

# NATURE, HUMAN AND SPACE



We create  
human-friendly  
and eco-conscious  
living spaces.



# LG Hausys 2016 Sustainability Report

<b>Report Overview</b>	This report marks LG Hausys' fifth sustainability report. LG Hausys uses this report as a means to integrate and disclose the interest and requirements of its stakeholders in the areas of economy, the environment and society. LG Hausys will publish sustainability reports each year as a communication channel to reflect the feedback of internal/external stakeholders and disclose its achievements in sustainability management.
<b>Reporting Period</b>	This report covers the economic, environmental and social initiatives and accomplishments made by LG Hausys between January 1 <sup>st</sup> 2015 and December 31 <sup>st</sup> 2015, and latest data is included for several sections (e.g. BOD composition). Quantitative data covering the past three years (2013-2015) is presented in some cases to allow for time-series analyses.
<b>Reporting Scope</b>	The scope of this report includes the headquarters and domestic plants of LG Hausys. A portion of the data covers LG Hausys' overseas subsidiaries in China, the U.S. and other regions. Any data discrepancy from the previous year that occurred due to modification of data coverage or calculation methods is marked. Financial data of LG Hausys and its subsidiaries is reported on a consolidated basis in accordance with K-IFRS criteria.
<b>Reporting Principles</b>	This preparation of this report is based on the Core Option of the Global Reporting Initiative (GRI) G4 guidelines. Please refer to the GRI Index on pages 76-79 of this report for further details.
<b>Assurance</b>	This report was assured by an independent third-party assurance provider in accordance with AA1000APS (2008), and the Assurance Statement appears on pages 74-75.

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# CEO MESSAGE



President and CEO of LG Hausys Oh Jang-Soo

Dear Stakeholders,

I'd like to extend my deepest gratitude to our valued stakeholders for their on-going interest in and support for LG Hausys.

This year, LG Hausys presents its fifth sustainability report to disclose its wide-ranging initiatives and achievements undertaken to advance its sustainable growth in the economic, environmental and social arenas. In publishing this report, we aim to help you understand our sustainability management and integrated your invaluable feedback in our business conduct.

LG Hausys is Korea's largest manufacturer of building & decorative materials, high performance materials and automotive materials & components. We utilize our core technology to consistently explore future growth areas such as energy-saving windows, noise-attenuation flooring, high-performance insulation materials, lightweight automotive parts, acrylic solid surface, high-performance interior design films and other various developments.

Even though we faced challenging business conditions last year due to the sluggish growth of the upstream market and increasingly intensifying competition in respective business areas, we managed to generate stunning outcomes, posting KRW 2.7686 trillion in sales and KRW 150.1 billion in operating profits. While our sales fell by 0.8% from the previous year, our operating profits rose by 1.0% during the same period. I believe this can be attributed to our heart-felt endeavors for product innovation, cost innovation, and sales innovation to usher in fundamental change to our business structure.

In 2016, we expect an even more challenging business environment. This is mainly due to the sustained period of low-growth—brought about by reduced consumption, the prolonged sluggishness of exports and an increased volatility of the global economy. Yet, despite such circumstances, we are determined to overcome this crisis by tapping new opportunities—such as an increasing demand for energy-saving and eco-friendly building materials and a wider adoption of lightweight parts to satisfy strengthened fuel efficiency regulations.

LG Hausys aims to create 'human-friendly, eco-conscious happy living spaces'. We provide eco-friendly and energy-saving materials and products, and integrate them with our unique differentiated design to set the trend in tomorrow's living space. We will build on our exceptional technology and design capability to deliver pleasant living spaces to our customers.

Moreover, we will focus on making investments in R&D and recruiting talented researchers in order to set the stage for fostering a market-leading business and discovering continuous sources of new growth engines.

At LG Hausys, our vision is to 'create eco-conscious, human-friendly living spaces'. This embodies our commitment in creating living spaces where our customers are truly contented and where we create new value for our customers. Each and every LG Hausys employee strives to lead the market through the consistent delivery of human-friendly, eco-conscious and energy-saving products.

We undertake the following sustainability management initiatives as a way to achieve this vision at LG Hausys.

**First, we strengthen our product R&D capability to secure our growth engine.**

In 2015, our R&D investment amounted to KRW 55.8 billion, up by 242% from 2014. We attended the LG Techno Conference, forged a partnership with the Seoul National University to promote joint research on new technology and industry-academia cooperation, and worked with Harvard University in the U.S. to conduct joint research on green buildings as a way to secure an R&D workforce and new technology. These endeavors allowed our ship flooring products and lightweight automotive parts to gain the Korean 'New Excellent Technology' certification, and our green automotive skin manufactured with botanically-based bio materials was honored with the Jang Young-Shil Award.

**Second, we expand our global market reach to solidify our global presence.**

In the Middle East, Southeast Asia, India and other emerging markets as well as the U.S. and China, we launched products that cater to specific local market needs to discover new growth opportunities and expand our overseas sales. In 2015, we opened branches in Dubai and Jakarta, and our Wuxi branch in China initiated the operation of its flooring plant. We also constructed an automotive skin plant and expanded the engineered stone production line in the U.S., thereby broadening our overseas production and sales bases.

**Third, we broaden our green product portfolio to establish our green leadership.**

We established our 'Green Identify' to deliver green products including,

but not limited to, energy-saving and eco-friendly building materials and lightweight automotive parts with an aim to provide human-friendly products. This, in return, enables us to gain even more green certifications in Korea and abroad. We are the 1<sup>st</sup>-ever building material maker in China to be listed on the Top 10 Eco-friendly Real Estate for three consecutive years, and our ZEA Sorijam, ZEA wallpaper and PF board insulation were named "Green Products of the Year Chosen by Korean Consumers" for two consecutive years, demonstrating our achievement in delivering green products.

**Fourth, we create an eco-friendly and safe workplace.**

We invest and conduct self-initiated reviews of our plant equipment and facilities, both in Korea and abroad so as to prevent any incident that may impact our operations. We plan to intensively examine our workplace safety management system at all our plants and to conduct practical mock drills to ensure executive-level management accountability and prevent accidents. This will help us create an even safer workplace.

**Fifth, we build a market-leading organizational culture.**

To become a market leader recognized by customers, all our employees at LG Hausys take the 'F4' (Focus, Fun, Fair, Fast) perspective in accelerating their performance while undertaking future-oriented activities based on their group creativity and spontaneity. Our endeavors to establish a market-leading organizational culture earned us the title 'Great Work Place Korea 2015'.

**Sixth, we consistently implement supplier programs to promote shared growth mutual benefit.**

We assist our suppliers in building capacity through joint technology development and patent application, and business & financial support while constantly communicating with the management of our suppliers as a way to promote mutual benefits. Furthermore, we introduced a mutually-beneficial payment system to widen the scope of our support to include tier 2 and below suppliers so as to pursue shared growth along the entire supply chain.

We at LG Hausys will employ a variety of methods to grow hand in hand with our community and position ourselves as a market leader respected by society.




Thank you.



# CORPORATE OVERVIEW

LG Hausys is Korea's largest manufacturer of building & decorative materials, high-performance materials and automotive materials & components. We aim to deliver customer satisfaction and become a reliable company. To this end, we depend on our market-leading top-notch products and advanced technological prowess to provide our customers with healthy and aesthetically-pleasing living spaces.

## Business Areas

 <p><b>Building &amp; Decorative Materials</b></p> <ul style="list-style-type: none"> <li>• Windows</li> <li>• Flooring</li> <li>• Curtain wall</li> <li>• Wallpaper &amp; tile</li> <li>• High-functional glass</li> <li>• Synthetic wood</li> <li>• Acrylic solid surface for interiors</li> <li>• High-performance insulation</li> </ul>	 <p><b>High-Performance Materials</b></p> <ul style="list-style-type: none"> <li>• Deco sheets</li> <li>• Interior design film</li> <li>• Adhesive materials for IT devices and automobiles</li> <li>• Surface film for home appliances</li> <li>• Advertisement materials</li> <li>• Vacuum insulation panels</li> </ul>	 <p><b>Automotive Materials &amp; Components</b></p> <ul style="list-style-type: none"> <li>• Automotive skin</li> <li>• Components</li> <li>• Lightweight components</li> </ul>
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## Strategy

Over the past two years, LG Hausys has secured its business profitability and built its competitive edge to reach the 'Phase 1' goal of 'Turn Around'. During the following 'Phase 2' period, LG Hausys aims to transform its business structure and reinforce its preparedness for the future so as to focus on profitable shared growth.



## Historical Milestones



## LG Hausys at a Glance

<p>Sales</p> <p><b>2,768.6</b> KRW billion</p>	<p>Overseas Sales</p> <p><b>933.5</b> KRW billion</p>	<p>Employees in Korea</p> <p><b>3,242</b> persons</p>
<p>Operating Profit</p> <p><b>150.1</b> KRW billion</p>	<p>Ratio of Overseas Sales</p> <p><b>34%</b></p>	<p>Employees abroad</p> <p><b>1,219</b> persons</p>

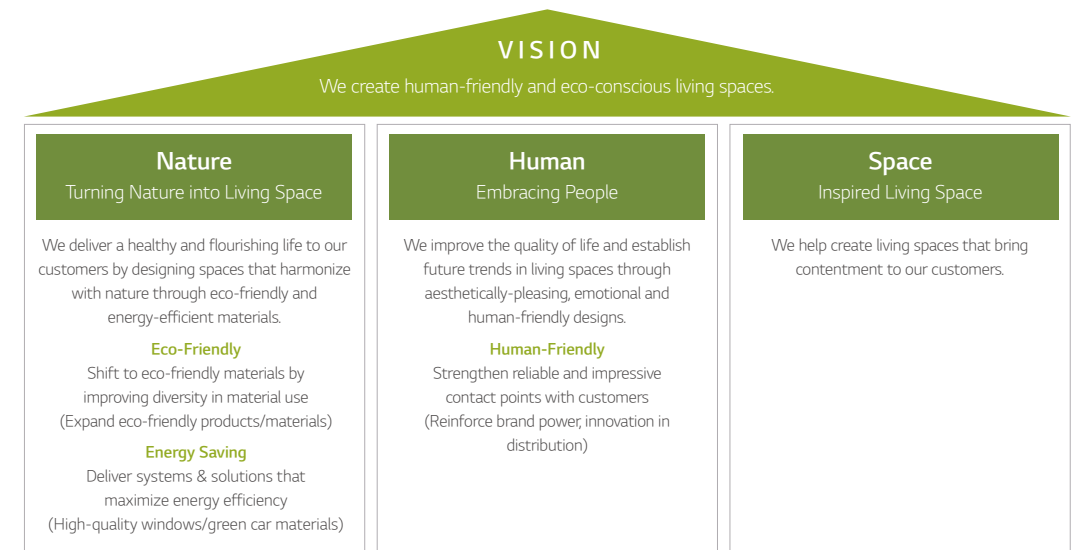


# VISION AND KEY PERFORMANCE FRAMEWORK FOR SUSTAINABILITY MANAGEMENT

Our vision at LG Hausys revolves around "creating eco-conscious, human-friendly living spaces." We aim to provide energy-saving and eco-friendly products, help create human-friendly spaces and set the future trend for living spaces. Our vision to pursue harmony between nature and people guides our endeavors to identify material issues for our stakeholders and to disclose relevant achievements.

The issues we identified as having the greatest impact on our internal/external stakeholders in 2015 were : securing growth engines through technology development, broadening global market presence, expanding green products, promoting a safe workplace, building an organizational culture, and ensuring shared growth with our suppliers.

(Please refer to pages 10-11 for the materiality analysis process)



	Material Issues in 2015	2015 Achievements	2016 Goals	Strategy and Mid/Long-term Goals	Report Details
<p>“ We create human-friendly and eco-conscious living spaces. ”</p>	<p><b>Harmony with SPACE</b></p> <ul style="list-style-type: none"> <li>Secure growth engines through sustained technology development</li> <li>Broaden global market presence</li> </ul>	<ul style="list-style-type: none"> <li>R&amp;D outcomes                             <ul style="list-style-type: none"> <li>Gained the NET certification for automotive component (Injection molding of bumper back beam)</li> <li>Gained the NET certification for low-lead sheet flooring used for ships</li> <li>Won the Jang Young-Shil Award for automotive skin that reduces carbon emissions</li> <li>Developed high-insulation Complete windows, semi-non-combustible organic insulation, etc.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Energy-saving building &amp; decorative materials                             <ul style="list-style-type: none"> <li>To enhance customer convenience and safety functionality of Complete windows , and widen the application of high-performance insulation</li> </ul> </li> <li>Acceleration of automotive parts development                             <ul style="list-style-type: none"> <li>To expand the line-up of lightweight automotive parts, and develop automotive skin that simulates the subtle quality of natural skin</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>To secure technological competitiveness based on fundamental processing technology</li> <li>To lead the market through technological convergence in the energy-saving and green product area</li> <li>To strengthen open innovation to respond to the rapidly-changing technology landscape</li> </ul>	<p><b>Material Issues 1</b> Strengthening Product R&amp;D Capability</p>
		<ul style="list-style-type: none"> <li>Completed the construction of an automotive skin plant in North America/ Invested in the expansion of the No. 2 engineered stone production line</li> <li>Initiated the operation of a flooring plant by the Wuxi branch in China</li> <li>Opened branches in Dubai and Jakarta</li> </ul>	<ul style="list-style-type: none"> <li>To increase the sales of overseas business</li> <li>To lay the foundation to become global No.1 in automotive skin and surface materials</li> <li>To accelerate growth in the Middle East and Southeast Asia</li> </ul>	<ul style="list-style-type: none"> <li>To accelerate strategic business and regional growth</li> <li>To become global No.1 in automotive skin and surface materials</li> </ul>	<p><b>Material Issues 2</b> Expanding Global Market Reach</p>
	<p><b>Harmony with NATURE</b></p> <ul style="list-style-type: none"> <li>Develop new eco-friendly products in a sustained manner</li> <li>Reduce the environmental impact of products throughout their life cycle</li> </ul>	<ul style="list-style-type: none"> <li>Expanded green products (eco-friendly and energy-saving products) : Launched ZEA Fresh wallpaper, ZEA Sorjam flooring, Super Save Window series 3, 5, 7, PF insulation, etc.</li> <li>Reached 19.7% in the ratio of sales of new green products</li> </ul>	<ul style="list-style-type: none"> <li>To develop new eco-friendly and energy-saving materials</li> <li>To reach 24% in the ratio of sales of new green products</li> </ul>	<ul style="list-style-type: none"> <li>To lead the green product market by developing new green materials and expanding green products</li> </ul>	<p><b>Material Issues 3</b> Enlarging Eco-friendly Product</p>
		<ul style="list-style-type: none"> <li>Establish workplace safety</li> </ul>	<ul style="list-style-type: none"> <li>Decreased year-on-year injury ratio by 31%, and company-wide EHS accidents by 25%</li> <li>Operated the company-wide Safety and Environment Committee</li> <li>Offered workplace safety expert training and company-wide online training</li> </ul>	<ul style="list-style-type: none"> <li>To reduce company-wide EHS accidents by 50% from the previous year</li> <li>To set thorough assessment and management criteria for high-risk facilities</li> <li>To strengthen the safety management capacity of managers</li> </ul>	<ul style="list-style-type: none"> <li>To reduce workplace safety accidents to "Zero"</li> <li>To establish safety-driven culture</li> <li>To secure a safe workplace and business continuity</li> </ul>
	<p><b>Harmony with HUMAN</b></p> <ul style="list-style-type: none"> <li>Build an employee-friendly organizational culture</li> <li>Support suppliers and pursue shared growth</li> </ul>	<ul style="list-style-type: none"> <li>Undertook working-level driven activities to improve the 'Working Culture'</li> <li>Undertook future-oriented activities through employee engagement</li> </ul>	<ul style="list-style-type: none"> <li>To accelerate change in organizational culture and the organizational-level 'F4' initiative</li> <li>To launch idea contest programs based on open innovation</li> </ul>	<ul style="list-style-type: none"> <li>To build a market-leading organizational culture</li> </ul>	<p><b>Material Issues 5</b> Building Market-leading Organizational Culture</p>
		<ul style="list-style-type: none"> <li>Promoted a culture of fair collaboration : Signed the standard subcontracting agreement, integrated the four Fair Trade Principles in purchasing policy</li> <li>Strengthened financial support, quality/technology development support, staff/training support and management support</li> <li>Offered CSR support : Conducted CSR assessment on suppliers (117 domestic suppliers), selected the targets of CSR management among suppliers of the U.S. branch</li> <li>Reinforced support for tier 2 suppliers by introducing a mutually-beneficial payment system</li> </ul>	<ul style="list-style-type: none"> <li>To reinforce the preliminary review of subcontracting transactions</li> <li>To expand shared growth support and discover additional projects</li> <li>To conduct CSR risk assessment on domestic suppliers and extend its scope to include overseas suppliers</li> <li>To increase the No. of banks that support the mutually-beneficial payment system (2→4)</li> </ul>	<ul style="list-style-type: none"> <li>To create a conducive environment for fair trade</li> <li>To help suppliers build fundamental competitiveness</li> <li>To strengthen communication with suppliers and external communication</li> </ul>	<p><b>Material Issues 6</b> Shared Growth and Mutually Beneficial Support</p>

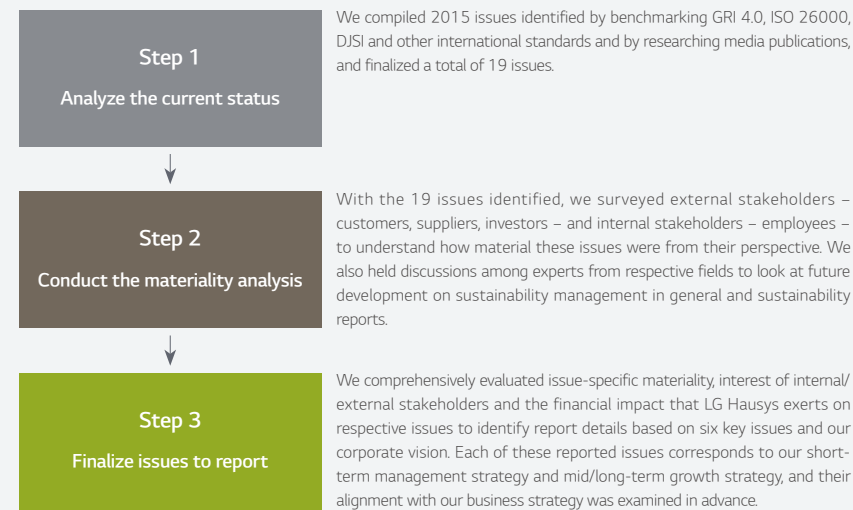
# MATERIALITY ANALYSIS PROCESS

LG Hausys defines shareholders & investors, employees, customers, suppliers, and local communities as its key stakeholders in accordance with their role, influence, and responsibility, out of the individuals and organizations who interact with the company in its business conduct. The LG Hausys Sustainability Report 2016 illustrates the major issues of 2015 in alignment with its vision "Harmony with Nature, Human and Space."

We at LG Hausys will closely communicate with our stakeholders to understand their issues of interest and expectations so that we can establish sustainability management that advances hand in hand with stakeholders.

Communication Channel with Key Stakeholders	Key Stakeholder Issues in 2015
<b>Shareholders/ Investors</b> Company presentations, disclosures, etc.	They expect fair compensation on the company's investment activities – securing growth engines, tapping the global market, etc.
<b>Employees</b> Labor-Management Council, counseling, etc.	They expect to work in a safe and pleasant workplace with HR systems that allow individuals to reach their full potential.
<b>Suppliers</b> Supplier presentations, meetings, etc.	They expect that ethical business relationships be established through a fair and transparent selection process, and need diverse mutually-beneficial support systems.
<b>Local Communities</b> Volunteer activities	They are interested in LG Hausys' social-giving initiatives including the production of eco-friendly products and the preservation of a safe workplace that minimize any negative impact in relation to economy, the environment and society.
<b>Customers</b> VOC, Z-ENNE, social network, etc.	They expect that diverse LG Hausys products and services be delivered safely and that seamless communication take place with the company and other customers.

## Identification of Key Issues



## Reported Issues by Stakeholder Group

<b>Shareholders/Investors</b> Strengthening Product R&D Capability Harmony with Space 1.	<b>Customers</b> Enlarging Eco-friendly Product Harmony with Nature 1.	<b>Employees</b> Building Market-leading Organizational Culture Harmony with Human 1.
<b>Shareholders/Investors</b> Expanding Global Market Reach Harmony with Space 2.	<b>Local Communities</b> Operation of Eco-friendly and Safe Workplaces Harmony with Nature 2.	<b>Suppliers</b> Shared Growth and Mutually Beneficial Support Harmony with Human 2.

# KEY ISSUE IDENTIFICATION PROCESS

The LG Hausys Sustainability Report 2015 represents our fifth such report and describes selected issues that were of high interest to our stakeholders. We identified a total of 19 sustainability management issues that emerged in 2015 by referring to international sustainability management standards, sustainability reports of leading Korean and overseas companies, media reports on LG Hausys' sustainability management, and stakeholder survey. In 2015, we also hosted panel meetings attended by outside experts to reflect their feedback in identifying key issues.

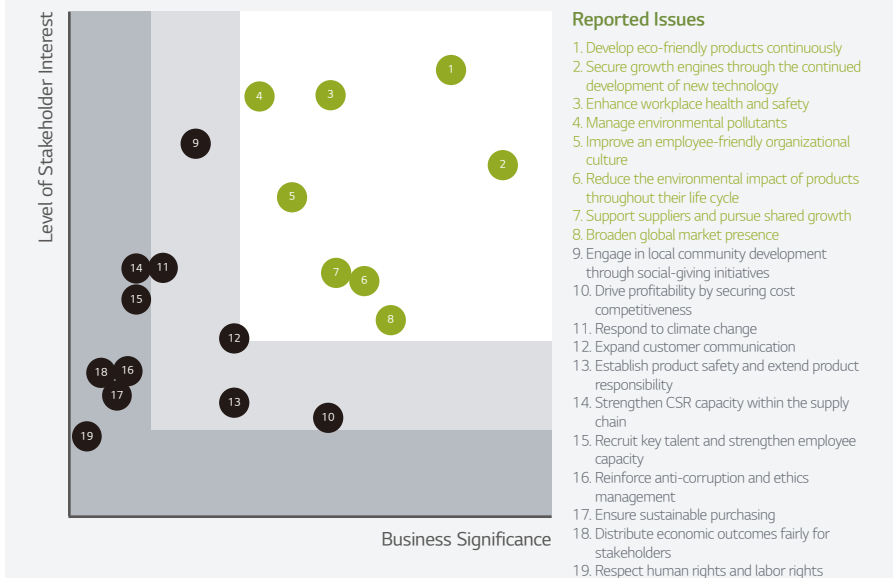
## STEP 1. Pool of Issues

<b>Economy</b> <ul style="list-style-type: none"> <li>Drive profitability by securing cost competitiveness</li> <li>Broaden global market presence</li> <li>Secure growth engines through the continued development of new technology</li> <li>Strengthen anti-corruption and ethics management</li> <li>Distribute economic outcomes fairly for stakeholders</li> </ul>	<b>Society</b> <ul style="list-style-type: none"> <li>Support suppliers and pursue shared growth</li> <li>Strengthen CSR capacity within the supply chain</li> <li>Respect human rights and labor rights</li> <li>Improve an employee-friendly organizational culture</li> <li>Recruit key talent and strengthen employee capacity</li> <li>Secure product safety and extend product responsibility</li> <li>Expand customer communication</li> <li>Engage in local community development through social-giving initiatives</li> </ul>
<b>Environment</b> <ul style="list-style-type: none"> <li>Enhance workplace health and safety</li> <li>Respond to climate change</li> <li>Reduce the environmental impact of products throughout their life cycle</li> <li>Manage environmental pollutants</li> <li>Develop eco-friendly products continuously</li> <li>Ensure sustainable purchasing</li> </ul>	

## STEP 2. Issue Selection Process

<b>Outcomes of stakeholder survey</b>	To understand stakeholder expectations on material issues in further detail, we surveyed 2,256 stakeholders – employees, customers, suppliers and external stakeholders – between Dec. 15 <sup>th</sup> and Dec. 22 <sup>nd</sup> 2015.
<b>Media research</b>	We analyzed material issues from the media perspective based on reports published on LG Hausys between Jan. 1 <sup>st</sup> and Dec. 31 <sup>st</sup> 2015.
<b>Panel discussion with stakeholders</b>	We hosted discussions attended by experts in diverse fields to look at future development on sustainability management in general and sustainability reports, and integrated issues discussed into the outcomes of the materiality analysis.

## STEP 3. Issues Presented in This Report



## Key Issues and Relevant Report Contents

Harmony with Space Strengthening Product R&D Capability Expanding Global Market Reach	Harmony with Nature Enlarging Eco-friendly Product Operation of Eco-friendly and Safe Workplaces	Harmony with Human Building Market-leading Organizational Culture Shared Growth and Mutually Beneficial Support
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## MATERIAL ISSUES

# Nature, Human and Space

LG Hausys' vision, "We create human-friendly and eco-conscious living spaces," inspires our employees to achieve the highest level of customer value. In so doing, we deliver eco-friendly, energy-efficient materials and products while highlighting attractive and human-friendly design principles so as to bring contentment to our customers in their living space.

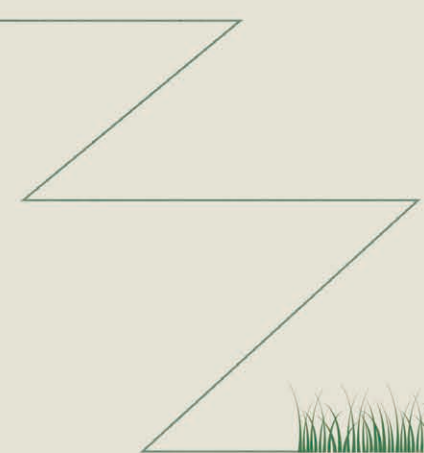
### Harmony with Nature

Enlarging Eco-friendly Product  
Operation of Eco-friendly and Safe Workplaces



### Harmony with Space

Strengthening Product R&D Capability  
Expanding Global Market Reach



### Harmony with Human

Building Market-leading Organizational Culture  
Shared Growth and Mutually Beneficial Support



# Strengthening Product R&D Capability

With a higher standard of living comes increasing customer needs for better performance and outstanding design qualities. At LG Hausys, respective business units, research labs and the design center are seamlessly aligned to lead the market and to develop products that cater to such customer needs. Our endeavors to strengthen R&D capacity include attending the LG Techno Conference, operating customized courses, providing wide-ranging recruitment and talent-fostering programs, and continuously investing in industry-academia R&D programs.

Occasions to be honored at the global top 3 design awards\* (As of Feb. 2016)

47

\* iF, IDEA, and reddot awards

Certifications and awards granted in Korea and abroad (As of the end of 2015)

13



## [ Achievement and Goal ]

### Conduct R&D



#### Principle & Strategy

- Secure technological competitiveness based on fundamental processing technology
- Lead the market through technological convergence in the energy and green fields
- Strengthen open innovation to respond to the fast-changing technological environment

#### 2015 Achievement

- Building & decorative materials
  - Gained the NET certification for low-lead sheet flooring for ships
  - Developed high-insulation Complete windows and semi-non-combustible organic insulation
- Automotive materials & parts
  - Gained the NET certification for the injection molding of bumper back beam
  - Won the Jang Young-Shil Award for carbon emission-reducing automotive skin

#### 2016 Goal

- Energy-saving building & decorative materials
  - To improve the customer convenience and safety of Complete windows, and extend the application of high-performance insulation
- Acceleration of the development of automotive materials and parts
  - To extend the lightweight automotive parts line-up, and develop automotive skin that delivers emotional qualities of natural skin

### Strengthen research capacity



#### Principle & Strategy

- Strengthen the recruitment of R&D talent in Korea and abroad

#### 2015 Achievement

- R&D investment : KRW 55.8 billion (Up by 24.2% from 2014)
- External cooperation : Signed the mid/long-term industry-academia cooperation agreement with the Seoul National University

#### 2016 Goal

- To increase R&D investment and staff

## Strengthening R&D Activity and Capacity

Our research labs and design center play a leading role in strengthening our R&D and design capacity. We will place customer convenience first in conducting research and design development in the upcoming years.

### R&D Activity

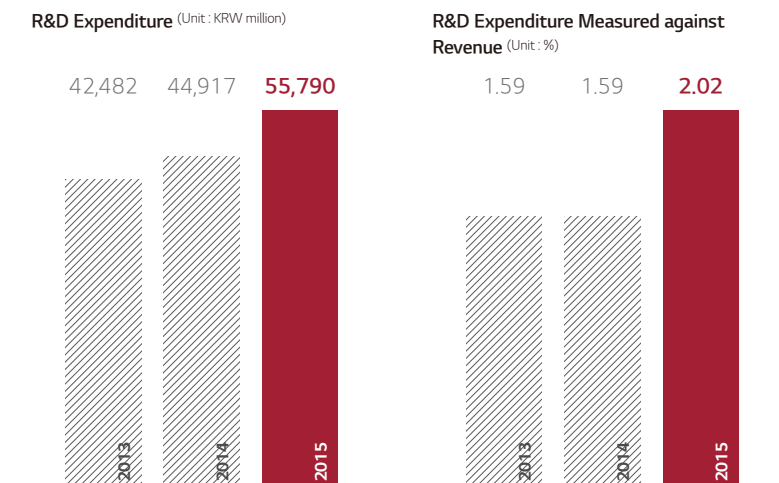
Our research labs take the leading role in performing research in close alignment with such business areas as building & decorative materials, automotive materials & parts and high-functional materials while developing customer-friendly products.

#### → R&D Activity at a Glance

The history of LG Hausys' research labs goes back to 1989 when the Processing Technology Research Center was established. Starting with plastic processing technology, the scope of our R&D endeavors continued to expand to include natural, inorganic, bio-degradable and composite materials.

Research Area	Main Outcomes	Research Priority
Energy-saving	<ul style="list-style-type: none"> <li>• Low-E glass</li> <li>• High-performance insulation</li> </ul>	<ul style="list-style-type: none"> <li>• Maximize the insulation of windows, along with reducing the use of energy in buildings</li> <li>• Secure insulation performance and fire safety</li> </ul>
Eco-friendly building & decorative materials	<ul style="list-style-type: none"> <li>• Eco-friendly flooring and wallpaper</li> </ul>	<ul style="list-style-type: none"> <li>• Develop products safe for humans and the environment by using corn-based polylactic acid (PLA)</li> </ul>
Functional fabric/film	<ul style="list-style-type: none"> <li>• Green fabric</li> <li>• Transparent adhesive film, industrial adhesive/pressure-sensitive adhesive film</li> </ul>	<ul style="list-style-type: none"> <li>• Contribute to reducing GHG emissions by developing pollution-resistant, highly-durable and eco-friendly fabric through the use of bio-based plastics</li> <li>• Develop functional adhesive/pressure-sensitive adhesive materials that offer greater convenience in everyday life</li> </ul>
High-strength, lightweight materials	<ul style="list-style-type: none"> <li>• High-strength, lightweight composite materials</li> </ul>	<ul style="list-style-type: none"> <li>• Contribute to improving mileage and fuel efficiency by developing lightweight automotive materials and researching on the enhancement of shock resistance performance</li> </ul>

### R&D Expenditure





→ R&D Achievement in 2015

The focus of our R&D endeavors at LG Hausys is to strengthen the structural competitiveness of our existing business and to discover new business areas for future growth while building a user-driven development system to create products that deliver the highest-possible customer satisfaction. We will continue to conduct R&D on customer-friendly products that are both eco-conscious and safe to use so as to emerge as a global leading company.

**High-Performance Insulation (PF Insulation)**

• Used for wall construction, our high-performance insulation materials deliver insulation and fire safety qualities simultaneously, and their insulation performance is unrivaled in the domestic organic insulation market. We plan to extend their application beyond construction.

**Energy-Saving Windows (Grade 1 Complete windows)**

• We integrated our sophisticated insulation design technology profile with Low E glass enabled by nano silver lamination technology to release grade 1 Complete windows (window where its frame and Low E glass are integrated) represented by 'Super Save' series into the market. (Grade 1 energy efficiency in insulation design)



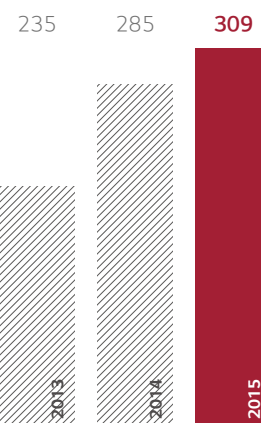
**Automotive Skin and Lightweight Components**

• Skin : Our bio materials-based synthetic automotive skin contribute to reducing GHG emissions \*, and we successfully adopted lamination fluids, that generate less odors and no harmful gas, for such skin products in order to improve the air quality within the automobile interiors.

\* The use of bio-based materials helps reduce CO<sub>2</sub> emissions by 1.2kg per kg.

• Lightweight Component : We develop high-strength and lightweight materials and products for eco-friendly modes of transportation (electric vehicles), which contributes to improving automobile mileage and fuel efficiency. Our insert injection molding technology that uses CFT (continuous fiber thermoplastic) to produce bumper back beams was granted the NET certification in 2015.

**R&D Workforce between 2013 and 2015** (Unit : No. of persons)



**Recruiting R&D Talent in Korea and Abroad and Forging Mid/Long-Term Industry-Academia Cooperation**

To recruit and foster qualified R&D talent with master's degrees and PhDs in Korea and abroad, we attended the LG Techno Conference and offered varied events and programs – customized industry-academia research courses – in 2015. We also cooperate with academia, government-invested research institutes and other companies to reinforce our R&D capacity.

→ Recruiting and Fostering Outstanding R&D Talent in Korea and Abroad

LG Techno Conference • We attended the LG Techno Conference to recruit researchers with master's degrees and PhDs as a way to secure talented R&D workforce. In 2015, we hired researchers mainly in the fields of polymer and automotive materials & components. We are determined to seek out qualified talent so that we can secure competent R&D workforce.

Customized Industry-Academia Research Courses • We opened customized research courses with Korea University and Hanyang University. We assist undergraduates whose passion is to conduct R&D in continuing their education into graduate courses, and when they join LG Hausys after graduation, we allow them to work on research projects closely aligned with their graduate courses as a way to foster talent with job readiness.

→ Forging Ties with Academia and Research Institutes

We cooperate with such prestigious universities in Korea as the Seoul National University and KAIST, and conduct joint research with government-invested research institutes (Korea Institute of Civil Engineering and Building Technology, Korea Conformity Laboratories, etc.). Such external

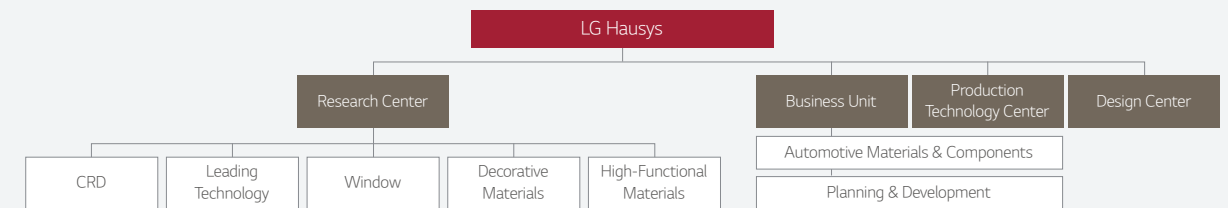
collaboration enables us to discover new technology that will evolve into future growth engines.

Forging Mid/Long-Term Industry-Academia Cooperation with SNU • We signed a 5-year mid/long-term industry-academia cooperation agreement with the College of Engineering, Seoul National University (SNU),

that began in 2015. In 2015, a total of four joint research projects were undertaken to deepen cooperation in securing fundamental technology and accelerating the development of key projects. SNU professors were invited to seminars and technical advices was provided to help build our internal capacity.

**[ R&D Organization and Development Process ]**

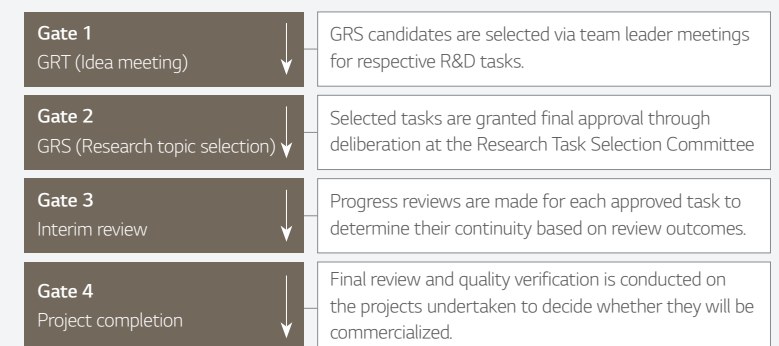
**R&D Organization** • Our R&D organization consists of research labs, Production Technology Center, Design Center, and a planning & development unit under the Automotive Materials & Components division. Our research labs are further categorized into CRD\*, Leading Technology, Window, Decorative Materials, and High-Functional Materials groups.



Organization	Group	R&R
Research Center	CRD*	• Discover growth engines by studying fundamental/platform technology and research on the living environment • Conduct reliability study and analysis to improve development, quality and competitiveness
	Leading Technology	• Undertake research projects on new technology/business and commercialize them early on
	Window	• Develop high-functional windows (energy-saving, noise attenuation, insulation) • Develop laminated glass by using inorganic thin film materials and lamination technology
	Decorative Materials	• Research on base film, green materials and energy-saving insulation materials based on polymer processing technology
	High-Functional Materials	• Research on electronic devices and industrial adhesive films based on polymerization and lamination processing technology
Business Unit	Automotive Materials & Parts	• Research lightweight automotive materials based on composite processing and structural design technology
	Planning & Development	• Develop automotive interior materials through polymer processing technology and research on green materials
Production Technology Center		• Study process optimization, develop new processes, and research on unit process-specific facilities and safety features
Design Center		• Provide design solutions by analyzing lifestyles, design trends and CMF (Color, Materials, Finishing) trends

\* CRD : Corporate Research & Development

**Development Process** • We have operated the Gate Review System (GRS) since 2001 to conduct phase-based reviews and take a more systemic R&D approach. Research projects undergo working-level reviews and are then finalized at the top decision-making body (GRS). The development schedule of selected projects is monitored constantly prior to the launching of new products.



Awards Granted to LG Hausys from the World's Top 3 Design Award organizations (As of Feb. 2016)



iF Design Award

31



reddot

reddot Design Award

11



IDEA Design Award

5

## Strengthening Design Activity and Capacity

LG Hausys takes the customer's perspective in understanding market trends and designing products that customers most desire. We have the largest design center in the domestic building materials industry, and we built our own unique design culture represented by 'Design Innovation'. We are also committed to fostering outstanding designers.

### Activity and Achievement

#### → Winning Design Awards

Our Design Center is dedicated to R&D endeavors that deliver new value to customers. As a result, our exceptional design capacity is being recognized by reputable international and domestic evaluators.

#### → Analyzing Trends to Develop Market-Leading Products

Our 'Design Trend Seminar' and 'Trend Forum' programs represent our commitment to creating market-leading products.

**Design Trend Seminar** • As the first of its kind, this LG Hausys initiated Design Trend Seminar celebrated its 16<sup>th</sup> anniversary in 2015. Each year, nearly 1,000 design experts attend this seminar to share information on domestic & international social/cultural issues, customer life styles and global design trends so as to forecast future design trends.

We are determined to identify environmental changes and trends beneficial to the integration of our design so that we have an ever-widening influence in the automotive, electronics and IT industries as well as the interior industry.

**Trend Forum** • Our Trend Forum allows us to analyze markets and consumer trends specific to respective business divisions to present product concepts catering to customer needs.

This is not limited to mere trend proposals but is extended to include design suggestions for new products consistent with the strategy of respective business divisions and to present the direction of mid/long-term design strategies.

#### → Collaboration with Well-Renowned Designers

We have collaborated with world-acclaimed industrial designers as Marcel Wanders, Karim Rashid, Alessandro Mendini, the Hanbok designer Lee Hyo-Jae and the architect Zaha Hadid as well as other prominent domestic and overseas designers in order to provide our customers with unique designs that set us apart from other competitors.



1. Design Trend Seminar  
2, 3. Attending the Milano Design Week



2

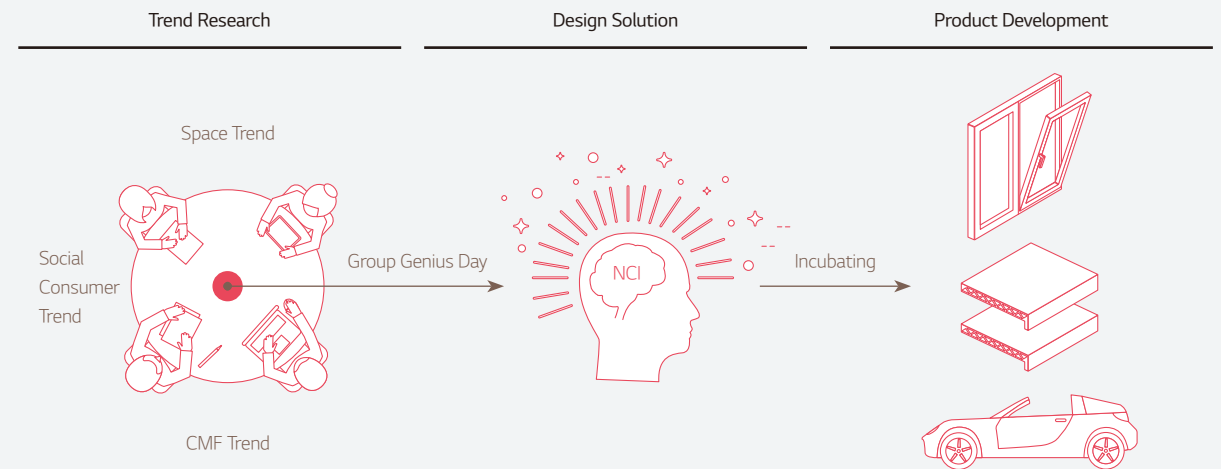


3

[ Preceding development driven by customer insight ]

## Design Innovation

LG Hausys' Design Innovation transforms ideas into pilot products through design incubations grounded by our motto 'Find uncut diamonds and turn them into invaluable jewels'. The products developed through this process are extremely well-received among customers.



Trend Research	Social Consumer Trend	Track down the underlying psychology behind today's environment and lifestyle based on contextual relationship analyses, and use the outcomes to identify strategic implications.
	Space Trend	Identify diverse elements that bring spatial changes to predict what spaces will look like in the near future and analyze spaces from the LG Hausys product-integrative perspective.
	CMF Trend	Discover and suggest new materials that deliver customer value by analyzing CMF (Color, Materials, Finishing) trends and studying materials-specific trends.
Design Solution	Group Genius Day	Designers from diverse fields gather together to apply the trend research and generate new solutions in a collective and intelligent program format.
	NCI System	Adopt the customers' perspective to freely suggest New Creative Ideas.
	Incubating	Diverse ideas identified by the NCI System are refined through expert mentoring and developed into pilot products.
Product Development	Product ideas that have been evolved along the way are materialized into final products and released to customers.	



Harmony with Space

# Expanding Global Market Reach

LG Hausys presents differentiated products in China, the U.S. and other regions of the world, and delivers customer-friendly products by building overseas sales and production bases to integrate customer needs from the initial development phase. Providing market-specific solutions and sales operations based on the needs of key stakeholders is what sets us apart from the competition. We define the U.S., China, India and other emerging countries as our key markets, and focus on competitive products in line with market specificities and customer requirements. Furthermore, we place our products in overseas landmark buildings, attend global exhibitions and collaborate with renowned designers so as to enhance our brand awareness and continuously broaden our global reach.

Ratio of overseas business in sales

34%



Sales in overseas business  
**933.5** KRW billion

## [ Achievement and Goal ]

### Secure and accelerate production bases



#### Principle & Strategy

Localize and accelerate production mainly in the U.S. and China

#### 2015 Achievement

- Complete the construction of an automotive skin plant in the U.S.
- Invested in the expansion of the 2<sup>nd</sup> engineered stone line in the U.S.
- Initiated the operation of a flooring plant in Wuxi, China
- Overhaul the environmental/safety facility of the Tianjin Plant in China

#### 2016 Goal

- To increase the sales of overseas business
- To operate the 2<sup>nd</sup> engineered stone line in the U.S.

### Build and strengthen sales bases



#### Principle & Strategy

Discover new growth opportunity by expanding emerging market presence

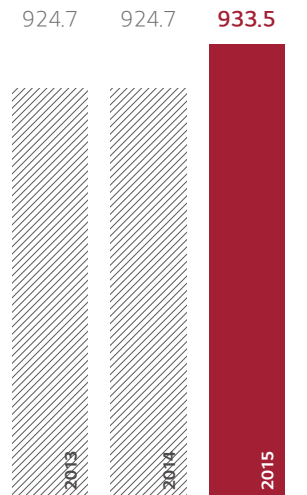
#### 2015 Achievement

- Established branches in Dubai and Jakarta
- Integrated the European sales bases

#### 2016 Goal

- To accelerate growth in the Middle East/Southeast Asia
- To broaden and strengthen local workforce in India

Sales in Overseas business (Unit : KRW billion)



## Strengthen Global Market Presence

LG Hausys is establishing bases in major locations to efficiently tap the global market and building a differentiated status through green products and customer-driven sales operation.

### Building Production Bases in Key Markets in 2015

In 2015, we further localized our production in the U.S. and China while widening and reinforcing our sales base in the emerging markets of the Middle East, Southeast Asia, India and Turkey.

#### → Completing the Construction of an Automotive Skin Plant in the U.S.

Our automotive skin plant was completed in Georgia, the U.S. in December 2015. The plant will initiate mass-production in March 2016 with annual capacity of six million m<sup>2</sup>. This will enable us to advance into the North American automotive market and to increase our global market share.

#### → Operating the 2<sup>nd</sup> Production Plant in Wuxi, China

Since June 2015, our 2<sup>nd</sup> production plant in Wuxi, Jiangsu Province, China has been producing flooring products. Its facility will be expanded in phases to manufacture automotive sheets and high-functional

materials so as to position itself as our production hub in China.

#### → Expanding the Engineered Stone Production Line in the U.S.

As the recovery of the U.S. construction market is boosting demand for high value-added premium products with differentiated designs, we are investing in expanding the 2<sup>nd</sup> engineered stone production line to start mass-production from July 2016. The new and differentiated products manufactured at the plant will enable us to top the North American market.

### Moving ahead of the Competition through Green Products and Customer-Driven Sales

Since global regulations on energy consumption and eco-friendly materials continue to grow ever more stringent, our global customers may continue to increase their demand for green products. Thus, we identify customer needs for energy-saving windows & insulations, and non-toxic

decorative materials, to deliver eco-friendly products.

#### → Making It to the 'Top 10 Green Building Materials Brands' in China for Three Consecutive Years (2014-2016)

LG Hausys became the 1<sup>st</sup> Korean company to be ranked in the 'Top 10 Green Building Materials Brands' for three consecutive years (2014-2016) at the Top China Real Estate hosted in Beijing, China. This feat is attributable to our achievement in reducing TVOC (Total Volatile Organic Compounds) emissions and enhancing anti-bacterial and anti-viral performance.

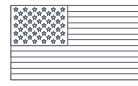
### Raising Global Brand Awareness

To enhance our brand awareness and present the remarkable functionality and design of our products to global customers, we attend numerous global exhibitions including Domotex Asia (Shanghai), Astana Build, NeoCon and the Big 5-International Building and Construction Show (Dubai).

## Nurturing Market-Leading Business by Region

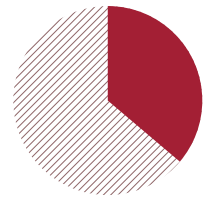
LG Hausys defines the U.S., China and emerging markets including India as our key markets and intensively nurtures those businesses selected for their great potential in each of these markets. To this end, we analyze market-specific conditions and build distribution and other cooperative relationships with stakeholders.

USA



Ratio of Sales by Region in 2015

38%



### U.S.

North America represents the world's largest decorative and automotive materials market, and our localization strategy focuses on acrylic solid surface, automotive skin, etc. Our HI-MACS (acrylic solid surface) and engineered stone plants are based in Atlanta, Georgia, and the engineered stone plant is currently under expansion. We secure the diversity of our distribution channels, including the largest building materials distributions within the U.S., to increase our market share.

Furthermore, our automotive skin plant in Georgia, once completed, will initiate operations in 2016. This will allow us to gradually raise our market share in the U.S.



CHINA



### China

In China, our localization strategy highlights such building materials as windows and flooring, and our market share is growing as the Chinese market recognizes the remarkable eco-friendly quality of our products.

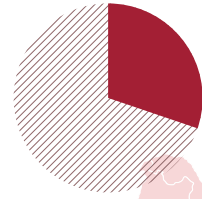
In 2015, we were the No.1 foreign building materials company in terms of market share in the window and flooring segments, and we are solidifying our position in the mid/high-priced premium building materials market.

Furthermore, we are establishing a local distribution network by strengthening our partnership with local retail channels while offering differentiated value to customers from production to distribution.

We also improved the overall environmental/safety facilities of our Tianjin plant to secure its eco-friendliness.

Ratio of Sales by Region in 2015

30%



Ratio of Sales by Region in 2015

5%



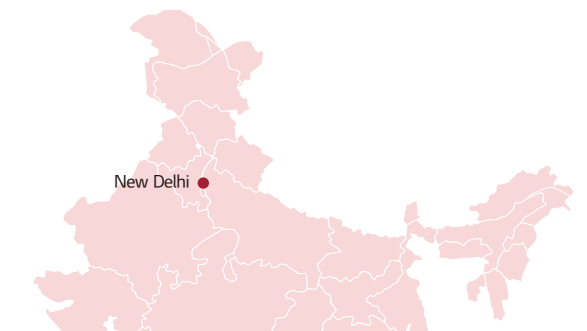
INDIA

### India

With a population of 1.2 billion, India is the world's largest emerging market and is considered to have an even greater potential than China. Therefore, LG Hausys is aggressively advancing into this market mainly in the home appliance surface materials segment.

We are launching products that satisfy the design trends of the Indian market, raising our brand awareness through customized design and regularly-hosted seminars, and discovering new customers.

Our goal in India is to respond to customer demand in a proactive and prompt manner in the local home appliance surface materials market to firmly position us as the leader with the highest market share. We will also focus our marketing capabilities in the HI-MACS (acrylic solid surface) segment to strengthen our No.1 status.



OTHER REGIONS

### Other Regions

The Middle East, Southeast Asia and other emerging regions are witnessing a rapid growth in the size of their decorative materials market. In Europe, we are taking a proactive export strategy with our decorative surface materials and acrylic solid surface.

It is through deep localization – attending local exhibitions and developing products that cater to specific customer life styles – that we tap into these emerging and European markets. Additionally, we opened new branches in Jakarta and Dubai to further drive our localization strategy.

#### → Flagship Products

- Middle East, Southeast Asia : Surface materials, wallpaper, flooring, etc.
- Europe : Decorative surface materials, surface materials, automotive materials, etc.

Ratio of Sales by Region in 2015

27%



Harmony with Nature

# Enlarging Eco-friendly Product

As social demand continues for products that are safe for humans and the environment and save energy consumption, the sales of our green products is growing accordingly. As such, LG Hausys is moving towards the goal of providing healthy green products and materials (Eco-Friendly), delivering systems and solutions that maximize energy efficiency (Energy-Saving), and evolving into a human-friendly company by interacting with our customers in a trustworthy and heartfelt manner (Human-Friendly). We establish our Green Identity from the mid/long-term perspective to offer sustainable products as well as the 'Eco Collection' composed of green products by using eco-conscious materials and developing products with high energy-efficiency.

Ratio of new green products\* in sales

# 19.7%

\* The calculation of the sales of new green products is based on decorative materials and windows

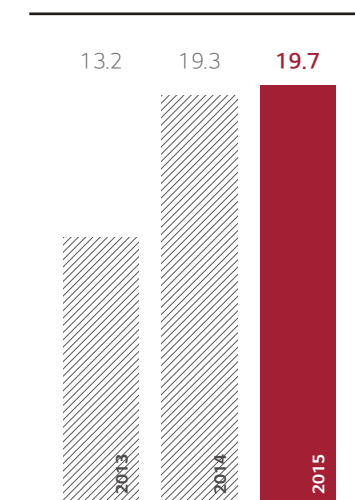
Products certified as green product\*

# 113

\* Korea Eco Label, HB Mark, and Carbon Reduction Label



Change in the Ratio of New Green Products in Sales\* (Unit: %)



\* The sales of new green products were calculated based on decorative and window materials.

## [ Achievement and Goal ]

### Expand the green product market



#### Principle & Strategy

- Widen new green products
- Increase the sales of green products

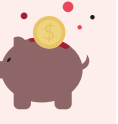
#### 2015 Achievement

- Launched new products : ZEA Fresh wallpaper and the eco-friendly noise attenuating flooring 'ZEA Sorijam'

#### 2016 Goal

- To raise the ratio of green products in sales to 10% (Against the sales of the concerned business division)

### Expand the energy-saving product line-up



#### Principle & Strategy

- Expand new energy-saving products
- Increase the sales of energy-saving products

#### 2015 Achievement

- Launched new products : Super Save window series 3,5,7, as well as PF insulation and fire-resistant PF fire belt

#### 2016 Goal

- To raise the ratio of energy-saving products in sales to 21% (Against the sales of the concerned business division)

## Strengthening Green Product Solutions

At LG Hausys, our products are created on the basis of our 'Green Identity'. Our product development follows the three key values : 'Eco-Friendly' that uses green materials to deliver a healthy and pleasant living space, 'Energy-Saving' that prefers high-efficiency products and lightweight materials to reduce energy consumption, and 'Human-Friendly' that helps address such eminent social issues as preventing fire and reducing inter-floor noise.

### [ LG Hausys Green Identity ]

Eco-Friendly	PLA Materials	• Eco-friendly and plant-based resin PLA materials	• ZEA Sheet, ZEA Maru, ZEA wall covering
	Eco-Friendly Materials	• Materials that reduce CO <sup>2</sup> emissions • PET materials	• Olefin materials, bio automotive skin Neuzen • Glossy Film- High-hardness glossy film
Energy Saving	High-Efficiency Energy-Saving Products	• Reduction in heating cost • 1.0W/m <sup>2</sup> k or under in insulation performance	• Super Save series 3,5,7 • High-performance double Low-E glass
	Improvement in Fuel Efficiency	• Reduction in fuel cost • Improvement of the air quality	• Glass fiber lightweight automotive parts
Human-Friendly	Improvement in the Living Environment	• Reduction in inter-floor noise • Attenuation of lightweight floor impact sound • Non-slip	• ZEA Sorijam • Non-slip flooring
	Fire Safety	• Semi-non-combustible performance • Fire prevention performance	• PF insulation • Fire-resistant PF fire belt • Flame-resistant interior film



## Developing New Green Products

We strive to adopt natural and recycled materials and improve energy saving as a way to increase the sales of new green products while expanding new green business by developing eco-conscious technology. In 2016, we will continue to strengthen our green product solutions by expanding our ZEA product line-up and developing high-performance semi-non-combustible insulation materials.

Category	New Green Product	Future Plan	
Eco-friendly materials	PLA materials	ZEA line-up (flooring, wallpaper)	Lead the market in expanding general-purpose products
	Green materials	Olefin, bio automotive skin Neuzen	Develop automotive skin that adopts new materials and prescriptions
	PET materials	High-hardness glassy film	Expand the global market through property improvement
Energy-saving	Energy-saving windows	Super Save series 3,5,7	Develop grade 1 system windows
	Laminated glass	High-performance double Low-E glass	Extend the high-performance product line-up
	Lightweightness	Glass fiber-based lightweight automotive parts (Undercover, sheet frame, bumper back beam)	Extend the use of carbon fiber in developing automotive parts
	Improvement of the living environment	ZEA Sorijam' flooring that helps reduce noise in everyday life	Develop buffering-improved and non-slip flooring
Functional products	Fire resistance	High-performance semi-non-combustible PF insulation	Expand application to include doors, panels, etc.
		Flame-resistant interior film	Broaden the global market
	Anti-bacterial performance	Anti-bacterial interior film	Increase market share in Korea through line-up expansion

## Green Product Awards and Certifications

LG Hausys' products are widely recognized both in Korea and abroad for their excellence and contribution to broadening a culture of eco-friendliness.

### → Awards

- Listed on the Top 10 Eco-friendly Real Estate (supervised by the Chinese National Construction Company Association)
- ZEA Sorijam, ZEA wallpaper and PF boards honored with the title 'Green Product of the Year' chosen by consumers (2014- 2015, supervised by the Korea Green Purchasing Network)
- ZEA Sorijam honored with the Grand Prize in the construction segment at the 1st Environmental Mark Awards' (2015, hosted by the Ministry of Environment, supervised by the Korea Environmental Industry & Technology Institute)

### → Certification

#### Korean Certification (Unit : No. of certificates granted)

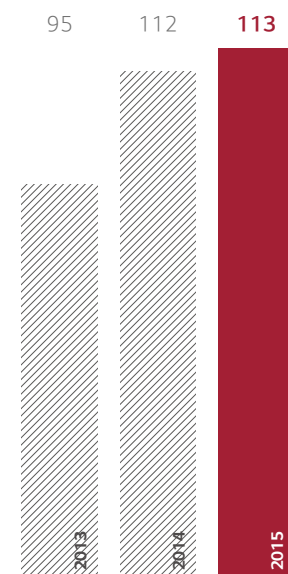
Category	2013	2014	2015	
Eco-friendly certification	Korea Eco Label	49	71	54
	HB Mark	28	27	40
	Carbon Reduction Label (Low-carbon certification)	18(2)	14(3)	19(2)
<b>Total</b>	<b>95</b>	<b>112</b>	<b>113</b>	

Category	2013	2014	2015
Energy efficiency grade scheme for windows (grade 1 to grade 5)	248	265	354



Eco-certified Products (Unit : No. of certificates granted)



## Overseas Certification

### Automotive materials & Components

Automotive sheet skin : Certified with Oeko-Tex Standard 100, an European certification for green textile products



## High-Performance Materials

- Interior film**
  - Certified with the Japanese green certification F☆☆☆☆ (Formaldehyde-free) (Supervised by the Japan Testing Center for Construction Material)
- Adhesive materials for IT devices and automobiles**
  - RoHS-certified (EU directive on the restriction of use of hazardous substances for electronic products)
- Home appliance materials**
  - Home appliance surface materials, vacuum insulation : RoHS-certified
  - Vacuum insulation : REACH-certified (EU's chemical substance management system)



## Building & Decorative Materials

- Flooring**
    - ZEA flooring : Korea's 1st C2C (Cradle to Cradle, certification granted to waste-zero products)\* certified flooring product
    - Carpet, carpet tile-applied building : Certified with the eco-friendly building certification LEED (Supervised by the U.S. Green Building Council)
  - Wallpaper, wood flooring**
    - Placed in the highest baby product class category under Oeko-tex Standard 100, an European certification system for eco-friendly textiles
  - Acrylic solid surface**
    - Acrylic solid surface : Buildings constructed with LG Hausys' acrylic solid surface products were granted the LEED certification (Supervised by the U.S. Green Building Council)
    - SCS green product certification (Supervised by the U.S. SCS Global Service)
- \* C2C (Cradle to Cradle) certification : International green product certification granted on products that can be restored to their natural state or recycled as industrial resources during their disposal process



## ECO-Collection

LG Hausys delivers systems and solutions that maximize energy efficiency by adopting natural materials and recycled resources so as to provide a trustworthy and impressive customer experience. We will continue to increase our sales of new green products and strengthen our eco-friendly product solutions.



Reduce everyday noise  
**30%**<sup>1)</sup>

Reduce energy use through  
high-insulation glass  
**40%**<sup>3)</sup>

### 1. Wall covering/materials

#### ZEA Fresh wallpaper

- Meet highest TVOC (Total Volatile Organic Compounds) HB grade criteria
- Use corn-based resin (PLA)
- Sum Tile
- Modulate indoor humidity, absorb harmful substances and deodorize

### 2. Interior film

- Use eco-friendly ink : BTX (benzene, toluene, and xylene) is almost non-existent
- Reduce the detection of phthalate-based plasticizer and HCHO (formaldehyde) to almost zero

### 3. Flooring

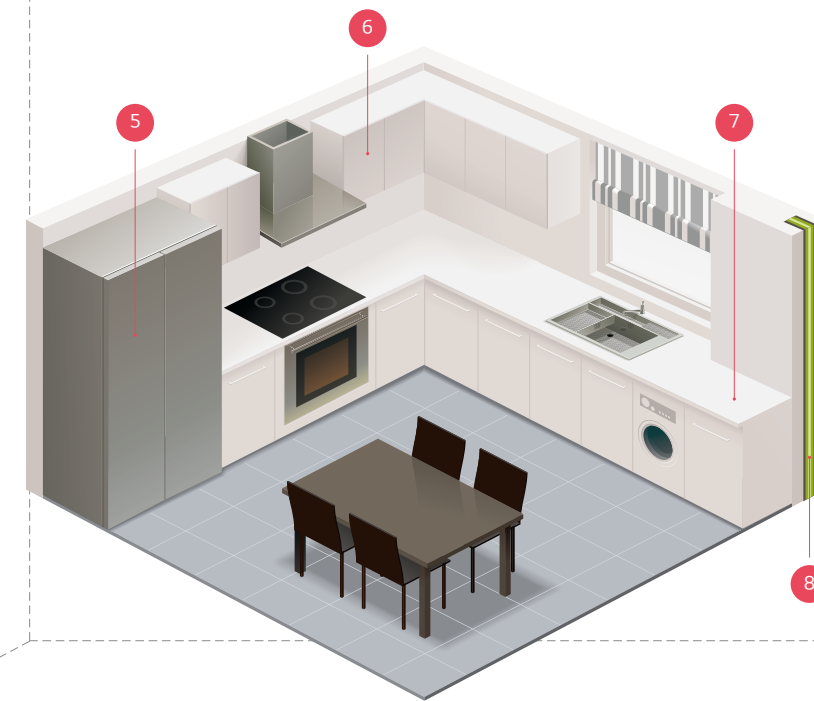
#### ZEA Sorijam

- Help attenuate inter-floor noise by reducing everyday lightweight floor impact noise\* by 30% against LG Hausys' plywood flooring<sup>1)</sup>
- Cut heating cost by 30% thanks to outstanding thermal conductivity which is 70% higher than LG Hausys' laminated flooring<sup>2)</sup>
- \* Lightweight floor impact noise : Noise generated on the floor by relatively light and hard impact (e.g. sound of sliding chairs)

### 4. Window

#### High-insulation Low-E glass

- Reduce energy consumption by 40% compared to general glass<sup>3)</sup>



Reduce heating cost through  
high-performance insulation

**20%**<sup>4)</sup>

### 9. Synthetic wood

#### Woozen

- Use such natural materials as wood chips and wood powder as well as olefin resin adopted for formula bottles and food containers to deliver outstanding durability

### 10. Automotive materials

#### Eco-friendly automotive skin

- Do not use phthalate-based plasticizer not to pose any harm to human body and thus is free from heavy metals and other harmful substances

#### Lightweight parts

- Use glass fiber to reduce weight and to improve fuel efficiency

### 5. Home appliance materials

#### PET home appliance surface materials

- Use eco-friendly resin that poses no harm to human body

#### Vacuum insulation

- Improve the efficiency of energy consumption by minimizing thermal losses

### 6. Decorative sheet

#### Glossy Film

- Use eco-friendly resin : Heavy metals (lead, mercury, cadmium, hexavalent chrome, and arsenic) are rarely detected within products
- Use eco-friendly ink : BTX (benzene, toluene, and xylene) is almost non-existent

### 7. Acrylic solid surface

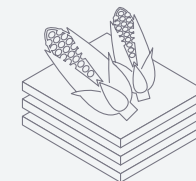
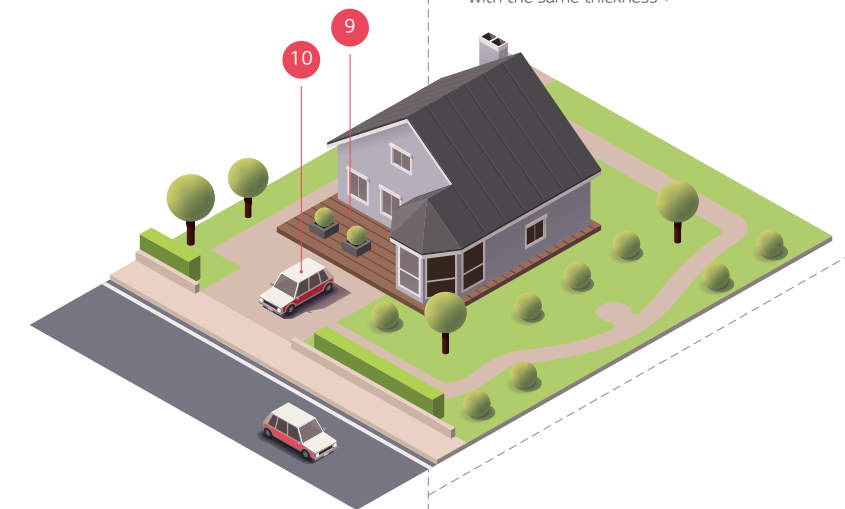
#### HI-MACSL E

- Produced through the use of recycled chips
- Alleviate concerns over bacterial reproduction based on remarkable hygiene and durability performance

### 8. High-performance insulation

#### PF board

- Use semi-non-combustible materials that generate less toxic gas in case of fire
- Reduce annual cooling/heating cost by up to 20% compared to general-purpose insulation panels with the same thickness<sup>4)</sup>



### What is Poly Lactic Acid?

PLA is made from materials extracted from corn, sugar cane and other plants. PLA proves to have outstanding anti-bacterial and deodorizing effects, and does not generate toxic gas in case of fire, which demonstrates its safety. LG Hausys is the world's 1st to use PLA in developing flooring and wall covering products so as to provide customers with products that are safe for people and the environment.

Source

- 1) Research papers from the Daewoo Institute of Construction Technology
- 2) Research papers from the Korea Advanced Institute of Science & Technology
- 3) Energy Analysis Report
- 4) A building energy simulation report from the Passive House Institute Korea (2011)



# Operation of Eco-friendly and Safe Workplaces

Company's environmental footprint and both big and small workplace safety accidents are further raising social interest in a safer workplace. With this, governmental supervision and local community's interest and monitoring are intensifying as well. We set and manage company-wide workplace safety targets, invest heavily in equipment/facilities to prevent major occupational accidents that gravely impact our business conduct, and conduct diverse self-initiated reviews to improve our system and management level.

Reduction in injury ratio (2015 against 2014)

31%

Invested in improving fire safety (As of 2015)

8 KRW billion



Reduction in total EHS accidents (2015 against 2014)

25%

## [ Achievement and Goal ]

### Establish safety-driven workplace culture



#### Principle & Strategy

- Strengthen executive-level accountability
- Establish a company-wide workplace safety training system
- Establish safety-driven culture

#### 2015 Achievement

- Operated the company-wide Safety and Environment Committee
- Strengthened CEO's Management by Wondering Around
- Offered basic training on workplace safety to all employees
- Introduced standardized work procedures/ experience-based training

#### 2016 Goal

- To reinforce managers' safety management capacity
- To strengthen customized shop floor training

### Reduce workplace ESH accidents to "zero"



#### Principle & Strategy

- Secure safe workplace and business continuity through preliminary risk assessment, review and improvement

#### 2015 Achievement

- Conducted planned/theme-based assessment on workplace safety
- Built a blocking system

#### 2016 Goal

- To set detailed assessment and management standards for high-risk facilities
- To strengthen the blocking system

### Manage employee health



#### Principle & Strategy

- Promote employee health through the prevention of occupational diseases and health care programs

#### 2015 Achievement

- Undertook health promotion initiatives including hyperlipidemia management programs

#### 2016 Goal

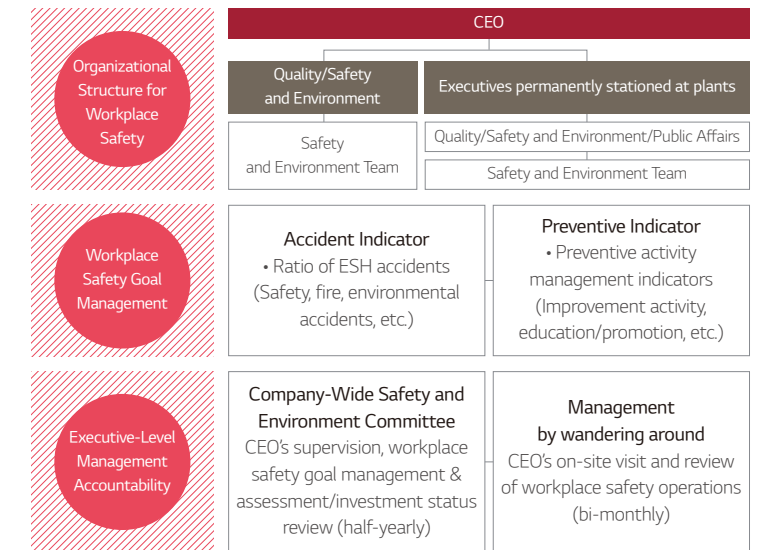
- To strengthen health promotion initiatives including metabolic syndrome management programs

## Workplace Safety System

LG Hausys operates company-wide organizations and goals and strengthens workplace safety systems to create an injury-free workplace. We constantly improve our workplace safety management system to enhance the safety of our employees and local communities where we are based.

### Reinforcing Management Accountability on a Company-Wide and Executive Level

LG Hausys built a company-wide organizational structure while setting workplace safety management goals and integrating them into organizational assessment as a way to strengthen management accountability to ensure workplace safety.



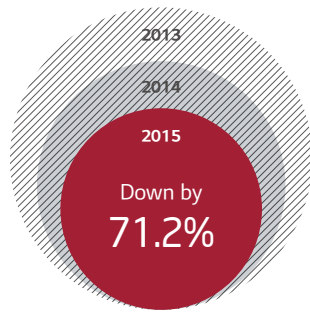
### Building a Workplace Safety Training System

LG Hausys provides all our employees with basic workplace safety training as well as expert training for employees assigned to workplace safety positions. In so doing, we strengthen our training system and build a culture where workplace safety risks are minimized.

Training Target	Status and Details	
	LG Group	LG Hausys
Workplace safety position	• Basic introductory courses under development and operation	• Office workers on the Safety and Environment Teams at Korean plants trained on the five areas of fire fighting, process safety, occupational safety, environment and system
All employees	• Workplace safety modules under development and operation as part of the promotion courses • Group-level workplace safety e-Learning courses developed (targeting staff at Chinese and Korean plants)	• E-Learning courses targeting all office workers developed and under operation



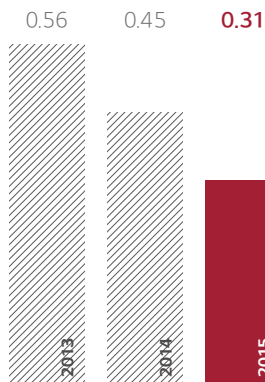
Total EHS Accidents



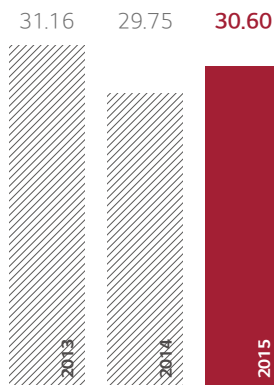
\* Since our Oksan Plant suffered a leak caused by an overheated reactor used for insulation processing in September 2015, we have reexamined and improved upon the fool-proof and interlock control systems of major our facilities. We will conduct detailed assessments and improvements on high-risk facilities to prevent major incidents that pose significant impacts on our operations so as to create a safer workplace and secure business continuity.

Employee Safety (Unit : %)

Occupational injury ratios



Rate of employees diagnosed with specific medical conditions



## Strengthening Workplace Safety Management

### Operating a Preliminary Workplace Safety Review Process

LG Hausys is operating a workplace safety review process to eliminate risk factors by reviewing relevant regulations and guidelines prior to building new plant facilities or modifying existing facilities.

### New/Existing Facility Safety Review Process under Operation

Composition



Purpose



### Safety and Environment Committee under Regular Operation

Our Safety and Environment Committee meets monthly to review the progress of major initiatives undertaken to improve workplace safety.

Fire prevention TFT	<ul style="list-style-type: none"> <li>• Set management items – use of electricity, LNG, and overheated facilities</li> <li>• Construct measurement/warning systems</li> <li>• Improve on the fire-fighting devices of offices, warehouses and other vulnerable facilities</li> <li>• Train individuals on emergency response procedures</li> </ul>
Oil mist/static electricity elimination TFT	<ul style="list-style-type: none"> <li>• Install static dischargers, oil mist measurement devices, and industrial humidifiers</li> <li>• Modify the prescription of raw materials/measure and manage the emission of oil mist daily</li> </ul>
Blocking System Zero Stricture blocking system	<ul style="list-style-type: none"> <li>• Undertake activities to eliminate strictures that are highly like to reoccur</li> <li>• Install safety devices to prevent and minimize damage</li> </ul>
Disaster prevention system reinforcement	<ul style="list-style-type: none"> <li>• Expand evacuation facilities and warning/monitoring systems</li> <li>• Strengthen fire-fighting devices for vulnerable facilities</li> </ul>
EHS management status review	<ul style="list-style-type: none"> <li>• Review feedback from the examinations made based on relevant principles as well as feedback on the management of staff diagnosed with certain medical conditions</li> <li>• Confirm the progress made in reducing waste</li> </ul>

### Workplace Safety Initiatives

#### → Preventing Safety Accidents

LG Hausys has installed blocking systems at hazard points across all our facilities as a way to prevent any safety accidents and secure facility safety. We also created 'Work Safety Manuals' by standardizing safe work procedures to enhance employee safety awareness. This was followed by manual training and aligned with hazard assessments to help employees better recognize workplace hazards. Additionally, we continuously offer group training based on virtual stricture experience and broadcast workplace safety videos on our commuter bus to enhance our employees' emotional perceptions regarding any possible safety accidents.

#### → Preventing Major Occupational Accidents

LG Hausys expanded fire-fighting devices in areas of high fire risk to prevent major occupational accidents and installed leak detection devices near nitrogen-consuming facilities to build a choking accident prevention system. We also reorganized emergency response manuals across all departments and conducted practical mock drills to prepare for any possible accident.

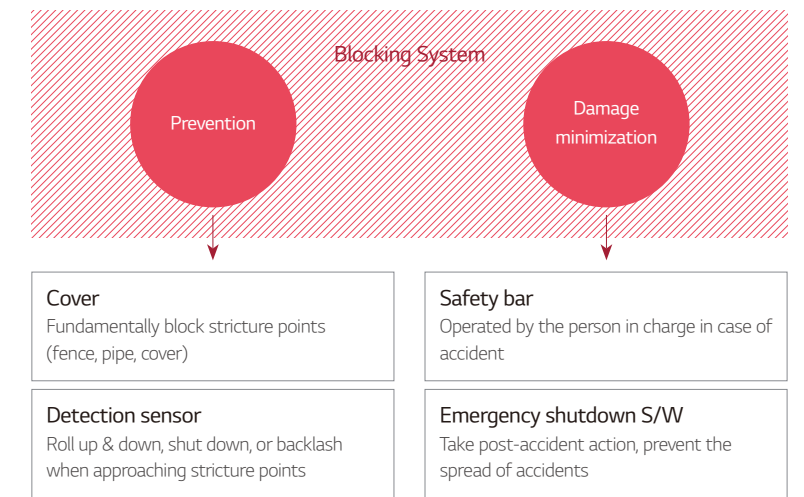
#### → Strengthening the Disaster Prevention System

Our Ulsan Plant invested a total of KRW 1.7 billion for three years between 2013 and 2015 to strengthen its disaster prevention system by beefing up evacuation facilities, expanding hazard warning/monitoring systems and reinforcing fire-fighting devices in the power distribution room and at other vulnerable facilities.

### Supplier Workplace Safety

LG Hausys makes quarterly inspections on workplace safety to ensure shared growth with our on-premise suppliers. We also set up meetings with the CEOs of on-premise and off-premise suppliers to offer monthly training on workplace safety issues and regulatory changes. We conduct stringent reviews of construction sites, and provide special safety training to workers from off-premise suppliers before initiating construction following any days off or holidays as a way to prevent accidents.

### Safety Device Installation System



### Detailed improvement on the disaster prevention system

Supplement evacuation facilities	<ul style="list-style-type: none"> <li>• Install and improve entrances for pedestrians</li> <li>• Build disaster experience training facilities</li> </ul>
Expand warning/monitoring systems	<ul style="list-style-type: none"> <li>• Install hazard leak detection devices and systems</li> <li>• Improve fire detection facilities at office buildings</li> <li>• Build an activated carbon absorber monitoring system</li> </ul>
Reinforce fire-fighting devices	<ul style="list-style-type: none"> <li>• Install fire-fighting devices at power distribution/transformer rooms</li> <li>• Install fire-fighting devices along the gas system of the cafeteria kitchen</li> <li>• Improve fire-fighting devices at indoor hazard storage rooms</li> </ul>



# Building Market-leading Organizational Culture

Reaching the goals of our corporate vision requires a well-functioning organizational culture, along with a vision-aligned strategy. Enhancing organizational performance is only possible when an organizational culture is consistent with the prescribed business strategic directions. This highlights the importance of a great organizational culture as the most important driver behind sustainable corporate growth. Since 2013, LG Hausys has been undertaking its working culture 'F4' internalization program designed to create a market-leading organizational culture, as well as a collective creativity program, that welcomes voluntary employee engagement to prepare for the future. Our goal for 2016 is to bring leader-driven change to strengthen our strategic execution capability and to take part in open innovation-based future-oriented activities.

In the Working Culture 'F4' internalization index

**92.5** points

Cases of participation in Future-Oriented Activities\*

**1,326**

\* Idea Tree/Hamimo/COP



## [ Achievement and Goal ]

### Working Culture 'F4'



#### Principle & Strategy

- Put employees' execution at the heart of the working culture 'F4'

#### 2015 Achievement

- Improved the 'F4' survey questionnaire to emphasize employee behaviors and made assessment
- Launched campaigns to improve meeting/reporting practices
- Selected and operated team-specific 'F4' Change Agents'

#### 2016 Goal

- To build a leader-driven and execution-centered organizational culture
- To assess organizational culture by division and make improvement

### Future-Oriented Activity



#### Principle & Strategy

- Engage employees in future-oriented activities

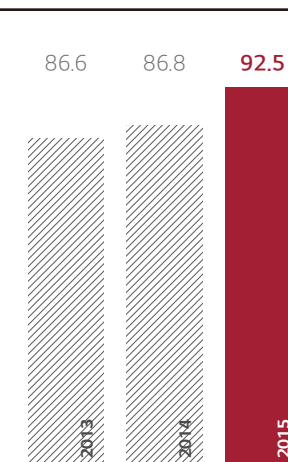
#### 2015 Achievement

- Operated 'Idea Tree' to support company-wide business issues
- Operated 'Hamimo', an idea contest program

#### 2016 Goal

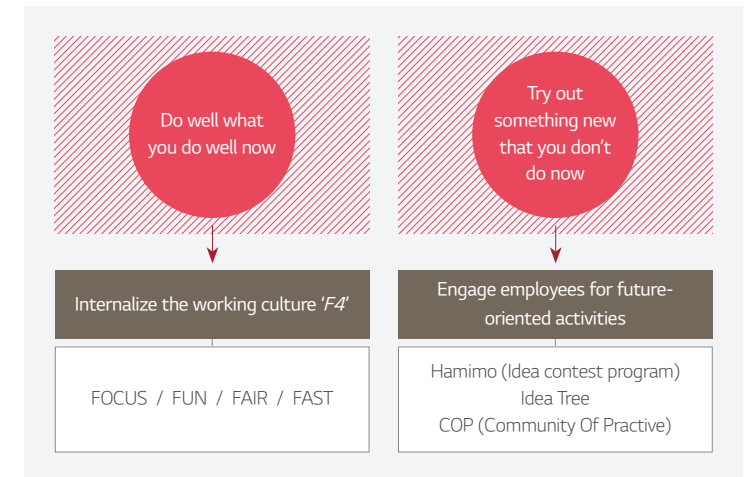
- To adopt open innovation for 'Hamimo' execution
- To strengthen the operational alignment between 'Hamimo' and 'Idea Tree'

'F4' Survey\* Scores (Unit : %)



\* 'F4' Index : This indicates the internalization level of the working culture 'F4' (Response ratio of 4 and above out of the 1 to 5 questionnaire scale)

## [ LG Hausys' Unique Market-Leading Organizational Culture ]



### Internalizing the Working Culture 'F4'

LG Hausys is creating our own working culture 'F4' to encourage employees to focus on and enjoy their work, execute fairly and quickly and generate exceptional outcomes. We work in diverse ways to help our employees understand and practice this 'F4' culture in their daily operations. In 2015, we performed the 'F4' Survey to assess our current status, and shared its outcomes with respective divisions to encourage them to run self-initiated improvement programs. Furthermore, it worked to intensively improve our meeting/reporting practices in the FOCUS category that was identified as a company-wide vulnerability. We also improved the 'F4' Survey questionnaire to help employees align our work culture to their individual behaviors from their 'own' viewpoint so as to bring self-initiated behavioral modifications, and chose team-specific 'F4' Change Agents to take action upon.

#### 1. Focus

Focus on customer value/core operations by eliminating internal waste elements

- Select and concentrate
- Focus on key projects to change the business structure
- Eliminate inefficient business practices

#### 2. Fun

Have fun at work through communication, and by creating a positive work environment

- Immerse in what you do and feel a sense of accomplishment
  - Motivate yourself and communicate to get immersed
  - Succeed and expect diverse compliment and compensation
  - Make self-initiated execution a part of your daily life

#### 3. Fair

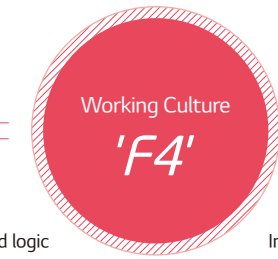
Compete fairly with sound logic and strong capabilities

- Comply with the basics and principles
- Build a sound organizational culture
- Continue with the Do Things Right initiative
- Keep your promise

#### 4. Fast

Implement plans with intensity to reach goals quickly

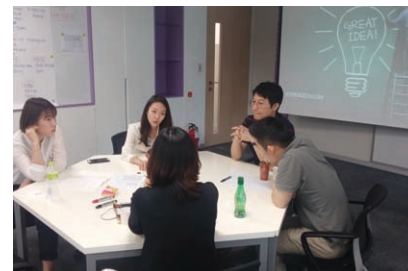
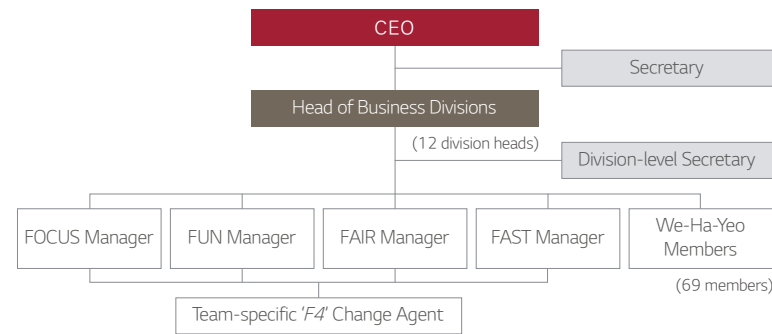
- Decide and execute quickly
- Strengthen organizational problem-solving capacity
- Always set the deadline in conducting business



→ Engaging Employees in Undertaking Working Culture 'F4' Initiatives

LG Hausys operates communication channels between employees and management through "Green Board", a gathering of employee representatives from respective divisions, and "We-Ha-Yeo", a group of female employee representatives. Both of these serve as liaisons with top executives through quarterly CEO meetings and contribute to building the working culture of 'F4' via division-level communication, training, volunteerism, charity bazaars and other bottom-up approaches.

Organizational Chart of Green Board/We-Ha-Yeo



Engaging Employees for Future-Oriented Activities

Our collective creativity programs led by employees' self-initiated engagement allow us to build a future-oriented organizational culture.

Program	Contents
Idea Tree	Idea suggestion program to allow employees to present their ideas on specific topics
Hamimo	Idea contest program to prepare for the future in the areas of new business, products and culture
COP (Community Of Practice)	Support program to encourage employees' self-initiated learning in their fields of interest related to business operations

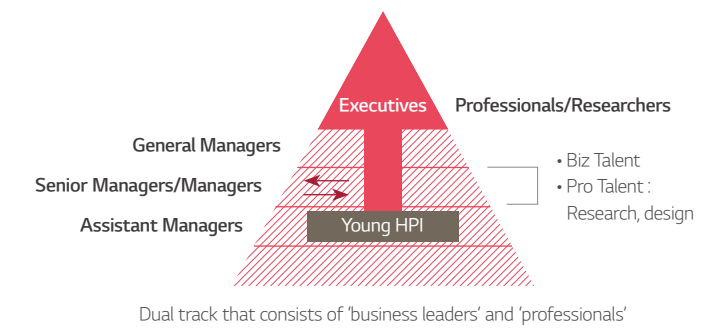
Fostering Talent to Lead the Market

In addition to building an organizational culture conducive to success, we also strengthen our business capacity through talent fostering programs to be the market leader. We believe that our sustainable growth as a company is only possible through hiring talented individuals who possess an agile response to quickly shifting business conditions and through maximizing employee capacity. In alignment with our business strategy, we provide future-oriented business leader training, specialized job training designed to secure employee expertise, global competency training for global operations, and job-specific essential training based on our core values.

→ Business Leader Training System

Becoming a market leader demands that we discover and nurture early on future business leaders with business execution and leadership capacities. Thus, we designed our own business leader training system and provide customized training : Young HPI programs for assistant managers, and next-generation talent programs for managers and senior managers that are further classified into the Biz Talent track for future business leaders and the Pro Talent track for future professionals. Furthermore, we identify key talent among locally-hired staff at our overseas companies and branches and provide online training to nurture them into future leaders.

Business Leader Training System



Training Roadmap

Target	Position	Training Goal	Main Tool
Biz Talent	Manager to	Discover and enhance business leaders' potential	• Execution of assigned projects
	Senior Manager		• Job rotation • Market leadership seminar
Pro Talent	Manager to	Strengthen professional capability in research/design	• External professional training
	Senior Manager		• Diverse project execution opportunity
Young HPI	Assistant	Nurture basic capacity for future business leaders	• Management capacity learning - Customer/market - Corporate operation - Management strategy
	Manager		• Job rotation

Total Employee Training Expenditure (Unit : KRW million)

Category	2013	2014	2015
Training Expenditure	3,666	3,925	3,888

LG Hausys Training System

Category	Position-Specific Essential Training	Business Leader Training	Specialized Job Training	Global Training
Executives	New executives	EnDP		One-on-one executive-level conversation skills
Level I General Manager	Future executives	Mid/long-term training		
Level II Senior Manager	Team leader leadership LG Way general manager	Global MBA LG MBA Job-specific overseas training Business strategy expert Marketing expert	Production/Engineering R&D	Advanced Chinese
Level III Manager	New team leader Senior manager promotion Level I promotion Level II-1 promotion	Biz/Pro Talent Market leadership seminar	Sales/marketing	Intermediate Chinese
Level IV Assistant Manager	Manager promotion Level II-2 promotion	Young HPI 4 <sup>th</sup> year : Corporate innovation 3 <sup>rd</sup> year : Management strategy 2 <sup>nd</sup> year : Corporate operation 1 <sup>st</sup> year : Marketing		Basic Chinese
Working-Level Staff	Refresh Start	Domestic MBA R&D degree Design expert		
	Refresh Start Level III promotion			
	Jump up Camp			
	Basic job skill			
	New/With previous career experience New/With previous career experience			
	Introduction for level IV 2/3			

**SPECIAL ISSUE**

**Named one of the '2015 Great Place to Work in Korea'**

In 2015, LG Hausys was honored with the 'Grand Prize in the Work-Life Balance Sector' and the 'Excellence Award in the Comprehensive Performance Sector' according to the '2015 Great Place to Work in Korea' list chosen and published by Job Planet and Fortune Korea. We earned 4.06 points out of five in the Work-Life Balance Sector to top the list of Korean big corporations, and 3.7 points in the Overall Satisfaction Sector to be ranked 5th among domestic big businesses.

Harmony with Human

# Shared Growth and Mutually Beneficial Support

Current key emerging business requirements include a growing social demand for strengthened commitments to shared growth between large businesses and SMEs, along with the need to eliminate risk factors in the human rights, environmental and labor areas within the entire supply chain. Thus, LG Hausys has created a dedicated department to support shared growth and is executing diverse support policies to pursue shared growth by establishing fair trade principles with suppliers and improving its competitiveness in a mutually-beneficial way. This also allows us to strengthen our CSR management system along the domestic and overseas supply chain to prepare for any CSR risk that our suppliers may face due to our business growth.

## [ Achievement and Goal ]

### Set a fair trade environment



#### Principle & Strategy

- Establish reasonable and fair business practices by complying with regulations and guidelines

#### 2015 Achievement

- Expanded subcontractor agreements signed with eligible small/medium subcontractors
- Fully integrated the four Fair Trade Principles in internal purchasing regulations

#### 2016 Goal

- To strengthen preliminary subcontractor agreement review
- To improve payment terms for SMEs

### Build suppliers' fundamental competitiveness



#### Principle & Strategy

- Create a sustainable industrial ecosystem by improving mutual competitiveness

#### 2015 Achievement

- Offered technology, management and training support to improve productivity and quality as well as financial support (LG Partnership Fund, cash payment, etc.)
- Conducted CSR assessment on suppliers (117 Korean suppliers) and defined the scope of CSR management for U.S. branch suppliers

#### 2016 Goal

- To expand shared growth support and discover more projects
- To extend supplier CSR risk management programs to overseas suppliers

### Ensure open communication



#### Principle & Strategy

- Strengthen the basis for shared growth and establish a healthy collaboration culture

#### 2015 Achievement

- Improved the transparency/standardization of work procedures by upgrading the online purchasing system 'OPEN System' and strengthened communication channels
- Built a tier 2 supplier support system by introducing a mutually-beneficial payment system

#### 2016 Goal

- To increase the No. of banks that support the mutually-beneficial payment system (2→4)
- To monitor how tier 1 suppliers support tier 2 suppliers and reward top performing suppliers

Eco-friendly materials purchased

24,007 tons

Suppliers assessed for CSR risk

117 suppliers

Standard subcontracting agreements signed

100%



## Shared Growth Management Principles

### Four Fair Trade Principles

- Fair contracting practices
- Fair selection and operation of suppliers
- Prevention of unfair transactions
- Issuance and preservation of documents

### Five Supplier Growth Projects

- Financial support
- Improvement of payment terms
- Support for quality and technology development
- Workforce and training support
- Management support

## Shared Growth Programs

We believe that our suppliers are our partners in seeking shared growth and thus operate a dedicated unit to support shared growth so as to create a sustainable industrial ecosystem by improving a mutual competitive edge. We introduced a mutually-beneficial payment system to extend the scope of shared growth to suppliers in the tier 2 and under range and reward tier 1 suppliers who go the extra mile in supporting tier 2 suppliers. In so doing, we strive to move towards shared growth along the entire supply chain.

### Signing the Shared Growth and Fair Trade Agreement

Since November 2008, LG Hausys has been signing the shared growth and fair subcontracting agreements to comply with subcontracting and other relevant regulations and to constantly support our suppliers. We have also been subject to shared growth index evaluations since 2012 and our shared growth initiatives for the concerned year are objectively assessed by the Fair Trade Commission and the National Commission for Corporate Partnership. In 2015, we were graded 'Excellent' in the shared growth index evaluation made in 2014. In 2015, we signed the shared growth agreement with 204 tier 1 suppliers to pursue mutually-beneficial development, through such diverse support policies as the improvement of payment terms, financial support, technology protection and training support. Our tier 1 suppliers also signed such an agreement with 65 tier 2 suppliers to join forces in expanding fair trade practices through the shortening of payment deadlines and the notification of price adjustments.

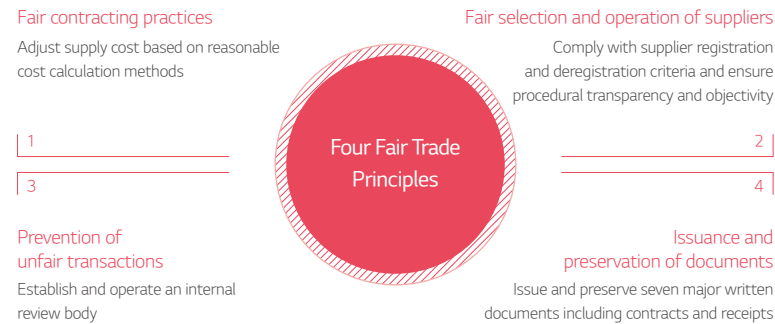
### Shared Growth Management Principles

It is through the four fair trade principles that LG Hausys defines five mutually-beneficial support projects to consistently pursue shared growth policy.



## Four Fair Trade Principles

LG Hausys integrated the guidelines suggested by the Fair Trade Commission in our purchasing regulations and abide by them as fair trade principles so as to establish fair subcontracting practices and lay the basis for mutually-beneficial cooperation between large companies and their SME partners.



## SPECIAL ISSUE

### 'Supplier Suggestion Festival'

LG Hausys hosted the '1st Supplier Suggestion Festival' at the Anyang R&D Center in October 2015. By inviting suppliers to suggest their product development ideas and requirements, this event allowed our researchers to initiate diverse development pathways and speed up their work while our suppliers gained an opportunity to officially present and introduce their R&D outcomes. We plan to regularly hold the festival so that this evolves from a mere one-time event into a new shared growth model and to provide beneficial support (assurance of stable supplier relationship) to those suppliers whose suggestions are adopted.

## Supporting Supplier Growth and Risk Management

### Five Growth Support Projects

LG Hausys' cooperation system is centered around five mutually-beneficial support projects – financial support, improvement of payment terms, support for quality and technology development, workforce and training support and management support.

### Managing Supplier CSR Risk

#### → Conducting Supplier Impact Evaluation

LG Hausys evaluates our suppliers for any possible impact they may have on such CSR items as labor, human rights, the environment and safety. Out of our Korean suppliers, 117 suppliers whose purchased amount exceeded KRW 4 billion in the previous year—or who supplied items of high strategic importance,

were subject to such evaluations. In addition, we modified our purchasing regulations to integrate CSR factors into our entire purchasing process in an aim to make more stringent assessments regarding the impact of our suppliers. We plan to extend the scope of suppliers subject to supplier CSR impact assessments from Korea to the U.S., China and other regions. Our U.S. branch has

### Fair Trade Program Operational Outcomes

Support Project	Description	Outcomes
<b>Financial Support</b>	We provide low-interest Network Loans, Family Loans, and the LG Partnership Fund for our suppliers. We also provide outstanding suppliers with additional support to help improve their financial conditions.	<ul style="list-style-type: none"> <li>Operated the LG Partnership Fund worth KRW 15 billion and supported 56 suppliers</li> <li>Operated the Network Loans to offer KRW 3.4 billion to 10 suppliers</li> <li>Offered KRW 100 million to invest in shared growth</li> </ul>
<b>Improvement of Payment Terms</b>	While our funding policy stipulates that cash payment be made only for those contracts worth KRW 3 million and under, we are significantly increasing the ratio of cash payments made to our suppliers to support their business operations.	<ul style="list-style-type: none"> <li>Maintained 100% in making cash-equivalent payment</li> <li>Made KRW 161.7 billion cash payment for contracts that did not meet funding policy criteria</li> </ul>
<b>Support for Quality and Technology Development</b>	We invested nearly KRW 2 billion in assisting our suppliers with facility investments & improvements, productivity enhancements & quality stabilizations, and system infrastructure support. Furthermore, we actively make joint patent applications to help suppliers protect their technology.	<ul style="list-style-type: none"> <li>Sent 30 technology/quality experts to 99 suppliers</li> <li>Mobilized a separate unit dedicated to supplier support to help suppliers establish their own quality assurance system</li> <li>Made three joint patent applications</li> </ul>
<b>Workforce and Training Support</b>	We continue to provide supplier employees with training on the FTA-related country-of-origin management, workplace safety and quality management. Also, we commission the LG Academy and the Korea Suggestion System Association (KSSA) to offer online training focused on business management in general and specialized job operations.	<ul style="list-style-type: none"> <li>FTA training attended by 44 employees from 36 suppliers</li> <li>LG Academy's online training attended by 30 employees from 30 suppliers</li> <li>KSSA's quality/productivity improvement training attended by 104 employees from 39 suppliers</li> <li>Provided recruitment opportunity through job fairs targeting middle-aged and young job seekers</li> </ul>
<b>Management Support</b>	<ul style="list-style-type: none"> <li>Price coupling and supply program : In response to fluctuating exchange rates and market conditions, we run this supply program for major chemical and building materials to adjust supply cost to reasonable levels</li> <li>Support for exchange initiatives : We share sensitive business issues through plant-specific subcommittees. In addition, our CEO and purchasing executives attend meetings with suppliers and pay on-site visits to listen to their difficulties and reflect their feedback in our business conduct.</li> <li>Included in our multi-faced management support initiatives are awards granted to top-performing suppliers, detailed evaluation of suppliers' financial structure and consulting for FTA-related country of origin management.</li> </ul>	<ul style="list-style-type: none"> <li>KRW 490.2 billion subject to the price coupling and supply program</li> <li>Held eight cooperation and discussion meetings in 2015 (202 persons from 197 suppliers attended and engaged in exchange initiatives)</li> <li>Rewarded top-performing suppliers (Granted Welfare Mall points) <ul style="list-style-type: none"> <li>Six top-performers in the comprehensive evaluation sector</li> <li>12 top-performers in the quality evaluation sector</li> <li>2 top performers in the tier-2 supplier support sector</li> </ul> </li> <li>Shared performance outcomes through the renovation of old facilities</li> <li>Offered renovation cost support for old facilities and shared outcomes concerning cost savings achieved in so doing</li> </ul>

already blazed the trail in this regard as it has revised its purchasing regulations in January 2016 to include CSR items in selecting suppliers and conducting half-yearly supplier evaluations.

#### → Managing the Supplier-Related Social and Environmental Impact Evaluation

LG Hausys manages CSR risks that may arise from our suppliers and lays the basis for shared growth in so doing. To this end, we include social contribution, health &

safety management and environmental management, along with ethics management system, fair trade and other relevant items in our supplier evaluation scope. In particular, we perform human rights impact assessments (written employment contract, prevention of discrimination and wage & working conditions) to enhance the level of human rights management of our suppliers in addition to identifying CSR risks. We will reflect human rights and other CSR risks and assessment results to enhance the level of our CSR assessments every year.

Risk Management Item • Customer protection (customer information protection, customer satisfaction management), Ethics management (ethics management system, fair trade), Social contribution, Health & safety (health & safety management system, occupational safety, occupational injury) Human rights & labor rights (written employment contracts, prevention of discrimination, wage and working conditions), Environment management (environment management system, management of harmful chemicals, management of environmental pollutants)

## Fair Trade Compliance Program

The Fair Trade Compliance Program is an in-house law-abiding system operated by companies independently to ensure their compliance with fair trade regulations. It presents fair trade criteria for employees to prevent any legal violations and make regular reviews to identify and correct such violations early on. LG Hausys developed our own compliance program in 2010. Our CEO declared the company's commitment to voluntarily abiding by fair trade regulations and we were registered as an operator of the Fair Trade Compliance Program recommended by the Fair Trade Commission.

### Major Programs

Internal inspection	Regulatory training	Preliminary review	Internal review of subcontracting transactions
<ul style="list-style-type: none"> <li>Conduct inspections of major departments and plants for their fair trade practices</li> </ul>	<ul style="list-style-type: none"> <li>Enhance employee awareness of fair trade and disseminate the culture of fair trade</li> <li>Distribute fair trade manuals and teaching materials</li> <li>Offer regular internal/external training</li> </ul>	<ul style="list-style-type: none"> <li>Target the entire operation from planning, sales and marketing, to purchasing and financing</li> <li>Aim to prevent any violation of competition regulations</li> <li>Mobilize internal fair trade experts to conduct review prior to undertaking business activities</li> </ul>	<ul style="list-style-type: none"> <li>Build systems to prevent and monitor unfair subcontracting practices in working with suppliers</li> <li>Operate the 'Internal Subcontract Transaction Review Committee' attended by purchasing managers</li> </ul>

### Compliance Organization

Our Fair Trade Compliance Program is operated by the dedicated working-level Compliance Team under the leadership of the executive-level CP (Compliance Program) manager. In addition, we have the Subcontract Review Committee up and running to ensure fairness in subcontracting with SME suppliers by conducting preliminary reviews of subcontract transactions valued above a specific amount and examining their legitimacy to prevent any violation of subcontracting regulations.

### Outcomes of the Fair Trade Compliance Program

We provide annual training on fair trade and subcontracting to our business divisions and plants while making necessary reviews. In 2015, we trained our employees from respective divisions on the prevention of cartel practices and compliance with subcontracting and fair trade regulations. Specifically, growing consumer transactions alerted us to review whether there were any concerns over online injustice labeling and advertising and to provide training to relevant managers.

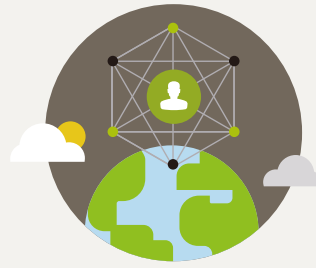
### 2015 Training Data

Topic	No. of Trainees	Training Sessions
Subcontracting	95	6
Cartel and unfair trade practices	260	8

### Fair Trade Program Outcomes

Year	No. of Program		Description
	Year	Sessions	
2015	14		<ul style="list-style-type: none"> <li>Cartel and unfair trade prevention training for new team leaders</li> <li>Internal review and intensive training on business divisions' fair trade practices</li> <li>Review and training on injustice labeling and advertising</li> </ul>
2014	18		<ul style="list-style-type: none"> <li>Sending CEO's fair trade messages</li> <li>Position-specific cartel and unfair trade prevention training</li> <li>Intensive subcontracting training for purchasing and technology departments/research labs</li> </ul>
2013	15		<ul style="list-style-type: none"> <li>Direct CEO training and sending text messages to employees on two occasions to prevent cartel</li> <li>Position-specific cartel and unfair trade prevention training</li> </ul>





# Sustainability Management

LG Hausys established its sustainability management system so as to become a company trusted by society and is striving to fulfill its social responsibility in the entirety of its business conduct.

## Sustainability Management System

Our vision to “create human-friendly, eco-conscious happy living spaces” guides our commitment to sustainability management. We manage sustainability risks and deliver differentiated value to stakeholders to fulfill our social responsibility.



## Sustainability Management Road Map



## Achievement and Goal

<b>Abide by global standards</b>	<b>Strengthen CSR crisis management</b>	<b>Manage supplier CSR risk</b>
<p><b>Principle &amp; Strategy</b></p> <ul style="list-style-type: none"> <li>Undertake global-level CSR initiatives</li> </ul> <p><b>2015 Achievement</b></p> <ul style="list-style-type: none"> <li>Was listed on the DJSI Korea</li> <li>Introduced GRI G4.0</li> </ul> <p><b>2016 Goal</b></p> <ul style="list-style-type: none"> <li>To be re-listed on the DJSI Korea</li> </ul>	<p><b>Principle &amp; Strategy</b></p> <ul style="list-style-type: none"> <li>Reduce CSR risk factors at the headquarters and plants</li> </ul> <p><b>2015 Achievement</b></p> <ul style="list-style-type: none"> <li>Conducted self-initiated assessment and monitoring : Completed three improvement projects</li> </ul> <p><b>2016 Goal</b></p> <ul style="list-style-type: none"> <li>To conduct self-initiated assessment and monitoring : On-site review and three improvement projects are scheduled</li> </ul>	<p><b>Principle &amp; Strategy</b></p> <ul style="list-style-type: none"> <li>Eliminate CSR risk factors within the supply chain</li> </ul> <p><b>2015 Achievement</b></p> <ul style="list-style-type: none"> <li>Assessed suppliers for their CSR performance (117 Korean suppliers)</li> <li>Selected the target of CSR management among U.S. branch suppliers</li> </ul> <p><b>2016 Goal</b></p> <ul style="list-style-type: none"> <li>To assess and monitor domestic suppliers for their CSR risk</li> <li>To broaden CSR management to include overseas suppliers</li> </ul>

## Progress of Sustainability Management

LG Hausys focuses on risk management, social contribution and stakeholder communication to effectively advance sustainability management. We offer differentiated value to stakeholders and constantly communicate with them so as to become a sustainable company.

### Risk Management

LG Hausys conducts annual self-initiated CSR assessments to identify and improve risks related to sustainability management. Such assessments include governance, ethics management, shared growth, fair trade, customer value, social contribution, labor conditions/human rights, health & safety and environmental management, and their outcomes are shared. Once predicted and identified through assessment, risks are shared among relevant departments for improvement and monitoring. In 2015, our Korean, Chinese and U.S. plants were evaluated and 117 domestic suppliers were assessed to better understand their CSR operations. From 2016 onwards, we will extend the scope of this assessment to include overseas suppliers in the U.S., China and other regions as part of our endeavors for CSR risk management.



### Social Contribution

At LG Hausys, we mobilize our own products to undertake social contribution initiatives that reflect the inherent characteristics of the industry, which is demonstrated via our Make Dokdo Green, Make a Happy Space and Green Remodeling projects. We also support the renovation of facilities related to Korea's Independence Movement and the residential conditions of those recognized for their service to the country so as to preserve our pride in our history. We carefully review social requirements and their impact on our business conduct in fulfilling our social

responsibility while building even closer ties with our local communities.

### Stakeholder Communication

LG Hausys categorizes its key stakeholders into customers, shareholders & investors, business partners, employees and local communities, and interacts with each of these groups via distinct channels to advance sustainability management. Our sustainability management endeavors and achievements are disclosed through sustainability reports, business reports and environmental information reports. We also communicate with our customers through on/off-line media, and solidify our network of employees via in-house communication channels. In 2015, we held stakeholder discussions attended by experts from diverse fields to examine our overall sustainability management. We will promote our CSR initiatives, offer training to our stakeholders, and disclose relevant information transparently to forge even closer ties with them.

### Achievements and Future Plans for Sustainability Management

LG Hausys designed its own sustainability management roadmap to systematically manage achievements and set a clear course for sustainability management. In

### External Awards Granted Concerning Sustainability Management

<b>2012</b>	<ul style="list-style-type: none"> <li>Special Carbon Disclosure Award (CDP)</li> </ul>
<b>2013</b>	<ul style="list-style-type: none"> <li>Grade A, ESG assessment by the Korea Corporate Governance Service (No.1 among industry peers in the environmental and social sector)</li> </ul>
<b>2014</b>	<ul style="list-style-type: none"> <li>Grade A, ESG assessment by the Korea Corporate Governance Service (No.1 among industry peers in the environmental and social sector)</li> <li>Included on the list of the &lt;East Asia 30&gt;, Companies with outstanding CSR performance in Korea, China and Japan, by the Hankyoreh Economic Research Institute</li> <li>Ranked 1<sup>st</sup> in the building materials industry on the Korean Sustainability Index (KSI) by the Korean Standards Association</li> </ul>
<b>2015</b>	<ul style="list-style-type: none"> <li>1<sup>st</sup>-time member to be listed on the DJSI Korea Index</li> <li><b>MEMBER OF Dow Jones Sustainability Indices</b> In Collaboration with RobecoSAM</li> <li>Ranked 1<sup>st</sup> on the 'Sustainable Super Company 25' list by the Sustainable Management Financial Center, Korea Economic Daily</li> <li>Ranked 1<sup>st</sup> in the building materials industry on the Korean Sustainability Index (KSI) by the Korean Standards Association</li> </ul>

2014, "major issues concerning corporate CSR activity" were added to the BOD report agenda, which serves as the foundation for the BOD to discuss sustainability management issues and enhance management awareness regarding corporate social responsibility. From 2015 onwards, we have identified CSR risk factors that may arise from our suppliers as well as from our own operations. We will include overseas suppliers in addition to our domestic suppliers in identifying CSR risks and taking monitoring and preventive action.

## Governance

LG Hausys is creating a fair decision-making system to earn trust from its stakeholders. Since 2014, our Board of Directors has been discussing social responsibility issues to improve our executional capability in advancing sustainability management.

"LG Hausys website"  
(<http://www.lghausys.co.kr/kor/util/investor/council.jsp> → Disclosure Information)

### Shareholder Composition and Rights

LG Hausys has established a fair and stable ownership structure to become a sustainable company. Our shareholders are entitled to wide-ranging shareholder rights, and information on major business issues is disclosed through the electronic information disclosure system of the Financial Supervisory Service or on the LG Hausys website.

### BOD Composition and Operation

LG Hausys' Board of Directors (BOD) is responsible for making decisions on major business conduct and for supervising the operations of the board members. The board also votes on matters specified by relevant laws and the Articles of Association, matters delegated by the general shareholder meetings and other important business-related matters. The separation of the CEO from the BOD chairmanship and the participation of outside directors in BOD activities guarantee that decisions are made in a reasonable and transparent manner.

#### → BOD Composition

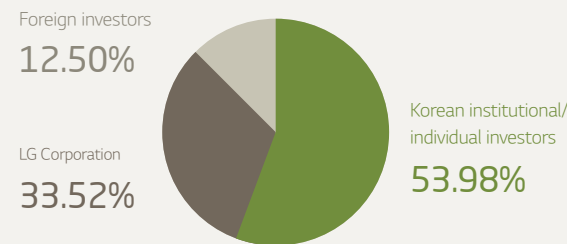
Our Board of Directors consists of two executive directors, two non-executive directors and three outside directors.

#### → Appointment and Responsibility of BOD and Outside Directors

The appointment of BOD members follows the procedures

stipulated in the Commercial Code and other relevant regulations, and should be approved by the BOD and at the general shareholder meeting. Outside directors should account for at least one fourth of the total number of board members. These directors are selected from a pool of experts who have no special interest in LG Hausys and bring with them extensive experience and expertise in the fields of economy, business management, and chemical engineering. Once appointed, outside directors can access LG Hausys' strategic directions in the economic, social and environmental areas as well as pending issues, and may play an active role in offering their perspective on such issues.

### Shareholder Composition (As of Dec. 31<sup>st</sup>, 2015)



### BOD Composition (As of Apr. 22<sup>nd</sup> 2016)

Category	Name	Position and Career Description	Note
Executive director	Oh Jang-Soo	President and CEO	-
	Lee Dong-Un	CFO	-
Non-executive director	Ha hyeon-Hoe	CEO and President of LG Corporation	BOD Chairman
	Yu Ji-Yeung	Managing Director, Business Administration Team, LG Corporation	-
Outside director	Kim Young-Ick	Professor of Economics, Sogang University	Chair of the Audit Committee
	Kim Jin-Gon	Professor of Chemical Engineering, Pohang University of Technology and Science	Audit Committee member
	Bae Zong-Tae	Professor, KAIST Graduate school of Techno Business Management	Audit Committee member

#### → BOD Activities

The LG Hausys BOD met eight times in 2015 and the average percentage of directors in attendance was 96.4%. Our BOD members deliberated on a total of 32 agenda items including the approval of business plans, out of which 24 were approved and eight were reported.

BOD Meeting	Date of Meeting	Agenda Item	Director Attendance (%)
1	Jan. 30 <sup>th</sup> 2015	Approval of the 6 <sup>th</sup> -term financial statement and seven other items	85.7
2	Feb. 25 <sup>th</sup> 2015	Approval of the convocation of the 6 <sup>th</sup> general shareholder meeting and two other items	85.7
3	Mar. 13 <sup>th</sup> 2015	Approval of the payment of director remuneration for 2015 and four other items	100.0
4	Apr. 23 <sup>rd</sup> 2015	Report on Q1 2015 business results and three other items	100.0
5	Jul. 23 <sup>rd</sup> 2015	Report on Q2 2015 business results and three other items	100.0
6	Oct. 5 <sup>th</sup> 2015	Approval of Chinese investment plan (draft)	100.0
7	Oct. 20 <sup>th</sup> 2015	Report on Q3 2015 business results and two other items	100.0
8	Nov. 26 <sup>th</sup> 2015	Approval of the appointment of executive directors (draft) and three other items	100.0

#### → BOD Remuneration

At LG Hausys, BOD remuneration criteria are determined each year in consideration of the annual evaluation of BOD performance, inflation, and the external competitiveness of outside director compensation. The remuneration limit is approved at the general shareholder meeting, and any modifications must be proposed to and ultimately approved by the BOD.

### BOD Committees

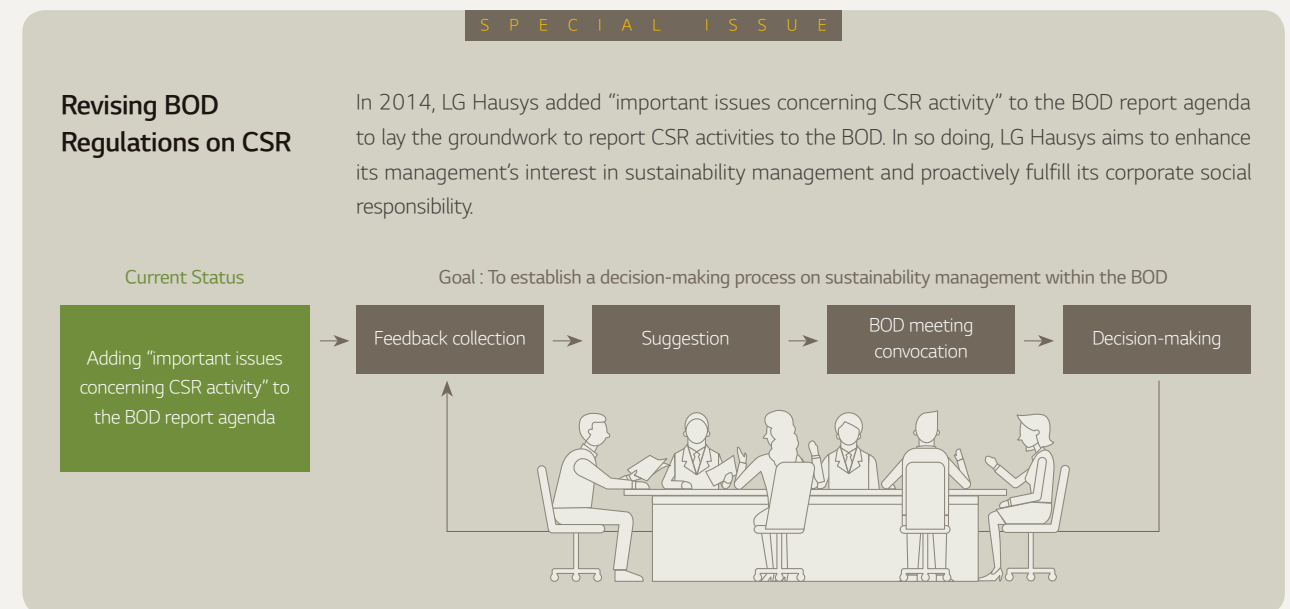
#### → Audit Committee

LG Hausys ensures the independence and transparency of auditing by operating the Audit Committee under the BOD. The committee consists of three outside directors, all of whom are exempt from the disqualification criteria stipulated in the Commercial Code.

#### → Operation and Activity of the Audit Committee

The Audit Committee is responsible for inspecting LG Hausys' corporate accounting and business practices, and reserves the right to request board members to report on business operations and to investigate the business conduct and assets of LG Hausys. The committee can convene ad-hoc general shareholder meetings to deal with special issues by submitting documents that describe the reason such meetings are required and the purpose of such meetings. The committee also has the right to request business reports from subsidiaries and investigate their operations and assets if deemed necessary.

Audit Committee Meeting	Date of Meeting	Agenda Items
1	Jan. 30 <sup>th</sup> 2015	Report on the operation status of the internal accounting management system in 2014 and three other items
2	Feb. 25 <sup>th</sup> 2015	Approval of the audit report (draft) concerning the 6 <sup>th</sup> -term financial statement and business report and three other items
3	Apr. 23 <sup>rd</sup> 2015	Plan for 2015 Jeong-Do Management operations and one other item
4	Jul. 23 <sup>rd</sup> 2015	Details of half-yearly accounting review operations and progress status for 2015 and one other item





## Jeong-Do Management

Jeong-Do Management—the high ethical standards that guide LG’s conduct in business and society—is at the very heart of all LG Hausys’ efforts to engage with and fulfill our responsibilities towards customers, suppliers, shareholders, employees, and society. It is the beacon that shines a light on the paths we should take to fortify our position as a highly respected company.

### LG Way and Jeong-Do Management

The LG Way constitutes a corporate culture unique to LG. It embodies the spirit of the LG Vision, “No. 1 LG,” and delineates the pathways by which LG can ultimately achieve this vision. The LG Way puts LG’s Management Philosophy of “Creating Value for Customers” and “Respecting Human Dignity” into practice, and takes the high ethical principles of Jeong-Do Management as its foundation.

### LG Code of Ethics

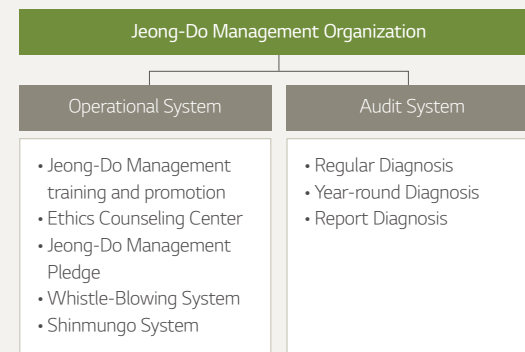
LG established and practices its Code of Ethics to help guide the behaviors and value judgments of all its employees. LG’s Code of Ethics Handbook is available in Korean, English and Chinese and is distributed to its employees.

### LG Code of Ethics – Table of Contents

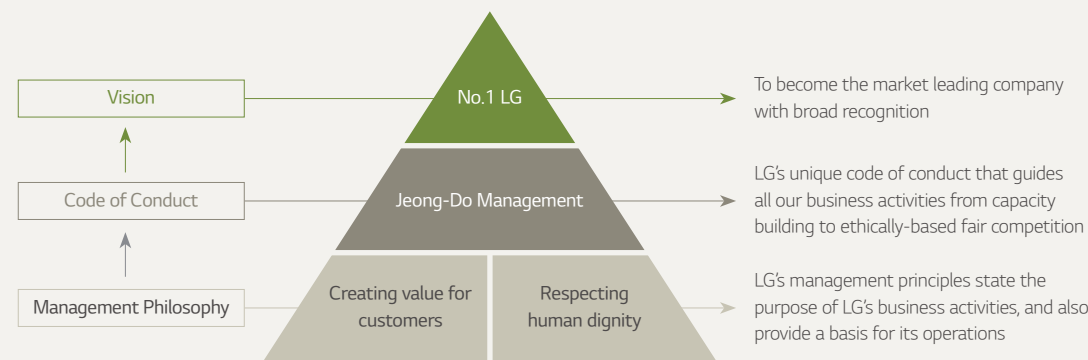
Chapter 1	Responsibilities and Duties to Customers
Chapter 2	Fair Competition
Chapter 3	Fair Transaction
Chapter 4	Basic Ethics of Employees
Chapter 5	Corporate Responsibilities for Employees
Chapter 6	Responsibilities to the Nation and Society

### Jeong-Do Management at LG Hausys

LG Hausys is acutely aware of the importance of Jeong-Do Management not as an option, but as a prerequisite for survival. Our Jeong-Do Management Organization ensures Jeong-Do Management is being practiced in the field and as a vital part of our corporate culture. In other words, for LG Hausys, Jeong-Do Management applies as much to in-field performance as it does to ethical management, and forms the basis of our competence to outperform rivals. LG Hausys pursues “Creating Value for Customers” by sharpening our competitive edge through consistent innovation; and “Respecting Human Dignity” by ensuring equal opportunity and a performance-based culture for our members, which in turn boosts their desire to provide customer service of high value and integrity. Jeong-Do Management and the LG Code of Ethics are embedded into every single one of our business activities, and beyond that, within our organizational culture itself, evidenced in our many actions to eradicate organizational irrationalities misconceived as customary practices in the past.



### LG Way and Jeong-Do Management



### Jeong-Do Management program

LG Hausys practices Jeong-Do Management through various programs such as the Jeong-Do Management Pledge, the Whistle-blowing and Shinmungo Systems, and Jeong-do Management training.

#### → Jeong-Do Management Pledge

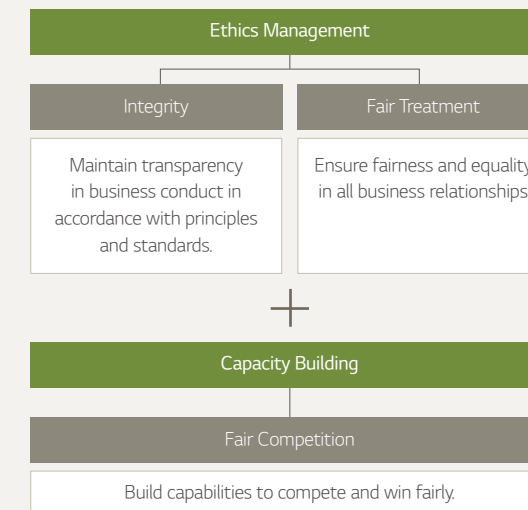
All our employees at LG Hausys sign the Jeong-Do Management Pledge online and our suppliers do the same through contract documents in opening business relationships so as to commit themselves to abiding by the LG Code of Ethics and practice Jeong-Do Management.

#### → Whistle-blowing System

LG Hausys under all circumstances prohibits any employee from accepting any bribe or reward from our stakeholders. In the case that such bribes or gifts are offered, they should be politely refused and returned in accordance with the Code of Ethics. If for any reason this is not possible, the concerned articles should be reported to the Ethics Bureau and be donated to welfare organizations or sold through an in-house auction so that the proceeds can be used for social-giving initiatives.

#### → Shinmungo System

Any violations of Jeong-Do Management principles are reported via the Shinmungo System. These include unfair practices, the acceptance of bribes by any LG Hausys employee, misuse of authority, and any other practice that goes against the LG Code of Ethics. In the case that online reporting is unavailable, reports can be made by phone, fax, and postal mail or in person. Any information provided is strictly confidential. However, should any individual

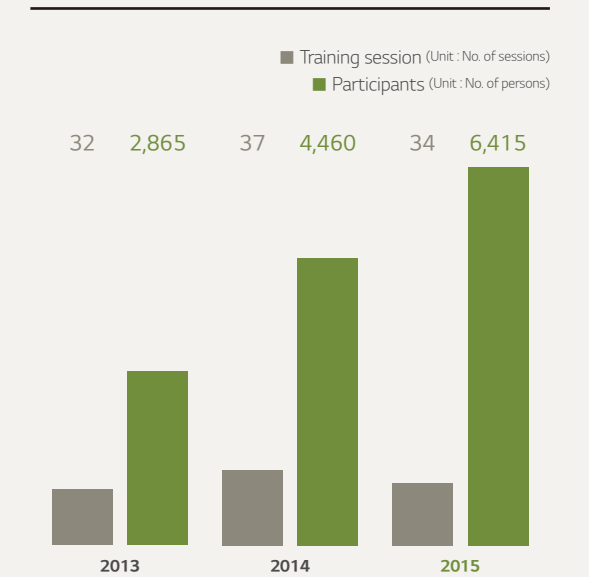


who has filed a report become compromised as a result, restoration or equivalent compensation measures will be provided without question.

#### → Jeong-Do Management Training and Promotion

LG Hausys offers annual Jeong-Do Management to employees in relation to their job or position. We also inform our suppliers and distributors of our ethics management, and ensure that they are able to receive training on Jeong-Do Management at least once every three years. As a result of analyzing the responses collected by employees through Jeong-Do Management e-learning courses in 2015, we discovered that our employees recognize Jeong-Do Management as a significant contributor to LG’s competitive edge. Furthermore, they are willing to commit themselves to complying with the behavioral guidelines of No.1 LG that aim to establish transparent business conduct and a sound organizational culture. We will continue to provide educational training and undertake promotional programs to position Jeong-Do Management as a behavioral principle that encourages self-initiated participation from all our employees and suppliers.

#### Training Session and Participants





# Green Management

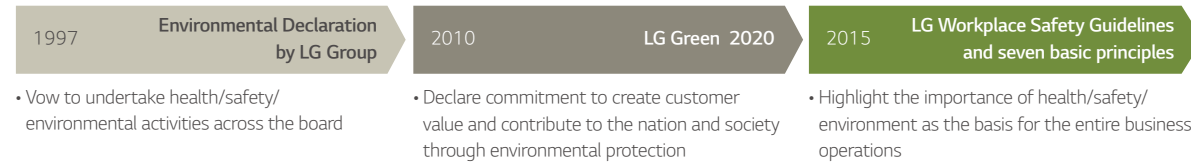
As social interest increases in the environmental impact imposed by business operations as well as in safe workplaces, LG Hausys advances 'Green Management' to minimize our environmental footprint in our entire business conduct and to pursue beautiful harmony with nature.

## Green Management Philosophy

LG Hausys' green management is based on the LG Management Philosophy to create value for customers and to respect human dignity. This fundamental principle guided our development of the workplace safety & health policy that highlights a company's social responsibility and role in promoting environmental preservation and health& safety on the basis of LG Green Management, so as to pursue harmony between our business conduct and the natural environment.



## History



## Achievement and Goal

<h3>Build an eco-friendly workplace</h3> <p><b>Principle &amp; Strategy</b></p> <ul style="list-style-type: none"> <li>Minimize the discharge of pollutants and environmental impact during the manufacturing process</li> </ul> <p><b>2015 Achievement</b></p> <ul style="list-style-type: none"> <li>Shifted to high-efficiency air pollution control facilities (Invested KRW 5.2 billion)</li> <li>Re-designated as Green Company</li> <li>Responded to chemicals management regulations proactively</li> </ul> <p><b>2016 Goal</b></p> <ul style="list-style-type: none"> <li>To stabilize the ESH system by re-establishing position-specific roles and in-house policy</li> <li>To prevent accidents by strengthening the monitoring system</li> <li>To discover and improve potential hazards</li> </ul>	<h3>Respond to climate change</h3> <p><b>Principle &amp; Strategy</b></p> <ul style="list-style-type: none"> <li>Reduce energy use through process innovation and operational optimization</li> <li>Reduce energy cost and GHG emissions by introducing renewable energy and external heat sources</li> </ul> <p><b>2015 Achievement</b></p> <ul style="list-style-type: none"> <li>Improved heavy energy-consuming facilities and their operational efficiency</li> <li>Used outside surplus steam</li> <li>Operated power storage devices</li> </ul> <p><b>2016 Goal</b></p> <ul style="list-style-type: none"> <li>To optimize the operation of heavy energy-consuming facilities and use external heat sources</li> <li>To reduce energy intensity composition by 10%</li> </ul>
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## Eco-friendly Workplace

LG Hausys employs diverse methods to not only to prevent any safety and environmental accidents from happening but also to minimize the discharge of pollutants into the air, water and soil systems.

## Managing the Atmospheric Environment

We actively introduce new technology and new pollution control devices to improve efficiency in processing air pollutants. Our Ulsan Plant operates a monitoring system to check the operational status of its air pollution control devices, which includes 12 24-hour RTOs (Regenerative Thermal Oxidizer) and 29 electric precipitators, along with various other devices. In so doing, the plant prevents these control devices from abnormal operations.

## Managing the Water Environment

We installed air-water separator tanks within our plants to prevent water pollution caused by unintended accidents, as well as an early warning system that detects liquid leaks and issues alerts accordingly. To appropriately treat wastewater generated from the manufacturing process, wastewater treatment professionals are stationed 24 hours a day at our plants to monitor the quality of treated wastewater. In addition, we have non-point pollution source treatment devices up and running to prevent nearby streams from being polluted by these sources.

## Managing Hazardous Chemicals

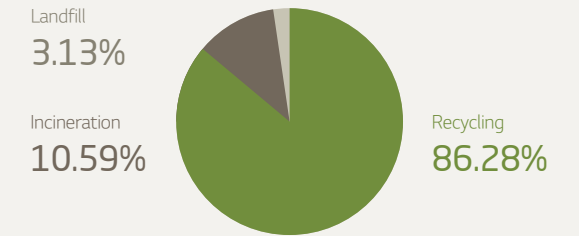
Our Ulsan and Cheongju Plants handle 14 types of hazardous chemicals—from lead compounds and MEK to acetic acid ethyl. This alerts us to focus on developing alternatives to reduce the use of such harmful chemicals. We also installed such safety devices as dykes and gas detectors around harmful chemicals storage facilities to prevent fires, explosions or leaks caused by these chemicals within the workplace while appointing managers at each spot in charge of managing hazardous chemicals to thoroughly examine relevant facilities.

## Managing Waste

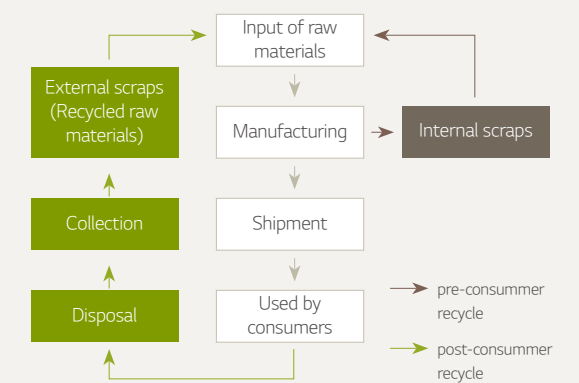
We are fully engaged in the governmental policy to promote resource conservation and recycling. Since 2008, we have signed a voluntary recycling agreement with the Ministry of Environment concerning our flooring and window profile products to develop a recycling system that includes the development of recycling technology, the expansion of collection systems and support for recycling service providers. We reuse internal scraps generated

within our plants in the manufacturing process, while developing and using raw material compositions, as a way to maximize the use of external scraps that are generated in end-of-life products disposed of following consumer use by turning them into resources. In 2015, we recycled 86.28% of the waste produced at our major plants.

## Waste Management



## Recycling Process



## Environmental Investment

LG Hausys continues to increase investments in environmental improvements—from process enhancement, eco-friendly product design and production, and GHG emissions reduction and energy conservation—to work environment improvements and environmental conservation.

## Managing Ozone-Depleting Substances

LG Hausys does not produce any ozone-depleting substances as defined in the Montreal Protocol or use such substances in its manufacturing process. Yet, CFC-based substances are contained in a portion of our refrigerant freezers used for product freezing and air conditioning, and halon is used in some of our fire extinguishers. Thus, we plan to replace these devices with cleaner and greener ones or adopt water-based (water spray) fire extinguishers.

### Minimizing Our Impact on the Ecosystem

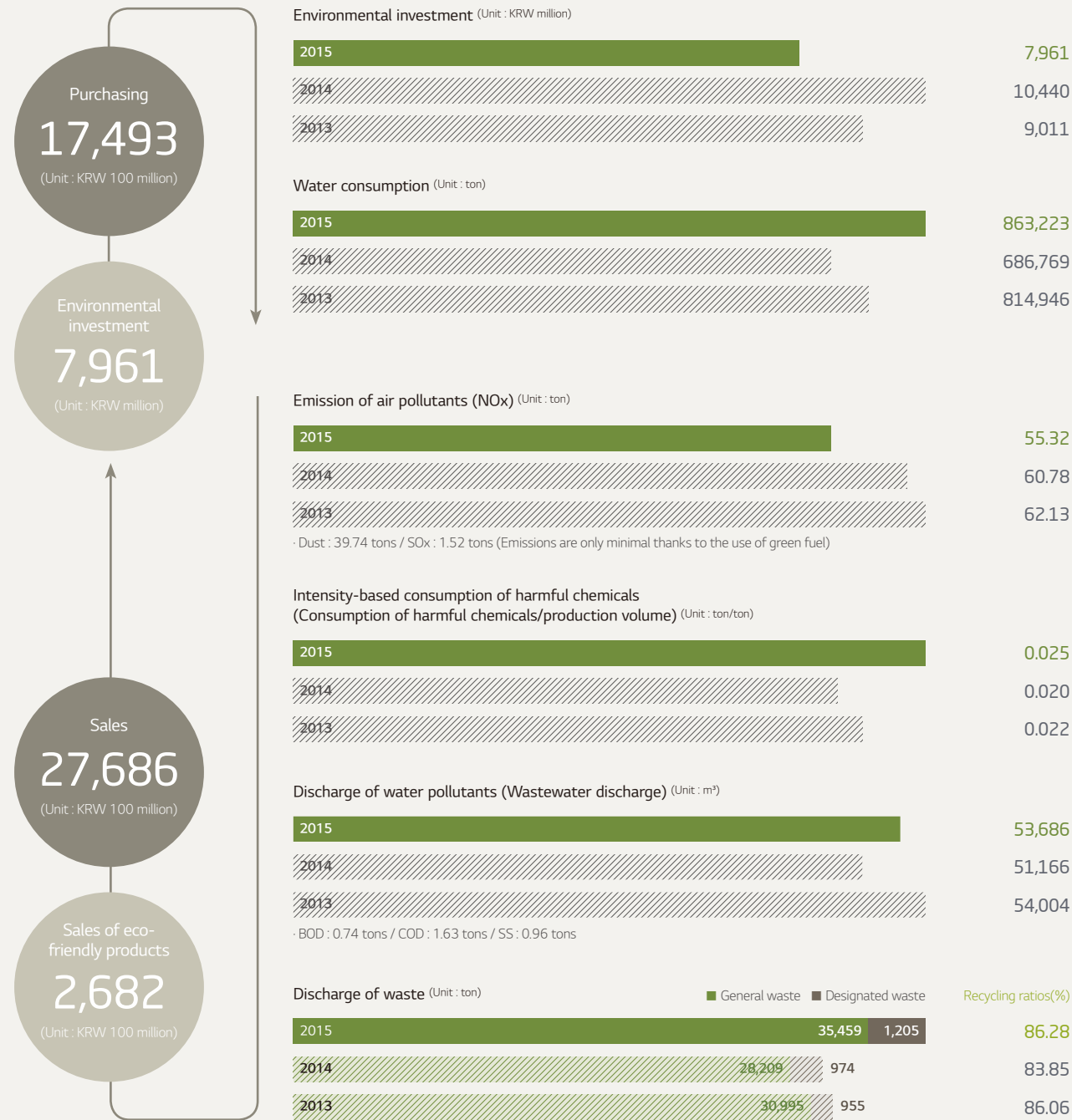
As part of our ecosystem conservation initiatives, we have been inspecting the water quality along the Heoya River system and making self-initiated environmental impact assessments on a quarterly basis since 1990. A total of 13 locations, from the Heoya Dam to Ganggunaru where the river meets the sea, are analyzed and managed for

six items (COD, SS, pH, etc.), and if deemed necessary, measurement data is provided to relevant authorities.

### Planting Trees to Purify the Environment

We plant more than 800 environmentally purifying trees each year to step up our overall greenness on a company-wide level. At our Ulsan Plant, green areas account for nearly 25% of the total site (148,369m<sup>2</sup>).

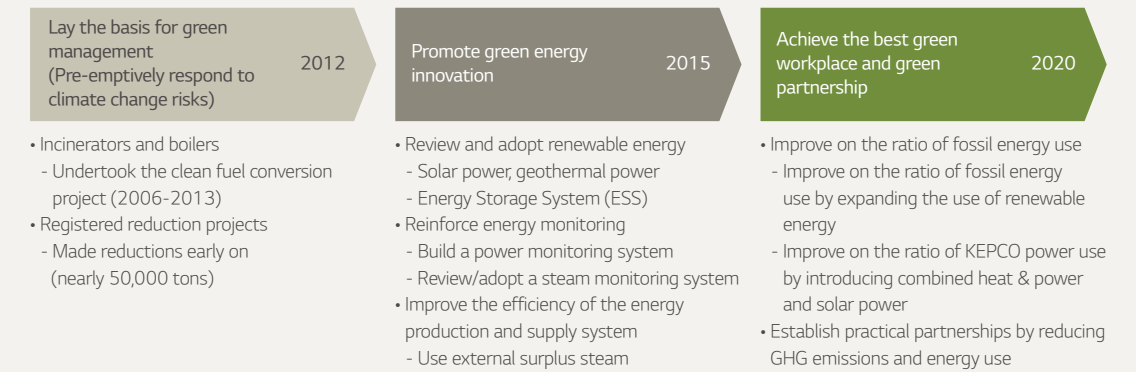
#### Material Flow



### Responding to Climate Change

LG Hausys takes the initiative in responding to climate change risks through sustained energy conservation and process innovation. We are subject to the GHG emissions trading scheme launched in 2015 and will thus work in various ways to reduce our GHG emissions, including the use of renewable energy and external heat sources.

#### Mid/Long-Term Climate Change Strategy



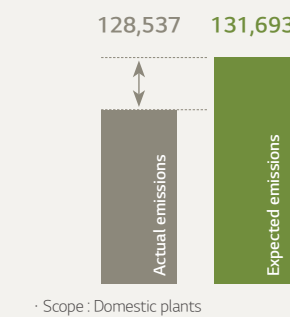
#### Reducing Energy Consumption and GHG Emissions

LG Hausys undertakes continued initiatives to cut its energy use and GHG emissions. In 2015, we invested KRW 7.31 billion in these initiatives, which resulted in KRW 43.48 million in total savings and in 15,903 tCO<sub>2</sub>e in reduced GHG emissions.

#### Key Initiatives to Reduce Energy Consumption and GHG Emissions

→ Energy Saving TFT  
Lg Hausys set up energy saving TFTs in domestic plants to engage all our employees in energy conservation.

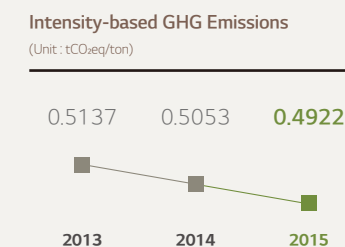
#### GHG Emissions Reduction in 2015 – Target and Achievement (Unit: tCO<sub>2</sub>e)



Category	2013	2014	2015	
Investment (KRW million)	2,734	3,641	7,310	
Annual Savings	Reduction in energy use (TJ)	183	364	235
Achieved	Reduction in GHG emissions (tCO <sub>2</sub> e)	9,321	18,334	15,903
	Savings Made (KRW million)	2,568	6,458	4,348

Category	2013	2014	2015	
Energy Consumption (TJ)	Direct energy	923	1,004	1,008
	Indirect energy	1,634	1,725	1,622
	Total energy consumption	2,557	2,729	2,630
GHG Emissions	Scope1(tCO <sub>2</sub> e)	47,513	51,229	51,403
	Scope2(tCO <sub>2</sub> e)	75,845	80,934	77,134
	Total emissions (tCO <sub>2</sub> e)	123,358	132,164	128,537
	Intensity-based emissions (tCO <sub>2</sub> e/ton)	0.5137	0.5053	0.4922

· Scope of energy use calculation: Ulsan, Cheongju, Oksan Plants  
· Include direct energy sources (oil, LGN, etc.) and indirect energy sources (power, steam)



### Energy Saving Slogan at Cheongju/Oksan Plants

**Make Energy Deposits!**

<p><b>Before turning on the heater</b></p> <p>Check any leak from steam traps</p> <p>Nearly KRW 1 million is wasted when leaks occur from 3mm holes</p>	<p><b>The right indoor temperature</b></p> <p style="font-size: 2em; color: green;">20°C</p> <p>Maintain the right indoor temperature and stay healthy!</p>	<p><b>Remove loss from idling</b></p> <p>Cut off main steam and air when idling</p> <p>Make a habit to turn devices off!</p>	<p><b>Pay attention to your surroundings</b></p> <ul style="list-style-type: none"> <li>Any leaks of steam or air?</li> <li>Anything that is under-heated?</li> </ul> <p>Take immediate action upon your notice</p>
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### Energy Saving Slogans at Ulsan Plant

Turn off | Pull | Fasten | Comply | Focus | **Reach 2.7% in energy composition ratio**

- Five Energy-Saving Habits**
- ① Turn-off: Idling facilities, lighting, computers
  - ② Pull: Cut off standby power
  - ③ Fasten: Prevent losses due to the leak of solids, liquids or steam
  - ④ Comply: Standard heat facilities, standard cooling/heating temperatures (19°C in winter, 17°C in summer)
  - ⑤ Focus: Focus on work (job) to improve yields (efficiency) (Prevent losses from re-work)

#### → Improving Heavy Energy-Consuming Facilities

The RTOs (Regenerative Thermal Oxidizer) used at our highly-efficient Ulsan air pollution control facility, consume a large quantity of LGN fuel due to the characteristics inherent in such emission facilities. In 2015, the plant adopted concentrators, improved the operational efficiency of RTOs (15 RTOs→12 RTOs), and introduced a waste heat recovery system (a low pressure steam production system), cutting KRW 1.67 billion in operational expenditures and 4,062 tons in CO<sub>2</sub> emissions.

**Heavy Energy Consuming Air Pollution Control Facility : RTO**

Install concentrators	Improve operational efficiency	Collect waste heat – Produce steam
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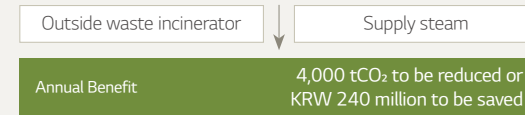
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Annual Benefit: 4,062 tCO<sub>2</sub> reduced or KRW 1.67 billion saved

#### → Using External Surplus Steam

Our Oksan Plant has been working to use the steam generated when external waste is incinerated since October

2015. Once this project is completed, incumbent steam boilers will be operated as a stand-by facility in case of an emergency. The use of external surplus steam is expected to save KRW 240 million in annual expenditures and reduce annual CO<sub>2</sub> emissions by 4,000 tCO<sub>2</sub> when compared to existing boilers.



#### → Building an Energy Storage System at the Oksan Plant

LG Hausys has been operating 1.5MWh-capacity ESS (Energy Storage System) since 2015. This enables us to save KRW 70 million each year by reducing maximum power loads and allowing for day/night-time charging and discharging.

#### → Pursuing Shared Growth through Green Partnership

LG Hausys conducted energy assessments on five suppliers in the vicinity of Oksan and helped discover energy saving projects in 2015 through a project that pursues 'energy-saving journey joined together by large businesses and SME' s' This allowed us to identify projects that could potentially reduce KRW 470 million in energy costs and 1,463 tCO<sub>2</sub> in CO<sub>2</sub> emissions.

Professional energy diagnosis service provider	+	5 suppliers in Cheongju/Oksan in 2015
LG Hausys Facility Team	+	5 suppliers in Gyeongnam/Ulsan in 2016

• Review the capacity of power receiving/distribution facilities, analyze demand/load factors

• Diagnose major energy-consuming facilities – air compressor, boiler, lighting, etc.

↓

Discover Energy-Saving Projects

#### → Green Logistics

LG Hausys reduces its GHG emissions by improving its warehouse operation efficiency and transportation process.

### Achievements of Green Logistics Initiatives

<p><b>Green transportation</b></p> <ul style="list-style-type: none"> <li>Increased the use of marine transportation through process improvement to reduce carbon emissions as measured against air-born transportation</li> <li>Minimized vehicle operation by increasing export container loading rates and direct delivery volume to reduce carbon emissions</li> </ul>	<p>→</p> <p>Reduced GHG emissions &amp; energy consumption</p> <p>→</p> <p>Built a green logistics system</p>
<p><b>In-center green logistics initiatives</b></p> <ul style="list-style-type: none"> <li>Replaced a portion of the diesel-powered forklifts that generate lots of harmful gas with electric forklifts</li> <li>Minimized the number of diesel forklift operations by optimizing work flow/frequency through the use of WMS (Warehouse Management System)</li> </ul>	
<p><b>Eco-driving education</b></p> <ul style="list-style-type: none"> <li>Provided eco-driving training and embed it into daily operations (prevention of idling and speeding) to improve fuel efficiency and reduce fuel consumption</li> </ul>	

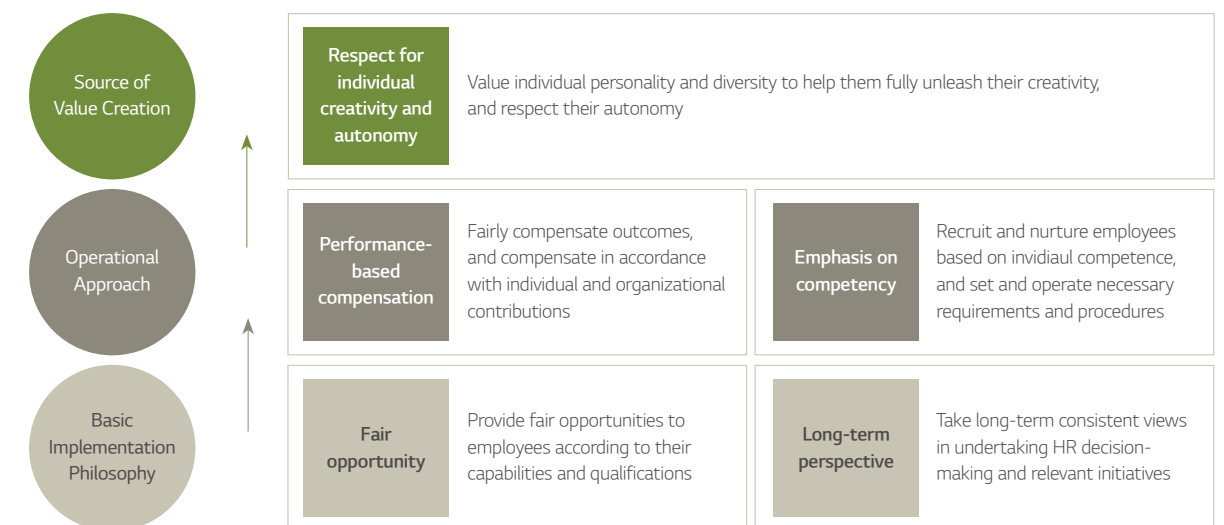


## Talent Management

LG Hausys stands by its 'respect human dignity' business philosophy as a company that grows with its employees. We respect the creativity and independence of our employees and fairly evaluate and compensate them.

### HR Principles

LG Hausys respects the individuality and diversity of its employees so as to help them fully use their creativity, and sets and operates procedures required to secure and nurture highly-competent talent.



### Achievement and Goal

**Take a performance-based approach through fair compensation**



**Provide optimized welfare programs**



#### Principle & Strategy

- Fairly evaluate based on individual performance and competence
- Improve the acceptability of evaluation outcomes as well as individual capability by continually offering feedback

#### 2015 Achievement

- Evaluated and offered feedback quarterly
- Offered training to strengthen evaluators' assessment capacity (mandatory)
- Held Assessment Review Committee meetings

#### 2016 Goal

- To reinforce quarterly reviews and feedback offering
- To offer training to strengthen evaluators' assessment capacity (mandatory)
- To enhance the assessment functionality of the Assessment Review Committee

#### Principle & Strategy

- Operate programs fairly and efficiently

#### 2015 Achievement

- Offered 173 sessions of professional EAP counseling
- Offered 86 sessions of industrial counseling
- Launched employee health promotion programs

#### 2016 Goal

- To continue to facilitate counseling programs
- To launch/operate differentiated health care programs



## The Ideal LG Hausys Employee

The ideal LG Hausys employee “believes in and is capable of practicing the LG Way’. As such, we strive to hire and nurture globally-competent individuals who fall within the parameters of this definition.

### Ideal LG Hausys Employee



- Challenge oneself to become the world’s best through ambition and passion
- Put customers first and ceaselessly pursue innovation
- Value teamwork, as well as independence and creativity
- Build expertise continually and compete fairly

## HR Management Principle

Value is created from individual creativity while performance is driven by employee capability. As such, LG Hausys provides fair opportunities in accordance with an individuals’ abilities and qualifications, fairly evaluates the delivered outcomes, and compensates according to the individual and organizational contributions made. Additionally, we take a long-term and consistent approach in making all HR management decisions. We guarantee

equal employment opportunities and respect human rights on the grounds of gender, age and religion as specified in our Code of Conduct and employment policy. We also do not differentiate base salary levels for our employees.

## Employee Data

We employed a total of 4,461 persons in Korea and abroad on a consolidated basis at the end of 2015. The ratio of office and production workers was 66.3% and 33.7% respectively. In 2015, we hired 200 new employees and we continue to recruit women, physically-challenged individuals, men of national merit and other socially-underserved minorities.

### Ratio of Locally-Hired Employees (Unit : %)

Category		2013	2014	2015
Ratio of local recruitment	U.S.	96.5	96.5	96.3
	China	95.7	95.7	95.9

### Ratio of Female Employees (Unit : %)

Category	2013	2014	2015
Ratio	12.4	13.1	13.8

### Employee Data<sup>1)</sup> (Unit : No. of persons)

Category		2013	2014	2015
Domestic employees		2,979	3,135	3,242
Type of employment	Regular	2,902	3,050	3,157
	Contract-based	77	85	85
Socially-underserved minorities	Women	368	412	446
	Handicapped	52	55	51
	Men of national merit	82	89	90
Age	20's	432	552	573
	30's	899	877	896
	40's	980	1,009	1,035
	50's and older	668	697	738
Job level	Executives	17	19	22
	Employees	2,962	3,116	3,220
Type of job responsibility	Office workers	1,918	2,043	2,151
	Production workers	1,061	1,092	1,091
Regional location <sup>2)</sup>	Headquarters (Seoul)	768	788	808
	Window/PSAA plant in Cheongju	595	302	252
	Oksan Plant	13	332	377
	Ulsan/Onsan Plant	1,081	1,101	1,119
	Others <sup>3)</sup>	522	612	686
New recruitment		218	268	200
Turnover <sup>4)</sup>		62	68	41
R&D <sup>5)</sup>		235	285	309

1) Criteria : The data includes subsidiary employees and expatriates as of the end of December of the concerned year  
 2) 2013 and 2014 employee data was modified due to change in the criteria of categorizing establishments and organizations  
 3) Others : Non-seoul sales teams, overseas corporations/branches, other plants, Design Center, R&D Center  
 4) Turnover: Employees who resigned voluntarily  
 5) R&D: All employees at the R&D labs and Design Center

## Compensation System

LG Hausys takes a performance-driven approach in assessing employees’ outcomes so as to build a market-leading organizational culture and to maximize business results by reinforcing our executional capability. It is based on these performance-centered HR principles that we respect individual creativity and autonomy and provide competitive wages and reward programs.

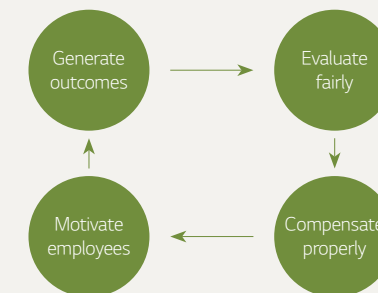
## Fair Assessment System and Continuous Feedback Offering

Included in our endeavors to fairly assess our employee performance are quarterly reviews, the Assessment Review Committee and training to reinforce our evaluators’ assessment capacity. We conduct quarterly progress reviews to strengthen our executional capability, and provide regular feedback and coaching to improve the fairness and acceptability of assessment outcomes. Our Assessment Review Committee enables us to perform comprehensive year-end assessments and reviews by considering contributions to business operations and organizational specificity in addition to individual performance and competence. We also provide mandatory e-learning courses to help evaluators build capacity to conduct objective and fair assessments.

## Performance-based Compensation System

Our compensation system is comprised of cumulative and non-cumulative components based on performance-driven principles: our cumulative annual salary scheme compensates individuals differently based on the previous year’s evaluation outcomes—while the non-cumulative system consists of role-based pay, performance pay, On-Spot Incentives that reward exceptional performance, Sales Incentives and team-level reward programs. Additionally, we operate the R&D Awards, Design Jump, Innovation Festival

### LG’s Performance-Driven Principles



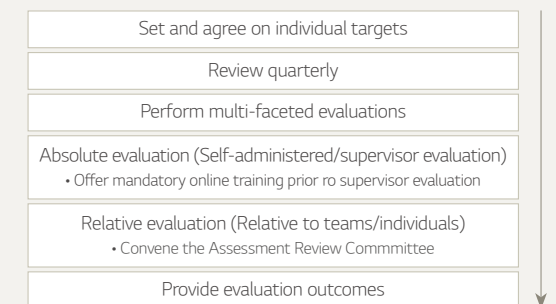
and other project-level reward programs for R&D and innovation initiatives in order to solidify our performance-driven HR principles of “High Performance, High Return”.

## Employees Subject to Regular Performance Evaluations and Career Development Reviews

Category	2013	2014	2015
No. of employees subject to these evaluations and reviews (No. of persons)	1,857	1,983	2,091
Ratio of employees subject to these evaluations and reviews (%)	99.5	99.6	99.9

- Target : Domestic office workers (excluding executives and senior-level employees)
- Ratio of employees subject to relative evaluation out of the total employees

### Evaluation Process



## Expanding and Supporting Female Talent

LG Hausys operates a wide range of programs to ensure the vocational stability of our female employees. We provide maternity leave and flexible work hours to assist our female employees in achieving a healthy work/life balance, as well as options for part-time hours to fully support the governmental policy to promote a better work-life balance. We also consistently ensure that our female employees are assigned to an appropriate position and promoted to leadership positions.

### Maternity Leave Data

Category	2013	2014	2015
Employees who took maternity leave (No. of persons)	22	23	45
Reinstatement rate (%)	89	89	92
Ratio of employees who worked for more than 12 months following their reinstatement (%)	90	94	100

### Reward Programs

R&D Awards, Design Jump	Division-level reward programs
On-Spot Incentive	Sales Incentives
Innovation Festival	⋮

## Building Labor Relations Led by a Sense of Community

LG Hausys builds and practices a labor-management partnership that values engagement and cooperation. In so doing, we generate sustained outcomes and secure a top-notch competitive edge to improve the quality of our employees' life. The ultimate goal of this partnership is to establish community-oriented labor relations that contribute to the development of society. To this end, we operate a unique three-dimensional labor relations model on the three pillars of business management, shop floor operations and collective bargaining to fully engage and seek cooperation from our employees. Furthermore, major changes in business operations require sincere consultations with the labor union as stipulated by the collective agreement to strengthen the foundation for labor-management cooperation.

### Protecting Employees' Human Rights

We fully comply with the Freedom of Association clause as defined by relevant domestic laws and the ILO(International Labour Organization. We support the 'UN Guiding Principles on Business and Human Rights' of the UN Human Rights Commission and fulfill our responsibility accordingly. In particular, any expected change in the status or working conditions of unionized employees should be notified to the union in advance and subject to sufficient

consultations as stipulated in the collective agreement. As of the end of 2015, 99.2% of our production workers were unionized. Furthermore, we fully comply with the forced/child labor prohibition, and restrain pregnant employees from working overtime or at night while providing sexual harassment prevention training to all our employees. There have been no violations identified concerning either forced labor or workplace discrimination.

Ratio of Unionized Workers (As of the end of the concerned year)

Category	2013	2014	2015
No. of unionized workers (No. of persons)	1,026	1,073	1,067
Ratio of unionized workers (%)	98.4	99.8	99.2

### Labor-Management Community

We pursue engaging and cooperative labor relations: labor relations are built horizontally, not vertically, and employees and the top management respect each others' roles on equal footing. Our executives host regular dialogs with employees and quarterly management meetings. Annual sports events held by each worksite also help revitalize our organization. Furthermore, we hold quarterly labor-management conferences and continuously undertake such activities as consultations concerning the scheduling of jointly-held events, the improvement and expansion of employee welfare facilities, and sharing business results and major corporate schedules.

### Labor Relations Vision



## Employee Welfare

LG Hausys offers a broad range of welfare programs to create a work environment that satisfies the needs of our employees. Our communication programs that highlight the psychological stability of our employees, along with our employee health care programs, ensure their ability to fully engage in their work based on their physical and mental well-being.

### Counseling Programs

LG Hausys is clearly aware of the role interpersonal communication between employees plays in the ability to secure their own psychological stability. To help our employees improve their psychological well-being, we provide them with diverse counseling programs such as EAP counseling and industry counseling.

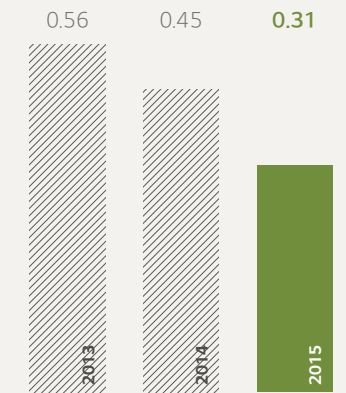
Program	Major Activity	Details	No. of Sessions
Specialized EAP counseling	• Support to address job stress and personal issues	• Individual level (Healing/prevention/growth) - Psychological stability - Reduce stress and improve resitancy • Organizational level (job engagement) - Improve communication competency among employees - Address conflicts	173
Industry counseling	• Professional communication on job-related problems	• Health care support • Psychological management support • Grievance and career management • Family issue counseling	86

### Employee Health Care Management

LG Hausys places ensuring employee health and safety as a top priority and provides education, training and assessment programs for respective work sites.

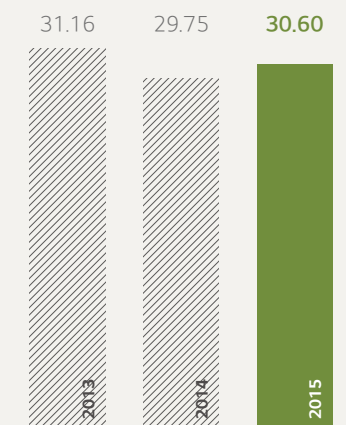
<b>Management of those diagnosed with specific medical conditions</b>	• Counseling provided by industrial health doctors for those diagnosed with general/job-related diseases • In-house blood testing and regular follow-up management • Health care plans and department-level counseling records
<b>Preventive management</b>	• In-house smoking cessation clinic and fitness programs • Training of department-level emergency medical staff and installation of automated external defibrillators
<b>Health check-up</b>	• Comprehensive medical check-ups provided as part of the employee welfare programs • General/special health check-ups and health check-ups conducted before/after assignment
<b>Special health check-up</b>	• Special health check-ups performed based on the type of hazardous substances (noise/dust/organic solvent/specific chemicals/heavy metal)
<b>Additional cancer screening</b>	• Blood test/gastroscopy/abdominal and thyroid ultrasonography

Occupational Injury Ratio (Unit: %)\*



\* Occupational injury ratio : Ratio of injured employees per every 100 employees per year (No. of injured employees ÷ No. of employees x 100)

Ratio of Employees Diagnosed with Specific Medical Conditions (Unit: %)\*



\* Employees diagnosed with specific medical conditions : Employees suspected of having a specific condition or disease as result of a medical check-up, Grade C requires observation and Grade D is diagnosed with specific conditions or diseases in accordance with the criteria set by the Korea Occupational Safety and Health Agency

\* Scope : Domestic establishments

### Occupational Safety and Health Committee

Our Occupational Safety and Health Committee consists of equal numbers of labor and management representatives and is under the official agreement signed with the labor union in relation to employee health and safety. The committee meets regularly every quarter, and employee representatives attend its half-yearly meetings to help solve employee health and safety issues. These include reviews on the work environment and preventive initiatives centered around production departments, along with any possible overlooked issues.

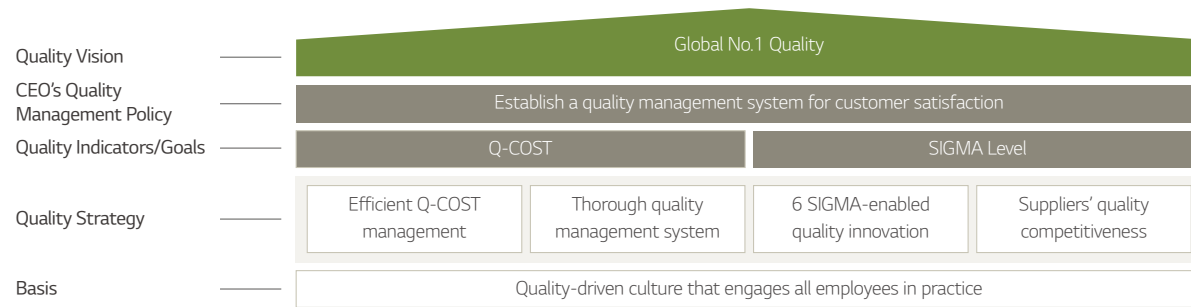


# Quality Management

Under our quality vision 'Global No.1 Quality,' we are determined to deliver top-notch quality to our customers. Thus, we expand our direct communication with our customers along the entire process of production, sales and the use of products.

## Quality Management System

In line with the quality management policy of our CEO, we will realize our quality vision by focusing on the following four strategies and the key management goal of reviewing internal/external failure cost ratios through quality level improvements, talent promotion and Q-COST management.



## Phased Quality Management



## Achievement & Goal

**Strengthen the quality competitiveness of new products from the customer's perspective**



### Principle & Strategy

- Strengthen the verification of new products
- Thoroughly verify the quality of new products

### 2015 Achievement

- Operated the new product development quality guarantee program (Q-Gate)
- Q1: Review product specifications, Q2: Conduct assurance tests, Q3: Operate the Quality Assessment Committee

### 2016 Plan

- Strengthen the quality verification of new products
- Engage in-house/external experts in accordance with development product grades
- Strengthen the management of initial operation control following their development
- Product quality reliability: Conduct mutual verification between quality departments and research labs

**Conduct tests on special conditions (high-rises, coastal lines)/Long-term reliability/Manufacturing & Construction**



### Principle & Strategy

- Conduct long-term quality reliability tests and manufacturing/construction tests in the real-world settings on windows/decorative materials/Hi-MACS and other LG Hausys products that require manufacturing and construction in order to verify their quality under the customers' real-use environment and to examine whether there are any problems with their actual use

### 2015 Achievement

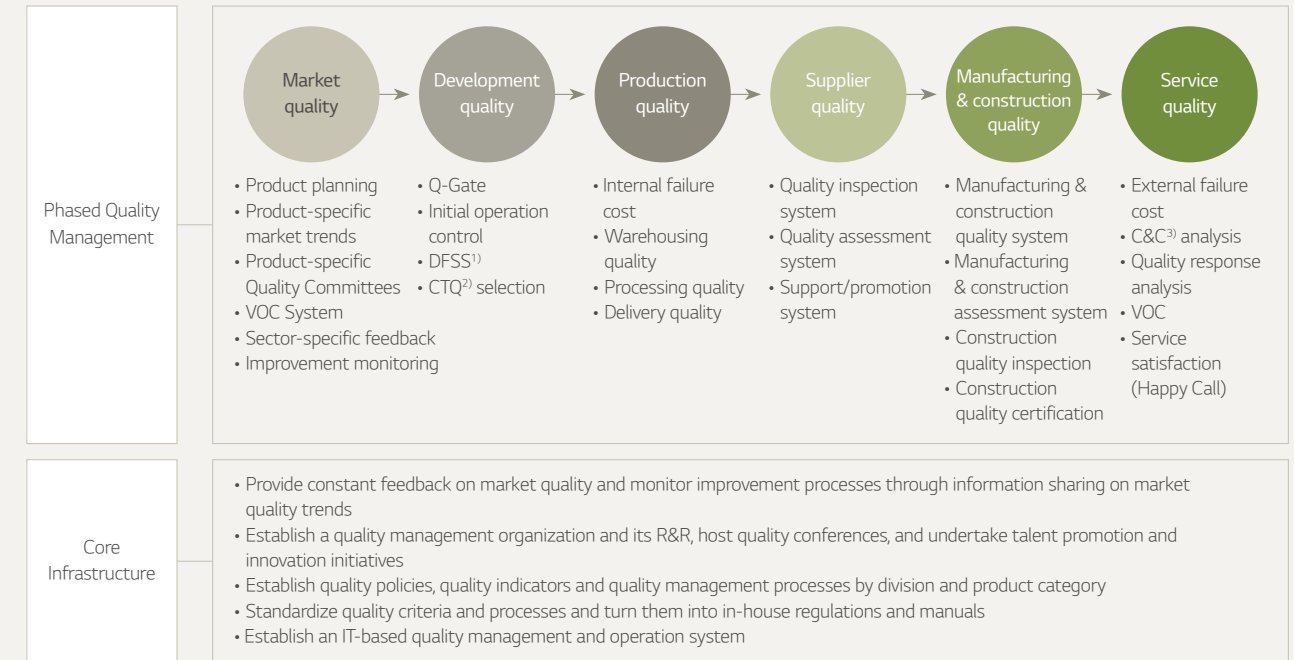
- Special conditions: Relevant departments made consultations
- Long-term reliability: Product long-term reliability tests were conducted under the supervision of quality departments
- Manufacturing & Construction Test: Tests were run under the supervision of relevant departments

### 2016 Plan

- Perform on-site special condition analyses and review domestic/international standards and customer demands on specifications under the supervision of quality departments

## Quality Management Process

Our quality management process takes a consistent customer-driven perspective—from product planning to service offerings.



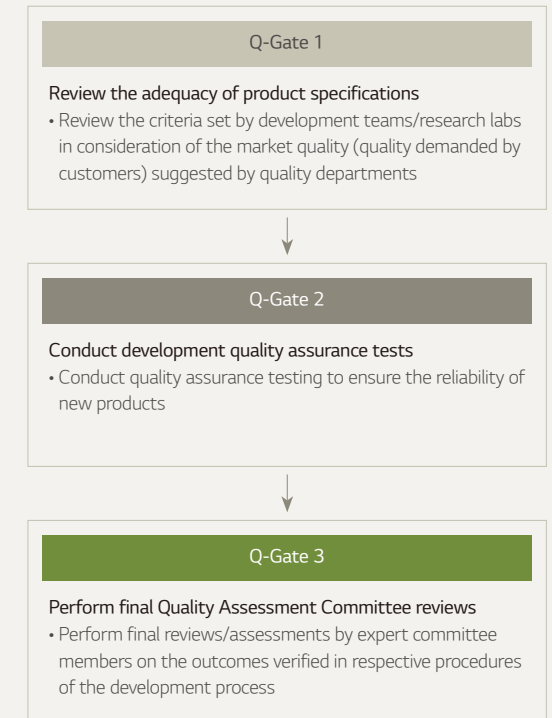
1) DFSS: Design for Six Sigma  
2) CTQ: Critical to Quality  
3) C&C: Claim & Complaint

## Quality Management Program

At LG Hausys, we operate programs to establish our quality management system—from product development to sales—with an aim to realize our quality vision.

### Product Development Quality Assurance System : Q-Gate

We continuously control the quality of our products—from product planning to production and initial operation control—in addition to reviewing product ideas (development concept). In so doing, we strive to deliver products with even higher quality.





### Improving Quality and Products from the Customer Perspective : Voice of Customer

We operate an integrated company-wide management system to efficiently reflect the "Voice of Customers" collected via diverse channels into our business conduct.

We also provide relevant information to quality-related departments so that VOC is incorporated in designing policies concerning strategy, marketing, new products, distribution and logistics.



### Market Quality Meetings

As we are clearly aware of the importance of market quality, we host market quality meetings to proactively manage it. The aim of these meetings is to establish a systemic market quality response approach by collecting and sharing phase-specific suggestions on market quality from the field, following product launches.



### Expanding Customer Communication

We operate wide-ranging communication channels that are up and running from on/off-line programs to customer communities so as to facilitate customer access to our products so that we can reflect their feedback into our products and business conduct.

#### Strengthening Online Customer Contact Points

We are diversifying our online customer contact points and reinforcing our online service offerings – from the Z:IN brand website that provides total interior information – to the Z:IN Mall where customers can purchase our materials and social network channels through which we communicate with customers. In 2015, we also opened the Z:IN Simulation portal and we will continue to reinforce our mobile channels to enable our customers to benefit from comprehensive online interior services.

#### Strengthening Off-line Customer Contact Points

We are currently operating 18 offline showrooms, including our flagship store, LG Hausys Gangnam Z:IN Square, located in the furniture district of Nonhyeon in Seoul, to allow our customers to directly experience and purchase our products. We use these showrooms as our overarching contact points for customer marketing to offer total solutions, from consultations on interior materials, to design suggestions and the arrangement of execution companies. We will further expand the scope of our showrooms and use them as viable contact points to promote customer marketing.

- Z:IN website (www.z-in.com)
- Z:IN Mall (www.z-inmall.com)
- Z:IN blog (blog.naver.com/lghausys\_zin)
- Z:IN Facebook (www.facebook.com/LGHausys.Zin)

### Facilitating Customer Communities

Our representative interior community Z:ENNE that consists of prosumers and brand ambassadors, and our PPL (Product Placement) programs that sponsor our materials and showrooms to TV shows, allow us to take a step closer to our customers. By providing product information to customers while collecting their feedback instantly via these communities, we will deliver products and conduct business in a way that caters to their needs.

### Protecting Customer Information

We protect our customer's personal information through wide-ranging security initiatives undertaken in accordance with Korea's 'Act on the Promotion of Information & Telecommunications Network Use and Information Protection' and 'Personal Information Protection Act'. In particular, separate personal data privacy training is provided to LG Hausys employees and its suppliers who deal with customers' personal information in their business operations. In addition, we set company-wide information protection policies and long-term roadmaps while operating information security units to reinforce our execution capability as a way to strengthen our information protection system and organization.

SPECIAL ISSUE

#### Z:ENNE

Z:ENNE, a community of housewives, has evolved into Korea's representative interior community that serves as both a prosumer and brand ambassador for our products and general marketing activities. Z:ENNE recruits new members every year, once chosen, these members fulfill their assigned mission during the year-long term, and serve as a communication channel between Z:IN and its customers.

#### Represent customer needs and suggest possible improvements

Our representatives are prosumers who provide their ideas on Z:IN products and services so that we can create a clean and eco-conscious living environment for our customers.

- Participate in product evaluations, FGDs\* and surveys
- Submit annual VOC reports
- FGD : Focus Group Discussion

#### Perform on/off-line promotional activities in relation to Z:IN

These representatives are brand ambassadors who practice the brand values of Z:IN – eco-friendliness, trust, and expertise – and disseminate these values via on/offline channels.

- Promote Z:IN events and new products via social networks
- Create blog postings on their experience of the showrooms, products and services

#### Create content from the customers' perspective

They are content creators who are knowledgeable about Z:IN and speak about their experience with various interiors from the customer's perspective.

- Interior and living themes
- Write postings on the Z:IN website/blog (Z:ENNE reports, etc.)

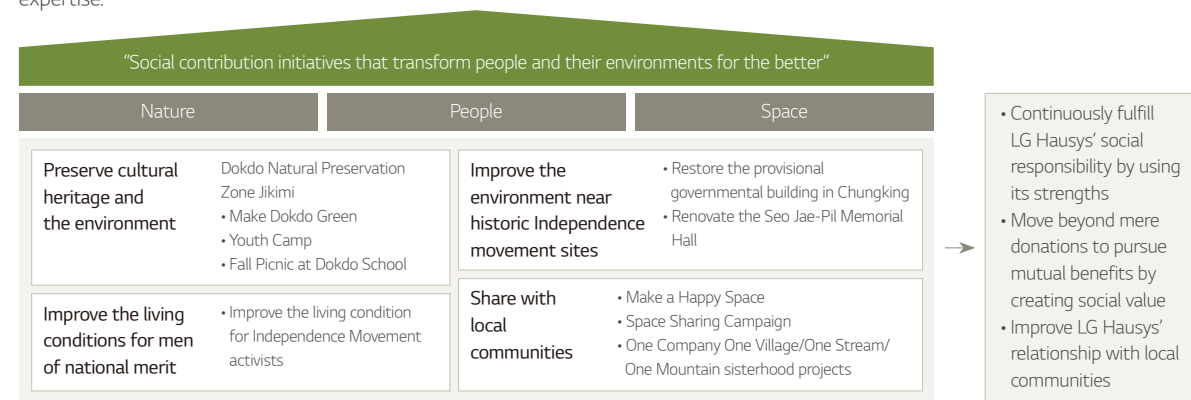


## Social Contribution

At LG Hausys, we pursue mutually-beneficial growth with society through social-giving initiatives that capitalize on our business features and our corporate and employee capabilities. We instigate change that serves for the betterment of society by preserving our cultural heritage and environment, renovating the historic sites of Korea's Independence Movement, improving the residences for men of national merit and undertaking sharing-driven programs for local communities.

### Social Contribution Vision Framework

Our social contribution initiatives aim to create value for both nature and people. Specifically, we contribute to the mutually-beneficial growth of LG Hausys as a company and as a community by fully utilizing our unique and exceptional product capability and employee expertise.



### Investment in Local Communities (Unit: KRW million)



### Achievement & Goal

Facilitate representative programs	Diversity social-giving initiatives	Undertake sharing programs for local communities
<b>2015 Achievement</b> • Make Dokdo Green (2009-present, 7 years) • Dokdo Love Youth Jikimi (2010-present, 150 participants) • Space Sharing Campaign (2011-present, 5 years, 30 locations) <b>2016 Goal</b> • Improve the quality and operation of programs • Assess and improve on social-giving initiatives	<b>2015 Achievement</b> • Improved the living environment for men of national merit • Renovated the Seo Jae-Pil Memorial Hall <b>2016 Goal</b> • Discover/undertake new programs • Include social-giving initiatives in conducting impact assessments	<b>2015 Achievement</b> • Make a Happy Space (2009-present, 7 years, 15 locations) • LG Happy Day • Briquettes of Love volunteer program • One Company One Village/One Stream/One Mountain campaigns <b>2016 Goal</b> • Encourage more employees in talent donation programs • Continue to contribute to local communities

**Preserving Korea's Cultural Heritage and Environment**

The Dokdo Natural Preservation Zone Jikimi Initiative, one of leading social-giving programs, enables us to preserve our invaluable natural and cultural heritage and to educate our youth on the importance of such places.

**Renovating the Historic Sites of Korea's Independence Movement**

We signed an agreement to restore the provisional government office in Chongqing with the Ministry of Patriots and Veterans Affairs and launched a support project to renovate the Seo Jae-Pil Memorial Hall to pass down the spirit of Korea's Independence Movement to the next generations.

**Renovating the Residence for Men of National Merit**

We renovate the residences for men of national merit and their direct descendents.

**Undertaking Sharing-Driven Programs for Local Communities**

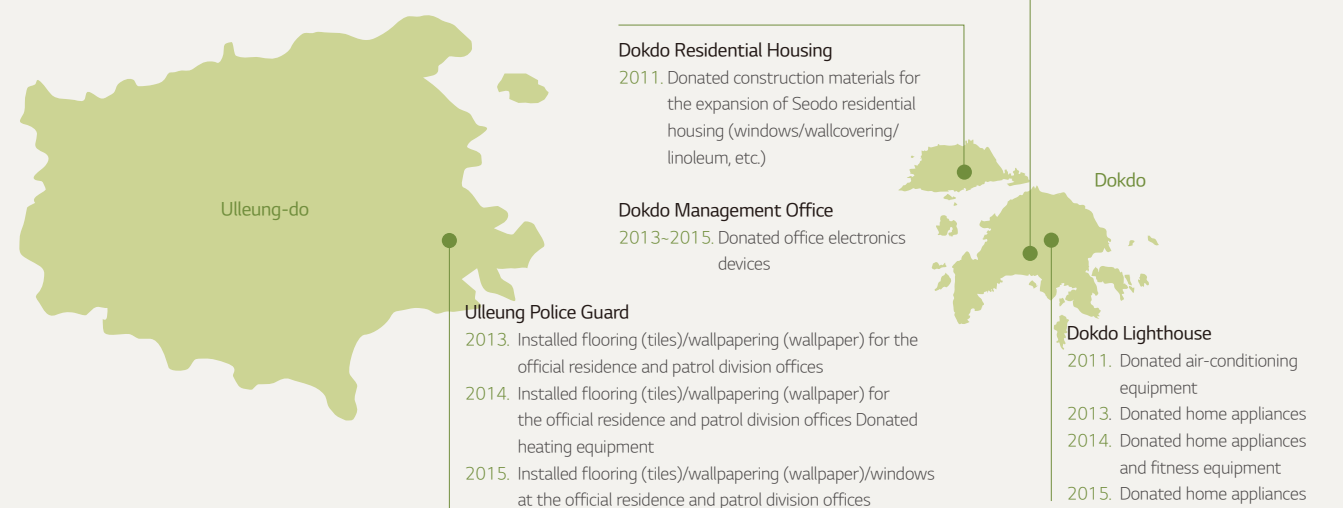
Our Make a Happy Space initiative, Space Sharing Campaign, One Company/One village/One Stream/One Mountain sisterhood projects, and support programs for the less-privileged (young heads-of-households, undernourished children and seniors living alone) are all designed to share the value we create with local communities. We also enable our employees and undergraduate volunteers to donate their talent in diverse ways.

### Preserving Korea's Cultural Heritage and Environment

We continue to provide educational programs for our youth to preserve our natural, historical and cultural heritage and to pass down their value to future generations.

### Make Dokdo Green

We help renovate major facilities located in Dokdo to improve the quality of life for Dokdo residents while preserving the pristine natural environment of this natural preservation area.



### Patrol Routes

2009-2015. Installed and repaired the safety fence (Used 'Woozer')

### Dokdo Police Guard

- 2009. Replaced the flooring (tiles) of the gym, internet cafe and cafeteria
- 2010. Renovated the flooring (tiles) and walls (wallpaper) of the barracks and donated equipment
- 2011. Renovated the kitchen facility (tiles and others) and donated cooking equipment
- 2012. Renovated the operations room/guest rooms/hall flooring (tiles) and walls (films)  
Renovated the changing room and donated furniture
- 2013. Replaced the flooring (tiles) of the situation room
- 2014. Replaced the flooring (tiles) of the briefing room
- 2015. Execution on bathrooms/toilets

**Dokdo Love Youth Camp/  
Fall Picnic at Dokdo School**

We provide educational programs to elementary and undergraduate students to help them better understand Dokdo and nurture the next generations to practice their respect for such natural areas.

→ Dokdo Love Youth Camp

We offer wide-ranging programs for undergraduate students participating in our Dokdo Love Youth Camp to directly/indirectly experience Dokdo, from visits to the island, exchanges with Dokdo keepers and special expert lectures to Love Dokdo conservation tasks and trekking.

→ Fall Picnic at Dokdo School

In celebration of Dokdo Day (Oct. 25<sup>th</sup>), we provide educational programs to elementary school students at Dokdo School located in the Independence Hall of Korea. These programs include information on Dokdo's fauna & flora and history, making Dokdo models, and Love Dokdo sports events, all of which allow these young students to learn about this unique island in a fun way.



Dokdo Love Youth Camp



Sections of the Seo Jae-Pil Memorial Hall decorated with LG Hausys' products



Re-opening of the Seo Jae-Pil Memorial Hall



Renovating the living environment for men of national merit

**Renovating the Historic Sites of  
Korea's Independence Movement /  
Renovating the Residence for Men  
of National Merit**

We renovate facilities related to Korea's Independence Movement as well as the residence for men of national merit so that the spirit of this historic movement and the sacrifice and national contribution of our ancestors will be forever remembered by future generations.

**Renovating the Historic Sites of Korea's  
Independence Movement**

Inhering the spirit of the group founder (the late Chairman Goo In-Hoe) to support Korea's Independence Movement, LG Hausys used its outstanding products (including high-insulation windows and green flooring materials), in renovating the Seo Jae-Pil Memorial Hall. We also signed an agreement to restore the nation's provisional government building in Chongqing, China, with a goal to complete the project by 2016.

**Renovating the Residence for Men of National Merit**

We renovate the living environment for men of national merit (veterans of the Korean War, Independence Movement activists) and their direct descendants. Specifically in 2016, we plan to expand the scope of such program beyond Korea to offer support to Korean War veterans in foreign countries.

**Launching Sharing-Driven Activities  
for Local Communities**

We launch diverse sharing-driven activities to show that we care for the less-privileged in local communities. Our Make a Happy Space, Space

Sharing Campaign, One Company/One Village/One Stream/One Mountain sisterhood projects and plant-specific social-giving programs are just some of these sharing-driven activities designed for local communities and the environment.



**Make a Happy Space**

To encourage our future leaders to dream and hope for a better future, we are undertaking our Make a Happy Space initiative that renovates public youth spaces with our specialized products, execution and design capabilities.

**Key Social-Giving Initiatives by Plant**

At our Ulsan and Cheongju Plants, employees are actively engaged in social contribution programs designed to contribute to the development of local communities and preserve the environment in the vicinity of these plants.

**Ulsan Plant Social-Giving Initiatives**

Initiative	Description
One Company One Village campaign	Support the events held in villages near the plant and purchased agricultural produce from these villages
One Company One Stream campaign	Inspect the water quality of Hoeya River near the plant and conduct clean-up activities along the river
One Company One Mountain campaign	Clean up Daeun Mountain with the Clean Ulsan Team (under the Ulsan City Hall)
LG Happy Day	Donate kimchi to the local children's center in Onyang and the elderly living alone with the funds raised by employees at year-end events
Labor for Love	Donate motorized adjustable beds, cold storage equipment, TVs, washing machines, fan heaters and electric fans to three senior welfare centers (Baekyang Silver Home, etc.)

**Cheongju Plant Social-Giving Initiatives**

Initiative	Description
One Company One Stream campaign	Clean up Miho Stream in alignment with the Geumgang River Basin Environmental Office
Support for children from low-income families	Provide minimum living expenses to children from low-income families in alignment with ChildFund Korea
Delivery of Briquettes with Love	Deliver briquettes to seniors living alone in alignment with Chungbuk Briquette Bank
Delivery of Kimchi with Love	Donate kimchi to childcare centers and senior welfare centers in the region
Labor for Love	Donate motorized adjustable beds and bed sheet covers to a senior welfare center (Hyobu Village Welfare Center)



### Space Sharing Campaign

We continue to undertake social welfare facility renovation projects through the business agreements we sign with public agencies. Between 2013 and 2014, we worked with the Seoul Design Center under the Seoul Metropolitan Government to launch our 'Happy Design Sharing' program that engaged citizens – undergraduates with design capability, design experts and the LG Hausys consumer community Z:ENNE – in renovating old social welfare facilities in Seoul. In 2015, we signed such an agreement with Gyeonggi Urban Innovation Corporation and initiated the 'Space Sharing Campaign' to remodel welfare facilities in the province. In 2015, this campaign benefited 14 facilities including Anna House, Rainbow Children's Center, Always Green Children's Center and Manna Welfare Center.



Employees volunteering for the Space Sharing Campaign

## SPECIAL ISSUE

### Creating Value for Local Communities through PPP\*

LG Hausys works with the central and local governments to mobilize its business capacity and infrastructure in renovating old residential facilities in local communities so as to support local community members to enjoy a more eco-friendly and pleasant living space.

\* PPP : Private-Public Partnership

#### Green Remodeling Project

The Green Remodeling Project is supervised by the Ministry of Land, Infrastructure and Transport to improve the energy performance of old buildings with reduced energy efficiency so as to address imbalances in energy supply/demand and reduce energy costs. LG Hausys provides our high-insulation windows and other high energy-efficiency products to expand this meaningful project. We replaced old windows on 170 and 1,774 cases in 2014 and 2015 respectively, which translates into nearly 64% of the total Green Remodeling Project. In 2015, we signed business agreements with Jeju Special Self-Governing Province and Gyeonggi Province to facilitate this project while supplying our eco-friendly building materials to improve the energy efficiency within buildings.

This project is undertaken through Z:IN Window Plus, our specialized window stores, TV homeshopping and other diverse B2C channels, and we aim to become a trend-setter in the energy-saving window segment by providing our high-insulation windows and Low-E glass products.

#### Seoul City's BRP\* Project

Seoul City's Building Retrofit Project(BRP) aims to replace old windows, insulation materials and boilers to reduce wasted energy in buildings. LG Hausys signed a BRP agreement with Seoul City and offers up to 20% discount to customers who replace their windows through financing support from the City.

\* BRP : Building Retrofit Project



# Appendix

- Data Summary
- Third-Party Assurance Statement
- GRI G4.0 / ISO 26000 Index
- Membership and Initiatives

# DATA SUMMARY

## Economic Data

### Profit/Loss Statement (Unit : KRW million)

Item	2013	2014	2015
Sales	2,676,952	2,792,135	2,768,561
Cost of sales	2,062,076	2,120,755	2,009,673
Gross profit	614,876	671,380	758,889
Selling & administrative expenses	500,288	522,837	608,829
Operating income	114,588	148,543	150,060
Non-operating profit & loss	△ 22,371	△ 34,705	△ 43,999
Continuing business profit before tax	92,217	113,838	106,061
Corporate tax	19,500	45,924	26,588
Profit & loss from discontinued operation	△ 419	△ 4,325	△ 8,311
Net income	72,298	63,590	71,162

### Balance Sheet (Unit : KRW million)

Item	2013	2014	2015
Current assets	945,827	931,683	1,006,985
Notes and accounts receivable	458,083	482,143	486,825
Inventories	234,007	249,218	266,776
Non-current assets	957,007	1,092,766	1,223,571
Tangible assets	869,800	992,493	1,110,499
Assets held for sale	49,254	32,616	21,195
Total assets	1,952,089	2,057,065	2,251,751
Current liabilities	820,309	718,248	712,261
Non-current liabilities	348,840	508,756	661,901
Total liabilities	1,169,150	1,227,004	1,374,163
Paid-in capital	50,000	50,000	50,000
Capital surplus	618,208	618,208	618,208
Other capital items	△ 8,188	△ 8,188	△ 8,189
Aggregate of other universal profit & loss	△ 18,713	△ 16,609	△ 12,060
Retained earnings	137,051	182,964	226,559
Non-controlling interest	4,582	3,686	3,070
Total equity	782,939	830,061	877,588
Total equity and liabilities	1,952,089	2,057,065	2,251,751

\* Indicates a negative value

### Profitability Indicators (Unit : %)

Main Financial Statement Indicators	2013	2014	2015
Ratio of operating profit to net sales	4.3	5.3	5.4
Ratio of net income to net sales	2.7	2.3	2.6
Return on total assets (ROA)	3.7	3.1	3.2
Return on equity (ROE)	9.2	7.7	8.1

### Growth Indicators (Unit : %)

Main Financial Statement Indicators	2013	2014	2015
Sales growth rate	9.2	4.3	△0.8
Tangible asset growth rate	12.3	14.1	11.9
Net income growth rate	153.5	△12.0	11.9
Total asset growth rate	9.8	5.4	9.5

### Activity Indicators (Unit : %)

Main Financial Statement Indicators	2013	2014	2015
Total asset turnover ratio	1.3	1.4	1.2
Receivables turnover ratio	5.4	5.8	5.7
Inventory turnover ratio	10.5	11.2	10.5
Tangible asset turnover ratio	2.8	2.8	2.5

### Stability Indicators (Unit : %)

Main Financial Statement Indicators	2013	2014	2015
Current ratio	115.3	129.7	141.4
Debt ratio	149.3	147.8	156.6
Fixed assets to stockholders' equity and long-term liabilities	84.6	81.6	79.5
Ratio of net worth to net capital	40.1	40.4	39

\* Stability: LG Hausys enhances our external credibility by managing our credit ratings and promotes stability in our financial operation so that we conduct business in a stable manner. As of the end of 2015, we were rated AA- in corporate bond and A1 in commercial paper by domestic credit rating agencies. This demonstrates that we, as a company, are highly capable of paying the principal and interest as well as swiftly redeeming corporate bonds and paying debts. Our credit ratings reflect such factors as the impact from upstream industries (construction, automobiles, IT), the current business conditions including our entry into high value-added adjacent businesses and advancement into the global market, and growth potential and financial stability.

### Risk Management Strategy

**Risk management system :** LG Hausys' risk management is conducted by the Financial Department. Our Financial Department reviews and approves documented policies concerning general risk management as well as as such specific areas as currency risk, interest rate risk, credit risk, the use of financial derivatives and non-derivatives and any investment that exceeds our available liquidity.

**Market risk management :** LG Hausys takes a systemic approach in managing currency risks as well as market-induced risks caused by cash flow and fair value interest rate risks.

### Tax Strategy

LG Hausys stringently complies with the tax laws and relevant regulations of Korea and those nations where our overseas branches are based while faithfully meeting our obligation for tax reporting and payment. We implement tax policies to effectively reduce tax payments and prevent double taxation within the boundary of tax laws to strengthen our competitive edge in the global market and to enhance shareholders' value. We also respond to the requirements of tax authorities in a reasonable manner.

Each year, we specify in our audit report information on our corporate tax expenses, deferred corporate taxes and valid tax rates while externally disclosing such information through the Data Analysis, Retrieval and Transfer System of the Financial Supervisory Commission. In so doing, we vow to sincerely fulfill our responsibility to pay taxes in a transparent and sound manner so that we become a company respected by society and customers.



# DATA SUMMARY

## Creating and Distributing Material Economic Value

Dividend payout to shareholders

**18** KRW billion

**Shareholders & investors** • LG Hausys constantly strives to maximize value for shareholders who are the true owners of the company. We return profits we generated to our shareholders via cash dividend payout. In 2015, KRW 1,800-worth cash dividends per common share were paid to our shareholders, and our EPS amounted to KRW 7,116.

Goods and services purchased

**1,749.3** KRW billion

**Suppliers** • We procure goods and services from our suppliers and we maintain fair and sustained business relationships with them. In 2015, we purchased goods and services worth KRW 1.7493 trillion in total from 1,415 suppliers. Nearly 40% of these purchases are made directly in the local community where we are based.

Salary, welfare benefits and retirement pay

**388.7** KRW billion

**Employees** • We paid our employees with salary, welfare benefits and retirement pay. We will continue to expand the distribution of economic value to our employees by sharing our business outcomes fairly and introducing diverse welfare programs.

Corporate taxes & other taxes and public utility charges

**41.4** KRW billion

**Government** • We transparently disclose the outcomes created through our business conduct, and faithfully pay corporate taxes, income taxes, real estate taxes and other taxes to the central and local governments.

Local community investment

**1.5** KRW billion

**Local community** • We undertake social-giving initiatives via local infrastructure support funds, sponsorship for arts & educational events and programs. In so doing, we return the economic value that we generated to our local communities.

		2013	2014	2015
Shareholders & Investors	Dividend per share (KRW)	1,800	1,800	1,800
	Earnings per share (EPS) (KRW)	7,230	6,359	7,116
	Total dividend payout (KRW 100 million)	180	180	180
Employees	Salary* (KRW 100 million)	2,574	2,725	2,936
	Welfare benefits (KRW 100 million)	536	645	725
	Retirement pay (KRW 100 million)	183	268	226
Government	Corporate taxes & other taxes and public utility charges (KRW 100 million)	306	593	414
Suppliers	Purchase of products and services (KRW 100 million)	18,343	18,826	17,493
Local Communities	Investment in local communities (KRW million)	504	999	1,551

\* There is no pay disparity between genders.

## Environmental Data

### Management System Certification (Initial Certified Date)

Name of Certification	Ulsan	Cheongju	Oksan*	Tianjin
ISO14001	Dec. 1996	Sep. 1997	Sep. 1997	Nov. 2011
KOSHA18001	Nov. 2000	Dec. 2009	-	-
OHSAS 18001	Nov. 2013	Dec. 1999	Dec. 1999	-
Green Company	Dec. 1995	Dec. 1995	-	-

\* Our Oksan Plant was grouped together with our Cheongju Plant during the certification process and thus shares the same initial certified date on the certificate.

### Consumption of Primary Raw Materials (Unit : ton)

Category	2013	2014	2015
PVC	129,762	138,241	130,818
Calcium carbonate	77,005	82,299	89,083
Plasticizer	29,336	33,701	31,286
MMA	16,131	17,192	15,904
Total	252,234	271,433	267,091

### Energy Consumption (Unit : TJ)

Category	2013	2014	2015	
Energy Consumption	LNG	890.4	990.9	995.2
	Diesel	10.2	12.9	12.4
	Gasoline	1.8	0.5	0.4
	Electricity	1,445.1	1,570.9	1,558.9
Steam	189.3	154.0	62.7	

\* Consumption of recycled materials : 24,007 tons

### Plant-Specific Environmental Data

Category		Ulsan			Cheongju			Oksan
		2013	2014	2015	2013	2014	2015	2015
Energy consumption	Direct energy (TJ)	877	928	860	46	77	17	131
	Indirect energy (TJ)	921	1015	989	713	710	259	374
	Total energy consumption (TJ)	1,798	1,943	1,849	759	787	276	505
Water consumption (ton)		721,708	593,324	708,963	93,238	93,445	54,493	99,767
GHG emissions	Scope1 (tCO <sub>2</sub> eq)	45,181	47,305	43,874	2,332	3,923	893	6,636
	Scope2 (tCO <sub>2</sub> eq)	44,738	49,309	48,034	31,107	31,625	11,505	17,596
	Total emissions (tCO <sub>2</sub> eq)	89,919	96,614	91,907	33,439	35,549	12,397	24,232
Air pollutant emissions	NOx (ton)	62.1	60.4	55.1	-	0.4	0.2	0
Discharge of wastewater	Wastewater (m <sup>3</sup> )	52,897	47,560	44,414	1,107	3,606	584	8,688
	BOD (ton)	0.14	0.10	0.31	0.01	0.07	0.05	0.38
	COD (ton)	1.51	1.22	1.13	0.01	0.10	0.01	0.49
	SS (ton)	0.28	0.36	0.65	0.02	0.08	0.02	0.29
Discharge of waste	General waste (ton)	18,631	14,019	14,897	12,364	14,190	3,168	17,393
	Designated waste (ton)	560	559	559	395	415	402	244
	Recycled waste (ton)	16,075	11,364	12,117	11,421	13,106	2,335	17,181
	Recycling rate (%)	83.9	77.9	78.4	89.5	89.7	65.4	97.4

\* We do not produce any of the ozone-depleting substances defined in the Montreal Protocol; nor do we use such substances in our manufacturing.

# LG HAUSYS THIRD-PARTY ASSURANCE REPORT

## To the Stakeholders of LG Hausys

The Korea Productivity Center (the "Assurer") was requested by LG Hausys Ltd. ("LG Hausys") to conduct independent assurance on the information presented in the 2016 LG Hausys Sustainability Report (the "Report") and hereby provides the following assurance statement:

## Responsibility and Independence

LG Hausys is entirely responsible for all information and opinions presented in the Report. The Assurer is solely responsible for providing the assurance statement for the contents of the Report. As an independent assurance agency, the Assurer was involved neither in the process of developing the Report with LG Hausys, nor in any conflict of interest that may undermine our independence.

## Assurance Standards

The independent assurance was performed in accordance with Type 1 and Type 2 (applied to specific performance information) and the Moderate Level of assurance engagement based on the AA1000AS (2008)<sup>1)</sup> assurance standards. The Assurer verified the suitability of inclusivity, materiality, and responsiveness based on the AA1000APS (2008)<sup>2)</sup> assurance principle. Furthermore, the Assurer confirmed the compliance of the contents of the Report with GRI G4 Guideline standards.

## Limitations

The Assurer conducted an assurance of LG Hausys' performance in 2015 in accordance with the standards above, and verified the credibility of the performance in the Report, in the following manner:

- Financial data was verified through the financial statement and disclosed documents were audited by an auditing agency.
- The baseline data for Environmental and Social performance was not verified, while the aggregated data was used for the verification.
- Limited on-site inspections were conducted in the headquarters, Seoul. The results can be affected if any additional verification procedures are carried out.

## Methodology

The independent assurance of the Report was conducted following the methods below:

- Verified if the requirements for core options of GRI G4 Guidelines were fulfilled.
- Verified the compliance with the principles of the contents of the Report, and quality based on GRI G4 Guidelines.
- Verified the appropriateness of material issues and contents of the Report through media research and benchmarking analysis.
- Verified the suitability of the contents and any errors in expression through comparison analysis with other sources.
- Verified the basis of core data and information, and the internal process and system through on-site inspection at the headquarters in Seoul.

Material Issues	DMA & Indicators
Develop new eco-friendly products in a sustained manner	DMA-Products and services, G4-EN 27
Secure growth engines through sustained technology development	DMA-Products and services, G4-EN 27 DMA-Customer health and safety, G4-PR 1, PR 2
Manage environmental pollutants	DMA-Effluents and waste, G4-EN 27
Reduce the environmental impact of products throughout their life cycle	DMA-Energy, G4-EN 3, EN 5, EN 6, EN 7 DMA-Water, G4-EN 8, EN 9 DMA-Emissions, G4-EN 15, EN 16, EN 18, EN 19, EN 20, EN 21
Build an employee-friendly organizational culture	DMA-Training and education, G4-LA 9
Support suppliers and pursue shared growth	DMA-Anti-competitive behavior, G4-SO 7
Broaden global market presence	N/A
Establish workplace safety	DMA-Occupational health and safety, G4-LA 5, LA 6, LA 7, LA 8

1) AA1000AS (2008) : AA1000AS is a sustainability assurance standard developed by the UK-based Institute of Social and Ethical Accountability (AccountAbility) in November 1999 to assure organization-wide sustainability performance and accountability by improving the quality of accounting, auditing and reporting practices in the social and business ethics domain. The revised 2008 version has been in effect since 2010.

2) AA1000APS (2008) : AA1000 AccountAbility Principles Standard (2008) represents the global assurance principles set forth by AccountAbility to provide guiding principles that lay the basis for the AA1000 standards.

## Findings & Conclusion

The Assurer verified that the Report accurately and fairly reflects LG Hausys' sustainability activities and performance. The Assurer also verified that the Report meets the requirements for core options of GRI G4 Guideline.

In case of General Standard Disclosures, the Assurer verified that the Report is written in compliance with the requirements of core options. For Specific Standard Disclosures, the Assurer reviewed Disclosure on Management Approach (DMA) and indicators regarding material issues by using the reporting criteria process below.

### · Inclusivity : Stakeholder Engagement

The Assurer confirmed that LG Hausys defines its key stakeholders as 5 groups: shareholders & investors, employees, suppliers, local community, and customers. The Assurer also verified that LG Hausys collects opinions of its stakeholders through clear categorization of communication channels and expectations of each group, and through active communication.

### · Materiality : Identification and Reporting of Material Issues

Based on issues in the previous report, LG Hausys surveyed international standards for sustainable management, such as GRI G4 Guideline and ISO26000, media analysis, and issues from the domestic and overseas construction materials (building products) industry. LG Hausys then identified and organized 19 sustainability issues. The company prioritized 8 material issues (aspects) for internal and external stakeholders by conducting the materiality test. The company also made sure that the information included in each page of the report was balanced.

### · Responsiveness : Organization's Response to Issues

The Assurer verified that LG Hausys identified major expectations that are effective to performance of stakeholders, took responsive measures for the matters, and accurately presented such contents in the Report. LG Hausys sincerely publicizes its response activities and performance for key sustainability issues in the Report. The Assurer has evaluated the reliability of the data and information about water usage, waste water and waste treatment, and occupational accidents for Type 2 Assurance. The Assurer has interviewed the personnel responsible for the data and information, in order to figure out the generation, aggregation and processing of data and information, and has reviewed the relevant documents and records based on which the statements in the Report are addressed.

## Recommendation

The Assurer highly values the various efforts of LG Hausys and the outcomes thereof, to enhance its sustainability, and provides the following suggestions for future publications of the Report and improvement of its sustainability standards:

- It is necessary to reinforce activities for collecting direct opinions from stakeholders and identifying their expectations. It is therefore recommended to establish a process for stakeholder engagement.
- To implement sustainable management in a systemic way, it is recommended to draw and manage tasks and key performance indicators (KPI) based on a strategic system for sustainable management, and describe activities and performances regarding sustainability in the report in detail.



Apr 2016  
Korea Productivity Center  
CEO Hong, Sun-Jik

The Sustainability Management Center of Korea Productivity Center is an assurance agency officially certified by AccountAbility [organization established AA1000, the international standard for stakeholder participation and verification] and is qualified to independence assurance engagements. Its Assurance Committee is comprised of competent experts who have in-depth experience in sustainability management consulting and assurance and have completed the relevant training.

# GRI G4.0 / ISO 26000 INDEX

The LG Hausys Sustainability Report 2015 was prepared in accordance with the Core Options of the GRI (Global Reporting Initiative) G4 Guidelines, and indicates the level of reporting for both general and specific standard disclosures as well as external assurance indexes.

## GRI G4 General Standard Disclosures

● Fully reported ○ Partially reported ○ Not reported

Aspect	Indicator	Contents	Page	Note	External
Strategy and Analysis	G4-1	Provide a statement from the most senior decision-maker of the organization about the relevance of sustainability to the organization and the organization's strategy for addressing sustainability	4-5		●
	G4-2	Provide a description of key impacts, risks, and opportunities	4		●
Organizational Profile	G4-3	Report the name of the organization	6		●
	G4-4	Report the primary brands, products, and services	6		●
	G4-5	Report the location of the organization's headquarters	7		●
	G4-6	Report the number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report	7		●
	G4-7	Report the nature of ownership and legal form	46		●
	G4-8	Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries)	6-7, 22-23		●
	G4-9	Report the scale of the organization, including: Total number of employees, Net sales, Total capitalization, and Quantity of products or services provided	7		●
	G4-10	Report the total number of employees	56		●
	G4-11	Report the percentage of total employees covered by collective bargaining agreements	58		●
	G4-12	Describe the organization's supply chain	72		●
	G4-13	Report any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain	2, 21-23, 72		●
	G4-14	Report whether and how the precautionary approach or principle is addressed by the organization	31, 40, 45, 53, 71		●
	G4-15	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses	58, 80		●
	G4-16	List memberships of associations and national or international advocacy organizations	80		●
	Identified Material Aspects and Boundaries	G4-17	List all entities (subsidiaries and joint ventures) included in the organization's consolidated financial statements or equivalent documents	Business Report 3	
G4-18		Explain the process for defining the report content and the Aspect Boundaries	10-11		●
Stakeholder Engagement	G4-19	List all the material Aspects identified in the process for defining report content	11		●
	G4-20	For each material Aspect, report the Aspect Boundary within the organization	10		●
	G4-21	For each material Aspect, report the Aspect Boundary outside the organization	10		●
	G4-22	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements	2		●
	G4-23	Report significant changes from previous reporting periods in the Scope and Aspect Boundaries	2		●
	G4-24	Provide a list of stakeholder groups engaged by the organization	10		●
	G4-25	Report the basis for identification and selection of stakeholders with whom to engage	10		●
Report Profile	G4-26	Report the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process	10, 11		●
	G4-27	Report 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	9, 10, 11		●
	G4-28	Reporting period for information provided	2		●
	G4-29	Date of most recent previous report	2		●
	G4-30	Reporting cycle (such as annual, biennial)	2		●
	G4-31	Provide the contact point for questions regarding the report or its contents	2		●
	G4-32	Report the 'in accordance' option the organization has chosen	2, 76-79		●
Governance	G4-33	Report the organization's policy and current practice with regard to seeking external assurance for the report	2, 74-75		●
	G4-34	Report the governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts	45, 47		●
	G4-38	Report the composition of the highest governance body and its committees	47		●
	G4-39	Report whether the Chair of the highest governance body is also an executive officer	46		●
	G4-40	Report the nomination and selection processes for the highest governance body and its committees, and the criteria used for nominating and selecting highest governance body members	47		●
	G4-44	Report the processes for evaluation of the highest governance body's performance with respect to governance of economic, environmental and social topics	47, Business Report 188		●
	G4-45	Report the highest governance body's role in the identification and management of economic, environmental and social impacts, risks, and opportunities	47		●
	G4-47	Report the frequency of the highest governance body's review of economic, environmental and social impacts, risks, and opportunities	47		●
	G4-50	Report the nature and total number of critical concerns that were communicated to the highest governance body and the mechanism(s) used to address and resolve them	46		●
	G4-52	Report the process for determining remuneration. Report whether remuneration consultants are involved in determining remuneration and whether they are independent of management. Report any other relationships which the remuneration consultants have with the organization	47, Business Report 188		●
Ethics and Integrity	G4-56	Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics	48		●
	G4-57	Report the internal and external mechanisms for seeking advice on ethical and lawful behavior; and matters related to organizational integrity	49		●
	G4-58	Report the internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity	49		●

## GRI G4 Specific Standard Disclosures

● Fully reported ○ Partially reported ○ Not reported

Aspect	Indicator	Contents	Page	Note	External	
<b>Environmental</b>						
Energy	G4-DMA	Management Approach	53			
	EN3	Energy consumption within the organization	53, 73		●	
	EN5	Energy intensity	53		●	
	EN6	Reduction of energy consumption	53		●	
	EN7	Reductions in energy requirements of products and services	28-29		●	
	Water	G4-DMA	Management Approach	50		
		EN8	Total water withdrawal by source	51, 73		●
EN9		Water sources significantly affected by withdrawal of water	-	Industrial water is used for the entire operations	●	
Emissions	G4-DMA	Management Approach	53			
	EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	53, 73		●	
	EN16	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	53, 73		●	
	EN18	Greenhouse gas (GHG) emissions intensity	53		●	
	EN19	Reduction of greenhouse gas (GHG) emissions	53		●	
	EN20	Emissions of ozone-depleting substances (ODS)	51		●	
	EN21	NOx, SOx, and other significant air emissions	52, 73		●	
Effluents and Waste	G4-DMA	Management Approach	50			
	EN22	Total water discharge by quality and destination	52, 73		●	
	EN23	Total weight of waste by type and disposal method	52, 73		●	
	EN24	Total number and volume of significant spills	-	No such spills occurred	●	
	EN26	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff	51, 52		●	
	Products and Services	G4-DMA	Management Approach	25		●
EN27		Extent of impact mitigation of environmental impacts of products and services	28, 29			
EN28		Percentage of products sold and their packaging materials that are reclaimed by category	51			
<b>Labor Practices and Decent Work</b>						
Occupational Health and Safety	G4-DMA	Management Approach	31			
	LA5	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	59		●	
	LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	32, 59		●	
	LA7	Workers with high incidence or high risk of diseases related to their occupation	31, 33, 59		●	
	LA8	Health and safety topics covered in formal agreements with trade unions	31, 59		●	
	Training and Education	G4-DMA	Management Approach	35		
		LA9	Average hours of training per year per employee by gender, and by employee category	37		●
	LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	57		●	
<b>Society</b>						
Anti-competitive Behavior	G4-DMA	Management Approach	39			
	SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	41	No relevant violations occurred	●	
<b>Product Responsibility</b>						
Customer Health and Safety	G4-DMA	Management Approach	25			
	PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	16, 25		●	
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes	-	No relevant violations occurred	●		

# GRI G4.0 / ISO 26000 INDEX

## GRI G4 Specific Standard Disclosures-Other Disclosures

● Fully reported ○ Partially reported ○ Not reported

Aspect	Indicator	Contents	Page	Note	External
<b>Economy</b>					
Economic Performance	EC1	Direct economic value generated and distributed	72		●
	EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	53		●
	EC3	Coverage of the organization's defined benefit plan obligations	Business Report 96		●
Market Presence	EC5	Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation	-	0%	●
Indirect Economic Impacts	EC7	Development and impact of infrastructure investments and services supported	64-68		●
	EC8	Significant indirect economic impacts, including the extent of impacts	28-29, 72		●
Procurement Practices	EC9	Proportion of spending on local suppliers at significant locations of operation	72		●
<b>Environmental</b>					
Materials	EN1	Materials used by weight or volume	73		●
	EN2	Percentage of materials used that are recycled input materials	73		●
Compliance	EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations		No such non-compliance occurred	●
Transport	EN30	Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce	54		●
Overall	EN31	Total environmental protection expenditures and investments by type	51, 52		●
Supplier Environmental Assessment	EN32	Percentage of new suppliers that were screened using environmental criteria	40, 41		●
<b>Labor Practices</b>					
Employment	LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	56		●
	LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	59		●
	LA3	Return to work and retention rates after parental leave, by gender	57		●
Labor/Management Relations	LA4	Minimum notice periods regarding operational changes	58		●
Diversity and Equal Opportunity	LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	56		●
Equal Remuneration for Women and Men	LA13	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	Business Report 187		●
Supplier Assessment for Labor Practices	LA14	Percentage of new suppliers that were screened using labor practices criteria	40, 41		●
Labor Practices Grievance Mechanisms	LA16	Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms	59		●
<b>Human Rights</b>					
Investment	HR2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained		Sexual harassment prevention training was fully provided	●
Non-discrimination	HR3	Total number of incidents of discrimination and corrective actions taken		No such discrimination occurred	●
Freedom of Association and Collective Bargaining	HR4	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights	58		●
Child Labor	HR5	Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	58		●
Forced or Compulsory Labor	HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	58		●
Assessment	HR9	Total number and percentage of operations that have been subject to human rights reviews or impact assessments	40, 41, 58		●
Supplier Human Rights Assessment	HR10	Percentage of new suppliers that were screened using human rights criteria	40, 41		●
Human Rights Grievance Mechanisms	HR12	Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms	59	none	●
<b>Society</b>					
Local Communities	SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	64-68		●
	SO2	Operations with significant actual and potential negative impacts on local	51, 52		●
Anti-corruption	SO3	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	49		●
	SO4	Communication and training on anti-corruption policies and procedures	41, 49		●
Compliance	SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations		none	●

## GRI G4 Specific Standard Disclosures-Other Disclosures

● Fully reported ○ Partially reported ○ Not reported

Aspect	Indicator	Contents	Page	Note	External
Supplier Assessment for Impacts on Society	SO9	Percentage of new suppliers that were screened using criteria for impacts on society	40, 41		
<b>Product Responsibility</b>					
Product and Service Labeling	PR3	Type of product and service information required by the organization's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements			<a href="http://www.lghausys.com/">http://www.lghausys.com/</a>
	PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes		No such incidents confirmed in 2015	
Marketing Communications	PR6	Sale of banned or disputed products		No such cases occurred	●
	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		No such incidents confirmed in 2015	●
Customer Privacy	PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	63		●
Compliance	PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services		No such non-compliance occurred	●

## ISO 26000

Core Subject	Key Issue	Page	
Organizational Governance	Decision-making process and framework	56	
Human Rights	Due diligence	40-41, 58	
	Human rights risk situations	40-41, 58	
	Avoidance of complicity	40-41, 58	
	Resolving grievances	None	
	Discrimination and vulnerable groups	56, 58, Business Report 187	
	Civil and political rights	58	
	Economic, social and cultural rights	28-29, 51-52, 64-68, 72	
	Fundamental principles and rights at work	56, 58, Business Report 187	
	Employment and employment relationships	40-41, 56, 58, 72, Business Report 187	
	Conditions of work and social protection	57, 59, Business Report 187	
Labor Practices	Social dialogue	58	
	Health and safety at work	31-33, 59	
	Human development and training in the workplace	37, 57	
	Prevention of pollution	28-29, 51-52, 73, 64-68	
	Sustainable resource use	28-29, 50-54, 73	
	Climate change mitigation and adaptation	21, 28-29, 53, 64-68, 73	
Fair Operating Practices	Protection of the environment, biodiversity and restoration of natural habitat	51-52	
	Anti-corruption	41, 49	
	Responsible political involvement	None	
	Fair competition	41	
	Promoting social responsibility in the value chain	28-29, 40-41, 49, 54, 58,	
	Respect for property rights	28-29, 41, 72	
	Consumer Issues	Fair marketing, factual and unbiased information and fair contractual practices	None
		Protection of consumers' health and safety	16, 25
		Sustainable consumption	16, 25, 28-29
		Consumer service, support, and complaint and dispute resolution	None
Consumer data protection and privacy		63	
Access to essential services		28-29, 72	
Community Involvement and Development	Education and awareness	None	
	Active community involvement	72	
	Education and culture	58	
	Employment creation and skills development	28-29, 72	
	Technology development and access	None	
	Wealth and income creation	28-29, 59, 64-68, 72, Business Report 96	
	Health	16, 25, 31-33, 59	
	Social investment	28-29, 64-68, 72	



# MEMBERSHIP AND INITIATIVES

## Membership

Korea Chamber of Commerce and Industry	Korea Fair Competition Federation	Korea Specialty Construction Association
Korea Vinyl Environmental Council	Korea Employers Federation	Federation of Korean Industries
Korea Economic Research institute	Korea Listed Companies Association	Green Company Council
Korea Air Cleaning Association	Korea Packaging Recycling Cooperative	Korean Association of Occupational Health Nurses
Korea Fire Protection Association	Korea Industrial Safety Association	Korea Fire Safety Association
Korea Environmental Preservation Association	Korea Products Safety Association	

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