automobile Rubber Hose, FCCL (Flexible Copper Clad Laminate), UC(Ultracapacitor)	Credit Rating (Company stock)	NICE Investors Service A+, Korea Investors Service A+
		Number of Employees	1,683 / 3,636(Including subsidiaries)

As of December 31, 2013, K-IFRS basis

Management Philosophy



Vision

Green and comfortable world

INNOVATIVE TECHNOLOGY PARTNER

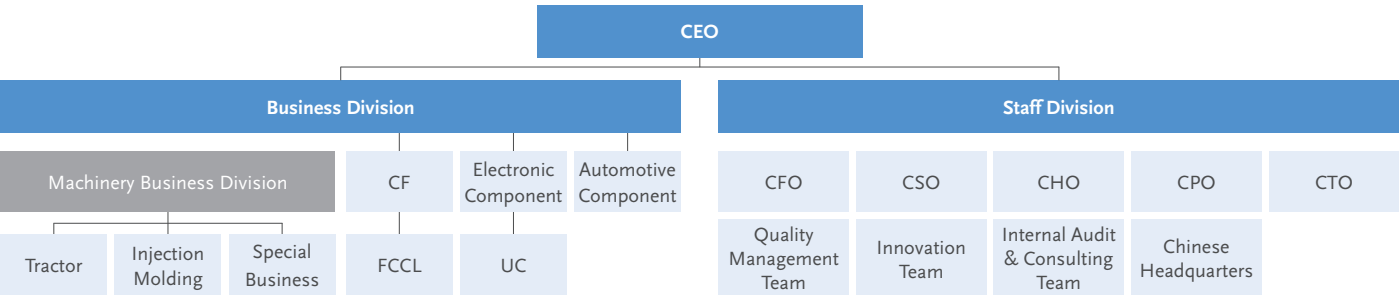
2015 Management Goal - KRW 4 trillion in sales, 10% of operating profit

Management Principles

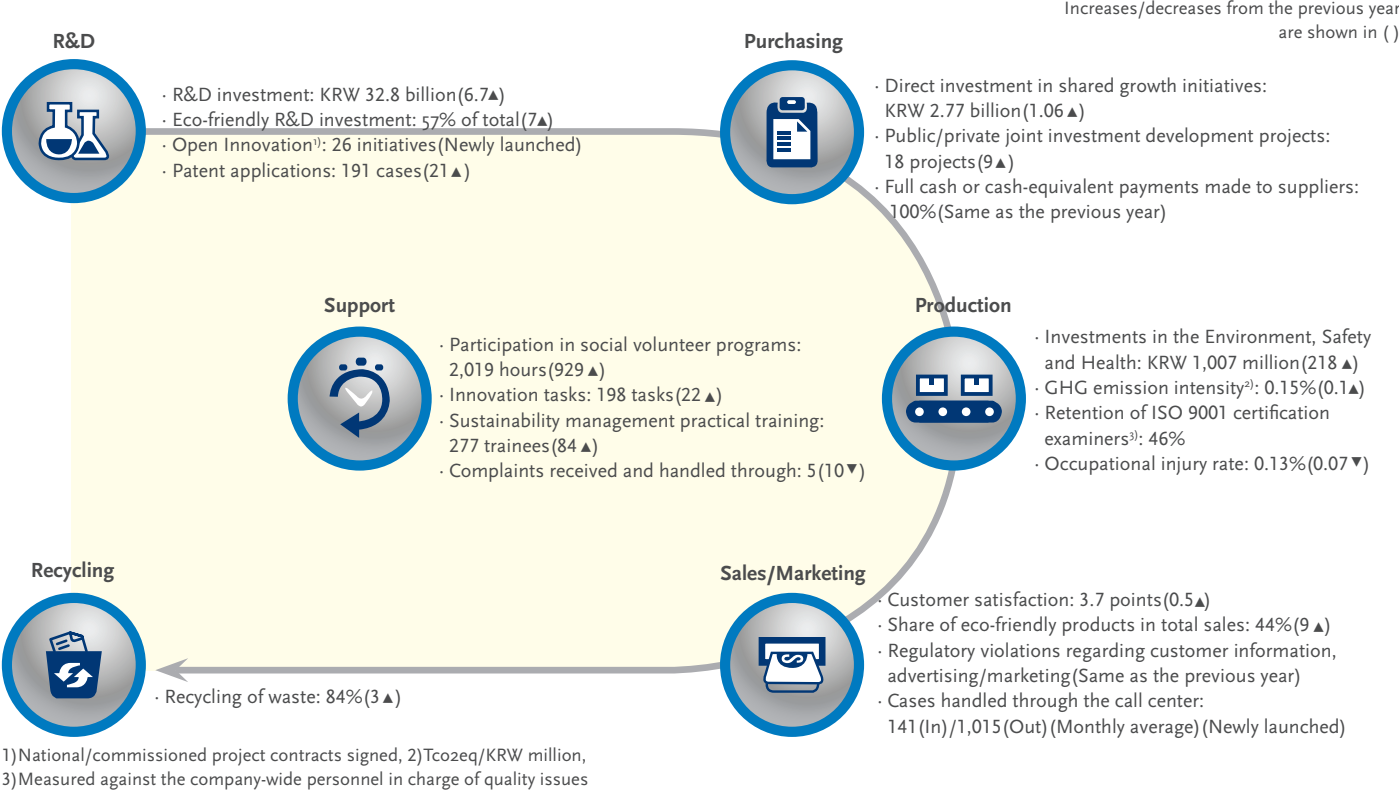
Stronger global competitive edge	Deliver global top-tier products and technology
Break through limitations	Break through limitations with unlimited confidence and passion
No. 1 Mtron people	No. 1 company, No. 1 talent, No. 1 culture

Organizational Chart

In 2013, the Machinery Business Division was newly created in order to generate synergistic effects and ensure the efficient operation of our machinery division. Another new addition to our organizational structure was the Production Technology Center which was established under our technological R&D division in a bid to strengthen our core platform technology. Moreover, our Tractor Division, CF/FCCL Division, Auto-motive Component Division and Quality Management Team were further reinforced to improve our competitive edge in product quality.



Our Efforts toward Sustainable Business in 2012



Sales and Operating Profit

- Head Office

(Unit: KRW 100 million)					
Category		2010	2011	2012	
Sales		7,649	8,887	9,238	
	Region	Korea	5,692	6,199	5,945
		Overseas	1,957	2,688	3,293
	Business	Machinery	4,662	5,348	5,628
	Division	Components	3,027	3,539	3,610
Operating profit		414	535	405	
Net income from continuing operations		291	361	315	
Net Income from discontinued operations ¹⁾		110	634	38	
Net income		401	995	353	

* K-IFRS basis
1) The Air Conditioning Division was transferred in May

- On a Consolidated Basis

(Unit: KRW 100 million)			
Category	2010	2011	2012
Sales	8,092	15,007	16,322
Operating profit	388	573	468
Net income from continuing operations	168	203	192
Net Income from discontinued operations ¹⁾	151	621	38
Net income	319	824	230

* K-IFRS consolidated basis
1) The Air Conditioning Division was transferred in May

Distributed Economic Value

- Head Office

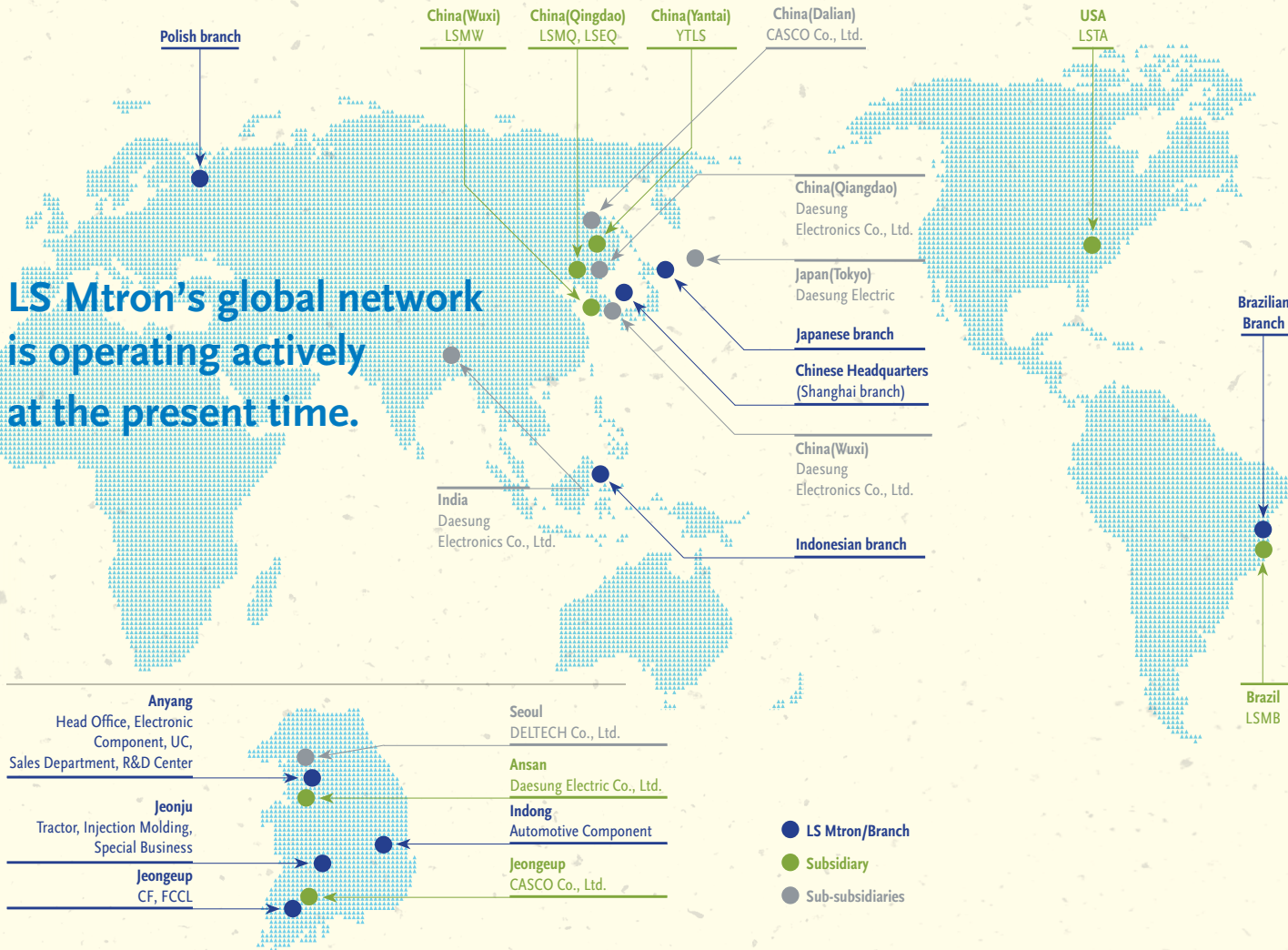
(Unit: KRW 100 million)			
Category	2010	2011	2012
Total	7,844	7,829	7,837
Purchasing expenses(Suppliers)	6,579	6,357	6,290
Labor expenses(Employees) ¹⁾	1,099	1,288	1,345
Taxes and utility charges(Governments) ²⁾	55	58	54
Donations(Local communities) ³⁾	3	6	4
Interest expenses(Creditors)	108	120	144

1) Sum of wages, retirement payments and benefits
2) Sum of taxes, utility charges and corporate taxes
3) Including other social contribution activities(such as the in-house volunteer group)

2012 Sales and Purchasing expenses(Head Office)

(Unit: KRW 100 million)			(Unit: KRW 100 million)		
Region	Sales	Percentage	Region	Purchasing expenses	Percentage
Korea	5,945	65%	Korea	4,674	74%
Asia	1,288	14%	China	764	13%
North America	1,234	13%	Europe	398	6%
Europe	579	6%	Japan	367	6%
Others	192	2%	Others	87	1%

LS Mtron's global network
is operating actively
at the present time.



We move the world through a differentiated global competitive edge

The key to succeed in the future market lies in the constant gathering of the expectations and requirements of customers and other stakeholders and the proactive integration of such feedback into business operations, products and services. At LS Mtron, sustainability management is advanced through stakeholder communication and satisfaction, as well as through the integration of sustainability management into the respective functions of each business division. This, in turn, sets the course for our corporate strategy that aims to prevent financial and non-financial risks, while we take a leap forward in leading a global company.

In 2012, our Tractor and Electronic Component Divisions aggressively tapped into the overseas market and experienced a 22% growth increase that was posted in the export market. This was achieved in spite of the shrinking domestic demand and the global economic downturn. Moreover, sustained R&D investments enabled us to develop eco-friendly and energy-saving production technology capabilities that satisfied customized needs. We also laid the foundation to accelerate our endeavors to tap into the global market through the establishment of the Indonesian and Brazilian subsidiaries, in addition to the tractor production facilities in Brazil.

In 2012, we provided sustainability management training to establish and disseminate sustainability management at each business division, while risk prevention and management manuals were developed to ensure integrated risk management. At our overseas subsidiaries, the status of regulatory compliance was verified to ensure the compliance with local regulations and to prevent key risks in the areas of employment, labor and the environment. Meanwhile, checklists were developed to be used year-round. In 2013, the Machinery Business Division was created to generate synergistic effects among machinery business divisions and ensure efficient organizational operations. Meanwhile, the Production Technology Center was added to the organizational structure to strengthen key platform technology in the technology development area. Such efforts were further complemented through the extensive organizational reinforcements regarding tractor, CF/FCCL, automotive component and quality management operations, in a bid to enhance our competitive edge in quality. At LS Mtron, we are determined to retain global top-notch products and technology through relentless innovation and to maximize synergy among domestic/overseas sales, production and strategic service bases. We believe that such actions will enable us to build upon on our global competitive edge in the industrial machinery and cutting-edge component business.

Your support and participation in LS Mtron's journey towards a brighter future will be greatly appreciated.

Kwang-Won Lee _ Senior Executive Vice President



Location

- Jeonju site(Wanju-gun, North Jeolla Province)
- LSMQ(Qingdao, Shandong Province, China)
- LSMB(Santa Catarina, Brazil)
- LSTA(North Carolina, U.S.A.)

Major Customers

- General farmers and trusted farming businesses

Product Line-up

- Plus series(70~100hs): Cozy interior space! Operator-oriented specifications and affordability
- U series(55~75hs): High durability! Chassis design that enables the use of various agricultural implements
- R series(40~55hs): Unbeatable compact tractor brand! Excellent maneuverability in confined spaces
- J series(20~30hs): Small but strong! All-powerful tractor that enables wide-ranging operations

2012 Achievements

- No. 1 in market share in the Korean tractor market
- Rapid growth in overseas sales(up 33% from the previous year)
- Increased production capacity
(1,000 units > 1,400 units per month)
- Expanded markets through the development of localized products

2013 Plans

- Hold a groundbreaking ceremony at the LSMB(Brazilian manufacturing subsidiary) plant, start mass production(August)
- Launch a new model equipped with a Tier4 engine
- Develop fuel-saving and eco-friendly tractors
- Strengthen competitive edge of our localized models in China and Brazil

Introduction to Main Products

- Enhanced safety and durability through the application of automatic 4WD hydraulic brakes and cerametallic clutches
- Convenient installation of various implements through 10 external hydraulic output ports
- Improved operational convenience through front/rear wheel electro-hydraulic LSD (limited slip differential)
- Maximized transmission efficiency through the optimization of power transmission pathways
- Best-in-class hydraulic lift force
- Environment-related improvements
 - Significantly improved output, torque and fuel efficiency through the installation of turbo chargers and intercoolers
 - Remarkable savings in fuel cost thanks to direct-injection engines



Plus series(PS100)

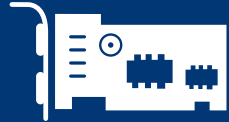
Tractor Division



LS Mtron's tractors rank No. 1 in the Korean market and are exported to more than 25 countries around the world

Our tractor division is growing into a world-class total agricultural machinery brand with core technology developed through continued R&D efforts and proactive overseas marketing programs. LS Mtron tractors are prominent in the North American and European markets for their top-notch quality and design, which is demonstrated in the \$100 million contract that was awarded us in the U.S. Moreover, the division is posting a more than 30% growth rate every year in the overseas market. Our Jeonju site and Qingdao subsidiary in China are capable of producing 20,000 units per year. Sustained investments, including increased facility investments and nurturing talented individuals with technology development capabilities, help put LS Mtron on a track toward becoming a world-renowned tractor manufacturer.

Injection Molding Division



Provide eco-friendly, highly productive injection molding systems for the plastic injection molding industry

Since its inception in 1969, LS Mtron's Injection Molding Division has led the Korean injection molding industry into becoming a total manufacturer that boasts a wide spectrum of product line-ups. The division exports more than 60% of its products through its outstanding technological competency and R&D capabilities, integrated production systems and its 32 sales and SVC networks established in 25 countries. Moreover, our Chinese subsidiary was created with more than 20 sales offices and service networks based across the nation, which were made possible through the combination of China's well-established infrastructure/investment conditions, and the division's exceptional technological capabilities. Furthermore, this division is capable of developing, manufacturing and selling systems that enable shortened cycle times on precision injection molding. Because of this, LS Mtron's Injection Molding Division is establishing itself as a world-class injection molding brand.



Location

- Jeonju site(Wanju-gun, North Jeolla province)
- LSMW(Wuxi, Jiangsu Province, China))

Major Customers

- Samsung Electronics, Hyundai Mobis, Hanil E-Wha, PT.YASUNLI, etc.

Product Line-up

- Electric injection molding machine(30~550 ton): Clean molding, high response, ultra high-speed molding demonstration, different colors/material quality
- Hydraulic injection molding machine(80~4,500 ton): Maximized productivity, high efficiency, low operational cost
- Toggle-type injection molding machine(68~730 ton): Excellent reproducibility, exceptional power-saving feature

2012 Achievements

- Completion of the electric upgrade(LGE-III) series line-up
- Development of the hydraulic mid-to-large size upgrade (LGH-MII) series
- Establishment of overseas subsidiaries (Indonesia, Poland, Brazil)
- Received the Presidential Bronze Award at the Quality Management Awards

2013 Plans

- Secure ultra precision electric injection molding technology
 - Improve the reproducibility and performance of electric injection molding products
 - Advance into the fine pitch connector, mold frame and light guide plate market segments
- Develop extra large hydraulic upgrade(LGH-SII) series
 - Replace the LGH-S series: A total of five models
 - Focus on reducing load on oil pipes and enhancing assembly features

Introduction to Main Products

- Enable high speed molding operations through the application of high-power, high-response AC servo motors
- Enable energy-saving(60% against hydraulic models), low-noise and clean molding operations



Small electric model(LGE-II)

- Achieve 30% energy savings through the application of the P, Q variable control system
- Improve on oil leak issues as well as productivity through precision honing and special solid sealing



Extra largehydraulic model(LGH-S)



Location

- Jeonju site(Wanju-gun, North Jeolla Province)

Major Customers

- Defense Acquisition Program Administration(DAPA), combat mobility equipment manufacturers, overseas defense companies, etc.

Product Line-up

- Tank/Armored vehicle/Self-propelled artillery caterpillar: K1A1, K2, etc.
- Revetment-Kit: Protective walls for military aircrafts

2012 Achievements

- Development of caterpillars for TNMBT(Turkish National Main Battle Tank), the world's heaviest tank, and export of the technology
- Received the DAPA Commissioner's citation (Chosen as a top-performing DAPA supplier in 2012)

2013 Plans

- Advance into large global caterpillar markets (U.S., Middle East) and generate visible outcomes
- Initiate the full-fledged mass production of caterpillars for next-generation tanks(K2)

Introduction to Main Products

- 60-ton grade high strength available
- Designed to respond to high mobility requirements
- Development of high-durability rubber materials



K2 caterpillar

- Component-specific improvements in strength stability
- Significantly enhanced durability life
- Exceptional affordability



K55A1 caterpillar

- Designed to respond to improved vehicle performance
- Improved durability of rubber pads
- Scalability into other vehicles in the same vehicle family was taken into account



K1A1 caterpillar

Special Business Division



Take a leap forward to become a global industry leader, based on advanced technological capabilities in caterpillars

Ever since its R&D efforts to develop the domestic caterpillar technology were initiated in 1975, LS Mtron has been a reliable provider of top-quality caterpillars to Korea's military forces for more than three decades. Caterpillars support both tank loads and combat mobility equipment, while securing mobility under rough road conditions. The year 2006 was a turning point for LS Mtron to expand by considerable quantities into the overseas market and our sales have been growing ever since. We believe that the development of new products that are based on cutting-edge technology and ambitious initiatives to advance into overseas market will enable LS Mtron to emerge as a global top caterpillar manufacturer, while it simultaneously leads the development of state-of-the art technology in the defense industry.

CF Division



Core material that leads the electronic circuit and the secondary battery segment

Our CF Division's circuit copper foil (LSUST) is deployed in printed circuit boards (PCB) that are mounted in every electronic device—from TVs and computers—to mobile phones. Our copper foil (LSB-ST) is also used for flexible PCBs whose flexuous features are required—either to allow circuit boards to move (as in the case of cell phones or digital cameras)—or to insert or structure components. Battery copper foil (LSB-ST) is primarily used for batteries that are mounted in smart phones, notebook PCs and other IT devices. One of our CF Division's recent achievements was the successful development of the world's first $6\mu m$ ultra thin battery copper foil. This achievement is attributed to the outstanding technological capabilities of our CF Division.



Location

- Jeongeup site (Jeongeup City, North Jeolla Province)

Major Customers

- LG Chem, Samsung SDI, LG Innotek, Doosan Electro-Materials, DAEDUCK GDS, Panasonic, Sony, BYD, etc.

Product Line-up

- Circuit copper foil (LSU-ST): Used for general electronic devices
- Flexible PBC copper foil (LSB-FX): Highly flexuous copper foil for flexible PCBs
- Battery copper foil (LSB-ST): Used for anode collectors of lithium ion batteries

2012 Achievements

- Development of ultra thin $6\mu m$ battery copper foil
- Development of double-width long-distance technology
- Development of high-strength battery copper foil

2013 Plans

- Develop battery copper foil to respond to next-generation anode materials
- Develop low-light circuit copper foil for package applications
- Develop $4\mu m$ ultra high strength copper foil

Introduction to Main Products

- Mounted on CCL (copper clad laminates), raw material for printed circuit boards
- Physical and chemical properties are created through surface treatment processing

Circuit copper foil



- Used for flexible PCBs, covering smart phones and digital cameras
- Electrolytic copper foil that is highly flexuous and low in surface roughness

Flexible PCB copper foil



- Used for anode collectors of secondary batteries mounted in notebooks, cell phones and electric vehicles
- Electrolytic copper foil, which is glossy on both sides

Battery copper foil



Location

- Anyang site (Anyang City, Gyeonggi Province)
- LSEQ (Qingdao, Shandong Province, China)

Major Customers

- Samsung Electronics, LG Display, LG Electronics, ZTE, etc.

Product Line-up

- B2B (Board to Board) cell phone connector: Top quality wide-ranging product line-ups
- m-USB cell phone connector: Capacity to develop customized connectors and high-speed transmission technology
- FPD connector: Leading smart electronic component technology that includes high-speed transmission connectors
- Cell phone antenna: Diversifying the customer base through the development of new products, such as the LTE MIMO (Multi Input Multi Output)

2012 Achievements

- Secured sales base for large global customers, including Samsung and ZTE
- Strengthened relationships with existing captive customers
- Developed customized products and adopted innovative mass production processing technology

2013 Plans

- Expand the customer base (including Samsung Electronics and businesses in Greater China)
- Develop subminiature B2B connectors and low-profile card connectors
- Relocate to Anyang Hi-tech Center

Introduction to Main Products

Connector

- B2B products to connect main boards and various modules
- Designed to respond to smaller mounting areas required by customers due to high-capacity smartphone batteries
- Standard: Width 2.5mm, Height 0.8mm



Antenna

- Available in the broadband frequency operating range for 4G services
- Technology to enable a more efficient use of limited spaces in order to ensure form factor freedom in designing antennas for smartphones that are increasingly thinner



Electronic Component Division



Global electronic component maker with best-in-class quality products and in-house R&D capabilities

Starting as a connector manufacturer back in 1987, the division has presently grown to produce and sell connectors and antennas for cell phones and display devices. Our Electronic Component Division is Korea's only connector producer that possesses the R&D capabilities necessary to produce original in-house products. Based on the cutting-edge global manufacturing network in Korea and China that was created through top-notch quality, price competitiveness, diverse product line-ups and customized development capabilities, the division delivers differentiated value to major global customers, including LG Electronics, LG Display, Samsung Electronics, and ZTE.

Automotive Component Division



Automotive rubber hose that guarantees top quality and safety

Established in 1998, LS Mtron's Automotive Component Division manufactures wide-ranging high and low pressure hose assembly components that are mounted on vehicles for the transmission of fluid and hydraulic pressure. To respond to market requirements for more eco-friendly and efficient automobiles, the division developed ultra low expansion brake hoses and successfully expanded its production line of CAC(Charged Air Cooler) hoses that fully comply with EURO V standards, the most stringent environmental standards in the world. With its remarkable product quality and safety, the division is determined to become the world's No. 1 automobile hose segment producer by 2015.



- Location**
- Indong site(Gumi City, North Gyeongsang Province)
 - YTLS(Joint venture, Yantai, Shandong Province, China)
- Major Customers**
- GM, Hyundai Motor Company, Renault, Nissan, etc.

- Product Line-up**
- CAC(Charged Air Cooler) hose: Eco-friendly hose that improves fuel efficiency while reducing gas exhaust emissions
 - Brake hose: Used as the key component connecting hydraulic brake pedals with brake lines
 - Power steering hose: Maximized driver convenience through enhancing driver's steering power

2012 Achievements

- More than 20% growth in sales from 2011
- Became a CAC hose supplier for Hyundai Motor Company

2013 Plans

- Diversify product line-up with the launching of the automobile air conditioning hose
- Secure blow molding technology
- Initiate full operation of Chinese sites as a manufacturing hub
- Acquire new global customers

Introduction to Main Products

- Supply charge air that is supplied through the turbo charger to the intercooler engine as well as to the engine combustion chamber
- Serve as a core component to improve engine combustion efficiency, leading to increased engine output and reduced gas exhaust emissions

CAC hose



- Delivers the hydraulic pressure of brake fluids when the driver applies the brakes
- Highest security grade is required(among other finished vehicle components that are directly related to driver ergonomics and safety) and thus outstanding durability, as well as customer requirements regarding high pressure and low expansion, should be satisfied

Brake hose



- Location**
- Jeongeup site(Jeongeup City, North Jeolla Province)
- Major Customers**
- LG Innotek, STEMCO(Samsung subsidiary), etc.

- Product Line-up**
- Display(COF) FCCL: Used for high resolution signal & video connection devices, covering TVs, notebooks and monitors
 - FPC FCCL: Designed to respond to microcircuits and slim devices, covering smart phones and medical devices
 - Flexible solar cell(CIGS) Mo Film: Used for eco-friendly thin film substrates, which are deployed to generate electricity from solar energy

2012 Achievements

- FCCL approved by Samsung Electronics(December)
- Ranked No. 2 in global market share
- Secured semi-additive manufacturing technology

2013 Plans

- Hold a groundbreaking ceremony at the LSMB(Brazilian manufacturing subsidiary) plant, start mass production (August)
- Launch a new model equipped with a Tier4 engine
- Develop fuel-saving and eco-friendly tractors
- Strengthen competitive edge of our localized models in China and Brazil

Introduction to Main Products

- Consists of sputter seed layer and copper-plated layer upon polyimide film
- Environment-related improvements: Thin film surface treatment technology was used to prevent wastewater discharge and air pollution
- Product Features
 - FCCL for LCD application: Used as materials for display driving circuits and the availability of an ultra fine $10\mu m$ circuit width
 - Smartphone FCCL: Replace the existing COG technology to improve on heat dissipation issues caused by increasingly larger smartphones



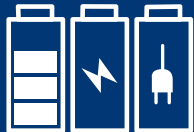
FCCL Division



Key material that leads the display industry

Our FCCL(flexible copper clad laminates) are used as our key LCD panel material for TVs, notebooks and monitors. LS Mtron is the world's third business to successfully launch the mass production of FCCL and in 2013 it ranked second in the world, in global market shares. With a wide-spectrum of product line-ups, the division is expanding its business scope activities to include double-plated products for cell phones, semi-additives for micro circuits, flexible display materials, medical device materials and RFID, which are based on our core technology of roll-to-roll thin film manufacturing. In so doing, the division is emerging as an industry leader specializing in miniature thin film materials.

UC Division



LS Mtron's ultracapacitor that leads the next generation energy market

LS Mtron's ultracapacitors are used as an energy source in a variety of areas covering reserve power in preparation for outages that require high-energy efficiency, power density and long-term reliability, as well as auxiliary power and instant power. We work with major companies both in Korea and overseas to develop customized products, while strengthening our partnerships with our client companies. As part of our advance research initiatives, the division also works with leading research institutes and Korean companies both domestically and overseas on national projects to develop UC modules for hybrid vehicles, heavy equipment, and special-purpose vehicles, which in turn, paves the path to welcome future growth engines.



Location

- Anyang site (Anyang City, Gyeonggi Province)

Major Customers

- Global companies in the wind power, solar power, electricity and vehicle industries

Product Line-up

- LSUC: Used for wide-ranging applications such as the UC cell that boasts world-class voltage performance and reliability
- LSUM: UC module that provides high-voltage systems deployed for wind farm generators and vehicles in one single package

2012 Achievements

- Secured products to solidify customer base through the development of modules specialized for electricity and photovoltaic applications
- Participated in UC development projects launched by European/Japanese automobile makers

2013 Plans

- Secure automobile monitoring and thermal radiation analysis modeling technology
- Improve productivity in an innovative manner through the development of new coating technology
- Strengthen production capacity with the relocation of the production site to Anyang Hi-tech Center

Introduction to Main Products

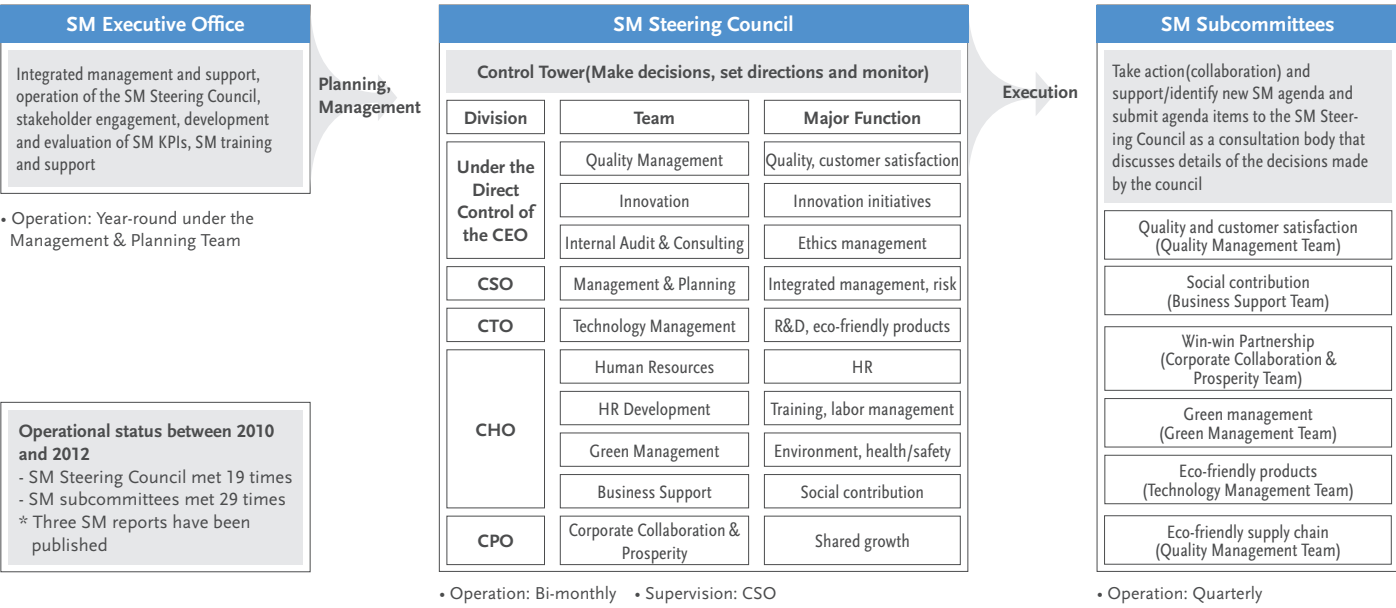
- Global top-level low resistance
- High reliability with a greater than 10 year lifespan
- All ultracapacitor products are used in the new and renewable energy sector including improved energy efficiency, wind power and solar power and are eco-friendly and do not contain hazardous substances



Integrated Sustainability Management(SM)

It is our belief that SM should be advanced in such a way as to establish a framework to identify both company-wide risks as well as opportunities in the intertwined relationship among the economy, society and the environment. This is why we at LS Mtron have established various systems and decision-making bodies that ensure the integrated management of SM initiatives and plans. Specifically, our SM Steering Council, which we have been operating bi-monthly since 2010, serves as an integral venue for decision-making that promotes balanced growth for all stakeholder values.

Integrated Sustainability Management System



Key Agendas of the Sustainability Management Steering Council in 2012

Council Meeting	Agenda	Reporting and Discussions	Follow-up Results
13th meeting (Jan. 2013)	Review performance and report plans SM Report 2011	<ul style="list-style-type: none">Report team-specific achievements and 2012 action plansSet timelines and directions (Each responsible team drew their own plans)	<ul style="list-style-type: none">Interim review of 2012 progress(16th review)Report content was planned and prepared intensively(~ Mar.)Review and support by the SM Executive Office(~ May)
14th meeting (Mar. 2013)	Division-specific operational risk response manuals SM Report 2011	<ul style="list-style-type: none">Set directions to prepare manuals	<ul style="list-style-type: none">A total of 24 manuals were developed including six in the Tractor Division(Oct.)
15th meeting (May 2012)	Build eco-friendly supply chain management systems	<ul style="list-style-type: none">Report team-specific planning directions and report content	<ul style="list-style-type: none">Final content was approved by executives in charge(May)Sustainability Report was issued(Jun.)
16th meeting (Jul. 2012)	CHO division's operational risk response manual	<ul style="list-style-type: none">Supplier-integrated environmental management system development roadmap	<ul style="list-style-type: none">Participating in the 2012 Large Business-SME Green Partnership(government-led project) program(to be completed by 2015)
17th meeting (Sep. 2012)	2nd SMroadmap	<ul style="list-style-type: none">Report progress and set directions for manual development(Share risks by department(HR, environment, safety and promotion) and by function)	<ul style="list-style-type: none">Management manuals were created to handle ten risks (negative media coverage and environmental safety accidents)(Aug.)
	CHO division's operational risk response manual	<ul style="list-style-type: none">Report team-specific progress made against initial plansIntroduce stakeholder group-specific guidelines for distribution	<ul style="list-style-type: none">2012 final review(20th review)93% were distributed(As of Dec. 2012)
18th meeting ad-hoc (Oct. 2012)	Advance SM roadmap at overseas subsidiaries	<ul style="list-style-type: none">Prepare to gather KPIs based on SM materiality test outcomesFinal reporting by team/function	<ul style="list-style-type: none">Ad-hoc meeting was held and reported(18th meeting)Risk management manuals was developed
19th meeting (Nov. 2012)	2nd SM roadmap	<ul style="list-style-type: none">Set directions(Develop processes to systemically respond to local regulations regarding SM)	<ul style="list-style-type: none">Target regulations were chosen: 11 regulations including the Labor Contract Law(Jun.)Diagnosis of regulatory status in China was completed(Oct.)Improvement F/U: To be made from 2012
	Materiality test regarding SM in 2012	<ul style="list-style-type: none">Redefine the SM vision and the meaning of stakeholdersDevelop plans to undertake implementation tasks and KPIsCreate SM slogans	<ul style="list-style-type: none">2nd vision and stakeholder definitions were redevelopedMajor KPIs were modified and supplemented
		<ul style="list-style-type: none">Report measures to undertake implementation tasks as well as KPIs	<ul style="list-style-type: none">December management meeting report(Dec.)2nd SM roadmap was developed
		<ul style="list-style-type: none">Share stakeholder expectations and requirements for improvement and their top interest areas regarding company information	<ul style="list-style-type: none">Integrated into team-specific operational plans for 2013Reflected in the table of contents of the SM Report 2012

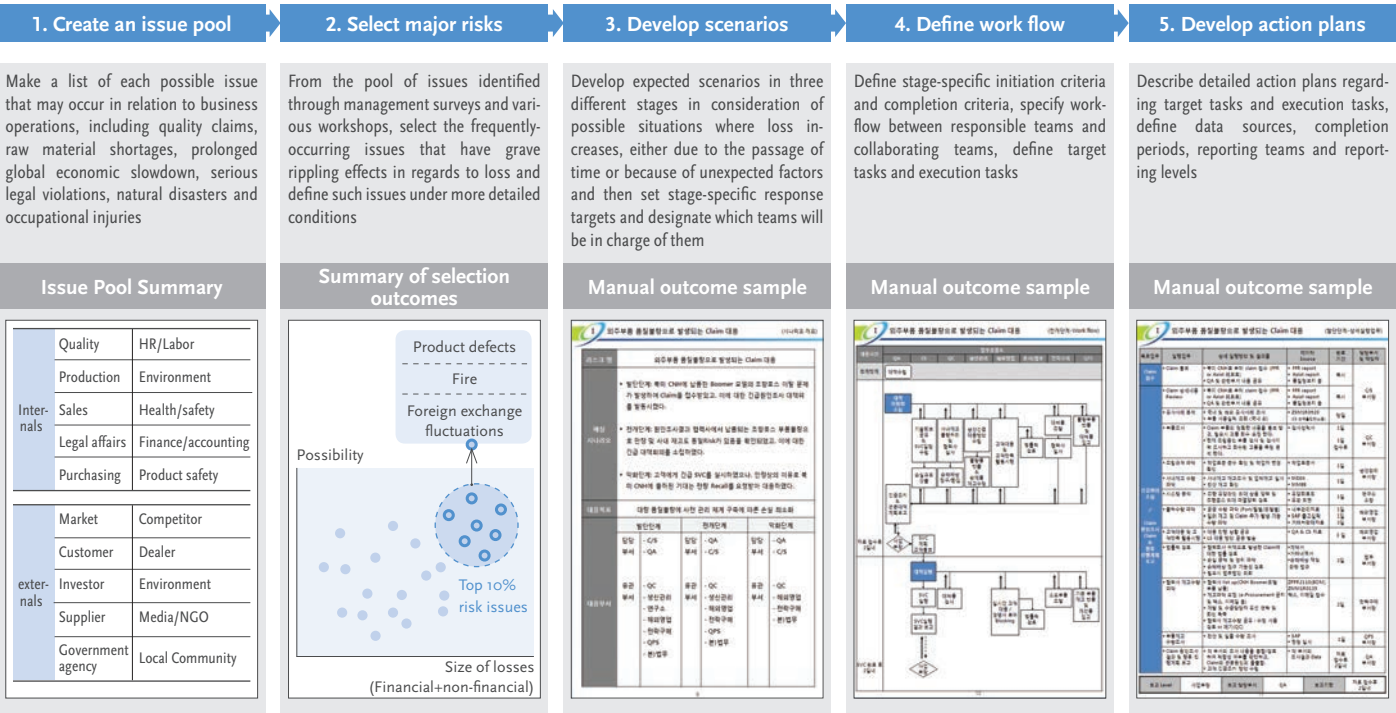
Integrated Risk Management

To ensure sustainable development, it should be the aim of risk management to take balanced action in addressing economic, social and environmental issues, thus ensuring that non-financial values are not comprised by an excessive focus on financial performance. To this end, risks are identified and addressed within the overarching framework of SM at LS Mtron. In 2012, manuals were developed to respond to potential business risks and Chinese local regulatory trends, as well as the regulatory compliance of our Chinese subsidiary, were reviewed.

Development of Risk Response Manuals

As part of our commitment to expand SM across our entire business spectrum, each of our divisions developed risk manuals in 2011, with the Tractor Division taking the lead. In managing risks, we strove to select and focus on frequently arising issues that came with grave rippling effects in regards to loss and to build integrated response systems. By utilizing our own manual development process and development tools, these manuals were developed in such a way as to bring operations back to normal within the shortest-possible time frame, with the least amount of loss when risks did occur. Relevant work-flow and implementation measures were designed to ensure risk prevention and management efficiency as well as application to actual operations. Our 2013 plan includes the further supplementation of these manuals as to make them more applicable to daily conduct and to undertake year-round response activities and training to ensure swift risk response.

Manual Development Process



Local Compliance Review at the Chinese Subsidiary

At LS Mtron, 2012 was a year to initiate SM on a global scale. Thus, our SM initiatives were expanded to our overseas subsidiaries. The first step was to identify local regulatory trends in China and review our compliance status so as to prevent any possible risks that may occur due to regulatory violations. Eleven administrative regulations and provincial regulations in China, including the Labor Contract Law(2008), were chosen and check-lists were developed, both in Korean and Chinese, to examine the status of our legal compliance. The results demonstrated that our Chinese subsidiary complied with the majority of these regulations and that our working-level employees were highly knowledgeable about such regulations as well. Our top priority in 2013 is to discover ways to address upcoming regulations that will take effect in the future, such as expatriate worker employment standards.

중국의 법률	韓商의 義務	제2차 노동계약법 제정	상징	Date
제2차 노동계약법 제정	제2차 노동계약법 제정	제2차 노동계약법 제정		
제2차 노동계약법 제정	제2차 노동계약법 제정	제2차 노동계약법 제정		
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제2차 노동계약법 제정	제2차 노동계약법 제정	제2차 노동계약법 제정		
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제2차 노동계약법 제정	제2차 노동계약법 제정	제2차 노동계약법 제정		

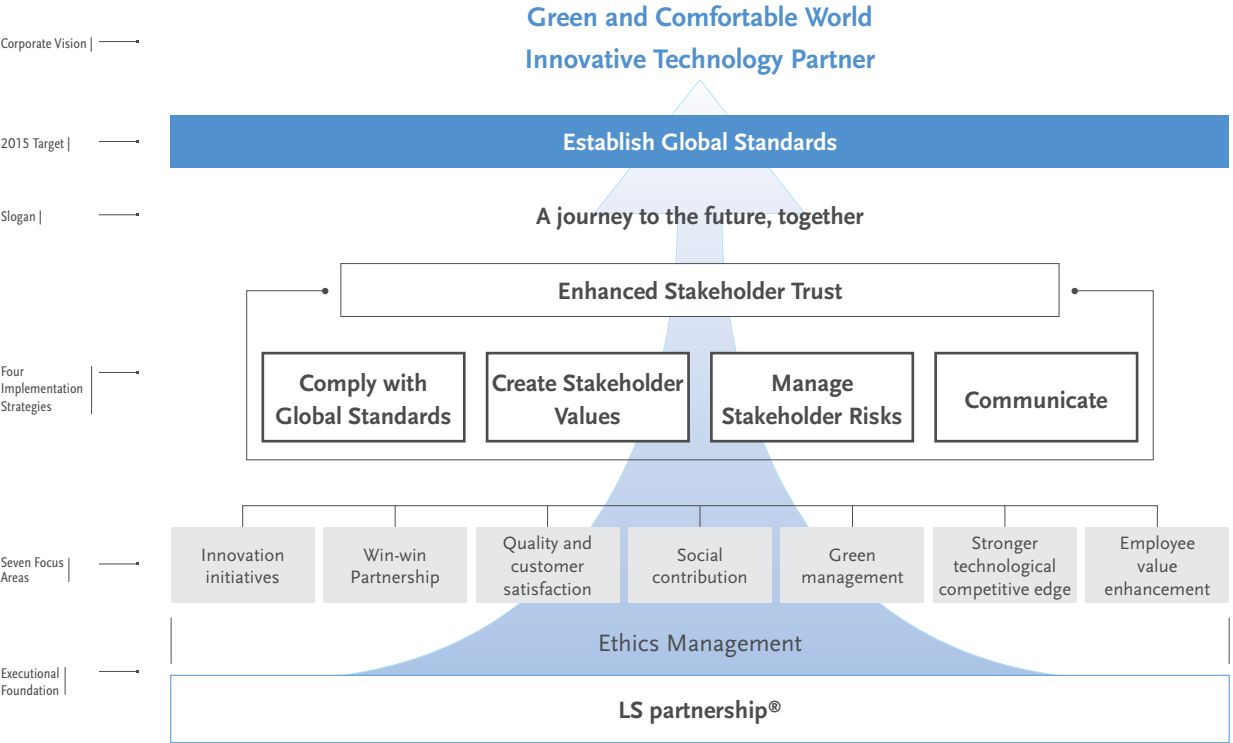
Check list of Chinese regulations

Direction for the 2nd-term Sustainability Management Roadmap

As the 1st-term SM roadmap(2010~2012) came to an end, we developed the 2nd-term roadmap to chart our SM initiatives until 2015. While the 1st-term roadmap focused on the establishment of action frameworks and the integration of sustainability into business operations, the 2nd-term roadmap aims to elevate the level of risk management performance to those of global standards and to strengthen communications with stakeholders, as to generate substantial values.

2nd-term Vision Structure

At LS Mtron, we set the 'Establishing Global Standards' target under the 2nd-term SM roadmap. In other words, we will proactively comply with the standards and regulations that are required of corporate citizens doing business in the global market environment. Under this vision structure lie LS Mtron's four unique implementation strategies and seven focus areas, which are founded upon LS partnerships, the LS Group management philosophy and its ethics management.



2nd-term Sustainability Management Roadmap and Slogan

2nd-term Roadmap

We developed the 2nd-term roadmap that defines annual operational plans in order to reach SM objectives under the roadmap.

Establish Global Standards		
2013	2014	2015
Lay the foundation for responding to global standards <ul style="list-style-type: none">- Develop strategies and KPIs- Improve communication channels	Strengthen executional capacities to comply with global standards <ul style="list-style-type: none">- Reinforce evaluation/monitoring- Expand global initiatives	Establish and internalize global standards <ul style="list-style-type: none">- Set business division-specific strategies- Expand global standards throughout the entire value chain

2nd-term Slogan

We defined the 2nd-term slogan in order to demonstrate directions for the 2nd-term SM initiatives as well as to build a broader consensus.

A journey to the future, together

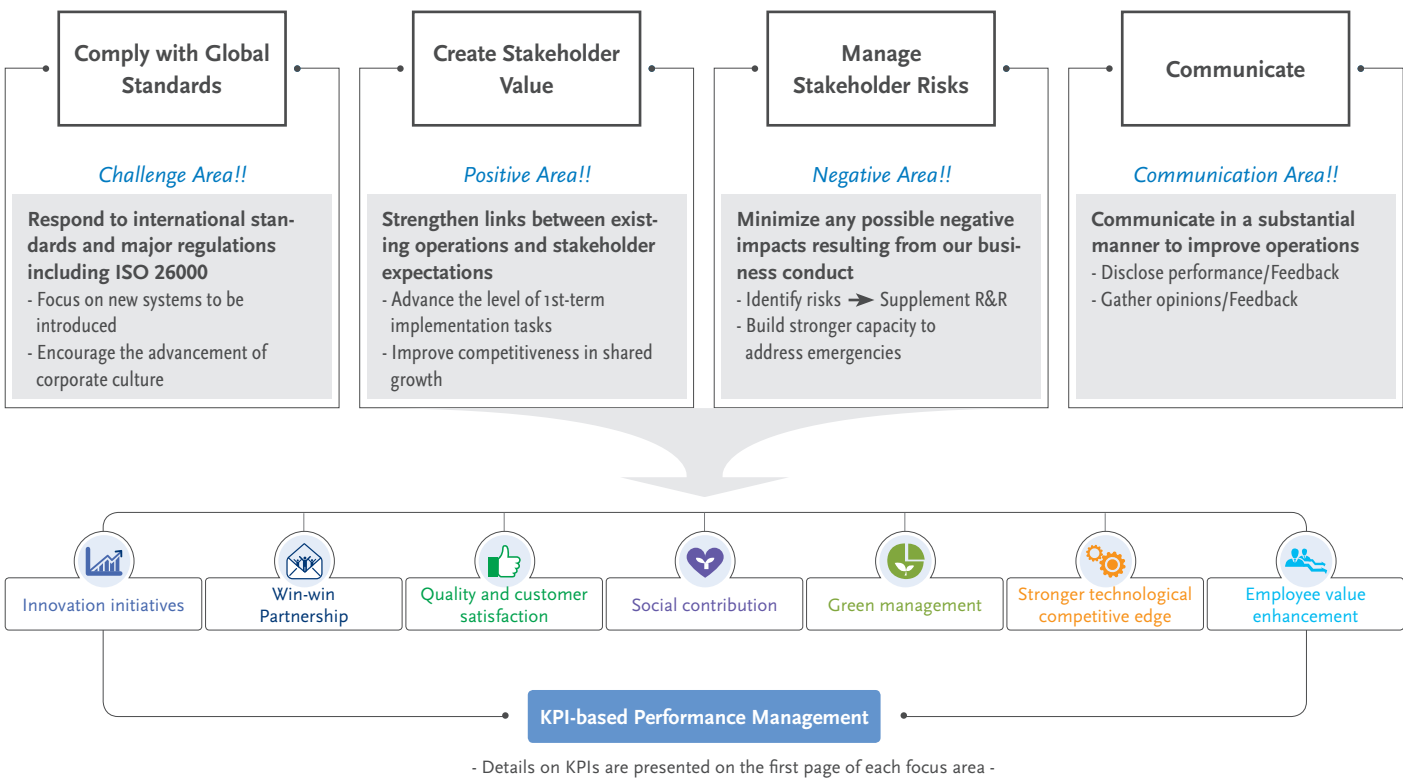
LS Mtron's employees consider customers and all other stakeholders as valuable business partners and aim to build relationships that are based on communication and cooperation.

As an Innovative Technology Partner that leverages toward a more convenient and comfortable world, LS Mtron is committed to creating a sustainable future with its stakeholders.

Development of Four Implementation Strategies and KPIs in the Seven Respective Focus Areas

We set the following four implementation strategies to meet our '2015 target': adhere to global standards to establish new systems and programs that take global requirements into account, create stakeholder values to further advance the implementation tasks that have been achieved under the 1st-term roadmap, manage risks to minimize any possible negative impacts we may create, and communicate in a way as to pursue substantial improvements in stakeholder relationships.

In order to undertake these implementation strategies, our teams that participate in the SM Steering Council developed implementation measures and KPIs for respective strategies. The first strategy of complying with global standards, which is the key strategy under the 2nd-term roadmap, was specifically identified on the basis of such global standards and guidelines as ISO 26000, GRI, EICC, and UNGC, as well as regulations that are directly related to our industry. Furthermore, we ensured that each KPI could be quantitatively evaluated so that it was possible to internally verify their level of completion. Particularly, major KPIs will be assessed through C/M, which is LS Mtron's company-wide schematic used to build consensus on targets and measure performance.



Review of the 1st-term Sustainability Management Initiatives

1st-term Roadmap

Advance SM infrastructure and make alignment with existing operations

2010	2011	2012
Build implementation systems <ul style="list-style-type: none">- Build management systems- Develop baseline plans	Establish implementation systems <ul style="list-style-type: none">- Develop evaluation systems- Build stronger executional capacity	Expand SM across the company <ul style="list-style-type: none">- Align with risk management- Introduce SM to overseas subsidiaries

Major Activities by Year

- 2010
 - SM Steering Council and SM Executive Office were newly created
 - First-ever SM report was published
- 2011
 - SM C/M indicators were operated (Division, staff)
 - Subcommittees were under operation/company-wide employee training was provided
- 2012
 - Risk management systems were developed in business divisions and the support division
 - SM was introduced to overseas subsidiaries (In response to regulatory risks)

External Awards Given in Relation to SM

- 7th SM Awards: Excellence Award in the large business sector
- 2010 Korea SM Conference : (Korea Sustainability Index) No. 1 in the electric/electronic, (Korea Reader's Choice Award) Excellence Award in the first publication sector
- 5th SM Awards: Grand Prize in the first publication sector
- 7th LOHAS Management Awards: Excellence Award in the telecommunication, electronic

Improvements to be Made

- Approach to international issues addressed by global standards
- Communication with stakeholders and integration of the feedback into business operations

Stakeholder Engagement and Materiality Test

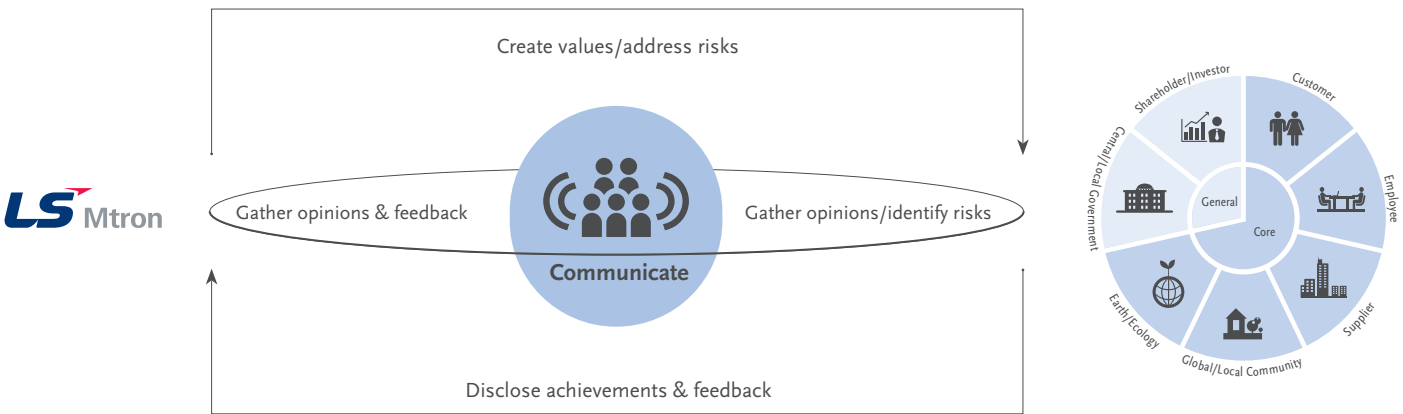
An organization’s sustainability originates from fulfilling its responsibilities in meeting stakeholder expectations. We at LS Mtron ensure that stakeholder expectations are reflected in the following year’s operational plans in accordance with their business impacts. Once determined, these plans are reviewed through the SM Steering Council and the year’s achievements and plans for the following year are presented to stakeholders through sustainability reports.

Our Definition of Stakeholders

We define stakeholders as anyone who interacts with us, directly or indirectly. With the initiation of the 2nd-term sustainability management, we re-developed our definition of stakeholders through the analysis of global trends and stakeholder expectations. At LS Mtron, key stakeholders are defined as customers, employees, suppliers, global/local communities, and earth/ecology and general stakeholders are defined as central/local governments and shareholders/investors.

Development of the Stakeholder Engagement Model

Our stakeholder engagement model was established in order to strengthen communications with stakeholders. This model presents a virtuous cycle of creating values that satisfy stakeholder interest, while identifying and addressing risk on the basis of communication activities. This then serves to seamlessly contribute to achieving our corporate vision and reinforce our organizational competitive edge.



Outcomes of Re-defining Stakeholders under the 2nd-term Roadmap

- Global/Local**
 - *Addition of global community:* Our role as a global corporate citizen was expanded with expanding overseas markets and overseas business sites, Global social contribution programs were initiated from 2011
 - *Expanded scope of local community:* The scope of the local community was extended—from areas that benefit from our social contribution programs—to schools, research institutes and technology cooperation partners in an aim to improve technology management and secure R&D personnel
- NGO**
 - *Reorganization of NGOs:* NGOs were re-classified into earth/ecology in the environment sector and into global/local community in the social sector by their purpose of establishment in order to more clearly designate responsible teams
- Earth/Ecology**
 - *Extended scope of earth/ecology:* All stakeholders who are focused on the environment

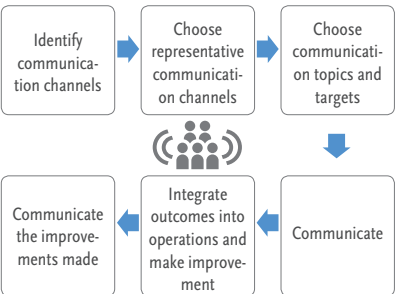
Teams in Charge of Communication Activities by Key Stakeholder Group

Stakeholder	Team in Charge
Customer	Quality Management Team
Employee	HR Development Team
Supplier	Corporate Collaboration & Prosperity Team
Global/Local	Business Support Team
	Technology Management Team
Earth/Ecology	Green Management Team

Definition: An organization that serves as a control tower in creating values for concerned stakeholders on a company-wide level as a member of the SM Steering Council

Role: Operate and manage stakeholder communication channels

Communication Process



The key factor in this communication process lies in identifying stakeholder expectations, as well as tasks we could initiate, in order to generate values aligned with business operations

Materiality Test

The materiality test is conducted annually so as to enable us to prepare SM plans for the following year. SM issues to be addressed in 2013 were identified in consideration of various internal/external business conditions. Stakeholder surveys were also performed so as to pinpoint stakeholder interest levels in the issues while opinions of top management and employees were gathered to understand their business impact. The outcomes were then divided into High, Medium and Low categories and used in developing SM strategies for 2013.

Issues Considered in Conducting the Materiality Test

- LS Mtron’s vision and mid-term strategy
 - Management meeting reports and decisions made at the SM Steering Council
 - SM principles and regulations
 - Completion of implementation task targets set in the previous year
 - Team-specific strategic indicators
- internal** ↔ **external**
- GRI(G3.1), ISO 26000, UNGC principles and etc.
 - Opinions made by SM advisory groups
 - Trends of competitors and industry leaders
 - Customer’s CSR check list index and questions raised by external organizations
 - Issues addressed by the media in relation to LS Mtron

Collection of Stakeholder Expectations in 2012

- Supervision: SM Executive Office
- Period: Aug. 2012 ~ Sep. 2012
- Method: Online/Offline survey
- Survey Target
 - Customers: 80 people
 - Employees: 730 people
 - Suppliers: 183 people
 - Community/Environment: 32 people
- Survey Item
 - Business impact evaluation by issue
 - Interest level evaluation by issue
 - Expectations by stakeholder group
 - Level of satisfaction with 2011 M-Story

▶ Stakeholder expectations that were identified are presented on the first page of each focus area

Level of Interest on Company-wide Management Issues by Stakeholder Group

Customer - Quality and customer satisfaction			Supplier - Win-win Partnership		
Rank	Issue	Page	Rank	Issue	Page
1	Competitive edge in quality	23~24	1	Competitive edge in quality	23~24
2	Technological competitive edge	34~37	2	Development of new business	34
3	Customer relationship management	25	3	Fair trade	20
4	Eco-friendly products/facilities	31, 33	4	Customer relationship management	25
5	Development of new business	34	5	Feedback gathering	12~13

Employee - Employee value enhancement			Global/Local Community - Social contribution Earth/Ecology - Green management		
Rank	Issue	Page	Rank	Issue	Page
1	Technological competitive edge	34~37	1	Job creation	39, 49
2	Competitive edge in quality	23~24	2	Social contribution	26~29
3	Employee health/safety/benefits	32, 43	3	Management of GHG emissions	31
4	HR systems	39	4	Eco-friendly products/facilities	31, 33
5	Support for employee training	40	5	Energy/Resource management	31

Materiality Test Matrix

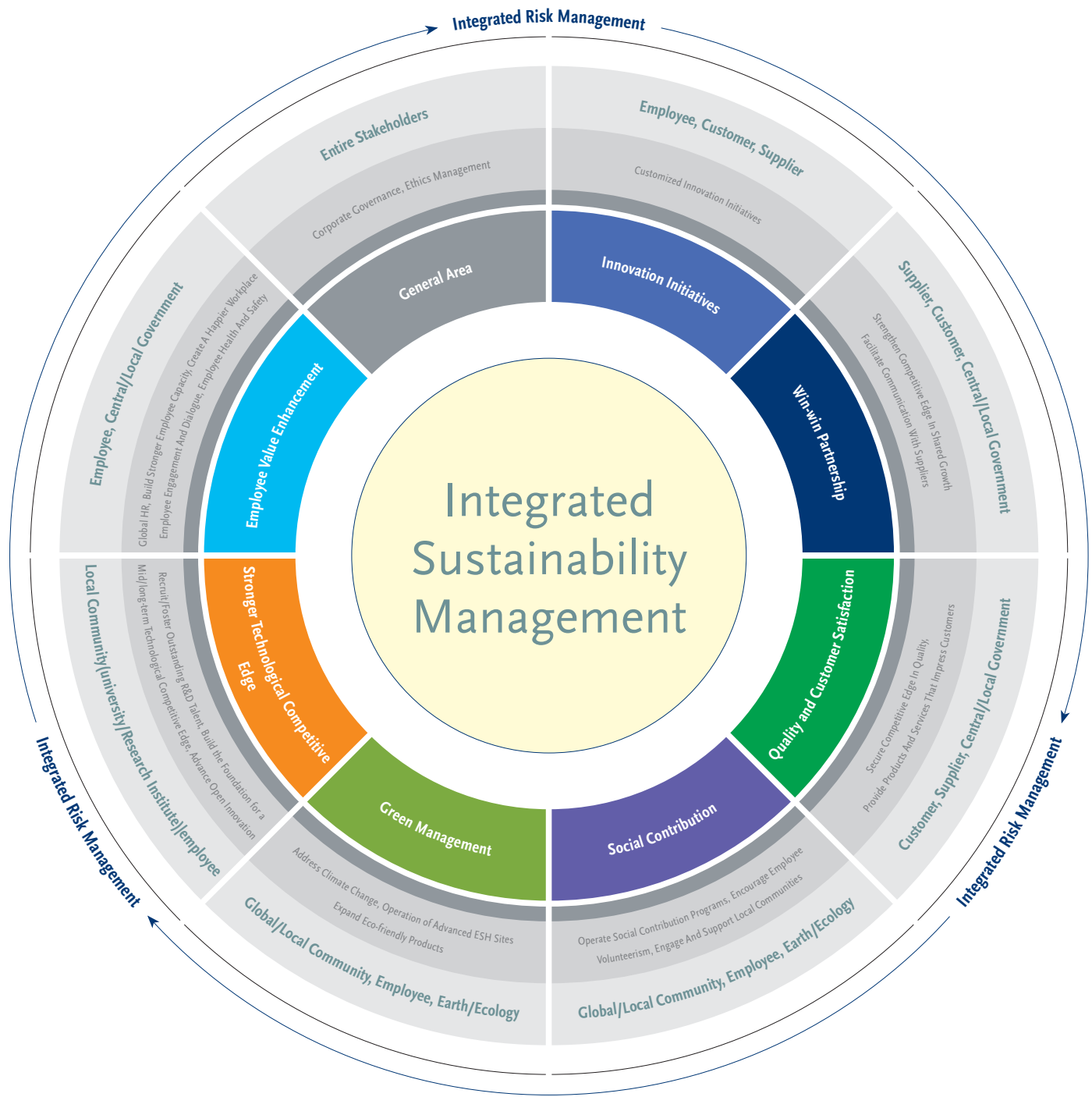
Business Impact	Medium area	High area
	<ul style="list-style-type: none">• Management of GHG emissions ⑨• Support for employee training ⑩• Innovation initiatives• HR systems(Evaluation/Compensation)	<ul style="list-style-type: none">• Competitive edge in quality ①• Technological competitive edge ②• Development of new business ③• Business performance ④• Customer relationship management ⑤• Fair trade ⑥
Stakeholder Interest	Low area	Medium area
	<ul style="list-style-type: none">• Job creation• Management of labor relations• Climate change adaptation• Management of pollutants• Social contribution programs• Revitalization of local economy	<ul style="list-style-type: none">• Support for suppliers• Employee health/safety/benefits ⑦• Anti-corruption/anti-bribery programs ⑧• Development of SM systems• Eco-friendly products/facilities• Feedback gathering• Energy/Resource management

Changes in Top Priority Issues in 2011/2012

2012 Rank	Issue	Measured against the Previous Year
1	Competitive edge in quality	1 ▲
2	Technological competitive edge	6 ▲
3	Development of new business	New issue
4	Business performance	New issue
5	Customer relationship management	2 ▼
6	Fair trade	—
7	Employee health/safety/benefits	7 ▲
8	Anti-corruption/anti-bribery programs	New issue
9	Management of GHG emissions	8 ▼
10	Support for employee training	—

2012 Sustainability Management Steering Wheel

Since 2010, LS Mtron has been using the SM Steering Wheel pictured below to outline SM focus areas and management issues in each area on the basis of the annual materiality test outcomes. Our 2012 Steering Wheel consists of seven focus areas and one general area in addition to 21 management issues. Together, they serve as the overarching framework in organizing our sustainability reports.



Changes from 2011 to 2012

In 2012, the number of focus areas increased from the previous six, to seven. This came with the addition of a stronger technological competitive edge that was needed to undertake stronger SM initiatives in the technology development division(CTO). Management issues to ensure a stronger technological competitive edge included the advancement of open innovation, recruitment and the fostering of outstanding R&D personnel and a stronger competitive edge in patents. Moreover, creating a more harmonious workplace was added as a new management issue under the employee value enhancement focus area.

Our Achievements in Numbers

Focus Area	Issue	2010	2011	2012
Innovation Initiatives	Financial value created through innovation initiatives	KRW 21.3 billion	KRW 18.7 billion	KRW 19 billion
	No. of innovation tasks implemented ¹⁾	235	176	198
	No. of innovation talent secured ¹⁾	178	146	183
	No. of innovation activities proposed ²⁾	30 per person	21 per person	21 per person
Win-win Partnership	Direct investment in Win-win Partnership	KRW 1.63 billion	KRW 1.71 billion	KRW 2.77 billion
	Number of supplier employees receiving job training	105	180	131
	Number of suppliers chosen as Q-partners	32	34	33
	Number of private-public joint investment projects	3/KRW 1.15 billion	9/KRW 3.35 billion	18/KRW 8.32 billion
Quality and Customer Satisfaction	Customer satisfaction (On a scale of one to five)	3.0 points	3.2 points	3.7 points
	Retention of ISO 9001 certification examiners ⁴⁾	22%	35%	46%
	Retention of Quality management engineers ⁴⁾	7%	9%	15%
Social Contribution	Total hours of social volunteering	330	1,080	2,019
	No. of volunteering employees	83	301	369
	Investment in social contribution programs	KRW 297 million	KRW 570 million	KRW 351 million
Green Management	Share of eco-friendly products (Against the total sales)	24%	35%	44%
	Environmental investment and expenses	KRW 402 million	KRW 599 million	KRW 787 million
	Recycling of waste	83%	81%	84%
	Intensity-based GHG emissions(tCO2eq/KRW million)	0.16%	0.14%	0.15%
Stronger Technological Competitive Edge	Number of national/commissioned project contracts signed ⁵⁾	14	28	26
	No. of patent applications	80	170	191
	No. of Strategic Labs chosen ⁶⁾	-	-	9
Employee Value Enhancement	Share of newly hired female employees (Against the total female employees)	16%	18%	18%
	Training support	KRW 1.439 million P.P.	KRW 1.749 million P.P.	KRW 1.55 million P.P.
	Benefits expenses	KRW 17.7 billion	KRW 21.1 billion	KRW 22.7 billion
	Occupational injury rate	0.12%	0.21%	0.13%
	No. of employees who received sustainability training ⁷⁾	-	198	277

1) Declines due to the disposal of the Air Conditioning Division in 2011

2) Including office workers from 2011

3) Business support consulting, purchase-conditional projects, private-public joint investment technology development projects, etc.

4) Measured against employees in charge of quality issues on a company-wide level

5) Contract management is based on the actual number of contracts signed from 2012(2012 number stands at 42 when the 2011 criteria are applied)

6) Strategic Labs work with LS Mtron in undertaking projects, signing MOUs or interacting through training or seminars, thus requiring strategic partnership

7) Practical training for office workers to prepare for ISO 26000 and to expand employee consensus

Innovation Initiatives

Changing our course to move into uncharted territory is what we call innovation at LS Mtron. To take a step higher through relentless growth, we continue to build a culture of creative innovation.



Declaration

LS Mtron will act as a key driver in creating economic and social values by establishing a culture of innovation that ushers in a new future through customized innovation initiatives that generate substantial outcomes.

Communication Channels

- Meeting with CEO(Monthly)
- CEO MBWA(management by wandering around) (Quarterly)
- Gathering of innovation officers(Quarterly)
- Mtron6 Festival(Annually)
- Innovation initiative bulletin(Year-round)

Directions

- Create new business value through creative innovation
- Build strong business capacity through challenging and proactive innovation
- Lay the basis for voluntary innovation through the establishment of a free and progressive culture of communication

● Innovation 1st-term Review(2009~2011)

1st-term Innovation “Innovation for Stronger Organizational Capability”		
2009	2010	2011
Establish an operational model to re-define innovation Lay the basis for innovation	Undertake innovation initiatives that generate substantial outcomes Launch customized innovation initiatives	Establish LS Mtron’s unique way of doing business Establish customized innovation

● Major Achievements in 1st-term Innovation

Category	Details
Improved business capacity	•Reduced opportunity cost •Increased production capacity
Improved innovation capability	• Culture of voluntary participation • A pleasant and encouraging workplace • No. 1 in innovative execution capacity in ‘Diagnosis of Competitive Edge in Sustainable Growth’(MK Economy)
Financial performance	• 2012: KRW 19 billion(2008: -)
Talent development	• Innovation talent in 2012: 183 employees(2008: 28 employees)

● 2nd-term Innovation Directions(2012~2015)

2nd-term Innovation “Innovation that Leads to Better Performance”		
Innovation Target	Innovation Theme	Innovation Culture
Lead to business performance Innovation customized to LS Mtron	Expansion of innovation initiatives Creative value innovation Challenging capacity innovation	3Cs that define innovative behaviors Challenge, Creativity Communication

● Key Performance Indicators(KPI)

Category	KPI	Team in Charge
Create Stakeholder Values	Innovation capacity index based on the dissemination of innovation culture to overseas subsidiaries, subsidiaries and suppliers	Innovation
	Capacity index based on upward-standardization of function-specific business capacity	Innovation
Communicate	Communication facilitation index	Innovation
	Completion of culture innovation tasks that aim to establish a culture of communication	Innovation

Customized Innovation Initiatives



● 2012 Achievements and 2013 Plans

2012 Major Achievements	Evaluation	2013 Major Plans	Deadline
• Big Y program was undertaken for executives in the Staff Division • Productivity management system was improved by resetting standard time • 44 innovation talents were fostered • TRIZ implementation system was established and five pilot projects were undertaken • Six rounds of innovation training as well as 22 rounds of task guidance were offered at overseas subsidiaries	● ● ● ● ●	• Provide company-wide training to integrate 3Cs that define innovation behaviors into business operations • Undertake 10 TRIZ tasks • Undertake 12 ‘Break Through Limitations’ tasks to build technological competitive edge • Ensure stability by strengthening innovation initiatives in daily operations(Participated by all employees)	Jun. Dec. Dec. ◎

- 1) Problem-solving expert certified by LS Mtron
2) TRIZ(Teoriya Resheniya Izobretatelskikh Zadatch, Theory of Inventive Problem Solving): Creative problem-solving methodology

SPECIAL ISSUE – Outcomes Generated through Customized Innovation Initiatives

Break through limitations through customized innovation initiatives

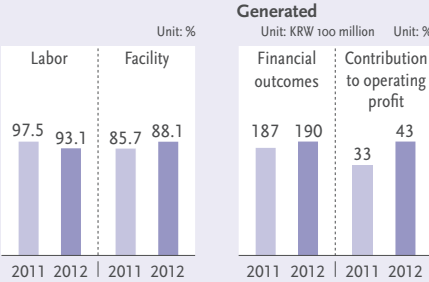
LS Mtron has undertaken innovation initiatives since 2009 to build our own differentiating capabilities and competitive edge based on innovation and change. 2012 was a year when we overcame limitations through customized innovation initiatives based on the capabilities developed over the years. By ‘thinking outside of the box’, the Electronic Component Division successfully resolved some technological issues that our competitors hadn’t noticed and this earned us the title of No. 1 vendor. The CF Division became the world’s first to mass produce 6 μ m battery copper foil, which is being supplied to leading global companies. Such accomplishments are attributed to the continuous innovation undertaken on the shop floor. In 2012 alone, these initiatives generated the financial outcome of KRW 19 billion and 198 innovation tasks were completed. What’s more, diverse innovation programs are currently under operation: employees are rewarded for the proposals and financial outcomes they generate, financially supported for their innovation activities and encouraged to participate in quality circle competitions. In so doing, they benefit from innovation outcomes and are encouraged to be part of innovation initiatives. In 2012, the ‘2nd-term innovation initiatives’ will be launched in full to ingrain innovation into our corporate DNA and the culture at large. These initiatives will lead our sustainable growth, based on the core values of ‘Challenge, Creativity, Communication’.

Completion of Innovation Tasks in 2012

(Unit: Number of tasks completed)					
category	6Sigma	LPS ¹⁾	VE ²⁾	TRIZ ³⁾	total
Green Belt	25	28	6	74	198
Black Belt	26	18	21		
total	51	46	27	74	198

- 1) LPS(LS Mtron Production System) 2) VE(Value Engineering)
3) Including daily tasks

Productivity Gains



Fostering Innovation Talent and Undertaking Innovation Tasks

We continue to foster innovation talent at LS Mtron. In 2012, 44 new innovation experts were made ready for positions and currently there are 183 such experts. These experts actively undertake innovation tasks within their specialty areas(covering the Six Sigma, LPS and VE) while enhancing innovation capabilities by completing 198 tasks in 2012 alone.

Introduction of TRIZ, the Creative Problem-solving Methodology

With our R&D Center in the lead, TRIZ was introduced to help our employees learn more about creative problem-solving skills. Basic and practical training was provided to 82 and 9 employees respectively, while five pilot TRIZ projects were undertaken. Our TRIZ certification program spans from Level 1 to Level 3, through the conformity review of other Belt certification programs. Within the first year of introducing TRIZ, 77 employees became Level 1–certified.

Mtron 6 Festival 2012

In December 2012, ‘Mtron6 Festival 2012’ was held at LS Miraewon. LS Mtron’s innovation leaders, suppliers and Korean and overseas subsidiaries gathered together to share the outcomes of successful innovation initiatives undertaken by respective divisions over the last year. In 2012, eight competitive tasks and two special tasks were presented.

Support to Facilitate Innovation Initiatives

Against operating profit (Support expenses)	2011	0.9%	(KRW 490million)
	2012	1.1%	(KRW 460 million)



Basic TRIZ training

Win-win Partnership

As we are not fully complete on our own,
our journey is taken 'together'.
Through the firm grip felt between hands held
together and the trustful eyes that meet 'eye to eye',
we see a bright tomorrow filled with hope.



Declaration

LS Mtron is determined to establish a virtuous cycle of mutual cooperation, where we can grow together with our suppliers, on the basis of a fair trade culture and build competitive capabilities to thrive in the global market.

Communication Channels

- Gathering of VOS(Voice of Supplier)
- Regular discussion meeting with suppliers (Business presentation)
- Performance-sharing supplier event
- Survey on the level of ethics management at LS Mtron
- Survey on supplier's expectations of sustainability management

Directions

- Build sustainable partnerships through shared growth
- Expand the value chain to secure our competitive edge in the global market
- Expand supplier participation in and execution of sustainability management

Supplier Expectations Identified in 2012

(n: 183 suppliers, changes in ranking from the previous year)		
1 Expand channels to gather feedback	15.0%	—
2 Operate the SRM system ¹⁾	14.4%	new
3 Provide consulting/training support	12.5%	▲1
Support to build competitive edge in quality	12.5%	▼2
Improve payment conditions	10.8%	▼2
ESI ²⁾ activity	9.1%	new
Increase the number of Q-partners	7.0%	▼2
Investment technology development projects	5.6%	▼1
Operate LS Win-Win Partnership Fund	4.8%	—
Others	8.3%	

1) SRM(Supplier Relationship Management): Payment order data is shared in real time in accordance with changes in production plans
2) ESI(Early Supplier Involvement): Suppliers participate in the early stages of the product development process

Key Performance Indicators(KPI)

Category	KPI	Team in Charge
Comply with Global Standards (ISO 26000)	Supplier and dealer satisfaction with our level of ethics *Fair operating practices-Anti-corruption 6.6.3	Corporate Collaboration & Prosperity, Internal Audit & Consulting
	Completion of the task to help suppliers build a stronger competitive edge(consulting/training) through VOS gathering 1, 3 * Fair operating practices - Promoting social responsibility in the value chain 6.6.6	Corporate Collaboration & Prosperity
Create Stake holder Values	Reduction in inventory through the systemized SRM operation 2	Corporate Collaboration & Prosperity
Communicate	Number of submitted RFPs for private-public joint investment technology development projects	Corporate Collaboration & Prosperity
	Distribution of sustainability reports	Corporate Collaboration & Prosperity
	Sustainability management surveys	Business Management & Planning
	Regular discussion meetings with suppliers	Corporate Collaboration & Prosperity

Key performance indicators were set in consideration of stakeholder expectations and LS Mtron's business impact

Strengthened Competitive Edge in Shared Growth



2012 Achievements and 2013 Plans

2012 Major Achievements	Evaluation	2013 Major Plans	Deadline
• Private-public joint investment technology development projects: 18 projects, KRW 8.31 billion	●	• Private-public joint investment technology development projects: 10 projects, KRW 6 billion	Dec.
• Customized support for stronger competitiveness: 45 suppliers, a 15% year-on-year increase in capacity index	●	• Customized support for stronger competitiveness: 30 suppliers, a 10% year-on-year increase in capacity index	Nov.
• SRM system ¹⁾ improvement	●	• Maintain the SRM system(Stabilization of indicators)	○
• LS Win-win Partnership Fund: 20 suppliers, KRW 3.5 billion in operation	◎	• Operate the LS Win-win Partnership Fund and maintain 100% full cash-equivalent payment	○
		• Support the Large Business-SME Green Partnership program	◎

1) SRM(Supplier Relationship Management): Payment order data is shared in real time in accordance with changes in production plans

SPECIAL ISSUE – Expansion of Private-Public Joint Investment Technology Development Projects

Strengthened supplier R&D capabilities will pave the way for shared growth

Private-public joint investment technology development projects, launched in 2010 to assist suppliers in strengthening their R&D capabilities, constitute our representative shared growth program. This program provides technologically-competitive SMEs with 75% of the total R&D expenses(government 2: large companies 1, up to KRW 1 billion in cash for three years) through a fund created by the government and large companies. We signed an agreement with the Small & Medium Business Administration(SMBA) and the Large & Small Business Cooperation Foundation in 2010 to invest KRW 20 billion in the fund (contributions made by the government and LS Mtron) and KRW 13.4 billion has been spent as of the end of 2012. Major 2012 projects include the development of eco-friendly engine moving systems in the Tractor Division and the development of automated automobile brake hose assembly facilities in the Automobile Component Division. Presently, a total of 18 projects are under progress. Thanks to our endeavors in identifying outstanding project tasks, we received the Task Discovery Award at the 2012 Large & Small Business Technology Cooperation Awards held by SMBA on September 6, 2012. Such exceptional tasks were also internally rewarded at the performance-sharing supplier event held in 2012.

Example of Outstanding Project Task

Project Name	FCCL 20 μ m-grade optical automated external defect inspection technology
Development Organization	ONETECH
Total Development Expenses (LS Mtron's contribution)	KRW 399 million(KRW 99 million)
Development Period	Jun. 2011 ~ May 2012
Financial Outcomes	Monetary value of actual products warehoused at LS Mtron through the project - LS Mtron's investment
Expected Benefits	1. Enhanced trust in quality from client companies 2. Respond to the shipment of No Stiffener & 500mmW plating FCCL 3. Reduced cost of losses for customers

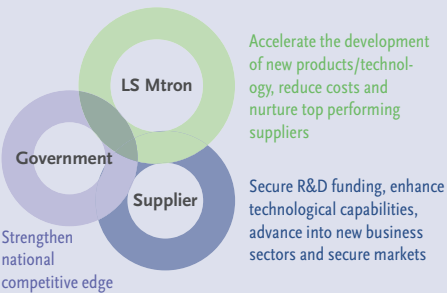


Inaugural ceremony of the private-public joint investment technology development project

Fund Performance

	Unit: Investment(number of projects)
2010	KRW 1.55 billion(3)
2011	KRW 3.35 billion (9)
2012	KRW 8.31 billion (18)

Expected Benefits



What is the private-public joint investment technology development project?

- Purpose
 - Foster suppliers with a technological competitive edge by providing R&D funding
- Details
 - The government and investor companies jointly create a support fund(cooperation fund) to invest in technology development projects undertaken by SMEs.
 - Investor companies(large companies) in need of developing their own or new technology(new products) create a fund in conjunction with the government ahead of time to provide R&D funds to SMEs to ensure shared growth.
 - If SMEs succeed in developing and commercializing technology, investor companies purchase products to help SMEs secure market.

Q-Partner Program

Our Q-partner program aims to identify and maintain partnerships with outstanding supplier. In 2012, 33 Q-partners(eight Platinum Partners and 25 Gold Partners) were chosen. Q-partners are entitled to 100% full cash payments and opportunities to work with us, including Win-win Partnership programs and innovation initiatives. Our current Q-partner assessment criteria include some sustainability management issues concerning environmental organizations, safety management, regulatory violations, injury management and labor management. The criteria will be gradually built upon to disseminate sustainability management to suppliers.

LS Mtron's Commitment to Enhanced Ethics Management

In order to check ethics management levels and strengthen business transaction fairness, annual ethics management surveys are conducted. Our suppliers are asked to anonymously assess our improvement in ethics awareness, their satisfaction with our ethics management, the ethics level of our staff and our fairness in business transactions. The outcomes are analyzed to raise the ethics mindset among our staff and to make improvements through training. Special contract terms for ethical business behaviors were also introduced in 2010 to pursue mutually-beneficial sustainability management and take the lead in establishing fair transaction practices.

SRM Operation

Our SRM(Supplier Relationship Management) aims to promptly share information with our suppliers and strengthen our trust-based relationships with them. Payment request data generated from the development and modification of production plans is shared with them in real time, while our performance in complying with commitments made to them is shared. In so doing, we aim to prevent lost business opportunities and minimize management resource waste.

Payment Conditions

Since October 2010, 100% full cash equivalent payments have been made to our suppliers, of which our major suppliers have been paid on a half-monthly basis. In addition, 100% full cash payments are available for Q-partners and transactions worth under KRW 5 million. This is just one of the many ways we demonstrate our efforts to help suppliers operate more stably.

LS Win-win Partnership Fund

Our LS Win-win Partnership Fund(worth KRW 5 billion) has been operating since 2010 through the agreement signed with Jeon Buk Bank. Another KRW 5 billion was added to the fund in conjunction with the Industrial Bank of Korea in 2012 to further expand the fund. Since 2010, this prime rate program allowed a total of 27 suppliers to take out loans amounting to KRW 8.35 billion in order to financially support suppliers in need of operational funds for facility investments.

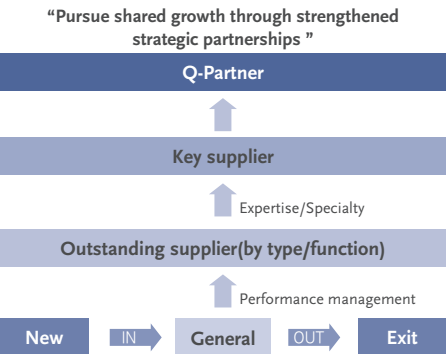
Customized Assistance for an Improved Competitive Edge

Our major suppliers are subject to annual capacity evaluations based on the Q-partner assessment criteria. The 2011 evaluation outcomes revealed a significant gap in capacity levels among suppliers and we provided customized assistance to them. They were able to independently analyze such outcomes and improve while setting and undertaking improvement plans. Such endeavors led to a 15% year-on-year improvement in capacity levels in the 2012 evaluation.

Win-win Partnership Programs

The joint overseas market partnership program and the Win-win Partnership SME exporter program were introduced at the end of 2012 with the Export-Import Bank of Korea, to assist our suppliers suffering from poor financial conditions. While the former aims to provide direct/indirect funding to suppliers who advance into overseas markets with us, the latter endeavors to offer financial support to produce export products, in addition to a performance guarantee to SME suppliers.

Win-win Partnership Model

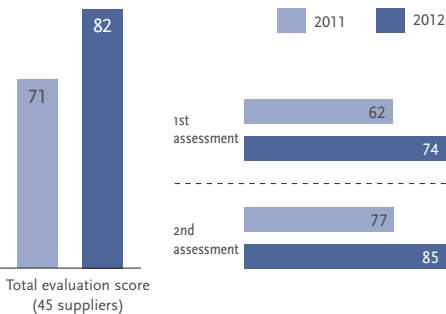


- Definition of Q-partners
 - Q: Quality on a company level
 - Partner: LS Mtron's partner
- Certification Level: Platinum Partner / Gold Partner
- Selection Criteria: Transactions worth more than KRW 300 million and more than 10 transactions made per year
- Target: Raw material suppliers, outsourcing processing companies, product suppliers, facility companies
- Assessment Details
 - 1st assessment: Q, C, D(Quality, Cost, Delivery) quantitative assessment
 - 2nd assessment: Technical expertise, quality assurance, financial status, sustainability management, etc.

Win-win Partnership Programs

Feed back Gather-ing	Financial support	LS Win-win Partnership Fund, P-CBO 100% cash-equivalent payment Win-win Partnership growth programs
	Capacity building building support	Customized support to build competitive edge Innovation initiatives undertaken together Win-win Partnership in health and safety
	Technology development support	Private-public joint investment technology development projects
	Strengthened quality cooperation systems	Supplementation and improvement of quality management systems Quality Partnership Day Quality management signing ceremony

Evaluation Outcomes of Customized Support Programs



Facilitation of Communication with Suppliers



2012 Achievements and 2013 Plans

2012 Major Achievements	Evaluation	2013 Major Plans	Deadline
• Improvement of the integrated purchasing system • Various offline communication channels: Under operation more than 30 times • Sustainability management surveys: 183 suppliers	● ● ●	• Improvement of the integrated purchasing system • Operation of various offline communication channels (Quarterly in each division) • Sustainability management surveys	Jun. ● Sep.

SPECIAL ISSUE – Performance-sharing Supplier Event 2012

Seeking shared growth through communication

Our annual performance-sharing supplier event serves as a representative supplier communication channel. The event aims to build consensus on mutually-beneficial relationships through the Q-partner certification ceremony, where outstanding suppliers are recognized as Q-partners and successful innovation initiatives and examples of win-win cooperation are shared. 2012's performance-sharing event commenced with CPO's welcoming remarks with a progress report, followed by innovation initiative presentations, the Q-partner awarding ceremony and a banquet dinner, with executives from 33 Q-partners and major suppliers in attendance. The progress report presentation enabled participants to share diverse activities to strengthen their competitive edge in shared growth from the LS Win-win Partnership Fund, a win-win cooperation in health and safety with the Green Partnership program. Specifically, presentations on the private-public joint investment technology development project, LS Mtron's representative shared growth program, as well as supplier quality circle improvement activities and productivity gain activities garnered immense attention from supplier executives. Special awards were given to Daechang Industrial Co., Ltd., Daesong Co., Ltd., Namkwangenc Co., Ltd. for their efforts to promote Win-win Partnership.



Performance-sharing Supplier Event 2012

Receiving the Special Award

Located in the Wanju Science Industrial Complex, Namkwangenc has been forging a close relationship with LS Mtron for over 15 years. We manufacture door and cover devices for injection molding machines, which constitute LS Mtron's major product. In 2012, we were chosen as the Platinum Partner. Our current success is attributable to immense consulting and innovation support offered by LS Mtron, ranging from production, quality to general management. These endeavors truly put us on the map as an expert that competes on a par with



Hak-Beom Kim, President, Namkwangenc Co., Ltd.

anyone in this particular industry. In addition, 100% cash payments (only available for certified Q-partners) substantially support our suppliers. This leads to improved payment conditions for tier 2 suppliers and lays a firm basis for mutually-beneficial supplier relationships. The long-established trust allowed us to participate in the new injection molding machine design model development projects. We sincerely hope that LS Mtron will continue to support us in making up for any shortcomings as a supplier. With this support, we can be a reliable partner and instrumental for the company in satisfying its ambitious goal of becoming one of the World's Best Top 7 in the injection molding industry. We, too, will be fully committed to reaching this goal.

Expansion of Direct Dialogue with Suppliers

In 2012, a total of 30 discussion meetings and business presentations were held to allow each business division to engage in dialogue with its suppliers. Such direct interactions allow us to share market conditions and manufacturing plans, along with introducing our Win-win Partnership programs. Furthermore, we directly visit suppliers to ascertain the status of manufacturing activities, quality improvements and shop floor improvement activities, while we explore overall ways to promote mutually-beneficial initiatives. In so doing, we aim to gather real-life situations that challenge our suppliers and to develop a culture of mutual cooperation that helps us meet their expectations through communication.



Discussion meeting with suppliers

Quality and Customer Satisfaction

We put ourselves in the customers' shoes and listen to their concerns as to ensure that our services deliver the greatest-possible satisfaction. Our top priority is to seek sustained quality improvements and provide better services.



Declaration

LS Mtron is committed to delivering products that satisfy customer requirements through sustained quality improvements and through providing a truly impressive customer experience with our best-in-class services.

Communication Channels

- Customer satisfaction survey
- Gathering of VOC (Voice of Customer)
- Product presentation (Product exhibition)
- Survey of customer expectations on sustainability management
- Quality Innovation Festival
- Vision-sharing dealer meeting

Directions

- Secure global competitive-edge in quality
- Secure core quality capacity by fostering talent
- Expand customer contact points and strengthen services
- Strengthen customer health, safety and data privacy

Customer Expectations Identified in 2012

(n: 80 client companies, change in ranking from the previous year)		
1	Secure competitive edge in quality	17.8% —
	Secure technological competitiveness	14.9% ▲2
2	Handle customer complaints swiftly	14.5% ▼1
3	Expand systems to gather customer feedback	13.4% ▲1
4	Reinforce after-sales activities	11.6% ▼2
	Expand quality management of suppliers	5.8% ▲4
	Expand quality management systems	5.4% —
	Strengthen product safety guarantees	4.7% ▼2
	Expand eco-friendly technology/products	4.7% —
	Others	7.2%

Key Performance Indicators (KPI)

Category	KPI	Team in Charge
Comply with global standards (ISO 26000)	Integrated harmful chemicals management system run with suppliers through the Large Business-SME Green Partnership program (government-led project) * Consumer issues - Protecting consumers' health and safety 6.7.4	Quality Management, Green Management, Corporate Collaboration & Prosperity
	Number of customer evaluation meetings held to differentiate the quality of services for tractors and injection molding machine consumers 2, 3, 4 * Consumer issues - Consumer service, support, and complaint and dispute resolution 6.7.6	Quality Management
Create stakeholder values	Retention of quality management engineers 1	Quality Management
	Retention of the ISO 9001 certification examiners 1	Quality Management
Communicate	Distribution of sustainability management reports	Quality Management
	Sustainability management surveys	Business Management & Planning
	Customer satisfaction surveys	Quality Management

Key performance indicators were set in consideration of stakeholder expectations and LS Mtron's business impact

Secure Competitive Edge in Quality



2012 Achievements and 2013 Plans

2012 Major Achievements	Evaluation	2013 Major Plans	Deadline
<ul style="list-style-type: none">• Retention of quality experts (quality management engineers): 15%• Retention of the ISO 9001 certification examiners: 46%• Operation of quality training courses: 7 courses• Sustained activities to secure competitive edge in quality<ul style="list-style-type: none">: Product quality improvement activities and management system diagnoses: 56 cases: Division-specific system improvement and optimization: 27 cases: Supplier quality diagnoses and improvement guidance: 71 cases: Support for quality improvement for overseas subsidiaries: 23 cases	<ul style="list-style-type: none">●●○○	<ul style="list-style-type: none">• Retention of quality experts (quality management engineers): 30%• Retention of the ISO 9001 certification examiners: 60%• Fostering quality internal examiners: 50%• Development of environmental hazardous substance management systems• Initiatives to secure competitive edge in quality• Operation of quality training courses	<ul style="list-style-type: none">Jun.Dec.○○○○

SPECIAL ISSUE – Fostering Quality Talent (Quality management engineers / ISO 9001 certification examiners)

Competitive edge in quality originates from competent individuals

There is no doubt that an edge in quality constitutes an essential prerequisite in a company's ability to become competitive. At LS Mtron, our strategy to improve quality and build capacity is centered around our investment and trust in the lives of real 'people'. It is obvious that product quality is enhanced when the producers of such products truly care. Therefore, we consistently work to foster quality experts so as to secure a competitive edge in quality. In addition to providing basic communication and problem-solving capability training to help our employees build the core capacity required in their workplace and play a central role in quality innovation initiatives, we encourage our employees to become certified quality management experts and ISO 9001 examiners so as to develop practical capabilities applicable to daily operations. Our quality management engineer training courses consist of basic statistics, reliability management, experimental planning methodology and quality management. To ensure efficient training, both online and offline courses are provided simultaneously. Specifically, offline courses offer intensive training support to assist employees in obtaining certificates by inviting external lecturers to training camps that are held at the in-house HR development institute.

Our ISO 9001 examiner training courses target employees who will play an essential role in making sustained improvements of quality systems. Trainees learn the basic requirements of quality management systems through in-house courses, while external training camps are provided by outside training organizations to help employees become certified examiners. Quality experts are responsible for taking the lead in various innovation initiatives so as to strengthen internal quality and diagnose quality management systems, while offering external improvement guidance for overseas subsidiaries and suppliers. LS Mtron consistently provides opportunities to its employees in capacity and career development in order to reinforce its quality capabilities.

Retention of Quality Management Engineers

* Against employees working in relation to quality issues on a company-wide level

2010	7%
2011	9%
2012	15%

Retention of ISO 9001 Certification Examiners

* Against employees working in relation to quality issues on a company-wide level

2010	22%
2011	35%
2012	46%

* Quality management engineers _ The quality management engineer certification is a national technical certification program certified by the Human Resources Development Service of Korea. It was launched to meet the demand for professional technical personnel who are capable of actively introducing and expanding quality management systems in satisfying shifting customer requirements.

Improvement on Quality Failure Cost

At LS Mtron, we use the ERP system to monitor quality cost in real time. The entire organization, including respective teams, is included in the scope of quality cost management and targets are set to reduce quality failure costs at the start of each year. In order to reach these targets, each business division selects sub-tasks to improve on product quality failures and meetings are held to monitor progress. The outcomes of such endeavors are reported to the CEO regularly.

Quality Improvement Initiatives(Product/management systems)

To improve product quality, we offer guidance to suppliers to help them with quality improvement, while diagnosing major manufacturing processes to strengthen management systems and improve continually to supplement vulnerable processes and ensure their efficient operation. Included in major improvements are the stabilization of the CAC hose manufacturing process quality in the Automotive Component Division, the development of work-standard management systems in the Injection Molding Division and the operation of the TFT to provide the quality assurance of battery copper foil length direction in the CF Division.

Optimization of Quality Management Systems

At LS Mtron, quality management activities are systematically complemented to satisfy both customer requirements and internal targets. Our ISO 9001 and ISO/TS 16949 quality management systems are subject to annual examinations by authorized certification bodies. Meanwhile, process diagnoses are performed and issues are identified to make continuous improvements and develop quality management systems that are optimized for distinctive features of each business division.

Quality Improvement Support for Overseas Subsidiaries

Korean experts were sent to the LSMQ, (Tractor Division's overseas subsidiary), to provide quality training, service support and assistance for the quality improvement of major components. Our plan is to continually improve on our quality assurance systems by fostering local experts so that such support activities enable the LSMQ to diagnose quality and improve independently. Our Injection Molding Division transferred its knowledge and long-term expertise to the Chinese local plant operated by its Chinese subsidiary, LSMW. The division also sent inspection experts three times to the subsidiary to help local inspectors build stronger inspection capabilities and improve detection rates. In the beginning of 2012, the Electronic Component Division discussed ways to promote quality collaboration with the LSEQ, its Chinese subsidiary in Qingdao. Chinese local inspectors received guidance from the division's Korean experts to improve their detection capabilities and efforts were made to secure quality regarding the transfer of mass production.

Strengthening Quality Cooperation Systems

We believe that our supplier's competitive edge is a direct lead-in to our own competitive edge. This is why we consistently make both regular and special diagnoses to help suppliers supplement and improve their quality management systems. As such, Taesan Technology, a supplier of the Tractor Division, was offered assistance to ensure stable product quality. Also, the Electronic Component Division held Partnership Day in February 2012 with 10 suppliers in attendance.

Quality Training Courses

To continuously strengthen quality capabilities, employees in each division, along with those in the areas of development, production and quality assurance, participated in regular quality training programs that included two basic and five professional courses. Furthermore, practical inspection courses and ERP quality module courses were provided to assist employees who, either through an organizational reshuffle or recruitment, became members of the newly created Quality Assurance Team. ERP quality module training used actual cases as teaching materials to provide customized courses and invited in-house instructors who were internally trained.

Protection of Customer Safety through the Eco-friendly Supply Chain

At LS Mtron, designated staff members work to ensure that relevant regulations are analyzed and management systems are systematically supplemented to promote sustainable production and consumption while delivering safer and more eco-friendly products. Our commitment to fulfilling social responsibility within our sphere of influence was demonstrated through our participation in the Large Business-SME Green Partnership Program that was organized by the Ministry of Knowledge and Economy, in 2012. Under this program, we plan to lay the foundation for shared growth by establishing system-based hazardous chemical management schemes in conjunction with suppliers and transferring relevant managerial skills to suppliers for the next two years.

Performance in Securing a Competitive Edge in Quality

Activity	Unit: Number of cases		
	2010	2011	2012
Improve product quality failures	14	7	56
Improve quality management systems	26	38	27
Support overseas subsidiaries	-	14	23
Diagnose suppliers and help them improve	49	100	71

Quality management system certificates



ISO 9001:2008

ISO/TS 16949:2009



Practical inspection training course

Provide Products/Services that Impress Customers



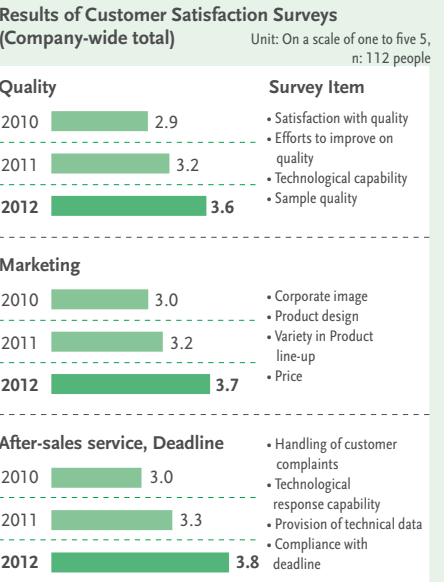
2012 Achievements and 2013 Plans

2012 Major Achievements	Evaluation	2013 Major Plans	Deadline
• Continuous customer satisfaction activities undertaken by each business division: 116 • Customer monitoring and special CS training • Customer satisfaction surveys	● ● ●	• Launch activities to provide differentiated service quality that may be truly felt by customers in the Tractor Division • Conduct customer satisfaction surveys • Undertake customer satisfaction activities in each business division and strengthen the management of customer contact points	Oct. Dec. ○

SPECIAL ISSUE – Improvement of Customer Satisfaction

Impressive customer experiences originate from customer feedback.

Our annual customer satisfaction surveys aim to contribute to delivering customer-driven services and enhancing quality by comparing and assessing where we are in relation to our competitors from a customers' perspective so that we can identify and improve upon our shortcomings. In 2011, customer satisfaction surveys were conducted for seven divisions on the issues of: quality, marketing, after-sales services and deadlines. In 2012, such surveys were expanded to include the all eight divisions. Customers and dealers(who sell only LS Mtron's products) were surveyed indirectly through e-mails and faxes. In 2012, the company-wide total score was 3.7 points on average, up 0.5 points from 2011. While the Tractor Division's marketing department scored 3.4 points in design, up by 0.8 points from 2011, the Injection Molding Division gained the lowest score of 3.1 points in handling customer complaints in the after-sales services and deadline category. Our plan for 2013 is to conduct customer satisfaction surveys as part of our strategy to differentiate the service quality customers experience and to fully commit ourselves to improving customer satisfaction.



Strengthen the Management of Customer Contact Points

We constantly manage customer contact points to deliver customer satisfaction and enhance our brand image over the long haul. In 2012, basic and professional advanced sales/service training was provided to help employees build stronger qualifications and capacities as professionals. Specifically, our overseas subsidiaries are given consistent CS training and service support. To ensure the systematized management of customer contact points, our call center is operated through the integration of functions that were previously performed by dealers under respective divisions, sales employees and engineers. Call center data consists of positive feedback as well as customer complaints gathered through the representative phone number. Both are considered in assessing customer satisfaction levels with our products and services.

Responsible Marketing

We provide a complete suite of product-related information to prevent any misuse of our products and to improve customer convenience. In addition to product guides and user manuals, regular direct invitations are sent to customers to present and exhibit new products.

Protection of Customer Information

All employees at LS Mtron consider the protection of a customer's personal information a top priority and principles and policies are up and running to protect consumer privacy. We also have designated personal information officers to improve relevant processes, while all employees are encouraged to raise their awareness of data privacy and related training is provided consistently.



Advanced training for CS employees at overseas subsidiaries



Visit to the CNH

Social Contribution

It is with deep affection that we look at the less privileged. We are never hesitant to lend a helping hand to whoever needs our love. We will become a light corridor, sincerely shining a bright light into the darkest reaches of our society.



Declaration

LS Mtron is determined to fulfill its social responsibility as a corporate citizen and go the extra mile to pave a path where everyone lives in harmony through proactive community development and growth initiatives and the spirit of employee volunteerism.

Communication Channels

- Consultation with local government agencies (Anyang City, Wanju-gun Office)
- Cooperation with NGOs (Partners in social contribution programs)
- One Company One School affiliation, One Company One Village affiliation
- Cooperation with local cultural/arts/sports organizations
- Surveys of community expectations

Directions

- Improve LS Mtron's reputation by developing a unique corporate brand through representative social contribution programs
- Maintain close and trust-based relationships with local communities
- Improve employee mindsets regarding corporate social responsibility and expand employee volunteer activities
- Promote shared growth with and economic development of local communities

Community Expectations Identified in 2012

(n: 32 people, Changes in ranking from the previous year)		
1 Welfare for vulnerable populations	30.8%	—
2 Environmental protection	26.9%	—
3 Promotion of culture/arts/sports	23.1%	▲1
Job creation and fostering of future talent	19.2%	▼1

Key Performance Indicators(KPI)

Category	KPI	Team in Charge
Comply with global standards (ISO 26000)	Number of operations of social contribution programs that directly engage employees in local communities in Korea as well as overseas 1, 2 * Community involvement and development — Community involvement 6.8.3	Business Support
	Support to promote culture, arts and sports in local communities where LS Mtron business sites are based (Monetary value) 3 * Community involvement and development — Education and culture 6.8.4	Business Support
Create stakeholder values	Volunteer hours per employee	Business Support
Communicate	Sustainability management surveys	Business Management & Planning
	Distribution of sustainability reports	Business Support

Key performance indicators were set in consideration of stakeholder expectations and LS Mtron's business impact

Facilitation of Employee Volunteerism (Community engagement and support)



2012 Achievements and 2013 Plans

2012 Major Achievements	Evaluation	2013 Major Plans	Deadline
• Volunteer activities undertaken on a company-wide and by four regional volunteer groups	●	• Strengthen support to facilitate employee volunteerism	Dec.
• Support for volunteerism (Awards, campaign, volunteer training)	●	• Affiliation activities for villages and schools in local communities	○
• Support to foster next-generation young farmers, local stream clean-up initiatives and other community affiliation activities	○	• Expand sponsorship for culture/arts/sports in local communities as well as employee participation	○
• Sponsorship for local cultural/arts/sports activities including the Jeonju International Film Festival, the Jeonju World Sori Festival	○		

SPECIAL ISSUE – LS Mtron's Community Volunteerism

LS Mtron grows hand-in-hand with local communities

Our employee volunteer initiatives that had been undertaken separately by respective business sites until 2011 were integrated and evolved to create a company-wide volunteer group. While site-specific volunteer activities remain in their informal format to ensure both spontaneity and autonomy, operational systems were built and the Social Contribution Subcommittee was created to systematically support and operate volunteer activities. Our company-wide volunteer group consists of 400 employees working at the four business sites in Jeonju, Anyang, Jeongeup and Indong. This group is happy with the less-formal atmosphere that welcomes the participation of both employees and their families.



Company-wide Volunteer Group



Sarang Nanumhoe (Love Sharing Team) in Jeonju
- Member Composition: Employees in the Tractor Division, Injection Molding Division, Special Business Division
- Major Beneficiary: Da Ae Community/Chudong village
- Activity: Donate money and supplies, help make kimchi, support construction and hands-on activities and experiences



Sarang Silcheonhoe (Love Practicing Team) in Anyang
- Member Composition: Employees at the Head Office, Electronic Component Division, UC Division, sales departments and R&D Center
- Major Beneficiary: Yanji House (Rehabilitation facility for patients with cerebral palsy)/Gyeonggi office of Child Fund
- Activity: Help bathe regularly/clean/dining education, donate money and supplies



Sarang Silcheonhoe (Love Practicing Team) in Jeongeup
- Member Composition: Employees in the CF Division and FCCL Division
- Major Beneficiary: Welfare facilities for the disabled
- Activity: Help repair homes for elderly people living alone and those from broken homes, care for long-term patients, offer field trips to children from broken homes



Huimang Nanumi (Sharing Hope Team) in Indong
- Member Composition: Employees in the Automotive Component Division
- Major Beneficiary: Shelter of Love (Local short-term care facilities for those with mental disabilities), Gumi Elementary School
- Activity: Help bathe regularly, offer regular support for children from broken homes, help deliver briquettes

Promotion of Local Culture/Arts/Sports

We sponsor annual cultural, arts and sports events to help develop local culture and improve the quality of life for local people. Specifically, we have been an active sponsor of the Jeonju International Film Festival and the Jeonju World Sori Festival, two representative cultural festivals held in North Jeolla where our Jeonju site is based, since 2008. Our staff directly participates in these events. We also sponsor the International Sculpture Exhibition to contribute to the local cultural industry and the Korea Cycle Federation to promote daily sports and public health.

Community Engagement through the Fostering of Local Talent and Product Donations

Included in our endeavors to contribute to the local community where we are located, are the donation of tractors to the farming group in Chudong village with which we forged ties under the One Company One Village program to help foster next-generation young farmers and the donation of tractors for experimental and practice purposes to the College of Agriculture & Life Sciences at Chonbuk National University. Furthermore, various industry-academia-research institute cooperation programs are underway including the completion of Mtech Workshop, a practical training site to advance agricultural machinery technology at the Iksan Campus of Korea Polytechnic College and the signing of industry-academia agreements for technical training.



Tractor donation ceremony held at Cheonan Yonam College

Representative Social Contribution Programs



2012 Achievements and 2013 Plans

●: Completed, ◐: Partially completed, ○: Not completed, ◎: Continuous Activity

2012 Major Achievements	Evaluation	2013 Major Plans	Deadline
<ul style="list-style-type: none"> 2nd Global Happy Village campaign in 2012(Vietnam) : Employee volunteers were sent to help educate children and construct a new school building Representative domestic social contribution program(We Love Farming Village Volunteer Group) : 50 employees helped elderly people living alone to take self-portraits and home repair 	●	<ul style="list-style-type: none"> 3rd Global Happy Village campaign in 2013 Operate representative domestic social contribution programs: Local volunteer activities undertaken by We Love Farming Village volunteers <ul style="list-style-type: none"> - Schedule: Twice a year - Venue: North Jeolla, North Gyeongsang - Details: Help seniors with taking self-portraits and getting haircuts, Support elderly people living alone - Participation: Informal members and employees of site-specific volunteer groups 	Year-round Year-round

SPECIAL ISSUE – LS Mtron's Global Happy Village Campaign

LS Mtron's Global Happy Village Campaign

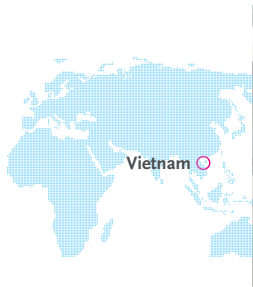
1. Overview

Dates: June 20 – June 26, 2012
Place: Banfu Village in Tuyen Quang Province, Vietnam (Highland areas N.W. Hanoi)
Target: Banfu Elementary School students and teachers, local people
Programs: Volunteer activities(Student education, physical volunteer activities and enlightenment education), support activities(Help construct a new school building and provide school supplies)

Volunteers: 12 LS Mtron employees(From different divisions, age groups and job categories)

2. Programs

The 'Happy Village Campaign', LS Mtron's representative global social contribution program, is performed in the different phases of preliminary education, volunteer activities and sustained volunteer engagement so that the spirit of volunteerism is integrated into the fabric of each employee's daily life. In this way, it becomes natural for them to share their experiences with others and spread the 'volunteer virus' to the wider world.



Episode | The target area for our volunteer activities was in the highland areas of the northwestern part of Vietnam, which is one of the most underdeveloped regions and populated by ethnic minorities. On numerous occasions, we could not use vehicles due to heavy rainfall or poor road conditions and on one occasion, our volunteers even had to walk several kilometers in the scorching sun with temperatures of over 40 to reach their students because the vehicle had gotten stuck in the mud. The weather, poor road conditions and general local conditions posed such challenges to our volunteers. Yet, we were able to finish the campaign with a smile and a great sense of satisfaction in the end.

Jong-Sig Kim – Campaign leader



Preliminary Education



← **Local information and language**
 Learn about the general conditions in Vietnam, the target beneficiary of volunteer activities, including its politics, culture, society and religions.

↓ **Program training**
 All the programs to be undertaken in Vietnam are practiced in detail with the leaders who are selected in each program to lead it.



Volunteering in Vietnam



↑ **Music education**
 Music education is hardly a part of the regular school curriculum in Vietnam and it is even more difficult to obtain the musical instrument that is needed to study it. LS Mtron volunteers were aware of such local conditions through preliminary research and found content suitable to teach music easily and help students stick with their learning.



← **Art education**
 Children were encouraged to draw the visions of their future dreams on T-shirts. Volunteers first shared their dreams and then introduced a variety of existing jobs in the world to the students.



↓ **Physical volunteer activity**
 Physical volunteer activities included fence construction and wall painting. The fence was built along with local teachers and murals were painted on the left and right sides of the wall.

← **Sports day**
 Sports day programs that are typically seen at school sports day in Korea such as relay races and treasure hunts were also provided in Vietnam. Volunteers became members of each class and bonded with the students while playing games and sports.

Disbanding Ceremony and Volunteering

↓ **Participation in domestic volunteer activities**
 Participation in domestic volunteer activities
 In November, Global Happy Village volunteers took part in volunteer activities in Korea.



Green Management

Toward a future where forests are filled with greenness, the earth breathes freely and everyone dreams of a tomorrow filled with overwhelming hope, our endeavors at LS Mtron never cease in developing eco-friendly green products.



Tractors in perfect harmony with nature(Excellence Award at the Tractor Photo Competition 2012)

Declaration

LS Mtron aims to become a global leading green company in the industrial machinery and cutting-edge component industry, through sustained endeavors to reduce energy consumption and GHG emissions, along with the support to expand the scope of green business.

Communication Channels

- Environmental policy presentations by central/local governments
- Discussions with environmental NGOs and environmental engineer councils
- Green company information disclosure
- Local Agenda 21 in Anyang
- Industrial Health and Safety Committee and committee meetings
- Surveys of expectations regarding sustainability management

Directions

- Adapt to climate change through the reduction of GHG emissions
- Expand the scope of eco-friendly products and green business
- Operate a safe and healthy eco-friendly workplace

Stakeholder Expectations Identified in 2012

(n: 32 external stakeholders in relation to the environment, changes in raking from the previous year)		
1 GHG management	22.2%	—
2 Conservation of resources and energy	18.9%	—
3 Development of eco-friendly products	12.2%	▲1
Improvement of eco-friendly facilities	11.1%	▼1
Reduction of pollutants	11.1%	—
Management of hazardous chemicals	7.8%	—
Reduction of water consumption	7.8%	new
Expanded operation of EMS	4.4%	▼1
Compliance with environmental regulations	4.4%	—

Key Performance Indicators(KPI)

Category	KPI	Team in Charge
Comply with global standards (ISO 26000)	Management of GHG emissions 1, 2 * Environment – Climate change mitigation and adaptation 6.5.5	Green Management
	Share of eco-friendly products in total sales (In accordance with LS Mtron's eco-friendly product development criteria) * Environment – Prevention of pollution 6.5.3 3	Technology Management, Division
	Create stakeholder values	Green Management
Communicate	Sustainability management surveys	Business Management & Planning
	Distribution of sustainability management reports	Green Management

Key performance indicators were set in consideration of stakeholder expectations and LS Mtron's business impact

Response to Climate Change



2012 Achievements and 2013 Plans

2012 Major Achievements	Evaluation	2013 Major Plans	Deadline
• Completion of the calculations of GHG emissions at each business site • Completion of the revision of GHG management regulations and inventory • Selection of employees in charge of GHG issues at respective sites and training	● ● ●	• Build GHG emission monitoring systems • Build GHG and energy IT systems	Jun. Sep.

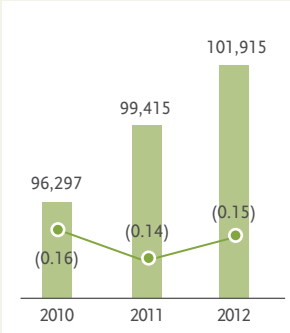
SPECIAL ISSUE – GHG-Energy Management

Fulfilling our environmental responsibility on a global level

We work with others to respond to climate change and to fulfill our environmental responsibility as a global company. Since our company-wide GHG inventory was built in 2010, we have set strategies to reduce GHG emissions and have our performance verified by a third-party company. In 2012, facility operations grew more efficient and high-efficiency facilities were introduced to this end. Specifically, our Jeongeup site(which accounts for a whopping 75% of our company-wide GHG emissions due to its indirect emissions) is more proactive in making regular energy diagnoses and investment plans. In 2012, our company-wide GHG emissions amounted to 101,915tCO₂eq, which consist of 8,315tCO₂eq tons of direct emissions caused by stationary and mobile combustion(Scope 1) and 93,600tCO₂eq of indirect emissions caused by the purchase of electricity(Scope 2). Specifically, 774tCO₂eq of emissions were reduced through the integrated operation of freezers, the operation of high-efficiency lighting devices and the replacement of motors. In addition, load factor control(through the installment of invertors and the deployment of power saving freezer devices) enabled us to save 283tCO₂eq of emissions annually. Staff in charge of respective sites and relevant team members are trained to strengthen our capacity to manage GHG emissions and develop GHG management processes, leading to a more systemized management of GHG emissions. Furthermore, a taskforce team is up and running to reduce emissions while daily remote meetings are being established as an operational routine. These include video conferencing systems to minimize the need for business trips, which in turn leads to GHG emission reductions. We plan to set company-wide climate change strategies to respond to the introduction of emission trading schemes through the calculation and evaluation of major performance indicators. In 2013, GHG/energy management IT systems will be launched to manage company-wide emissions in a more systemic manner.

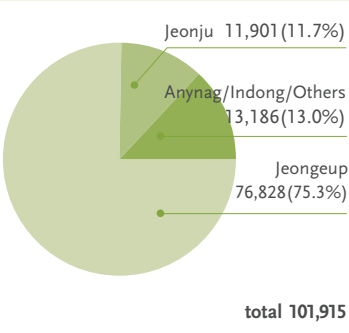
GHG Emissions between 2010~2012 (Intensity)

Unit: tCO₂eq, (tCO₂eq/KRW million)



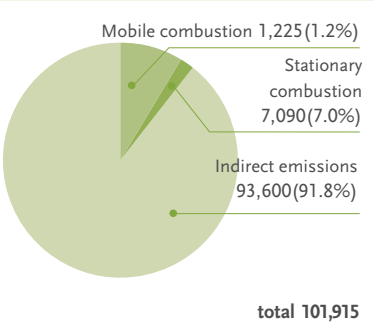
GHG Emissions by Site in 2012

Unit: tCO₂eq



GHG Emissions by Source in 2012

Unit: tCO₂eq



Support for Suppliers in Building Low Carbon Management Systems

Our participation in the Green-Carbon Partnership, a government-led national project, aims to advance mutually beneficial green management with suppliers by taking detailed actions to develop a low carbon supply chain for 20 suppliers. A kick-off workshop was held last December to share background information and project directions. Meanwhile, energy-saving measures are under development through the establishment of GHG inventory and environmental management systems as well as the diagnosis of energy consumption based on field diagnoses of suppliers. In addition, training for working-level employees with our suppliers will be provided so as to lay a firm foundation for green management within the supply chain.



Briefing of Launching the Green Carbon Partnership 2012

Operation of Advanced ESH Business Sites



2012 Achievements and 2013 Plans			
●: Completed, ◐: Partially completed, ○: Not completed, ◎: Continuous Activity			
2012 Major Achievements	Evaluation	2013 Major Plans	Deadline
• Risk management support given to Chinese subsidiaries : Diagnose fire prevention activities and prepare for emergency scenarios	●	• Identify major risks at Hi-tech Center and integrate them into internal regulations	Aug.
• Development of localized ESH management systems for overseas subsidiaries : Workshop training for environmental safety officers at Chinese subsidiaries	●	• Support overseas subsidiaries in building systems and diagnosing fire prevention activities	Sep.
• Secured transparency in disclosing corporate environmental data : Completion of the verification of disclosed environmental data	◎	• Foster environmental safety officers at overseas subsidiaries	Sep.

SPECIAL ISSUE – Support for Overseas Subsidiaries with ESH Management

Global initiatives for strengthened safety capacity

LSMQ, LSEQ and LSMW were subject to safety diagnoses in 2012 to improve their fire safety and prevention capabilities. Specifically, high-functional thermographic cameras were used to check heating areas to prevent electric fires while major risk factors of electric fires were closely examined. Firefighting facility inspections were made and firefighting training scenarios were developed or modified for a swift response to fire accidents. Random firefighting training helped our overseas subsidiaries build a more stable training system while workshops were held to foster local staff with improved fire safety awareness to encourage these subsidiaries to take the initiative in fire prevention. Our support will continue to help them maintain fire safety and prevention practices.



Briefing of diagnostic outcomes of overseas subsidiaries

Improvement of Eco-friendly Processes and Management of Pollutants

The reverse osmosis devices deployed in 2012 helped us reduce water consumption while the replacement of old precipitators and the additional installment of scrubbers improved the environment near our business sites. In 2012, the total waste discharge rose by 19%(on an intensity basis) from the previous year but our recycling was up by a 3% increase through the thorough management of recyclable materials. Our plan for 2013 is to establish an eco-friendly supply chain to proactively respond to domestic and overseas environmental regulations.

Improvement of Environmental Safety Computing Processes

Our computing processes regarding advance environmental safety examinations and work permits were improved to prevent risks related to environmental safety risk evaluations and construction undertakings. Environmental safety was aligned with construction order awarding processes to ensure that environmental safety reviews become a mandatory step in the entire process. In addition, electrical fire prevention reviews were added to minimize the risk of accidents.

Re-designation as a Green Company and Local Environmental Protection Campaigns

Our Jeonju site was re-designated as a Green Company in November 2011. This recognition distinguishes it from other sites for its sustained efforts in improving the surrounding environment and for its preventive environmental management practices. Other company-wide initiatives to fulfill our social responsibility include the One Company One Stream campaign, the Green Industrial Complex campaign and environmental technology support for SMEs.

The Development of Environmental Safety Operational Systems for the Hi-tech Center

Major environmental safety risks were identified for the Hi-tech Center that was built in Anyang in February, 2013 while inspection and improvement was made accordingly. We will establish ESH work standards and ensure that the center grows in harmony with the local community.



Signboard hanging ceremony to celebrate the re-designation



One Company One Stream campaign

Expansion of Eco-friendly Products



2012 Achievements and 2013 Plans			
●: Completed, ◐: Partially completed, ○: Not completed, ◎: Continuous Activity			
2012 Major Achievements	Evaluation	2013 Major Plans	Deadline
• R&D investments in eco-friendly products: KRW 18.9 billion • Sales/share of eco-friendly products: KRW 403.5 billion/44%	● ●	• Develop strengthened systems to manage eco-friendly products • R&D investment in eco-friendly products: KRW 20.2 billion • Share of eco-friendly products in sales: 47%	Apr. ◎ ◎

SPECIAL ISSUE – LS Mtron's Eco-friendly Product Management Systems and Accomplishments

The development of eco-friendly products is a shortcut to fulfilling our environmental responsibility

We believe that the development of eco-friendly products will provide us with a shortcut in fulfilling our environmental responsibilities, by delivering new values to customers and minimizing the environmental impacts of the manufacturing processes. In order to facilitate the development of such eco-friendly products, we at LS Mtron have independently defined the scope of eco-friendly products and introduced eco-friendly design processes since 2010. Every year, our internal criteria is used to include those products whose basic design factors were improved or which satisfy the eco-friendly business requirements according to our definition of eco-friendly products. Furthermore, great efforts are being put into developing eco-friendly products and expanding their sales. In 2012, an eco-friendly tractor diesel engine was developed through the use of our own technology and a hybrid tractor is under development with the goal of reducing exhaust gas by 90% and fuel consumption by 20% to that of the existing engine model. In addition, our Injection Molding Division is focusing on developing a mid-to-large size electric model that minimizes GHG emissions and saves more energy. The entire antenna and connector component models that have been launched into the market satisfy the RoHS criteria and are halogen(F/Cl/Br/I/At)-free. Furthermore, we are committed to building technological capacity for eco-friendly products in the energy storage device sector. This includes the development of UC models for hybrid vehicles, high-capacity battery packs for mobile devices and copper foil with the slim form factor.

Status of Eco-friendly Products

Unit: KRW 100 million, %			
Category	2010	2011	2012
Sales	2,211	3,283	4,035
Share	24	35	44

Share of Eco-friendly Products in R&D Investment (Number of projects)

Unit: %(Number of projects)			
Category	2010	2011	2012
Reduced GHG emissions	14(4)	4(8)	3(2)
Reduced hazardousness	70(25)	68(29)	73(29)
Resource saving	16(10)	28(19)	24(20)
total	100(39)	100(56)	100(51)

Eco-friendly Design Process

: Operate eco-friendly design verification procedures as part of the overall product development process

Determine →	GR1 →	GR2 →	GR3 ●
whether it meets eco-friendly product requirements	Select core eco-friendly design factors	Set eco-friendly design goals	Review whether the goal was attained and handle remaining issues

Eco-friendly Product/Technology Development Plan

: Operated while developing mid-term technology development strategies

Stage 1 →	Stage 2 →	Stage 3 →	Stage 4 ●
Environmental analysis of products/technology	Development of roadmap W/S	Briefing for executives	Briefing of mid-term technology development strategies

Major Eco-friendly Products in 2012

Business Division	Category of Eco-friendly Product	Product Model	Major Features(Achievements)
Tractor	Reduced hazardousness	P/U/R/I/J/G models for North America and Europe	• Reduced emission of pollutants and increased engine efficiency • 10% drop in fuel consumption(g/kWhr)
Injection Molding	Reduced GHG emissions	Hydraulic ME/SE models	• 25%, 45%, and 25% increase in efficiency compared to previous models(D/M/S)
Special Business	Resource saving	K-55A1 caterpillar	• Increased service life compared to the previous model(7 years → 12 years)
Electronic Component	Reduced hazardousness	All products	• Respond to RoHS requirements • Halogen(F/Cl/Br/I/At)-free, Be-free
CF	Reduced hazardousness	TM-treated products	• Elimination of arsenic during the plating process
Automotive Component	Reduced hazardousness	TCl/Brake/Power steering hose	• Components that satisfy Euro V requirements(Regulations on automotive exhaust gas emissions)
UC	Eco-friendly business	All products	• Applied to the eco-friendly energy sector including electric vehicles, wind power generators and ISG vehicles

Stronger Technological Competitive Edge

To be a driving force that leads the global era –
Our mission is to build an innovative and specialized R&D domain and strengthen our technological competitive edge.
We take a leap forward in the technological capabilities that few other companies can match.



Declaration

LS Mtron will recruit and foster outstanding R&D experts in the industrial machinery and cutting-edge component industry, undertake open innovation initiatives and develop eco-friendly products in a bid to deliver Leading Solutions to its customers.

Communication Channels Related to Technology Development

- External Channels _ Cooperation with industry-academia cooperation partners (universities) Cooperation with university labs(Lab.)
- Internal Channels _ Change Agent initiative Job level-specific discussion

Directions

- Facilitate R&D capacity-building and a corporate R&D culture
- Strengthen the industry-academia-research institute partnership
- Lay the foundation for building a mid/long-term technological competitive edge

● R&D 1st-term Review(~2012) and 2nd-term Directions(~2015)

Category	1st-term "Strengthen fast follower capacity"	2nd-term "Prepare to advance into toptier (First Mover)"
Secure a global technological competitive edge	<ul style="list-style-type: none">• Define and lay the basis for core platform technology• Defensive IP strategies, install and strengthen a production technology unit	<ul style="list-style-type: none">• Enhance the level of core platform technology• Offer close support for division-specific key tasks• Expand source/core patents
Strengthen the foundation for future growth	<ul style="list-style-type: none">• Identify essential tasks	<ul style="list-style-type: none">• Develop next-generation products and new technologies• Strengthen divisional research institutes and build overseas R&D capabilities
Build R&D capability	<ul style="list-style-type: none">• Appoint the CTO, lay the basis• Forge relationships with universities that serve as a base for open innovation	<ul style="list-style-type: none">• Select universities and Lab.s that serve as a major base• Strengthen an industry-academia-research institute network• Introduce development systems, innovation and TRIZ
Foster No. 1 research institute	<ul style="list-style-type: none">• GWP, introduce innovation initiatives	<ul style="list-style-type: none">• Diversify recruitment channels• Strengthen training for each job levels and research areas• Strengthen GWP activities

● Key Performance Indicators(KPI)

Category	KPI	Team in Charge
Comply with global standards (ISO 26000)	Development of training systems to help with stronger R&D capacity building and career development, satisfaction with training courses * Labour practices - Human development and training in the workplace 6.4.7	Technology Management, HR Development
Create stake holder values	Number of MOUs and research projects undertaken to strengthen industry-academia-research institute partnerships Ratio of outstanding R&D personnel recruited in advance Organizational capacity index and organizational activity index in the R&D job category (Establishing a great research institute)	Technology Management Technology Management Technology Management
Communicate	Number of C.A. activities undertaken	Technology Management

Advance Open Innovation



● 2012 Achievements and 2013 Plans

2012 Major Achievements	Evaluation	2013 Major Plans	Deadline
<ul style="list-style-type: none">• Signing of the MOU between LS Group and UNIST for industry-academia cooperation• 26 national/commissioned projects undertaken• Selection of 9 Strategic Lab.s¹⁾ aligned with core platform technology	<ul style="list-style-type: none">●●●	<ul style="list-style-type: none">• Sign one MOU for industry-academia cooperation• Undertake 30 national/commissioned projects• Select 17 Strategic Lab.s aligned with core platform technology	<ul style="list-style-type: none">○○○

1) Strategic Lab.: Strategic Lab's work with LS Mtron in undertaking projects, signing MOUs or interacting through training or seminars, thus strategic partnership is required



SPECIAL ISSUE – LS Mtron Chosen to be a Supervisor of the Strategic Core Materials Technology Development Project Led by the Ministry of Knowledge and Economy

Developing global leading products through open innovation

We were chosen as a supervisor for the strategic core materials technology development project led by the Ministry of Knowledge and Economy to develop ultra high-strength electrolytic copper foil for lithium-ion batteries and PCBs between 2012 and 2019. The first phase of this project(Nov. 2012 ~ Oct. 2016) alone will demand a total of KRW 15 billion in investment. We will develop core technology in conjunction with government-invested research institutes including the Korea Institute of Industrial Technology and the Korea Institute of Materials Science, along with universities such as Seoul National University and Hanyang University and five other companies. The project agreement meeting, held at our R&D Center last November, was attended by representatives and working-level staff from respective participating organizations to discuss the timetable of core technology development and cooperation measures. We will capitalize on this project to further facilitate the open innovation of core platform technology and strengthen our network with academia and research institutes for technological cooperation.

Phase-specific Targets

1-phase(2012. 11. ~ 2016. 10.): Pilot Production

- Develop electrolytic copper foil processing technology to achieve ultra high-strength
- Develop plating thickness and surface profile simulation technology
- Develop winding tension precision control and web-handling technology

Wide-ranging Industry-Academia-Research Institute Cooperation Programs

At LS Mtron, numerous national/commissioned projects are undertaken in cooperation with external partners. In addition, industry-academia cooperation projects are being operated under close relationships with top-notch universities(Seoul National University, Yonsei University and Hanyang University) in the tractor, injection molding and CF business. In the first half of 2012, 30 Strategic Lab.s were chosen within domestic universities to develop 14 core platform technologies and seven cooperation contracts(commissioned/advisory) were signed and are currently in progress. In the second half of the year, strategic relationships were forged with a total of nine labs and R&D activities are underway to identify further Strategic Lab.s.



Technology Center kick-off meeting

Join the Polymer Nano Convergence Materials Processing Technology

We are a corporate member of the Polymer Nano Convergence Materials Processing Technology Center recently launched through the consortium of 20 professors in the polymer processing field and 22 resin and injection molding companies. The membership allows us to build a stronger technological competitiveness by forging closer relationships with upstream businesses in the injection molding industry. This helps us in developing organic response capabilities to address injection molding-related field claims from the machinery and polymer perspectives and in collecting R&D information on industry leaders and research institutes in Korea and abroad.



Expert Technology Seminar

Expert Technology Seminars

In 2012, we hosted a number of technology seminars by inviting experts in respective fields: a seminar on trends and the future development of precision farming in Japan and China in relation to tractors in January 2012, a seminar on the material processing injection molding technology, rheology and energy storage materials in May, a seminar on building the foundation for reliability assessments and FMEA implementation in July, and a seminar on rechargeable battery market trends and metal anodes(as well as the development of Li-Air batteries) in October.

Recruit and Foster Outstanding R&D Talent



2012 Achievements and 2013 Plans			
●: Completed, ◐: Partially completed, ○: Not completed, ◎: Continuous Activity			
2012 Major Achievements	Evaluation	2013 Major Plans	Deadline
• Improvement of the company-wide industrial scholarship system and overseas recruitment system	●	• Select industrial scholarship students and retain outstanding and experienced workers	◎
• Selection of industrial scholarship beneficiaries	●	• Reinforce lab-tours and overseas recruitment	◎
• Three overseas and two in Korea		• Build a R&D training system and offer course development leadership training	◎
• Introduction of the R&D degree program and the selection of two beneficiaries	●	• Develop and implement a corporate culture facilitation program for the material technology group	◎
• Five discussion meetings with the CTO	●		

SPECIAL ISSUE – Elevate the Treatment of Industrial Scholarship Students to the Nation's Highest Level and Introduce the R&D Degree Program

Recruiting and fostering outstanding R&D talent

We believe that our sustainability as a company is secured only through the retainment of exceptional and talented individuals. Our industrial scholarship program was improved in 2012 to recruit outstanding R&D talent in advance. A key part of this improvement concerned improved treatment for beneficiaries. While the previous system merely focused on providing tuition support, the improved system offers financial learning support with specified benefit periods. Moreover, the level of such support rose significantly from 50% of the industrial average to the highest available percentage in Korea. Such improvements led to an enhanced awareness about us and a strengthened competitive edge in recruiting talented individuals. This system also eliminated cost-related risks caused by the unlimited financial support required for prolonged doctoral programs.

In addition, our R&D Center launched the R&D degree program under which researchers are sent to universities and other research institutes to earn their PhD in second half of 2012. Designed to build internal technological capabilities and strengthen industry-academia cooperation, this program targets doctoral courses offered by universities and other research institutes that serve as a base for industry-academia cooperation. This program will help our researchers build stronger capacity while improving employee satisfaction.

How to Recruit Outstanding R&D Talent

Strat-egy	• Industry-academia cooperation, advance recruitment, R&D degree program • Differentiated culture/strengthened value
Key Task	• Recruit in advance through strengthened industry-academia cooperation • Diversify recruitment channels • Reinforce internal talent development • Improve working conditions



Global talent recruitment presentation

Interviewer Training

Our interviewer training program was launched for the first time in order to strengthen our ability to recruit the right people. The training consisted of systemic theory courses and mock interview practices and enabled us to conduct more organized interviews through the introduction of new tools that included interview scenarios, questionnaires and assessment forms.

Strengthen Overseas Recruitment

Our overseas recruitment practices were improved—from the traditional open presentations—to major-specific seminars. Target universities and majors were studied in advance to prepare the overseas recruitment status data, which was then used to recruit talented individuals in a more systemized manner. We searched for and selected candidates from target Lab.s, which resulted in the recruitment of five exceptional R&D employees that we hired in advance through the overseas recruitment in the U.S.(1st half) and Japan(2nd half) in 2012.

Flexible Time Program for the R&D Center

The flexible time program is under operation at our R&D Center to help researchers focus on their work and to provide a creative research environment. While mandatory work hours are from 10 a.m. to 4 p.m., employees can use the one and a half hours before and after regular operation hours flexibly so that they may arrive and depart as they wish and plan their own work schedules. In 2012, The Flexible Time Program was used by 40 employees. This translates into a 50% utilization rate.

Build the Foundation for a Mid/long-term Technological Competitive Edge



2012 Achievements and 2013 Plans			
●: Completed, ◐: Partially completed, ○: Not completed, ◎: Continuous Activity			
2012 Major Achievements	Evaluation	2013 Major Plans	Deadline
• Advance response for patent issues(Address IP risks of developed products) ¹⁾	◎	• Win the patent lawsuits(Protect the domestic market from being canalized by overseas companies)	◎
• Protection of IP of R&D outcomes(Identify core patents and protect expertise)	◎	• Be the first to secure future technology through the identification of essential patents	Dec.
• Improve patent training(Build stronger capacity for the R&D department)	◎	• Improve the application grading system(Improve the quality of patents)	Dec.
• Five TRIZ pilot projects undertaken by the R&D Center	●	• Undertake six TRIZ projects	Dec.

1) IP(Intellectual Property)

SPECIAL ISSUE – Endeavors to Address the IP Risks of Developed Products

Addressing IP risks through an advance response to IP issues

To preemptively handle the risks of global patent disputes that are expected to occur due to our preparation to advance from a fast follower into a global top tier company, we at LS Mtron are undertaking wide-ranging patent activities. In 2012, a total of 18 patent analysis projects were implemented with external research companies and newly disclosed competitor patents were monitored. This helped us identify the patents that may function as a barrier to our developing products, as well as how to design around these patents and secure data to assert their invalidity, thus preventing possible patent disputes before they occur. In addition, annual patent training is provided, which also helps to eliminate patent dispute risks concerning our developing products and allow us to design around them. The first-ever patent training was launched in 2012. This expanded training opportunities for our researchers. In 2013, our goal is to introduce the 'IP-driven technology acquisition project' led by the Korean government within a broader spectrum of our business and integrate its outcomes across the board. In so doing, we will be able to ensure advance response to 'barrier patents', utilize R&D patent technology information and identify core and essential patents.



Government-led R&D patent strategic project briefing

Status of Patent Training

Trainees (completion rate)	2011	93	(43%)
	2012	237	(85%)

Application for Core Technology Patents

To protect our core technology and 36 patents whose remarkable patentability and technological/business feasibility was proven and managed as key patents, we created 191 patent applications in 2012. Six applications were also made for 'essential patents' that will lead the market within the next five to 10 years. In 2013, we will be fully committed to applying for such essential patents.

Introduce TRIZ, Creative Problem-solving Methodology

TRIZ was fully launched as a way to solve problems creatively, thus enabling us to innovate our R&D capabilities. Basic training was provided to researchers in March and 77 of those researchers became certified in Level 1. This allowed us to build the basis for improved problem-solving capacity, through the identification and application of diverse ideas. Task guidance was offered between April and October: five tasks were found, various ideas were explored in accordance with the TRIZ process, and the results with proven applicability were shared.

Strengthen Functionality on the Basis of Reliability

We are establishing reliability in our business conduct by building a stronger reliability function, as one of the specialized technological areas, that is required in becoming a global top-tier company. The machinery business will be the first target for strengthened reliability and this will further be expanded to include the components/materials business. To this end, new business units, as well as a professional analysis labs equipped with SEM, EDS and other analytical tools, were created.

Status of Patent Application

Category	2010	2011	2012
Essential patent	-	-	6
Core patent	17	31	36
Total patent applications	80	170	191



TRIZ Kick-off

Employee Value Enhancement

With the belief that each and every employee is the owner at LS Mtron, our top priority is to create a pleasant workplace. Our corporate value is enhanced by the participation and communication that engages everyone.



Declaration

LS Mtron recognizes employees as an important stakeholder and a main initiator behind the creation of corporate value. We respect the human rights of each individual employee and assist them in building capacity, while creating a corporate culture that encourages participation and dialogue.

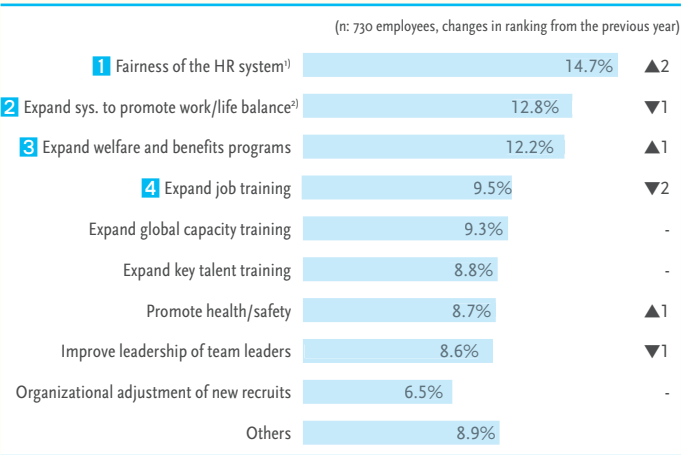
Communication Channels

- Engagement and Cooperation Enhancement Council
- Labor-management working-level consultations and meetings/Labor-management discussions
- Grievance Resolution Committee
- Employee communication meetings
- Organizational capacity surveys
- Cyber Ombudsman
- Sustainability management expectation surveys

Directions

- Advance the HR system to the level of global companies
- Develop a corporate competitive edge through the sustained efforts to build stronger employee capacity
- Strengthen trust-based relationships between labor and management as well as respect for the human rights of employees
- Create a culture of trust and communication
- Operate a safe, healthy and eco-friendly workplace

Employee Expectations Identified in 2012



1) Recruitment talent, assessment and compensation
2) Family-friendly management

Key Performance Indicators (KPI)

Category	KPI	Team in Charge
Comply with global standards (ISO 26000)	Operate a counseling office to address employee grievances * Human rights - Resolving grievances 6.3.6 2	HR Development
	Establish a job category-specific capacity training system 4 * Labour practices - Human development & training in the workplace 6.4.7	HR Development
	Operate in-house childcare facilities for children of employees * Labour practices - Conditions of work and social protection 2, 3	HR Development Team / Business Support
	Zero-injury, zero-accident rate(occupational injury rate) * Labour practices - Health and safety at work	Green Management
Create stakeholder values	Introduce an intensive leave program for recharging and increase the utilization rate 2	HR Development
	Support for overseas subsidiaries in building HR systems 1	
Communicate	Sustainability management surveys	Business Management & Planning
	Employee communication meetings	HR Development

Key performance indicators were set in consideration of stakeholder expectations and LS Mtron's business impact

Global HR



2012 Achievements and 2013 Plans

2012 Major Achievements	Evaluation	2013 Major Plans	Deadline
<ul style="list-style-type: none">• Diversify channels to recruit top talent: strengthen overseas recruitment/industry-academia alignment, introduce the internship program• Establish common HR regulations for overseas subsidiaries while reflecting country-specific features• Improve the office worker assessment system for increased fairness• Establish LS Mtron's unique technical worker HR system (on-going in 2013)• Establish a HR risk management system: six issues completed	<ul style="list-style-type: none">●●●●●	<ul style="list-style-type: none">• Improve the promotion system for office workers• Improve HR systems(recruitment, assessment)• Support overseas subsidiaries(LSMB, Brazilian subsidiary)• Strengthen the fostering of candidates for expatriate positions• Recruit top talent in a timely manner for growth in the business sector and R&D	<ul style="list-style-type: none">Jun. Dec.Dec.○○○

SPECIAL ISSUE – Develop a HR Regulation System for Overseas Subsidiaries

Improving the HR system to become a global company

To accelerate our development into a global company, the HR infrastructure for overseas subsidiaries was recently established. While heads of respective overseas subsidiaries previously used the HR regulations of the Korean head office for their operation, our own unique HR regulation system for overseas subsidiaries was developed to take nation-specific features into account, on the common platform of regulations that were defined by the head office for all overseas subsidiaries. Our overseas HR regulation system covers all HR-related categories and we did our utmost to reflect specificities resulting from nation-specific legal regulations and customs in regulations concerning compensation, as well as welfare and benefits. For instance, the HR regulations for our Russian subsidiary ensure the consideration for the nation's legal requirement that stipulates that employees should be paid at least twice a month. In Indonesia, our employees whose children get circumcised can take a leave of absence to celebrate the occasion. Such instances demonstrate our respect for the diversity of national traditional customs. Our overseas HR regulations took effect at all our subsidiaries in August 2012 and will be subject to constant revisions in the upcoming years.

HR Regulations for Overseas Subsidiaries

Operational direction	Provide common guidelines for all overseas subsidiaries(while taking national specificities in to account)
Category	Regulatory Scope
Recruitment	<ul style="list-style-type: none">• Determine personnel plans• Specify recruitment approval regulations
Evaluation and promotion	<ul style="list-style-type: none">• Develop a goal-based performance management system and make alignments between assessment outcomes and compensation• Specify promotion approval regulations
Compensation	<ul style="list-style-type: none">• Specify compensation approval regulations- Basis for wage increases and bonus payment
Welfare and benefits	<ul style="list-style-type: none">• Expenditures for congratulatory and bereavement occasions, business trip expenses, education, vacation, meal expenses, communication charges

Diversify channels to recruit top talent

Diversified recruitment channels help us hire the best and brightest in advance, through the expansion of the industrial scholarship program and the introduction of the internship program. The number of beneficiaries in these two programs will gradually increase to retain outstanding human resources. In addition, free notes that outline our corporate overview and welfare and benefits programs were distributed to ten domestic universities to improve awareness about us.

Improve the Office Worker Evaluation System for Increased Fairness

Our SPCM(Strategic Performance & Competency Management) system aims to evaluate the performance of the entire staff and assist them with capacity building. In 2012, the employee evaluation system was revised to improve on organizational operation issues that resulted from performance assessments, while maintaining the performance-driven HR policy to increase the fairness of our HR system. To ensure that organization-level, short-term performance does not affect an individual employee's long-term HR career, individual performance indicators were given in equal ratios to those of division-level performance in performance evaluations. Company-wide evaluation audits were also strengthened to prevent any performance-related distortions.

Developing the HR Risk Management System

Our HR risk management system was designed(with the minimum-possible cost) to protect our assets and business execution capabilities from the broader negative impacts caused by business operations. A total of six cases were identified as major HR risks and case-specific scenarios were developed. The number of such risk cases to be handled will increase even further.

Build Stronger Employee Capacity



2012 Achievements and 2013 Plans			
●: Completed, ◐: Partially completed, ○: Not completed, ◎: Continuous Activity			
2012 Major Achievements	Evaluation	2013 Major Plans	Deadline
<ul style="list-style-type: none">Fostering coach-type leaders through team leader leadership/candidate nurturing programsRevision of talent-fostering regulations and detailed rules in consideration of employee capacity building and requirementsDevelopment of the training roadmap based on job category/job-specific capacity mapping	● ● ●	<ul style="list-style-type: none">Strengthen a caring program for new recruitsEstablish a job category-specific common training system and develop/operate coursesStrengthen the leadership capacity of executives and team leaders	Jun. Sep. ◎

SPECIAL ISSUE – Fostering Coach-type Leaders

Fostering coach-type leaders to establish global leadership

Leadership courses for team leaders The 2011 organizational capacity survey demonstrated that the leadership capacity for team leaders was relatively low, compared to that of the CEO and executives. Our solution was to provide two rounds of two-day leadership courses to every team leader at LS Mtron to help them improve their performance management capacities and strengthen their staff interview/coaching skills. The 2012 organizational capacity survey(conducted after the training) showed a four-point increase in the category of 'leadership capacity of team leaders'. This demonstrated the substantial improvement in the performance management and team member management team leaders.

Team leader candidate-fostering program Our team leader candidate-fostering program was reinforced to respond to the growing importance of the leadership capacity of team leaders in maximizing organizational performance. A key talent pool that consists of team leader candidates was created and final candidates were chosen based on the succession plan, who were then trained in people/performance/organization management for three months.

Leadership training for team leaders

Opening →

Diagnosis & seminar
Advance diagnosis of capacity

1st month →

People management
Motivation
Empowerment

2nd month →

Performance management
Goal setting
Operation management

3rd month →

Organization management
Goal setting
Team building

Closing ●

Diagnosis & guidance
Post capacity diagnosis

New Entry Training

Our new entry training assists new recruits in developing ownership and a spirit of challenge and adjusting to their new career life. Those who join us directly after graduation take one-year Jump Program courses(Group introduction, LS Mtron introduction, mentoring, overseas training, Work Smart, QA, and vision development courses) and those who join us with previous work experience take the Group introduction, LS Mtron introduction, and mentoring program. These courses help new hires adapt to our corporate culture as quickly as possible and acquire job knowledge. This training system helps strengthen job capacity through career and technical management.

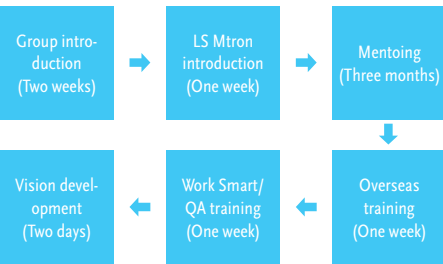
Job Capacity Reinforcement Training

LS Mtron has been offering common courses for sales representatives annually since 2011. In 2012, all our sales staff took more than two courses per person out of the nine courses available: accounting principles, cost analysis, bond management, basic legal knowledge(fair trade law), practice of trade, information collection and analysis, improvement of customer satisfaction mindset, sales presentation and improvement of customer relationship skills. Our goal for 2013 is to develop training systems and provide courses for other job categories.

Key Talent Training

Our mid/long-term and global training aim to nurture key talents into next-generation leaders. In 2012, six mid/long-term training courses(covering MBAs, evening graduate courses, advanced marketing strategy courses and global training courses in intensive English/Chinese) were offered.

Jump Program



LS MBA

Deliver a Pleasant Workplace



2012 Achievements and 2013 Plans			
●: Completed, ◐: Partially completed, ○: Not completed, ◎: Continuous Activity			
2012 Major Achievements	Evaluation	2013 Major Plans	Deadline
<ul style="list-style-type: none">Introduction of the intensive leave program to help employees rechargeOperation of the site-based counseling office to handle employee grievances: 228 employeesCelebration of LS Mtron Happy Family Day	● ◎ ●	<ul style="list-style-type: none">Support for employee childcareEstablish the intensive leave program to help employees recharge	◎ ◎

SPECIAL ISSUE – Introduction of the Intensive Leave Program

Pursuit of work/life balance

The introduction of the intensive leave program ensures that our employees enjoy a higher level of satisfaction, with increased job efficiency, through the right work/life balance. The program encourages employees to take leave for at least three to five days every six months(with their paid annual holidays combined). Executives and division heads used the program actively to make it more available for other employees. When the program was first launched back in 2012, about 75% of the eligible employees took intensive leave and our goal for 2013 is to increase this figure to 100%. We are committed to developing the program as part of our unique corporate culture that strives for a pleasant workplace through the development of the job back-up system and the launching of various promotional activities.

Welfare and Benefit Schemes

To help our employees promote the right work/life balance and respect their right to diverse social engagements, as well as economic, social and cultural rights, we provide a wide-spectrum of welfare and benefit schemes. These include pension funds, expenditures for congratulatory and bereavement purposes, tuition support, awards/mementos for long-term tenured employees, housing loan support, meal expense support, medical check-ups, medical expense support for employees and their families, resort facilities, and bonus payments for those who work on national holidays.

Summary of Welfare and Benefits Programs	
Type	Details
Medical/health	Comprehensive check-ups, medical expense support, group term insurance, fitness center, counseling office
Education	Tuition support for the children of employees (junior high and high school, university), financial support for internal/external training
Long-term employment/ congratulatory and condolence support	Prize money, holiday and vacation gift certificates for long-tenured employees, congratulatory and condolence support
Housing	Housing fund support, dormitory facility support (Jeonju/Jeongeup /Indong)
Leisure	Accommodation facility support, picnics, informal support, training center
Others	Welfare cards, bus rides for commuters and hometown visits on national holidays, meal expense support, safety equipment

Handling of Employee Grievances and the Gathering of Feedback

Grievance handling procedures are posted on our internal online bulletin board so that all employees can easily understand and use them in addressing any grievances they may be facing. Our Jeonju and Jeongeup sites operate a counseling office, which handled 228 employee grievances in 2012. In addition, annual organizational capacity surveys and employee satisfaction surveys are conducted of office workers and researchers. Survey results are then feedback to the respective divisions to help enhance organizational capacity and activity while various improvements are made to increase the satisfaction for those survey items that received low ratings.

LS Mtron Happy Family Day

To celebrate the Korean month of family in May, a ‘painting competition for LS Mtron employee children’ was held at the Gwacheon National Science Museum to encourage our employees to build stronger relationships with their family members. Held under the theme of ‘family and our company, LS Mtron’, the competition was attended by 300 children to demonstrate their remarkable painting skills and enjoy various programs such as, hand-printing, making relieves on copper plates and other recreational activities. The competition served as an invaluable opportunity in enabling the participants to recognize the fact that close family ties are the cornerstone of corporate growth. Award-winning paintings were used to make the 2013 calendar. LS Mtron will take the lead in creating a great workplace through such events that promote communication.



Employee Engagement and Dialogue



2012 Achievements and 2013 Plans			
●: Completed, ◐: Partially completed, ○: Not completed, ◎: Continuous Activity			
2012 Major Achievements	Evaluation	2013 Major Plans	Deadline
• Support for Chinese subsidiaries in developing labor management policies and information sharing	●	• Operate communication channels for employees	◎
• Operation of various systems to comply w/ regulations on human rights protection and labor issues	◎	• Operate programs to facilitate the organization	◎
• Meeting w/ the CEO: 9 meetings, Dialogue w/ division heads: 52 occasions	◎		

 SPECIAL ISSUE – Assistance for Chinese Subsidiaries in Improving Labor Relations

Establishing value-driven labor relations based on global standards

Recently, labor conditions in China have radically changed. Greater attention is being put on closing the increasing income gap, shifting the economic system to a domestic demand-driven one, fulfilling corporate social responsibility and protecting employee rights. These all lead to the growing importance of stable labor relations. LS Mtron provided training and workshops on numerous occasions for all expatriate workers and HR managers in charge of recruiting local employees in China. We did this in order to build value-driven labor relations through engagement and dialogue with local Chinese employees on the basis of global standards that require our compliance with human rights protection and legal regulations. Various systems were created to increase employee value and their success stories at the Korean head office were introduced, along with the sharing of major details regarding Chinese labor regulations. The systems that could be localized were immediately launched and are currently under operation in China. Such training courses and workshops will be held regularly and communication channels will be supplemented and improved so that we can continue to explore ways to expand dialogue with our employees.

Protecting Employee Human Rights

We work in various ways to protect the dignity of all our staff and improve their human rights. We fully comply with labor regulations(as well as the Labor Standards Act and ILO regulations) including the prohibition of child labor and forced labor, which are stipulated in our rules of employment. We also guarantee the three labor rights(the right to organize, the right of collective bargaining and the right of collective action) that are stipulated in the Korean Constitution to promote free labor union activities. HR departments at each site are responsible for the constant monitoring for any violations of employee human rights. Systems are up and running to report and handle such violations through the Cyber Ombudsman program, grievance handling offices and counseling offices. We provide childbirth and childcare leave to protect the maternal right of our female staff to be with their children, in addition to wide-ranging welfare and benefit schemes for non-regular workers, so as to deliver a discrimination-free workplace.

Establish a Corporate Culture of Communication

Diverse communication channels are up and running to establish a culture of communication that enables employees to accurately recognize corporate visions and goals and to present their ideas freely to top management. Meetings with the CEO provide a venue of free communication between the company CEO and the staff, while quarterly discussion meetings held under the supervision of division heads, help share the vision and philosophy of the top management, while gathering grievances and proposals raised by employees and followed with prompt feedback.

Build Value-driven Labor Relations

We ensure free labor union activities and comply with international standards(related regulations and ILO regulations). We had 628 unionized members(41.8% of the total employees) as of the end of December 2012, and these members have the right to vote. Our top management and labor union leaders share the status on business operations and business strategic directions through annual collective wage bargaining and the Engagement and Cooperation Enhancement Council. They also ensure that they are mutually cooperative to improve work conditions and their economic and social status. At each site, labor-management discussions and working-level meetings are held to discuss and address pending issues that cover work conditions. Furthermore, monthly, department-level, labor-management trust council meetings are held to handle employee grievances and consistently improve the work environment.




Dialogue with division heads

Employee Health and Safety



2012 Achievements and 2013 Plans			
●: Completed, ◐: Partially completed, ○: Not completed, ◎: Continuous Activity			
2012 Major Achievements	Evaluation	2013 Major Plans	Deadline
• Investigation of and improvement on musculoskeletal risk factors	●	• Operate anti-smoking programs and an anti-smoking fund	Feb.
• Identification of and improvement of risky sites to build a stronger fire prevention capacity	●	• Improve the operation of environmental safety risk assessment	Apr. Dec.
• Regular preventive diagnosis of electrical fires	●	• Foster fire prevention experts	

 SPECIAL ISSUE – Build Stronger Fire Prevention Capacity

Endeavors for an injury-free, accident-free workplace

Our electrical safety manuals for respective business sites were developed through the electrical fire prevention taskforce team, while the R&R regarding fire prevention were revised and regular internal audits are performed. The development of tools to classify and diagnose the major causes of electrical fires helped us make company-wide inspections and supplement relevant systems. To reduce the damage caused by sandwich panels(which are a main culprit for the spread of fire), sandwich panels were replaced with flame-retardant ones. Moreover, an environment conducive to fire prevention is being created through the development of various guidelines for fire prevention and the implementation of training courses. Work guidelines were set to handle fires caused by fire sparks, the advance approval system was created for the use of electrical heating devices and standards were developed for the installation and purchase of multi-sockets. Furthermore, the fire safety qualification system was newly launched to ensure that fire prevention management becomes ingrained into our daily operations, through the acquisition of professional knowledge and voluntary employee participation.

Safer Workplace and Support for Suppliers

We provide danger prediction training constantly to prevent injuries. In 2012, 211 injury risk factors were discovered and improved. Labor-management joint inspections are conducted(more than once every quarter) to check work conditions and the compliance with health and safety regulations on the shop floor. Private-public joint firefighting training and education ensure that we deliver a safer workplace. As part of our mutually-beneficial cooperation initiatives, we signed the health and safety mutual cooperation program with 50 suppliers and undertook regular improvement directives to prevent injuries. In 2013, we will assist major suppliers in building a stronger fire safety capacity and creating an injury-free, accident-free workplace.

Detailed Management of Employee Health and Risk Factors

In response to the growing occurrence of work-related musculoskeletal diseases, musculoskeletal risk factors were investigated through ergonomic assessments of the work environment where employees perform simple repetitive work or bear excessive workloads. The outcomes were used to identify processes that require improvement and our improvement activities will continue in the upcoming years. Furthermore, major cancers were included in the annual medical check-up screening to increase employee satisfaction with medical check-up services.

Improve the Environmental Safety Risk Assessment

The environmental safety risk assessment system allows us to identify and eliminate potential risks and establish voluntary safety practices. Improvements will be made to ensure the organic implementation of risk factor improvement measures. Meanwhile, the publication of an environmental safety white paper as well as rewards awarded in accordance with environmental safety assessment results will encourage employees to take the initiative in safety management.

Anti-smoking Program and Fund

Our anti-smoking program aims to improve employee health and create a pleasant work environment. To further encourage employees to participate in such anti-smoking initiatives, the anti-smoking fund was created to increase the success rate of quitting smoking. Once the initiative is completed, the remaining fund will be donated to volunteer organizations.



Fire extinguishing training



Health and Safety mutual cooperation program agreement



Operation of the anti-smoking program

Corporate Governance

Since the launching of the LS Group as a holding company, LS Mtron has continued to establish corporate governance that is led by professional executives and the board of directors. This ensures the independence and transparency of corporate governance. Presently, LS Mtron remains a non-listed company.

Board of Directors(BOD)

Our board of directors(BOD) consists of three inside directors and one auditor. The BOD is the highest decision-making body in the company and directors should fulfill their duty of care and loyalty as managers in good faith, in conformity with commercial laws. Directors are compensated in accordance with relevant compensation regulations within the limit approved at the general shareholder meeting. In addition to financial performance, the BOD assessment includes social and environmental performance.

Composition of the BOD(As of March 1, 2013)

Name	Title	Position	Gender	Experiences	Duty
Cha-Yol Koo	CEO	Chairman (chairman of the board)	Male	• Business management major at Korea University • Former director at LG International Corporation • Former vice president at LG Investment & Securities	CEO
Jae-Seol Shim	CEO	President	Male	• Mechanical engineering major at Hanyang University • Former vice president at LS Cable & System	CEO
Sung-Wook Yoon	Director	CFO	Male	• Accounting major at Chonbuk National University • Former head of the finance team at LS Mtron	CFO
Soo-Hong Lee	Auditor	-	Male	• Electrical engineering major at Seoul National University • Former professor at Hoseo University	Auditor

Major BOD Activities

Date	Agenda	Decision	Attendance
Feb. 1, 2012	Approval of the 4th-term financial statement/ business report and two others	Approved	100%
Feb. 13, 2012	Approval of the establishment of the Brazilian tractor production subsidiary	Approved	100%
Mar. 16, 2012	Revision of the HR management regulations for executives and two others	Approved	100%
Apr. 10, 2012	Approval of the purchase of the Indong plant for the automotive component business	Approved	100%
Jun. 11, 2012	Participation in the paid-in capital increase at Casco Co., Ltd. and one more	Approved	100%
Jul. 18, 2012	Approval of the mid-term strategy for 2012 and two others	Approved	100%
Sep. 12, 2012	Report of the third-quarter business results (forecast) in 2012	Approved	100%
Dec. 11, 2012	Approval of the business plans for 2013 and five others	Approved	100%

• Authority and Responsibility of the Auditor

In accordance with the corporate articles of association, there is one auditorat LS Mtron. The auditor is responsible for performing audits on accounting and business practices to ensure the transparency and legality of business conduct. To this end, the auditor may request the directors to brief them on business operations and investigate the company's operations and asset status, whenever the need arises.

Shareholder

As of the end of 2012, LS Mtron's issued shares stood at 9,000,000 in number and they are wholly owned by LS Corporation.

Composition of the Shareholders(As of December 31, 2012)

Shareholder	Type of Stock	Number of Stocks	Value (KRW million)	Stockholding Ratio
LS Corporation	Common stock	9,000,000	45,000	100%

As LS Mtron is not a listed company, we are not subject to cumulative, paper or electronic voting, nor are we subject to attend the events for the rights of minority shareholders.

Management and Responsibility for Sustainability Management

At LS Mtron, the Sustainability Management Steering Group supervised by the CSO(Chief Strategy Planning Officer) has been serving as the top decision-making body since 2010. The group is also responsible for managing sustainability management principles and operational regulations.

Communication with the Top Management

The monthly Meeting with the CEO is held regularly to ensure that the management directions and the messages of the CEO are delivered directly to the employees and that they have the opportunity to freely present their opinions to the CEO. The quarterly CEO MBWA(management by wandering around) aims to allow the voices on the shop floor to be heard and ensure instant and rapid decision-making. Furthermore, quarterly discussions with division heads are held under the supervision of respective division heads, to enable them to share employee ideas and grievances.

※ There were no changes that occurred in relation to LS Mtron's type of business or major business areas during the reporting period. For other issues regarding business operations, please refer to our business report 2012. (<http://dart.fss.or.kr>)

Ethics Management

At LS Mtron, we believe that integrity is an essential factor that lays the ground for us to generate performance. To comply with the principle of fair operating practices proposed by ISO 26000 for the upcoming 2nd-term of sustainability management, relevant systems are under operation and constant endeavors are being made to reinforce our communication with our stakeholders.

Communication with Stakeholders

• Continued Promotional Activities

Case studies and messages related to ethics management are shared through the internal ethics management bulletin board to help employees voluntarily raise ethics awareness and encourage stakeholder participation.

Ethics Management Promotional Activities between 2010 and 2012

Category	Internal postings	External official documents
Number of cases	21	6

• Standards Training for Employees

Since the company-wide training was provided to improve our ethics management capabilities, regular and year-round training is offered and new recruits(with or without previous work experience) are obligated to take introductory courses in ethical standards.

• Assessment of Ethics Management

At LS Mtron, ethics management assessments are made annually through our suppliers. Specifically, significance and satisfaction assessments were performed regarding the sustainability management of our suppliers since 2011. In 2012, our overseas subsidiaries in China were equally subject to ethics management assessments, in order to expand the scope of ethics management.

Ethics Management Assessment Outcomes between 2010 and 2012

Category	2010	2011	2012
Head Office	4.28	4.39	4.56
Overseas Subsidiary	—	—	4.43

* Calculation: Average of ethics awareness improvement, satisfaction with ethics management, employee ethics awareness, fairness in business transactions, occurrence of bribe-taking and the reception of unjustified gifts or entertainment

Compliance with Fair Trade Principles

To advance and monitor ethics management appropriately, we undertake programs to comply with laws regarding monopoly regulation and fair trade, as well as unfair competition. In 2012, our sales employees were trained to share and prevent unfair subcontract practices and price-fixing. In addition, all the latest policies that are introduced by the Fair Trade Commission are constantly monitored and shared.

Ethics Management Systems

• Cyber Ombudsman System

The Cyber Ombudsman and the Ethics Counseling Office are under operation on our corporate website. Furthermore, informant protection programs are provided to ensure that stakeholders(such as employees, customers and suppliers) feel free to report any issues that they may have. Such programs include confidentiality, identity protection and exemptions.

Issues Submitted and Handled through the Cyber Ombudsman

Category	2010	2011	2012
Number of Issues	13	15	5

• Clean Company System

In order to establish a corporate culture of integrity, the Clean Company system encourages employees to voluntarily report any bribes that were accepted. This also promotes the voluntary reporting of any bribe-taking that occurred inevitably.

Bribe-taking Cases Submitted and Handled

Category	2010	2011	2012
Number of Issues	3	2	1


• Ethics Pledge

All our employees are obligated to sign the ethics pledge. In addition, special conditions that specify the implementation of ethical practices were included, along with the general conditions in all the transactions and contracts made with suppliers. This helps us institutionalize ethical standards in our business conduct.

※ For the full version of the LS Mtron ethical standards, please visit the following URL.
: <http://ethics.lsmtron.co.kr/rule/law.asp>


Introduction to LS Mtron’s Chinese Subsidiaries

At LS Mtron, we consider China as a strategic partner in being able to ‘strengthen global competitive edge’ which constitutes our management principle for 2013. Since our first entry into the market in 2004, production/sales subsidiaries were established and are currently under operation in four business areas. In 2012, sustainability management initiatives at these overseas subsidiaries were undertaken through the function-specific support offered by the Sustainability Management Steering Group at the head office in Korea. Our Chinese subsidiaries, however, will establish and operate their own sustainability management systems in the upcoming years.




LSMQ
(LS Machinery Qingdao Co.,Ltd.)

- 2010 - Completion of the plant
- 2012 - Development of the K-model (55hs economical model)
- 2012 - Establishment of the office for the northeastern region
- 2013 - Entry into the U.S. market




LSMW
(LS Machinery Wuxi Co., Ltd.)

- 2005 - Completion of the plant
- 2010 - Development of the ultra super large 3,200ton size
- 2012 - Expansion of the component warehouse and the painting line
- 2012 - Completion of the product line-up of five electrical models



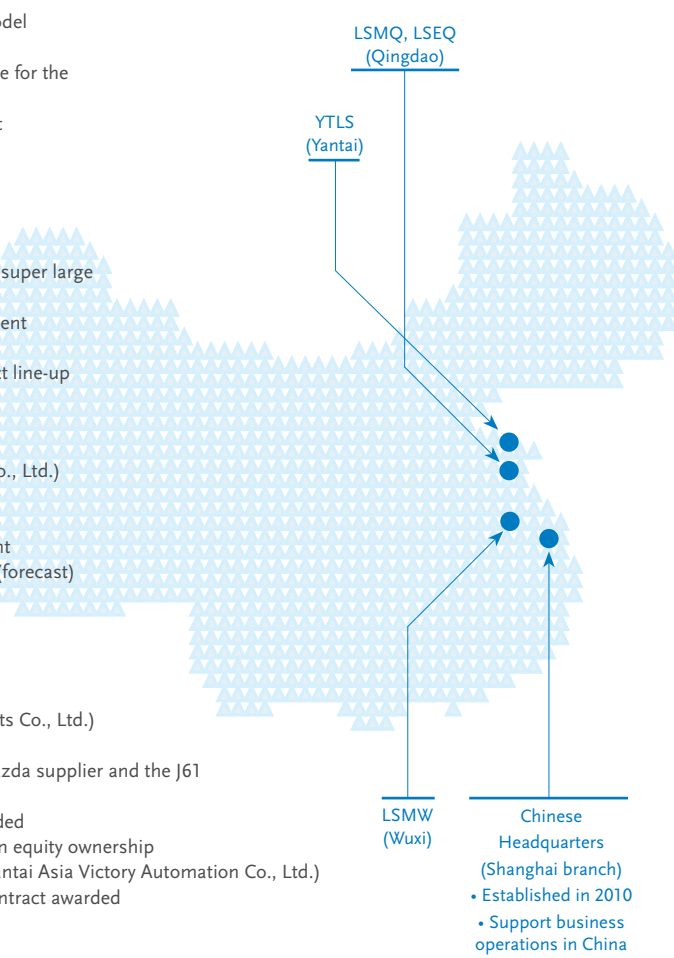
LSEQ
(LS Electronic-Devices Qingdao Co., Ltd.)

- 2006 - Completion of the plant
- 2012 - 150 million RMB in sales
- 2013 - Expansion of the 2nd plant
- 2013 - 300 million RMB in sales(forecast)



YTLS
(YanTai Leading Solution Auto Parts Co., Ltd.)

- 2005 - Completion of the plant
- 2007 - Approval granted as a Mazda supplier and the J61 contract awarded
- 2007 - SGM S308 contract awarded
- 2008 - Capital increase/change in equity ownership (50:50 between LS Mtron and Yantai Asia Victory Automation Co., Ltd.)
- 2012 - FCC D009 new vehicle contract awarded



YTLS (Yantai)

LSMQ, LSEQ (Qingdao)

LSMW (Wuxi)

Chinese Headquarters (Shanghai branch)

- Established in 2010
- Support business operations in China

Category	LSMQ	LSMW	LSEQ	YTLS
Location	Qingdao, Shandong Province	Wuxi, Jiangsu Province	Qingdao, Shandong Province	Yantai, Shangdong Province
Year of Establishment	2007	2004	2006	2005
Type of Business	Production/sales	Production/sales	Production	Production/sales (joint venture)
Capital(KRW million)	\$267 million	\$215 million	\$65 million	RMB 22.5 million
Equity Ownership	100%	100%	100%	50%
Product	Tractor	Injection molding	Connector, antenna	Automobile hose
Site Area(m2)	82,927m²	70,661m²	13,780m²	18,000m²
Certification	ISO 9001: 2010	ISO 9001: 2009 ISO 14001: 2010	ISO 9001: 2008 ISO 14001: 2008	ISO/TS 16949: 2006 ISO 14001: 2011
Total Employees(male/female)	153/31	209/53	52/339	38/4
New Recruits in 2012(male/female)	44/5	41/10	12/95	12/11
Employees in or above managerial positions	17	30	8	11

Innovation Initiatives

Our Chinese subsidiaries developed basic-level innovation capacities and laid the basis to generate substantial outcomes. With the assistance from the Innovation Team at the head office, basic innovation training for new recruits, quality circle leader training, KL training, and 'Immediate Practice' training for team leaders was provided at respective subsidiaries. Such endeavors enabled the production team at LSMW receive the Presidential Silver Medal at the National Quality Circle Competition held in Korea. Meanwhile, LSEQ participated in the Mtron 6 Festival, held at the head office in Korea, to share their success stories of innovation.

Improve Quality and Build Stronger Customer Satisfaction Capacity

All the sites run by our Chinese subsidiaries are building their quality management evaluation schemes and boosting their year-round improvement and optimization activities. Furthermore, various capacity-building activities were undertaken for improved customer satisfaction. LSMW focused on the IQC/OQC area(together with the Quality Management Team at the Korean head office) to strengthen its detection capability while undertaking measures for increased product quality. At LSEQ, issues that resulted from the transfer of mass production were identified and improved. Furthermore, LSEQ sites were audited by their client(Samsung Electronics) and became a certified supplier. These sales employees also visited their major customers for direct observation and practice. LSMQ strengthened the phone call system at the call center and hired more operators to shorten customer wait time. Furthermore, ‘360° Heart Service’ training was launched to ensure more efficient customer services.

Create a Safe and Pleasant Workplace

To create a safe workplace that meets global standards, annual fire prevention and production safety training is provided at our Chinese subsidiaries. While fire prevention training was previously offered to some of the local employees in conjunction with the Green Management Team at the head office, all local employees were trained in 2012. The training program included directives to be taken in the hypothetical scenario of onsite fires. These included the method for distributing the warning, evacuation, and early-stage extinguishing activities using internal firefighting equipment. Furthermore, the training was videotaped and analyzed to review both the fire-extinguishing activities and the rescue system. New recruits were educated on production safety and regular safety inspections were made of the production facilities and dormitories to be prepared against fires. Our Chinese subsidiaries will be fully committed to building proactive capabilities to prevent fires, safety accidents and other unexpected emergencies.

Develop Advanced HR Systems

Our Chinese subsidiaries believe that top-notch HR systems are the driving force behind the sustained improvement of business outcomes in China and are working proactively to establish such systems. We responded actively to the HR and labor regulations that were revised or modified in 2012 and HR workshops were held twice at our Shanghai office to improve the HR and promotion systems at Chinese subsidiaries. LSMQ became the first Chinese company to introduce the HR system. In addition, HR consulting projects were undertaken through the assistance of the Chinese Business Support Team while a HR management system was developed that reflects both Korean corporate culture and Chinese local conditions. This system was shared at the LS Mtron HR seminar held in China.

Deliver a Happy Workplace

At our Chinese subsidiaries, diverse programs are under consistent operation to promote a more harmonious workplace. This, in turn will secure future growth engines and a strengthened competitive edge. Included in such endeavors undertaken in 2012 are: mountain climbing, spending recreational time at an amusement park . These activities encouraged employees to develop a sense of loyalty to the company and boosted the morale among employees. LSMW provided medical check-up services to both the employees and their children and LSMQ offered entertainment and sports activities through the installation of various sports facilities, including ping-pong tables, a basketball court and the screening of movies free of charge in the auditorium. LSEQ gave bags and school supplies to the children of employees as a gift to mark the beginning of a new semester and practiced family-friendly management.

Innovation Capacity Training

Category	Name of Training Course	Completion
LSMW	Quality circle leader training	12 rounds
LSEQ	KL training	7 rounds
LSMQ	'Immediate Practice' training for team leaders	3 rounds
Common	Basic innovation course for new recruits	2 rounds



Attendance at the 19th Yangling Agricultural Machinery Exhibition



Mock firefighting training



HR workshop held in China



Gifts offered to the children of employees at the start of a new semester

Key Quantitative Indications

● Economic Data

LS Mtron
- Summary Financial Statement

(Unit: KRW million)

Category	5th-term(As of Dec. 31, 2012)	4th-term(As of Dec. 31, 2011)	3rd-term(As of Dec. 31, 2010)
Current Assets	472,942	399,186	386,271
Non-current Assets	678,966	603,281	509,915
Total Assets	1,151,908	1,002,467	892,186
Current Liabilities	345,908	259,883	275,793
Non-current Liabilities	209,802	166,488	139,278
Total Liabilities	555,710	426,372	415,071
Capital	45,000	45,000	45,000
Paid-in Capital in Excess of Par Value	426,066	425,887	425,894
Accumulated Other Comprehensive Income	-1,588	-1,551	-2,057
Retained Earnings	126,720	106,758	8,278
Total Capital	596,198	576,095	477,115
Total Liabilities and Capital	1,151,908	1,002,467	892,186

- Summary Income Statement

(Unit: KRW million)

Category	5th-term(Jan. 1, 2012~Dec.31, 2012)	4th-term(Jan. 1, 2011~Dec. 31, 2011)	3rd-term(Jan. 1, 2010~Dec. 31, 2010)
Sales	923,783	888,712	764,855
Operating Income	40,466	53,537	41,451
Half-yearly Income from Continuing Operations	31,468	36,079	29,129
Income from Discontinued Operations	3,845	63,409	10,996
Net Income	35,313	99,488	40,095

LS Mtron and its Subsidiaries

- Summary Financial Statement

(Unit: KRW million)

Category	5th-term(As of Dec. 31, 2012)	4th-term(As of Dec. 31, 2011)	3rd-term(As of Dec. 31, 2010)
Current Assets	838,046	749,999	494,380
Non-current Assets	834,821	729,104	506,292
Total Assets	1,672,867	1,479,103	1,000,672
Current Liabilities	786,539	619,834	364,182
Non-current Liabilities	331,034	312,057	170,545
Total Liabilities	1,117,573	931,891	534,726
Equity Ownership of Controlling Shareholders	554,694	547,212	465,946
Equity Ownership of Non-controlling Shareholders	600		
Total Capital	555,294	547,212	465,946
Total Liabilities and Capital	1,672,867	1,479,103	1,000,672

- Summary Income Statement

(Unit: KRW million)

Category	5th-term (Jan. 1, 2012~Dec.31, 2012)	4th-term (Jan. 1, 2011~Dec. 31, 2011)	3rd-term (Jan. 1, 2010~Dec. 31, 2010)
Sales	1,632,170	1,500,727	809,234
Operating Income	46,819	57,390	38,835
Half-yearly Income from Continuing Operations	19,189	20,309	16,775
Income from Discontinued Operations	3,845	62,114	15,159
Net Income	23,034	82,423	31,934

● Social Data(As of December 31, 2012)

(As of December 31, 2012)

Category	Unit	2010	2011	2012	Note
Total employees	No. of persons	1,669	1,649	1,683	Including non-regular workers and excluding day laborers
Regular/non-regular employees	No. of persons	1,497/172	1,514/135	1,547/136	
Jeonju	No. of persons	706/65	663/79	689/98	
Jeongeup	No. of persons	180/36	236/11	222/3	
Anyang	No. of persons	238/28	228/35	230/32	
Indong	No. of persons	87/17	115/2	127/1	
R&D	No. of persons	89/3	94/1	100/1	
Sales departments	No. of persons	110/5	69/5	80/1	
Head Office	No. of persons	87/18	103/2	99/-	
Employee by age group	No. of persons	1,669	1,649	1,683	
20's	No. of persons	175	259	258	
30's	No. of persons	636	647	670	
40's	No. of persons	451	411	398	
50's	No. of persons	382	314	341	
Over 60's	No. of persons	25	18	16	
New recruits	No. of persons	296	346	263	
Male/Female	No. of persons	255/41	281/65	214/49	
Female employees	No. of persons/%	74/4.4	97/5.9	99/5.9	
Employees with disabilities	No. of persons/%	36/2.2	40/2.4	32/1.9	
Training expenses	KRW 1,000/person	1,439	1,789	1,550	
Training hours by job level	No. of hours/person	-	-	109	New indicator introduced in 2012
Executives	No. of hours/person	-	-	127	
General managers	No. of hours/person	-	-	76	
Deputy general managers	No. of hours/person	-	-	117	
Managers	No. of hours/person	-	-	103	
Assistant managers/assistants	No. of hours/person	-	-	96/139	
Employees who took childbirth leave	No. of persons	-	7	4	
Employees who took childcare leave / reinstatement	No. of persons/%	-	1/-	3/100	Reinstatement: As of the reinstatement year after childcare leave
Employees who used counseling office services	No. of persons	-	315	228	Newly established in 2011(Jeonju, Jeongeup, R&D Center)
Unionized employees/ratio	No. of persons/%	616/36.9	630/38.2	628/41.8	Ratio: Measured against the total employees
Dialogue with the top management	No. of occasions	24	28	52	Meeting with the CEO, dialogue with division heads
Participation and Cooperation Enhancement Council	No. of meetings held	8	8	8	
Labor-management working-level consultations and meetings(company-wide/Jeonju)	No. of occasions	22	20	25	
Labor-management discussion meetings (Anyang/Jeongeup/Jeonju)	No. of meetings held	5	5	10	
Industrial Health & Safety Committee and committee meetings	No. of meetings held	20	16	20	
Retired employees/ratio	No. of persons/%	78/4.7	63/3.8	92/5.4	
Employees working at subsidiaries in Korea and abroad	No. of persons	2,498	1,863	1,953	
Occupational injury ratio	%	0.12	0.21	0.13	

- Other issues to note
 - The fixed pay rate is applied equally to all employees in the same job level regardless of gender difference.
 - Our new recruits are guaranteed the legal minimum wage regardless of their gender difference or location.
 - When unionized members are transferred to other sites or departments or changes occur in business operations, including the relocation of production facilities, both the labor union and union members are notified in advance.

● Environmental Data

(As of December 31, 2012)

Category	Unit	2010	2011	2012	Note
GHG emissions	tCO ₂ eq	96,297	99,415	101,915	Recalculated by excluding the Air Conditioning Division (whose operations were transferred in 2011) in accordance with the Korean government's GHG verification criteria
Jeongeup	tCO ₂ eq	72,626	73,717	76,828	
Jeonju	tCO ₂ eq	12,511	13,232	11,901	
Anyang/Indong/Head Office	tCO ₂ eq	11,160	12,466	13,186	
GHG emissions by source	tCO ₂ eq	96,297	99,415	101,915	GHG intensity was calculated on the basis of emissions measured against sales
Indirect emissions	tCO ₂ eq	89,723	91,904	93,600	
Stationary combustion	tCO ₂ eq	5,146	6,181	7,090	
Mobile combustion and others	tCO ₂ eq	1,428	1,330	1,225	
GHG intensity	tCO ₂ eq/KRW million	0.16	0.14	0.15	
Energy consumption (including direct/indirect consumption)	TJ	1,846	1,906	2,076	
Electricity	TJ	1,704	1,743	1,894	
LNG	TJ	99	120	137	
Others	TJ	43	43	45	
ESH expenditures and investments	KRW million	761	789	1,007	
Environment	KRW million	239	522	590	
Climate change	KRW million	163	77	197	
Health and safety	KRW million	359	190	220	
Primary raw materials – Copper	Ton	13,893	14,676	9,901	
Primary raw materials – Carbon and rubber	Ton	931	1,436	1,651	
Primary raw materials – Synthetic resin	Ton	101	94	121	
Water consumption	Ton	598,772	589,469	728,484	Water is sourced from the Han River, the Mangyeong River and the Nakdong River
Industrial water	Ton	522,943	507,540	639,332	
Residential water	Ton	55,643	65,246	81,613	
Underground water	Ton	20,186	16,683	7,539	
Emission of air pollutants – Dust	kg	4,790	12,106	11,544	
Discharge of water pollutants – COD	kg	7,378	8,131	15,315	
Discharge of water pollutants – SS	kg	4,271	4,904	7,326	
Discharge of wastewater	Ton	330,925	334,618	506,306	
Water recycling/recycling ratio	Ton/%	485,082/58	457,045/56	418,605/43	Recalculated due to the modification of calculation criteria at the Jeoneup site
Waste generation – General waste	Ton	4,225	3,958	4,542	
Waste generation – Designated waste	Ton	344	352	266	
Waste recycling ratio	%	83	81	84	
Ozone depletion substances – HCFC	kg	12,760	3,000	3,000	Reduced due to the transfer of the Air Conditioning Division operations in 2011

- Other issues to note
 - All out-sites, both in Korea and abroad, are not located in areas that were designated as water protection areas, special management areas or biodiversity preservation areas.
 - In 2012, there was no significant leakage of hazardous substances and we fully comply with the Basel Convention on the ‘Control of Transboundary Movements of Hazardous Wastes and their Disposal’.

Extra Data

● Legal Compliance

Category	2010	2011	2012
Penalties and non-financial sanctions imposed due to the violation of environmental regulations	None	None	None
Legal actions taken due to unfair competition and monopoly practices(price-fixing, etc.)	None	None	None
Regulatory violations regarding product-related customer safety and health	None	None	None
Violations of product-related information disclosure regulations(labeling, .etc.)	None	None	None
Violations of marketing and communication regulations	None	None	None
Regulatory violations regarding customer's personal information protection	None	None	None
Violations regarding product supply	None	None	None
Violations regarding the prohibition of discrimination	None	None	None
Violations regarding the infringement of the rights of local residents	None	None	None

● Awards

Date	Name of the Awards	Host Organization	Details
March	GM Supplier of the Year Awards	GM	Chosen as an excellent supplier(Automotive Component Division)
June	Quality Circle Competition in the North Jeolla Province	North Jeolla Province	Excellence Award(Injection molding production team, CR production team, LSMW production team)
June	Green Company Council Best Practice Presentation	Green Company Council	Environment Minister Award(Jeonju site)
October	Korea's 100 Great Workplace Awards	GWP KOREA	Grand Prize in the manufacturing sector
November	Sustainability Management Awards	Ministry of Knowledge and Economy	KSA President Award(Korean Standards Association)
November	National Quality Circle Competition	Korean Standards Association	One Presidential Silver Medal, two Bronze Medals(LSMW production team, injection molding production team, CF production team)
November	Joint Rechargeable Battery Workshop (knowledge economy technology innovation project)	Korea Battery Industry Association	Knowledge and Economy Minister Award Kyung-Nyung Woo(Senior Vice President)
December	One Heart Volunteer Conference in Wanju	Wanju-gun Office	Chosen as a top-performing organization in the volunteer activity segment

● Government Subsidy

In 2012, net government subsidies amounted to KRW 2.21 billion and technology expense redemptions amounted to KRW 350 million.

● Membership

Economy	Korea Chamber of Commerce & Industry, Korea Industrial Technology Association, Korea West Area Defense Industry Security Association, Wanju Industrial Complex Promotion Association, Ministry of Knowledge Economy Association Korea Agricultural Machinery Industry Cooperative, Korea Management Association, Korea Defense Industry Association, Korea Printed Circuit Association, Korea Intellectual Property Association, Korean Standards Association, Korea Synthetic Resin Processing Machinery Industry Cooperative
Society	Korea Industry Safety Association, Reserve Forces Commanders Association, Wanju Industrial Complex Safety Supervisor Association Fair Competition Federation, Korea Fire Safety Association
Environment	Wanju Industrial Complex Fire Safety Supervisor Association, Wanju Industrial Complex Environment AssociationGreen Company Council, Korea Environmental Engineers Association
Sustainability Management	United Nations Global Compact(UNGC)

GRI G3.1 / ISO 26000 Index

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GRI G3.1		Disclosure Items	Application level	Page	note: ISO 26000
Profile					
Strategy and Analysis	1.1	Statement from the most senior decision-maker of the organization about the relevance of sustainability to the organization and its strategy	●	4~5	6.2
	1.2	Description of key impacts, risks, and opportunities	●	4~5,9~11	
Organizational Profile	2.1	Name of the organization	●	6	
	2.2	Primary brands, products, and/or services	●	6,inside booklet	
	2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures	●	6, 59	6.2
	2.4	Location of organization's headquarters	●	6	
	2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report	●	inside booklet 46~47,59	
	2.6	Nature of ownership and legal form	●	44	
	2.7	Markets served(including geographic breakdown, sectors served, and types of customers/beneficiaries)	●	inside booklet	
	2.8	Scale of the reporting organization	●	6~7, 48	
	2.9	Significant changes during the reporting period regarding size, structure, or ownership	●	6, 44	
	2.10	Awards received in the reporting period	●	51	
Report Parameters	3.1	Reporting period	●	3	
	3.2	Date of most recent previous report	●	3	
	3.3	Reporting cycle	●	3	
	3.4	Contact point for questions regarding the report or its contents	●	3	
	3.5	Process for defining report content	●	3, 12~14	
	3.6	Boundary of the report	●	3	
	3.7	State any specific limitations on the scope or boundary of the report	●	3	
	3.8	Basis for reporting that can significantly affect comparability from period to period and / or between organizations	●	3	
	3.9	Data measurement techniques and the bases of calculations	●	6~7	
	3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement	●	50	
	3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods	●	44	
	3.12	Table identifying the location of the Standard Disclosures in the report	●	52~55	7.5.3
	3.13	Policy and current practice with regard to seeking external assurance for the report	●	56~57	
Governance, Commitments, and Engagement	4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight	●	44	6.2
	4.2	Indicate whether the Chair of the highest governance body is also an executive officer	●	44	
	4.3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members	●	44	
	4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body	●	44	
	4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives	●	44	
	4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided	●	44	
	4.7	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics	●	44	
	4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation	●	58	
	4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance	●	8, 44	
	4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance	●	8, 44	
	4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization	●	9, 30	
	4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses	●	51, 55	
	4.13	Memberships in associations(such as industry associations) and/or national/international advocacy organizations in which the organization	●	51	
	4.14	List of stakeholder groups engaged by the organization	●	12~14	
	4.15	Basis for identification and selection of stakeholders with whom to engage	●	12	
	4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	●	12~13	
	4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting	●	13, 18, 22, 26, 30, 38	

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GRI G3.1		Disclosure Items	Application level	Page	note: ISO 26000
ECONOMIC Disclosure on Management Approach					
Economic Performance	EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments	●	7	6.8 / 6.8.3 / 6.8.7 / 6.8.9
	EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	●	31	6.5.5
	EC3	Coverage of the organization's defined benefit plan obligations	◐	41	-
	EC4	Significant financial assistance received from government	●	51	-
Market Presence	EC5	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation	●	49	6.4.4 / 6.8
	EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation	●	7	6.6.6 / 6.8 / 6.8.5 / 6.8.7
	EC7	Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation	●	46	6.8 / 6.8.5 / 6.8.7
Indirect Economic Effect	EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or probono engagement	●	26~29	6.3.9 / 6.8 / 6.8.3 / 6.8.4 / 6.8.5 / 6.8.6 / 6.8.7 / 6.8.9
	EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts	●	18~21	6.3.9 / 6.6.6 / 6.6.7 / 6.7.8 / 6.8 / 6.8.5 / 6.8.6 / 6.8.7/ 6.8.9
ENVIRONMENTAL Disclosure on Management Approach					
					6.2 / 6.5
Materials	EN1	Materials used by weight or volume	●	50	6.5 / 6.5.4
	EN2	Percentage of materials used that are recycled input materials	●	50	
Energy	EN3	Direct energy consumption by primary energy source	●	50	
	EN4	Indirect energy consumption by primary source	●	50	
	EN5	Energy saved due to conservation and efficiency improvements	●	31	
	EN6	Energy saved due to conservation and efficiency improvements	●	31~33	
	EN7	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives	◐	31	
Water	EN8	Total water withdrawal by source	●	50	6.5 / 6.5.4
	EN9	Water sources significantly affected by withdrawal of water	●	50	
	EN10	Percentage and total volume of water recycled and reused	●	50	
Bio Diversity	EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	N/A	-	6.5 / 6.5.6
	EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	N/A	-	
	EN13	Habitats protected or restored	N/A	-	
	EN14	Strategies, current actions, and future plans for managing impacts on biodiversity	N/A	-	
	EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	N/A	-	
Emissions, Effluents, and Waste	EN16	Total direct and indirect greenhouse gas emissions by weight	●	31, 50	6.5 / 6.5.5
	EN17	Other relevant indirect greenhouse gas emissions by weight	●	31, 50	
	EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved	●	31	
	EN19	Emissions of ozone-depleting substances by weight	●	50	6.5 / 6.5.3
	EN20	NOx, SOx, and other significant air emissions by type and weight	●	50	
	EN21	Total water discharge by quality and destination	●	50	
	EN22	Total weight of waste by type and disposal method	●	50	
	EN23	Total number and volume of significant spills	●	51	
	EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	●	50	
	EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff	N/A	-	6.5 / 6.5.4 / 6.5.6
Products and Services	EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	●	33	6.5 / 6.5.4 / 6.6.6 / 6.7.5
	EN27	Percentage of products sold and their packaging materials that are reclaimed by category	○		6.5 / 6.5.4 / 6.7.5
Compliance	EN28	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations	●	51	6.5
Transport	EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce	●	32	6.5 / 6.5.4 / 6.6.6
Overall	EN30	Total environmental protection expenditures and investments by type	●	50	6.5

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GRI G3.1		Disclosure Items	Application level	Page	note: ISO 26000
LABOR PRACTICES AND DECENT WORK Disclosure on Management Approach					6.2 / 6.4 / 6.3.10
Employment	LA1	Total workforce by employment type, employment contract, and region	●	46, 49	6.4 / 6.4.3
	LA2	Total number and rate of employee turnover by age group, gender, and region	●	49	
	LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations	●	41	6.4 / 6.4.3 / 6.4.4
Labor/ Management Relations	LA4	Percentage of employees covered by collective bargaining agreements	●	42, 49	6.4 / 6.4.3 / 6.4.4 / 6.4.5 / 6.3.10
	LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements	●	49	6.4 / 6.4.3 / 6.4.4 / 6.4.5
Occupational Health and Safety	LA6	Percentage of total workforce represented in formal joint management–worker health and safety committees that help monitor and advise on occupational health and safety programs	●	49	6.4 / 6.4.6
	LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region	●	49	
	LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases	●	41, 43	6.4 / 6.4.6 / 6.8 / 6.8.3 / 6.8.4 / 6.8.8
	LA9	Health and safety topics covered in formal agreements with trade unions	●	32, 43	6.4 / 6.4.6
Training and Education	LA10	Average hours of training per year per employee by employee category	●	49	6.4 / 6.4.7
	LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	●	40	6.4 / 6.4.7 / 6.8.5
	LA12	Percentage of employees receiving regular performance and career development reviews	●	39	6.4 / 6.4.7
Diversity and Equal Opportunity	LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity	●	44	6.3.7 / 6.3.10 / 6.4 / 6.4.3
	LA14	Ratio of basic salary of men to women by employee category	●	49	6.3.7 / 6.3.10 / 6.4 / 6.4.3 / 6.4.4
Employment	LA15	Return to work and retention rates after parental leave, by gender	●	49	6.4 / 6.4.3

Human Rights Disclosure on Management Approach					6.2 / 6.3
Investment and Procurement Practices	HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening	○		6.3 / 6.3.3 / 6.3.5 / 6.6.6
	HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken	①	20	6.3 / 6.3.3 / 6.3.5 / 6.4.3 / 6.6.6
	HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	●	45	6.3 / 6.3.5
Non-Discrimination Freedom of Association and Collective Bargaining	HR4	Total number of incidents of discrimination and actions taken	●	51	6.3 / 6.3.6 / 6.3.7 / 6.3.10 / 6.4.3
	HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights	●	42	6.3 / 6.3.3 / 6.3.4 / 6.3.5 / 6.3.8 / 6.3.1 / 0 / 6.4.3 / 6.4.5
Child Labor	HR6	Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor	●	42	6.3 / 6.3.3 / 6.3.4 /
Forced and Compulsory Labor	HR7	Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor	●	42	6.3.5 / 6.3.7 / 6.3.1 / 0
Security Practices	HR8	Percentage of security personnel trained in the organization’s policies or procedures concerning aspects of human rights that are relevant to operations	○	45	6.3 / 6.3.5 / 6.4.3 / 6.6.6
Indigenous Rights	HR9	Total number of incidents of violations involving rights of indigenous people and actions taken	●	51	6.3 / 6.3.6 / 6.3.7 / 6.3.8 / 6.6.7
Assessment Remediation	HR10	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments	①	51	6.3 / 6.3.3 / 6.3.4 / 6.3.5
	HR11	Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms	●	41, 45	6.3 / 6.3.3 / 6.3.4 / 6.3.6

Society Disclosure on Management Approach					6.2 / 6.6 / 6.8
Community	SO1	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting	○		6.3.9 / 6.8 / 6.8.5 / 6.8.7 / 6.6.7
Corruption	SO2	Percentage and total number of business units analyzed for risks related to corruption	○		
	SO3	Percentage of employees trained in organization’s anti-corruption policies and procedures	●	45	6.6 / 6.6.3
	SO4	Actions taken in response to incidents of corruption	●	45	
Public Policy Behavior	SO5	Public policy positions and participation in public policy development and lobbying	N/A	-	6.6 / 6.6.4 / 6.8.3
	SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country	N/A	-	
Anti-Competitive	SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	●	51	6.6 / 6.6.5 / 6.6.7
Compliance	SO8	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance w/ laws and regulations.	●	51	6.6 / 6.6.7 / 6.8.7
Community	SO9	Operations with significant potential or actual negative impacts on local communities	N/A	-	6.3.9 / 6.8 / 6.8.5 /
	SO10	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities	●	26–29, 31–32	6.8.7 / 6.6.7

● : Fully Reported,
 ① : Partially Reported,
 ○ : Not Reported,
 N/A: Not Applicable

GRI G3.1		Disclosure Items	Application level	Page	note: ISO 26000
Product Responsibility Disclosure on Management Approach					6.2 / 6.6 / 6.7
Customer Health and Safety	PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures	①	22–23, 32–33	6.3.9 / 6.6.6 / 6.7 /
	PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes	●	51	6.7.4 / 6.7.5
Product and Service Labeling	PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements	①	22–25	6.7 / 6.7.3 / 6.7.4 / 6.7.5 /
	PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	●	51	6.7.6 / 6.7.9
	PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction	●	22–25	6.7 / 6.7.4 / 6.7.5 / 6.7.6 / 6.7.8 / 6.7.9
Marketing Communication	PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship	●	25	6.7 / 6.7.3 / 6.7.6 /
	PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes	●	51	6.7.9
Customer Privacy	PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	●	51	6.7 / 6.7.7
Compliance	PR9	Monetary value of significant fines for noncompliance with laws and regulations concerning the provision and use of products and services	●	51	6.7 / 6.7.6

• EN27, HR1, HR10, SO1, SO2 : The possible negative impact and direct/indirect relevance with the company is low regarding the issue of concern and performance measurement processes are not sufficient

● GRI Application Level

Our '2012 Sustainability Report' contains each of the criteria to qualify for GRI-G3.1 Application level A+ and therefore, we make a self-declaration Level A+ for this report. The entire report contents and reporting process were reviewed by an independent external assurance provider. We did not apply the GRI G3 Sector Supplements to this report as the requirements cover only a small portion of our business activities.

UNGC COP Report

We joined the UN Global Compact on September 2, 2011 and comply with 10 principles in the four areas of human rights, labor, environment and anticorruption. All employees and executives at LS Mtron will take the lead in creating a fair and transparent society by complying with the UN Global Compact on the four areas, and fulfilling duties and actions required for a corporate citizen.



The Ten Principles	LS Mtron policies	page
Human Rights		
Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and, Principle 2: make sure that they are not complicit in human rights abuses.	• Code of Conduct, Chapter 2: Basic Ethics of Employees • Employment Regulation Introduction • Business Partner Ethics Implement Special Contract	38–43
Labour Standards		
Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining; Principle 4: the elimination of all forms of forced and compulsory labour; Principle 5: the effective abolition of child labour; and, Principle 6: the elimination of discrimination in respect of employment and occupation.	• Collective Agreement • Code of Conduct, Chapter 5: Corporate Responsibilities for Employees • Employment Regulation Introduction	38–43
Environment		
Principle 7: Businesses should support a precautionary approach to environmental challenges; Principle 8: undertake initiatives to promote greater environmental responsibility; and Principle 9: encourage the development and diffusion of environmentally friendly technologies.	• Green Management Policy - Clause 2. Reducing greenhouse gas emissions and developing environmentally friendly products - Clause 3. Building safe and healthy environment as well as preventing hazards) - Clause 4. Win-win green management and corporate social responsibility) • Code of Conduct, Chapter 6: Responsibilities for Country and Society	30–33
Anti-Corruption		
Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.	• Code of Conduct - Chapter 3: Fair Competition(with Competitors) - Chapter 4. Fair Business Transaction(Subcontractors) - Chapter 6. Responsibilities for Country and Society • Business Partner Ethics Implement Special Contract	45

Independent Assurance Statement

The Business Institute for Sustainable Development(BISD), led by the Korean Chamber of Commerce & Industry(KCCI), was commissioned by LS Mtron to perform the assurance engagement of the ‘LS Mtron Sustainability Report 2012’(the ‘Report’ hereafter) and presents its conclusions as follows.

Purpose

This assurance statement aims to verify if this report contains any significant errors or prejudices and to present the conclusions through an independent assurance engagement of the issues and performance regarding the sustainability management conducted at LS Mtron.

Responsibility and Independence

This report outlines the endeavors, achievements and future plans concerning the sustainability management of LS Mtron in 2012 and the responsibility related to the preparation of this report lies with LS Mtron.

In conducting the assurance engagement of this report and presenting assurance conclusions, BISD has no interest in any business operations of LS Mtron that aim to generate profits other than serving as a third-party assurance provider in a bid to maintain its independence and autonomy.

Assurance Standards and Limitations

BISD performed the assurance engagement in consideration of the three accountability principles of AA1000AS(2008)(inclusivity, materiality and responsiveness) as well as the reporting principles proposed by the Global Reporting Initiative(GRI) G3.1 guidelines.

The scope of the assurance was limited to the performance in 2012, and therefore excludes any data before 2012. In conducting the assurance engagement, physical inspections were made of the Head Office located in Anyang out of LS Mtron’s business sites in Korea and abroad and online data was not included in the assurance scope. Furthermore, financial and GHG data that has already been verified from another third-party organization was excluded from the assurance engagement.

Major Assurance Procedures

BISD did not participate in stakeholder activities and assured this report through the review of the interviews conducted of LS Mtron employees, as well as related documents provided by LS Mtron. Major assurance procedures undertaken are as follows:

- Review the application of LS Mtron’s internal sustainability reporting standards
- Review the data contained in the Korean version of the Report as well as the process of gathering such data
- Review the report content, corporate policies and systems related to the materiality test and material issues
- Verify environmental/safety data and interview the employees in charge(Head Office)
- Interview employees in charge of sustainability management operations, report preparation and editing(Head Office)

Opinions

BISD performed the assurance engagement in accordance with the procedures described in this assurance statement and the Report was modified when and if deemed necessary. BISD is not aware of any significant errors in this Report as a result of its assurance engagement.

The opinions of BISD produced as a result of its assurance engagement and in consideration of the AA1000APS accountability standards, are explained below.

Inclusivity

Does LS Mtron adhere to the principle of stakeholder engagement in order to ensure a responsible and strategic response in advancing sustainability management?

- LS Mtron is gathering major concerns and opinions from customers, employees, suppliers and local communities through diverse stakeholder communication channels.
- BISD is not aware of any significant stakeholder groups that were omitted from the process of gathering sustainability management issues through LS Mtron’s stakeholder communication channels.

Materiality

Does LS Mtron include material issues that affect stakeholders in the entire spectrum of sustainability management in this Report?

- LS Mtron used the materiality test process to finalize major sustainability management issues.
- LS Mtron identified major issues through a separate process of gathering opinions on stakeholder expectations(by stakeholder group) as part of the materiality test process.
- BISD is not aware of any significant issues that were omitted from the materiality test process.

Responsiveness

Does LS Mtron appropriately respond to stakeholder issues?

- LS Mtron ensures that major sustainability management issues that were identified through the materiality test process are reflected in the key performance indicators in relevant segments so as to appropriately address the issues that interest stakeholders.
- BISD is not aware of any violations of the principle of responsiveness in LS Mtron’s response to major sustainability management issues or of sustainability management performance that is described in this Report from the perspective of significance.

Recommendations

BISD presents the following recommendations in a boundary that does not affect the assurance conclusions.

- LS Mtron has been sincerely undertaking the process of establishing targets for major issues and taking concrete steps to reach them through the Sustainability Management Steering Group and subcommittees. BISD believes that this process plays an essential role in LS Mtron’s actions to undertake various sustainability management initiatives and is also related to numerous activities described in the Report. Therefore, it is recommended that LS Mtron report how this process is continuously being operated and improved for stakeholders so as to improve its sustainability management system even further.
- BISD believes that it would be meaningful to develop direct communication channels(including stakeholder dialogue) so as to gather feedback from stakeholders. Specifically, venues to directly interact with stakeholders that allow their genuine opinions may be heard, in addition to surveys, will be helpful to LS Mtron’s sustainability management.
- While maintaining the consistency and completeness of sustainability management data, LS Mtron would benefit from enhancing the alignment of the reported data through an analysis of the meaning behind such data. Likewise, it is recommended that the company integrate the outcomes of such analyses into its future plans.
- LS Mtron needs to secure the validity of the report content through a balanced perspective. This can be achieved through the inclusion of both positive and negative views regarding the major issues that affect the company in the Report. While the Report does contain some negative issues, the company needs to consider whether to include more detailed strategies to address such issues that may cause risks in the upcoming years.
- LS Mtron’s sustainability management organization needs to be reinforced to ensure a more proactive response to shifting conditions related to sustainability management.

April, 2013



Tae-Jin Park _ President

Sustainability Management Guideline

I. Purpose
The Sustainability Management(SM) Principles and Action Guidelines cover basic principles to ensure systemic implementation of our SM initiatives and lay the foundation to provide stakeholders including customers with the best value as a global leader in the machinery and component business.

II. Integrated SM Management System

1. Establishment of Policy

1.1 Integrated SM Framework

In order to ensure systemic implementation of sustainability management, the Sustainability Management Steering Group, a Board of Directors and top management level body, serves as a top decision-making group and company-wide SM management responsibilities lie with managers in charge within the company.

- 1) SM Steering Group
This is an enterprise-wide consultative group to deploy SM initiatives and its main roles are as follows.
(1) Discussing directions and strategies to practice SM
(2) Identifying company-wide SM issues and discussing ways to improve each SM issue
(3) Publishing SM Reports and holding dialogue with stakeholders
(4) Supplementing SM-related policies and systems
- 2) Sustainability Management Executive Office
The SM Executive Office is the supervising body for SM initiatives and its main roles are as follows.
(1) Setting SM directions, strategies and education plans
(2) Diagnosing and evaluating company-wide SM activities
(3) Supervising the SM Steering Council
(4) Publishing SM Reports
(5) Creating and managing SM-related policies

1.2 stipulation of relevant policy

SM-related operation policies, systems and issue-specific implementation policies must be stipulated and actively disseminated to ensure their company-wide application and deployment.

1.3 regular review and improvement

Policies set in relation with SM must be reviewed on a quarterly basis and revised if their modification and supplementation is needed.

2. SM Materiality Test

The SM Executive Office, in charge of practical SM matters, performs SM materiality tests every year through stakeholder engagement in order to understand stakeholder interest and business impact, which form the basis for building SM strategies.

3. Regular diagnosis and monitoring

LS Mtron’s in-house SM diagnosis model, which includes all SM-related global standards, is utilized to conduct regular diagnosis once a year and continued monitoring is carried out by the SM Steering Group.

4. Company-Wide Education and Consensus Building

Company-wide education plans are set and includes every year to promote sustainability management and to build consensus among employees.

5. SM Reporting Framework

Team leaders and their working-level employees with those departments in relation with SM Focus Areas identified through materiality test are obliged to report progress made and improvements to be made to the SM Steering Group via business-division level cooperation in order to ensure appropriate response to and improvement of SM issues.

5.1 LS Mtron SM Focus Area and Relevant Departments

- 1) Integrated SM Management: SM Executive Office
- 2) Economic and Social Value Creation: Win-Win Partnership Team, Quality Management Team, Innovation Team
- 3) Social Contribution: Business Support Team
- 4) Green Management: Green Management Team, Technology Management Team, Production Technology Group
- 5) Employee Value Enhancement: HR Team, HR Development Team
- 6) Stronger Technological Competitive Edge: Technology Management Team, Patent Management Team

- 7) Integrated Risk Management: SM Executive Office
- 8) Corporate Governance: Business Management & Planning Team
- 9) Ethics Management: Internal Audit & Consulting Team

6. Operation of Sub-committee

Sub-committees were created to boost executive capabilities in each SM Focus Area and to encourage proactive participation of each business division and they should report progress made and future improvements to the SM Steering Group.

6.1 SM Sub-committee and Supervising Department

- 1) Green Management: Green Management Team
- 2) Eco-friendly Product: Technology Management Team
- 3) Corporate Collaboration & Prosperity: Corporate Collaboration & Prosperity Team
- 4) Social Contribution: Business Support Team
- 5) Customer and Quality Management: Quality Management Team
- 6) Eco-friendly Supply Chain: Quality Management Team

III. Stakeholder Dialogue and Fulfillment of Promise

1. Stakeholder Dialogue

Regular and official dialogue opportunities created by building dialogue channels with core stakeholders and setting annual dialogue plans are utilized to review SM Focus Areas, determine future implementation directions, add more Focus Areas and modify existing ones and promote participation in writing SM Reports.

1.1 Identification of Core Stakeholders and Responsibility to Respond

- Stakeholders are identified through analysis of social interest and impact on LS Mtron’s business and the following roles and responsibilities to respond to them should be performed.
- 1) Customer: Customer satisfaction, increased customer responsibilities(product quality, productliability, customer safety and etc.) and etc.
- 2) Business partners: seeking win-win growth through partnership, enhancing fair trade relationship and etc.
- 3) employee: building employee capacity and improving their working conditions, protecting their human rights and complying with labor regulations and etc.
- 4) Global/Local community: Engaging and developing local communities, social philathropic activities and etc.
- 5) Earth/Ecology: managing and reducing impact of products and processes on the environment, promoting eco-friendly products and services, responding to climate change and controlling GHG emissions and etc.

1.2 Improvement of Stakeholder Dialogue

As for annual plan to hold dialogue with core stakeholders, the first phase is to gather information on expectations and requirements of stakeholders, the second phase to set goals and detailed plans and then stakeholder dialogue is conducted via direct dialogue or surveys, which is followed by the results summarized and incorporated in setting next year’s directions and plans.

2. Expansion of SM Disclosure

In addition to publishing the SM Report every year to fulfill promises with stakeholders and provide critical information, more information is to be disclosed on the company’s financial and nonfinancial performance on the corporate website.

IV. Management of Non-Financial Risks

LS Mtron strives to systemically manage and respond to not just financial risks but Also nonfinancial risks including SEE(Social, Environmental, Ethical) risks. Every SM Focus Area is considered as a core risk issue and company-wide response is ensured through the integrated risk management framework of the SM Steering Group.

Apr. 1, 2013 (The fourth edition)

Global Network

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Report Preparation

This report was prepared under the supervision of the Sustainability Report Editorial Meeting which consists of the Sustainability Management Steering Group and the Sustainability Management Executive Office, in accordance with LS Mtron's sustainability management reporting system, with the support offered by business division.

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UC Division

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For More Information

For further information on LS Mtron, please refer to the following websites:

LS Mtron	www.lsmtron.co.kr
Tractor Division	www.lstractor.co.kr
Injection Molding Division	www.lsinjection.co.kr
Special Business Division	www.lstrackshoe.co.kr
Electronic Component Division	www.lsccomponent.com
UC Division	www.ultracapacitor.co.kr
LS Mtron's business report	dart.fss.or.kr
Information on the LS Group	www.lsholdings.co.kr

Previous Reports

Sustainability Reports



Sustainability Report 2009



Sustainability Report 2010



Sustainability Report 2011

Environment Reports



Environment Report 2002



Environment Report 2005

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LS Mtron's 2012 Sustainability Report was printed on FSC Mont Blanc paper produced by Hansol Paper Co., Ltd.. The FSC Mont Blanc paper contains the FSC certification that is only awarded to products manufactured from environmentally developed and managed wood. As elemental chlorine-free pulp is utilized in the processing, the paper is also environmentally-friendly. Furthermore, the report was printed with soy oil ink which massively reduces air pollutants that may be emitted from an FSC-certified printing house during the printing process.

