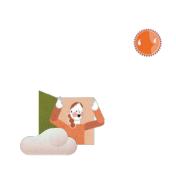




We create human-friendly and eco-conscious living spaces.





#### Report Overview

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..

#### Reporting Period

This report covers the economic, environmental and social initiatives and accomplishments made by LG Hausys between Jaunary 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.

#### Reporting Scope

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.

#### Reporting Principles

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.

#### Assurance

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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## LG Hausys 2016 Sustainability Report

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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 1st—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**



#### **Building & Decorative Materials**

- Windows
- Flooring
- Curtain wall
- Wallpaper & tile
- $\bullet \ \mathsf{High}\text{-}\mathsf{functional}\ \mathsf{glass}\ \bullet \mathsf{Synthetic}\ \mathsf{wood}$
- Acrylic solid surface for interiors
- · High-performance insulation



#### High-Performance Materials

- · Deco sheets
- Interior design film
- Adhesive materials for IT devices and automobiles
- Surface film for home appliances
- · Advertisement materials
- Vacuum insulation panels



#### Automotive Materials & Components

- · Automotive skin
- Components
- Lightweight components

#### 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.

2013~2014

Phase 1 Successful TA

- Secure business profitability early on
- Build fundamental business competitiveness

2015~2016

Phase 2. Profitable Shared Growth

- Shift into high-profit portfolio
- Discover market-leading products and new business

2017~

Phase 3.

No.1 LG

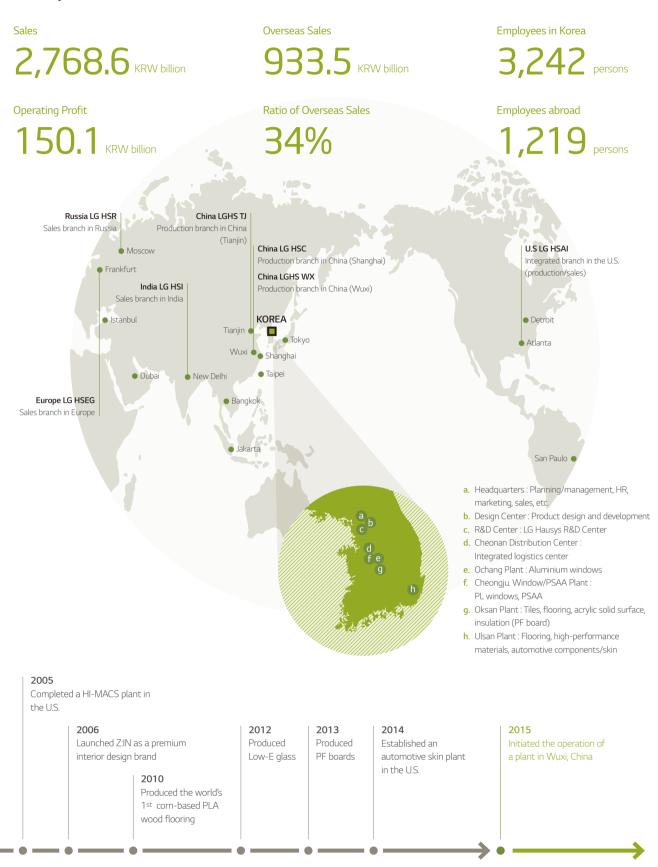
- Nurture No.1 business
- Materialize new business

#### Historical Milestones

1952 1976 1984 1995 Manufactured Korea's 1st Produced PVC Produced plastic Produced acrylic solid synthetic resin-formed windows automotive parts surface HI-MACS products 1997 Established The mother Produced vinyl flooring a production company of LG Group corporation in Tianjin, China

Since 1947

#### LG Hausys at a Glance



Corporate Overview

7

## 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 quides 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)

#### 2015 Achievements



#### VISION

We create human-friendly and eco-conscious living spaces

#### Nature

Turning Nature into Living Space

We deliver a healthy and flourishing life to our customers by designing spaces that harmonize with nature through eco-friendly and energy-efficient materials.

#### Eco-Friendly

Shift to eco-friendly materials by improving diversity in material use (Expand eco-friendly products/materials)

#### **Energy Saving**

Deliver systems & solutions that maximize energy efficiency (High-quality windows/green car materials)

#### Human

Embracina People

We improve the quality of life and establish future trends in living spaces through aesthetically-pleasing, emotional and human-friendly designs.

#### Human-Friendly

Strengthen reliable and impressive contact points with customers (Reinforce brand power, innovation in distribution)

#### Space

nspired Living Space

We help create living spaces that bring contentment to our customers.

2016 Goals	Strategy and Mid/Long-term Goals	Report Details
Energy-saving building & decorative materials     To enhance customer convenience and safety functionality of Complete windows, and widen the application of high-performance insulation     Acceleration of automotive parts development     To expand the line-up of lightweight automotive parts, and develop automotive skin that simulates the subtle quality of natural skin	To secure technological competitiveness based on fundamental processing technology  To lead the market through technological convergence in the energy-saving and green product area  To strengthen open innovation to respond to the rapidly-changing technology landscape	Material Issues 1 Strengthening Product R&D Capability
To increase the sales of overseas business To lay the foundation to become global No.1 in automotive skin and surface materials To accelerate growth in the Middle East and Southeast Asia	To accelerate strategic business and regional growth  To become global No.1 in automotive skin and surface materials	Material Issues 2 - Expanding Global Market Reach
To develop new eco-friendly and energy-saving materials To reach 24% in the ratio of sales of new green products  To reach 24% in the ratio of sales of new green products	To lead the green product market by developing new green materials and expanding green products	Material Issues 3 Enlarging Eco-friendly Product
To reduce company-wide EHS accidents by 50% from the previous year To set thorough assessment and management criteria for high-risk facilities To strengthen the safety management capacity of managers	To reduce workplace safety accidents to "Zero"  To establish safety-driven culture  To secure a safe workplace and business continuity	Material Issues 4 Operation of Eco- friendly and Safe Workplaces
To accelerate change in organizational culture and the organizational-level 'F4' initiative  To launch idea contest programs based on open innovation	• To build a market-leading organizational culture 	Material Issues 5 Building Market- leading Organizational Culture
<ul> <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> <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>	Material Issues 6 Shared Growth and Mutually Beneficial Support

## 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

#### Shareholders/ Investors = (\$

Company presentations disclosures, etc.

#### Key Stakeholder Issues in 2015

They expect fair compensation on the company's investment activities – securing growth engines, tapping the global market, etc..

#### **Employees**

.abor-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.

#### Suppliers



They expect that ethical business relationships be established through a fair and transparent selection process, and need diverse mutually-beneficial support systems.

#### Local Communities



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.



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

#### Step 1

Analyze the current status

We compiled 2015 issues identified by benchmarking GRI 4.0, ISO 26000, DJSI and other international standards and by researching media publications, and finalized a total of 19 issues.

#### Step 2

Conduct the materiality analysis



Step 3

Finalize issues to report

With the 19 issues identified, we surveyed external stakeholders – customers, suppliers, investors – and internal stakeholders – employees – to understand how material these issues were from their perspective. We also held discussions among experts from respective fields to look at future development on sustainability management in general and sustainability reports.

## We comprehensively evaluated issue-specific materiality, interest of internal/ external stakeholders and the financial impact that LG Hausys exerts on respective issues to identify report details based on six key issues and our corporate vision. Each of these reported issues corresponds to our short-term management strategy and mid/long-term growth strategy, and their alignment with our business strategy was examined in advance.

#### Reported Issues by Stakeholder Group

#### Shareholders/Investors

Strengthening Product R&D Capability Harmony with Space 1.

#### Shareholders/Investors

Expanding Global Market Reach

Harmony with Space 2.

#### Customers

Enlarging Eco-friendly Product

Harmony with Nature 1.

#### Local Communities

Operation of Eco-friendly and Safe Workplaces Harmony with Nature 2.

#### **Employees**

Building Market-leading Organizational Culture Harmony with Human 1.

#### Suppliers

Shared Growth and Mutually Beneficial Support Harmony with Human 2.

## **KEY ISSUE IDENTIFI-CATION 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

- Drive profitability by securing cost competitiveness
- Broaden global market presence
- · Secure growth engines through the continued development of new technology
- Strengthen anti-corruption and ethics management
- Distribute economic outcomes fairly for stakeholders

- Enhance workplace health and safety
- Reduce the environmental impact of products throughout their life cycle
- Manage environmental pollutants
- Develop eco-friendly products continuously
- Ensure sustainable purchasing

arowth Strengthen CSR capacity within the

supply chain Respect human rights and labor rights

· Support suppliers and pursue shared

- · Improve an employee-friendly organizational culture
- Recruit key talent and strengthen employee capacity
- Secure product safety and extend product responsibility
- Expand customer communication
- Engage in local community development through social-giving initiatives

#### STEP 2. Issue Selection Process

Outcomes of stakeholder survey

To understand stakeholder expectations on material issues in further detail, we surveyed 2,256 stakeholders - employees, customers, suppliers and external stakeholders - between Dec. 15th and Dec. 22nd 2015.

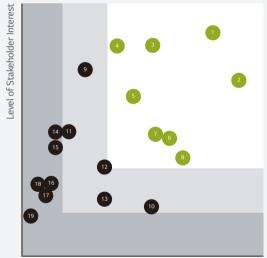
Media research

We analyzed material issues from the media perspective based on reports published on LG Hausys between Jan. 1st and Dec. 31st 2015.

Penal discussion with stakeholders

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



#### **Business Significance**

#### Reported Issues

- 1. Develop eco-friendly products continuously
- Secure growth engines through the continued development of new technology
- 4. Manage environmental pollutants
- 5. Improve an employee-friendly organizational
- 6. Reduce the environmental impact of products
- throughout their life cycle
  7. Support suppliers and pursue shared growth
- 8. Broaden global market prese 9. Engage in local community development
- through social-giving initiatives
- 10. Drive profitability by securing cost competitiveness
- 11. Respond to climate change 12. Expand customer communication
- 13. Establish product safety and extend product responsibility

  14. Strengthen CSR capacity within the supply
- 15. Recruit key talent and strengthen employee
- 16. Reinforce anti-corruption and ethics
- management
- 17. Ensure sustainable purchasing 18. Distribute economic outcomes fairly for
- 19. Respect human rights and labor rights

#### Key Issues and Relevant Report Contents

Strengthening Product **R&D Capability** Market Reach

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

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

### **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

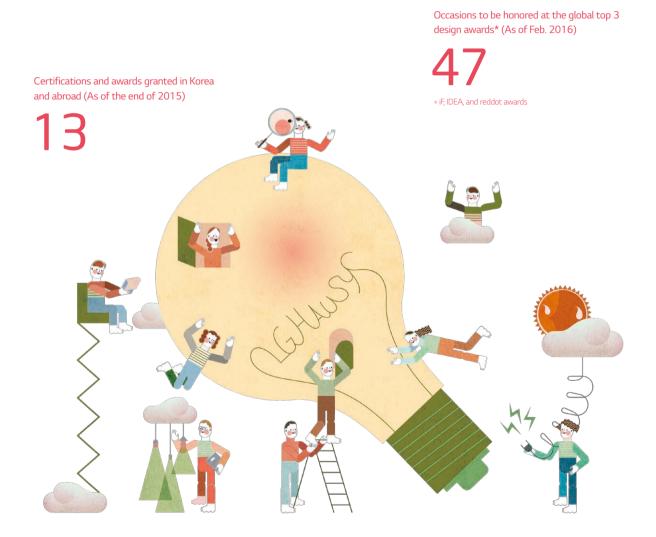




#### Harmony with Space

## Strengthening Product R&D Capability

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.



#### [ 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**

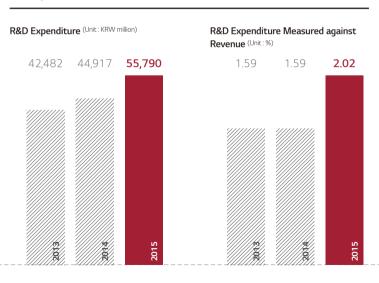
Our research labs take the leading role in performing research in close alignment with such business areas as building & decorative materials, automotive materials & parts and high-functional materials while developing customer-friendly products.

#### → 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	• Low-E glass	Maximize the insulation of windows, along with reducing the
	High-performance	use of energy in buildings
	insulation	Secure insulation performance and fire safety
Eco-friendly	• Eco-friendly flooring	Develop products safe for humans and the environment by
building &	and wallpaper	using corn-based polylactic acid (PLA)
decorative		
materials		
Functional fabric/	Green fabric	Contribute to reducing GHG emissions by developing
film	Transparent adhesive	pollution-resistant, highly-durable and eco-friendly fabric
	film, industrial adhesive/	through the use of bio-based plastics
	pressure-sensitive	Develop functional adhesive/pressure-sensitive adhesive
	adhesive film	materials that offer greater convenience in everyday life
High-strength,	High-strength,	Contribute to improving mileage and fuel efficiency by
lightweight	lightweight composite	developing lightweight automotive materials and researching
materials	materials	on the enhancement of shock resistance performance

#### **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.

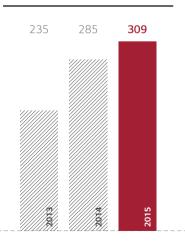


#### Automotive Skin and Lightweight Components

- 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 CO₂ 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)



#### 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)

#### 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

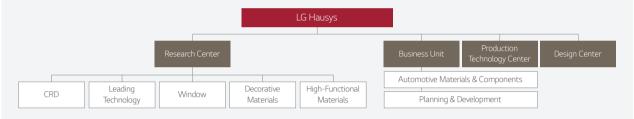
collaboration enables us to discover new technology that will evolve into future growth engines.

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		Study process optimization, develop new processes, and research on unit process-specific facilities and safety features
Technology Center		
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 16th 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.



Design Trend Seminar
 Attending the Milano Design Week

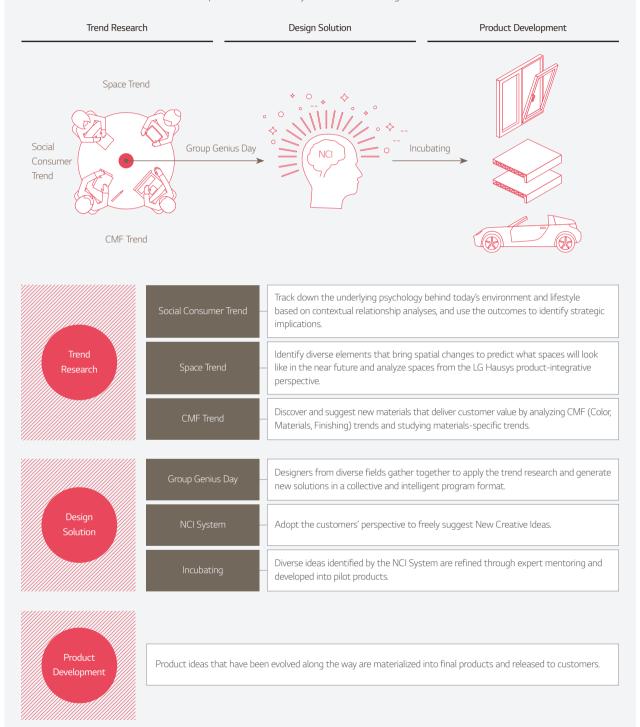




3

## 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.



#### 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.

Sales in overseas business

Sales in overseas business

Sales in overseas business

#### [ 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,
- 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

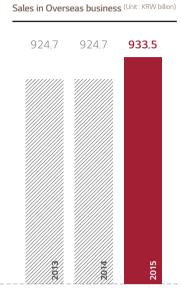
Discover new growth opportunity by expanding emerging market presence

#### 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



#### 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 m². 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 1st 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 stkakeholders.

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 ecofriendly 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







#### 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.



Jakarta •

**OTHER** 







Indonesia



LIAF



Russia



Germany

## **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

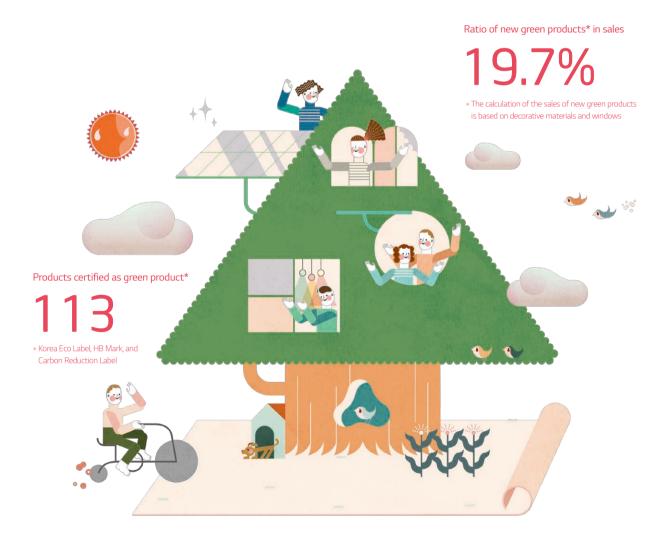
- Middle East, Southeast Asia: Surface materials, wallpaper, flooring, etc.
- Europe : Decorative surface materials, surface materials, automotive materials, etc.

Ratio of Sales by Region in 2015

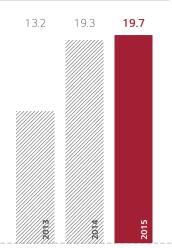


## Enlarging Eco-friendly Product

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.



### 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 energysaving 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 ]



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



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)

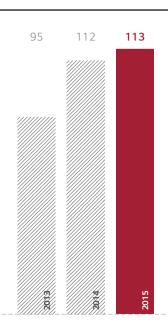
#### → Certification

Korean Certification (Unit: No. of certificates granted)

Korea Eco Label	49	7.	
	72	71	54
-IB Mark	28	27	40
Carbon Reduction Label	18(2)	14(3)	19(2)
Low-carbon certification)			
Total		112	113
	2013	2014	2015
Category			
Energy efficiency grade scheme for windows		765	354
	Carbon Reduction Label Low-carbon certification)	Carbon Reduction Label 18(2) Low-carbon certification) 95 2013	18(2)   14(3)     14(3)     14(3)     14(3)     14(3)     14(3)     14(3)     14(3)     14(3)     14(3)     14(3)     14(3)     14(3)     14(3)     14(3)     14(3)     14(3)     14(3)     14(3)



**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  $F \Leftrightarrow \Leftrightarrow \Leftrightarrow (Formaldehyde-free)$  (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 1<sup>st</sup> 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 Buildling 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%

Reduce energy use through high-insulation glass

40%

#### 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

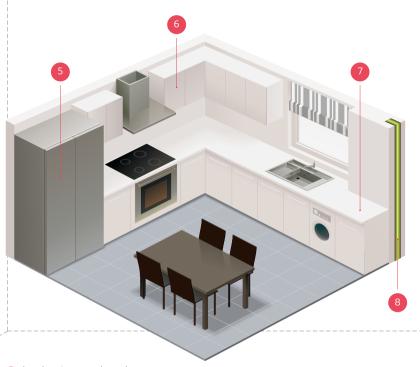
#### ZEA Sorijam

- 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%

#### 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-MACS LE

- 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 Latic 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
- Research papers from the Baewoo institute of Construction recliniology
   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)

#### Harmony with Nature

## 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%



#### [ 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
- $\bullet$  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

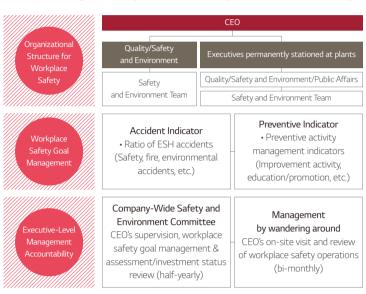
• To strengthen health promotion initiatives including metabolic syndrome management programs

#### 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.

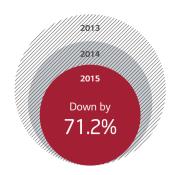


#### Building a Workplace Safety Training System

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	LG Group	LG Hausys	
Workplace	Basic introductory courses under	Office workers on the Safety and Environment	
safety position	development and operation	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	• E-Learning courses targeting all office workers	
	development and operation as part of	developed and under operation	
	the promotion courses		
	Group-level workplace safety e-Learning		
	courses developed (targeting staff at		
	Chinese and Korean plants)		

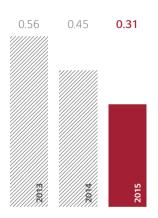
#### Total EHS Accidents



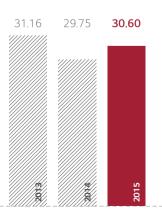
\* Since our Oksan Plant suffered a leak caused by an overheated reactor used for insulation processing in September 2015, we have reexamined and improved upon the fool-proof and interlock control systems of major our facilities. We will conduct detailed assessments and improvements on high-risk facilities 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

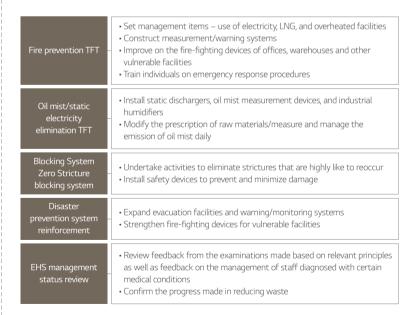


#### Purpose



#### 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.



#### 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.

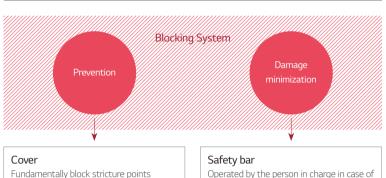
## → Strengthening the Disaster Prevention System

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



Fundamentally block stricture points (fence, pipe, cover)

#### Detection sensor

Roll up & down, shut down, or backlash when approaching stricture points

accident

Emergency shutdown S/W
Take post-accident action, prevent the spread of accidents

#### Detailed improvement on the disaster prevention system

Supplement evacuation facilities	Install and improve entrances for pedestrians     Build disaster experience training facilities
Expand warning/ monitoring systems	Install hazard leak detection devices and systems     Improve fire detection facilities at office buildings     Build an activated carbon absorber monitoring system
Reinforce fire- fighting devices	Install fire-fighting devices at power distribution/transformer rooms     Install fire-fighting devices along the gas system of the cafeteria kitchen     Improve fire-fighting devices at indoor hazard storage rooms

#### Harmony with Human

## 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 perscribed 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 executional 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

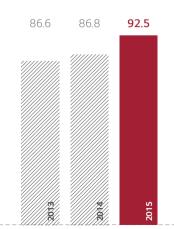
#### 2015 Achievement

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

#### 2016 Goal

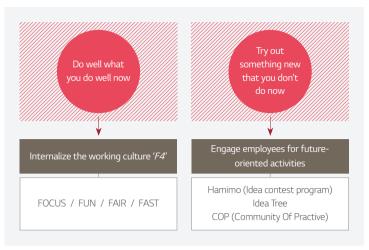
- To adopt open innovation for 'Hamimo' execution
- To strengthen the operational alignment between 'Hamimo' and 'Idea Tree'

#### '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
- $\bullet$  Continue with the Do Things Right initiative  $\overset{\cdot \cdot \cdot }{\cdot \cdot \cdot}$
- Keep your promise

#### 4. Fast

## Implement plans with intensity to reach goals quickly

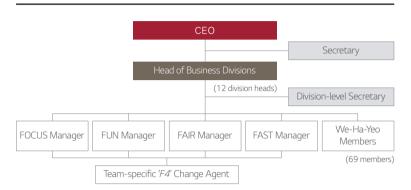
 Decide and execute quickly
 Strengthen organizational problemsolving capacity

• 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 topic		
Hamimo Idea contest program to prepare for the future in the areas of new business		
	and culture	
COP (Community Of	Support program to encourage employees' self-initiated learning in their fields of interest	
Practice)	related to business operations	





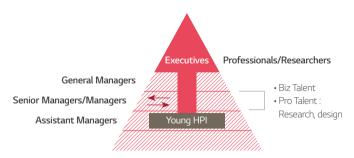
# Fostering Talent to Lead the Market

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**



Dual track that consists of 'business leaders' and 'professionals'

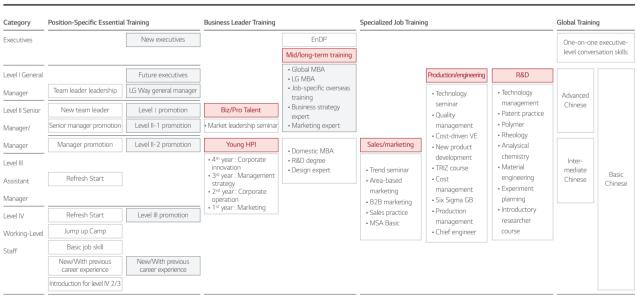
## Training Roadmap

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



# 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

#### Shared Growth Management 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 Comission 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.

Four Fair Trade Principles



review body

Fair selection and operation of suppliers

Comply with supplier registration and deregistration criteria and ensure procedural transparency and objectivity

2

Issuance and preservation of documents

Issue and preserve seven major written documents including contracts and receipts

# '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
Financial Support	We provide low-interest Network Loans, Family Loans, and the LG Partnership Fund	Operated the LG Partnership Fund worth KRW 15 billion and supported 56 suppliers
	for our suppliers. We also provide outstanding suppliers with additional support to	Operated the Network Loans to offer KRW 3.4 billion to 10 suppliers
	help improve their financial conditions.	Offered KRW 100 million to invest in shared growth
Improvement of	While our funding policy stipulates that cash payment be made only for those	Maintained 100% in making cash-equivalent payment
Payment Terms	contracts worth KRW 3 million and under, we are significantly increasing the ratio of	Made KRW 161.7 billion cash payment for contracts that did not meet funding policy criteria
	cash payments made to our suppliers to support their business operations.	
Support for	We invested nearly KRW 2 billion in assisting our suppliers with facility investments	Sent 30 technology/quality experts to 99 suppliers
Quality and	& improvements, productivity enhancements & quality stabilizations, and system	• Mobilized a separate unit dedicated to supplier support to help suppliers establish their own quality
Technology	infrastructure support. Furthermore, we actively make joint patent applications to	assurance system
Development	help suppliers protect their technology.	Made three joint patent applications
Workforce and	We continue to provide supplier employees with training on the FTA-related	• FTA training attended by 44 employees from 36 suppliers
Training Support	country-of-origin management, workplace safety and quality management. Also, we	• LG Academy's online training attended by 30 employees from 30 suppliers
	commission the LG Academy and the Korea Suggestion System Association (KSSA)	• KSSA's quality/productivity improvement training attended by 104 employees from 39 suppliers
	to offer online training focused on business management in general and specialized	• Provided recruitment opportunity through job fairs targeting middle-aged and young job seekers
	job operations.	
Management	Price coupling and supply program: In response to fluctuating exchange rates and	KRW 490.2 billion subject to the price coupling and supply program
Support	market conditions, we run this supply program for major chemical and building	• Held eight cooperation and discussion meetings in 2015 (202 persons from 197 suppliers
	materials to adjust supply cost to reasonable levels	attended and engaged in exchange initiatives)
	• Support for exchange initiatives : We share sensitive business issues through plant-	Rewarded top-performing suppliers (Granted Wellfare Mall points)
	specific subcommittees. In addition, our CEO and purchasing executives attend	- Six top-performers in the comprehensive evaluation sector
	meetings with suppliers and pay on-site visits to listen to their difficulties and reflect	- 12 top-performers in the quality evaluation sector
	their feedback in our business conduct.	- 2 top performers in the tier-2 supplier support sector
	• Included in our multi-faced management support initiatives are awards granted to	Shared performance outcomes through the renovation of old facilities
	top-performing suppliers, detailed evaluation of suppliers' financial structure and	- Offered renovation cost support for old facilities and shared outcomes concerning cost savings
	consulting for FTA-related country of origin management.	achieved in so doing

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 CRS 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 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

#### Regulatory training Conduct inspections of major Enhance employee awareness of fair · Target the entire operation from · Build systems to prevent and monitor departments and plants for their fair trade and disseminate the culture of planning, sales and marketing, to unfair subcontracting practices in trade practices fair trade purchasing and financing working with suppliers · Distribute fair trade manuals and • Operate the 'Internal Subcontract · Aim to prevent any violation of teaching materials competition regulations Transaction Review Committee' Offer regular internal/external training Mobilize internal fair trade experts to attended by purchasing managers conduct review prior to undertaking business activities

# 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

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

# Fair Trade Program Outcomes

	No. of Program	
Year	Sessions	Description
2015	14	Cartel and unfair trade prevention training for new team leaders
		• Internal review and intensive training on business divisions' fair
		trade practices
		Review and training on injustice labeling and advertising
2014	18	Sending CEO's fair trade messages
		Position-specific cartel and unfair trade prevention training
		Intensive subcontracting training for purchasing and technology
		departments/research labs
2013	15	Direct CEO training and sending text messages to employees on
		two occasions to prevent cartel
		Position-specific cartel and unfair trade prevention training

# SUSTAINABLE MANAGEMENT

LG Hausys is fully committed to addressing climate change issues and protecting the environment to pursue its sustainable growth as a company. We are deeply interested in improving environmental value and fulfilling our social responsibility through diverse initiatives that usher in a pleasant transformation to living spaces where nature and people exist harmoniously. We advance sustainability management that harmonizes economic environmental and social value in a way that befits our status as a global company. In so doing, we continue to evolve into a company trusted and respected by customers.



# 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

2014 Build a CSR system 2015 Strengthen CSR initiatives 2016 Internalize CSR

- Build a CSR support system
- Strengthen CSR risk management
- Introduce global CSR standards
- Manage supplier CSR risk
- Strengthen stakeholder communication
- Initiate CSR change management on a full scale

# Achievement and Goal

# Abide by global standards



# Principle & Strategy

• Undertake global-level CSR initiatives

## 2015 Achievement

- Was listed on the DJSI Korea
- Introduced GRI G4.0

## 2016 Goal

• To be re-listed on the DJSI Korea

# Strengthen CSR crisis management



## Principle & Strategy

• Reduce CSR risk factors at the headquarters and plants

# 2015 Achievement

 Conducted self-initiated assessment and monitoring: Completed three improvement projects

## 2016 Goal

 To conduct self-initiated assessment and monitoring: On-site review and three improvement projects are scheduled

# Manage supplier CSR risk



## Principle & Strategy

- Eliminate CSR risk factors within the supply chain 2015 Achievement
- Assessed suppliers for their CSR performance (117 Korean suppliers)
- Selected the target of CSR management among U.S. branch suppliers

#### 2016 Goal

- To assess and monitor domestic suppliers for their CSR risk
- To broaden CSR management to include overseas suppliers

# 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

2012

• Special Carbon Disclosure Award (CDP)

2013

 Grade A, ESG assessment by the Korea Corporate Governance Service (No.1 among industry peers in the environmental and social sector)

014

- Grade A, ESG assessment by the Korea Corporate Governance Service (No.1 among industry peers in the environmental and social sector)
- Included on the list of the <East Asia 30>, Companies with outstanding CSR performance in Korea, China and Japan, by the Hankyoreh Economic Research Institute
- Ranked 1st in the building materials industry on the Korean Sustainability Index (KSI) by the Korean Standards Association

2015

• 1st\_time member to be listed on the DJSI Korea Index

MEMBER OF

DOW Jones

Dow Jones
Sustainability Indices
In Collaboration with RobecoSAM

- Ranked 1st on the 'Sustainable Super Company 25' list by the Sustainable Management Financial Center, Korea Economic Daily
- Ranked 1st in the building materials industry on the Korean Sustainability Index (KSI) by the Korean Standards Association

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.

# $\rightarrow$ BOD Composition

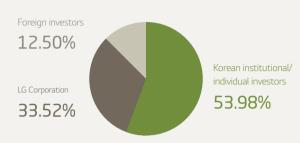
Our Board of Directors consists of two executive directors, two non-executive directors and three outside directors.

# → 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. 31st, 2015)



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

		D 10	
		Position and Career	
Category	Name	Description	Note
Executive	Oh Jang-Soo	President and CEO	-
director	Lee Dong-Un	CFO	-
Non-	Ha hyeon-Hoe	CEO and President of LG	BOD Chairman
executive		Corporation	
director	Yu Ji-Yeung	Managing Director, Business	-
		Administration Team, LG	
		Corporation	
Outside	Kim Young-Ick	Professor of Economics,	Chair of the Audit
director		Sogang University	Committee
	Kim Jin-Gon	Professor of Chemical	Audit Committee
		Engineering, Pohang University	member
		of Technology and Science	
	Bae Zong-Tae	Professor, KAIST Graduate	Audit Committee
		school of Techno Business	member
		Management	

#### → 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	Date of		Director
Meeting	Meeting	Agenda Item	Attendance (%)
1	Jan. 30 <sup>th</sup> 2015	Approval of the 6 <sup>th</sup> -term financial statement and seven	85.7
		other items	
2	Feb. 25 <sup>th</sup> 2015	Approval of the convocation of the 6 <sup>th</sup> general shareholder	85.7
		meeting and two other items	
3	Mar. 13 <sup>th</sup> 2015	Approval of the payment of director remuneration for 2015	100.0
		and four other items	
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. 5th 2015	Approval of Chinese investment plan (draft)	100.0
7	Oct. 20th 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)	100.0
		and three other items	

#### → 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.

# $\rightarrow$ 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	Date of			
Meeting	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		

# Revising BOD Regulations on CSR In 2014, LG Hausys added "important issues concerning CSR activity" to the BOD report agenda to lay the groundwork to report CSR activities to the BOD. In so doing, LG Hausys aims to enhance its management's interest in sustainability management and proactively fulfill its corporate social responsibility. Current Status Goal: To establish a decision-making process on sustainability management within the BOD Adding "important issues concerning CSR activity" to the BOD meeting convocation Decision-making Decision-making

# 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 Jeong-Do Management website (http://ethics.lg.co.kr/ main/en.do)

# 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

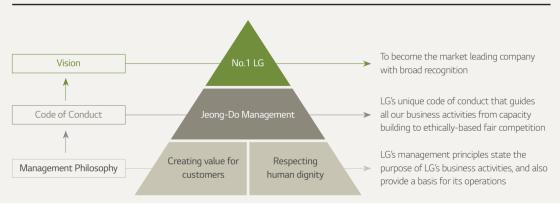
Chapter 1	Responsibilities and Duties to Customers
Chapter 2	Fair Competition
Chapter 3	Fair Transaction
Chapter 4	Basic Ethics of Employees
Chapter 5	Corporate Responsibilities for Employees
Chapter 6	Responsibilities to the Nation and Society

# 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

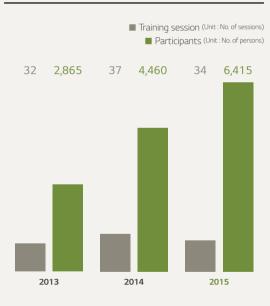


who has filed a report become compromised as a result, restoration or equivalent compensation measures will be provided without question.

## → 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.



Corporate Role/ Responsibility	The company fosters human and physical resources to protect human life, property and the environment of local communities from disasters and accidents, and takes the lead in creating a safe society and preserving a clean environment.
Organizational Role/Responsibility	The organization recognizes management goals for safety, the environment and health as equally-important business performance goals, and sets goals to minimize risk/hazard factors and their environmental footprint.
Employee Responsibility	Employees strictly abide by governmental and corporate regulations to prevent safety/environmental accidents.
Performance Disclosure	The company transparently discloses the performance of its safety and environmental operations to customers, communities and stakeholders.
Supplier Support	The company assists suppliers in engaging in safety, environmental and health initiatives.

# History

1997	Environmental Declaration
1997	by LG Group

 Vow to undertake health/safety/ environmental activities across the board

# 2010 **LG Green 2020**

 Declare commitment to create customer value and contribute to the nation and society through environmental protection

# 2015 LG Workplace Safety Guidelines and seven basic principles

 Highlight the importance of health/safety/ environment as the basis for the entire business operations

# Achievement and Goal

# Build an eco-friendly workplace

## Principle & Strategy

• Minimize the discharge of pollutants and environmental impact during the manufacturing process

#### 2015 Achievement

- Shifted to high-efficiency air pollution control facilities (Invested KRW 5.2 billion)
- Re-designated as Green Company
- Responded to chemicals management regulations proactively

#### 2016 Goa

- To stabilize the ESH system by re-establishing position-specific roles and in-house policy
- To prevent accidents by strengthening the monitoring system
- To discover and improve potential hazards

# Respond to climate change



#### Principle & Strategy

- Reduce energy use through process innovation and operational optimization
- Reduce energy cost and GHG emissions by introducing renewable energy and external heat sources

#### 2015 Achievement

- Improved heavy energy-consuming facilities and their operational efficiency
- Used outside surplus steam
- Operated power storage devices

#### 2016 Goa

- To optimize the operation of heavy energy-consuming facilities and use external heat sources
- To reduce energy intensity composition by 10%

# **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.

- \* Water intake at Ulsan
  Plant : Surface water,
  tap water
- Water intake at Cheongju Plant: Underground water, industrial water
- Water intake at Oksan Plant: Tap water, industrial water

# 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 Chemmicals

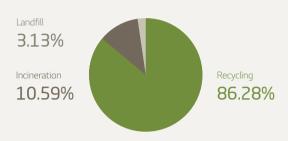
Our Ulsan and Cheongju Plants handle 14 types of hazardous chemicals—from lead compounds and MEK to acetic acid ethyl. This alerts us to focus on develping alternatives to reduce the use of such harmful chemicals. We also installed such safety devices as dykes and gas detectors around harmful chemicals 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

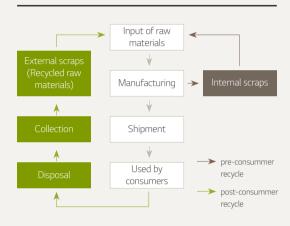
We are fully engaged in the governmental policy to promote resource conservation and recycling. Since 2008, we have signed a voluntary recycling agreement with the Ministry of Environment concerning our flooring and window profile products to develop a recycling system that includes the development of 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).

#### 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

Lay the basis for green management 2012 (Pre-emptively respond to climate change risks)

- Incinerators and boilers
- Undertook the clean fuel conversion project (2006-2013)
- · Registered reduction projects
- Made reductions early on

Promote green energy

· Review and adopt renewable energy

- Build a power monitoring system

• Improve the efficiency of the energy

production and supply system - Use external surplus steam

- Review/adopt a steam monitoring system

- Solar power, geothermal power

- Energy Storage System (ESS)

• Reinforce energy monitoring

• Improve on the ratio of fossil energy use

Achieve the best green

workplace and green partnership

- Improve on the ratio of fossil energy use by expanding the use of renewable
- Improve on the ratio of KEPCO power use by introducing combined heat & power and solar power
- Establish practical partnerships by reducing GHG emissions and energy use

- (nearly 50,000 tons)

**Emissions** 

# Reducing Energy Consumption and GHG

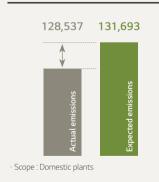
LG Hausys undertakes continued initiatives to cut its energy use and GHG emissions. In 2015, we invested KRW 7.31 billion in these initiatives, which resulted in KRW 43.48 million in total savings and in 15,903 tCO<sub>2</sub>eq in reduced GHG emissions.

# Key Initiatives to Reduce Energy Consumption and GHG Emissions

#### → Energy Saving TFT

Lq 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: tCO2eq)



# Intensity-based GHG Emissions

(Unit∶tCO₂eq/ton)



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> eq)	9,321	18,334	15,903
	Savings Made (KRW million)	2,568	6,458	4,348

Category		2013	2014	2015
Energy Consumption	Direct energy	923	1,004	1,008
(TJ)	Indirect energy	1,634	1,725	1,622
	Total energy consumption	2,557	2,729	2,630
GHG Emissions	Scope1(tCO₂eq)	47,513	51,229	51,403
	Scope2(tCO <sub>2</sub> eq)	75,845	80,934	77,134
	Total emissions (tCO2eq)	123,358	132,164	128,537
	Intensity-based emissions	0.5137	0.5053	0.4922
	(tCO <sub>2</sub> eq/ton)			

- · 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



#### Energy Saving Slogans at Ulsan Plant



(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 CO₂ emissions.



# ightarrow 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

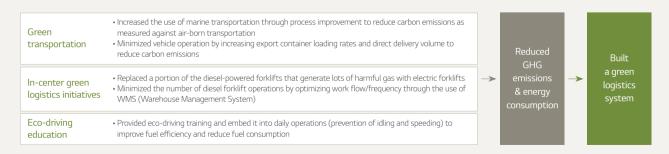
LG Hausys conducted energy assessments on five suppliers in the vicinity of Oksan and helped discover energy saving projects in 2015 through a project that pursues 'energy-saving journey joined together by large businesses and SME' s' This allowed us to identify projects that could potentially reduce KRW 470 million in energy costs and 1,463 tCO $_2$  in CO $_2$  emissions.



# $\rightarrow$ Green Logistics

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

# Achievements of Green Logistics Initiatives



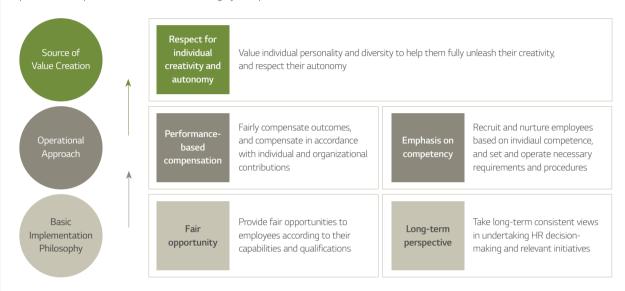


# Talent Management

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 cteativity, 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

- $\bullet$  Fairly evaluate based on divididual 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 Goa

- 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

# Principle & Strategy

 $\bullet$  Operate programs fairly and efficiently

# 2015 Achievement

- $\bullet$  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 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	U.S.	96.5	96.5	96.3
local recruitment	China	95.7	95.7	95.9

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

Category	2013	2014	2015
Ratio	12.4	13.1	13.8

#### Employee Data1) (Unit: No. of persons)

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

- · 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	22	23	45
(No. of persons)			
Reinstatement rate (%)	89	89	92
Ratio of employees who worked for more than	90	94	100
12 months following their reinstatement (%)			

# 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 labormanagement 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 labormanagement 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 identrified 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	1,026	1,073	1,067
(No. of persons)			
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 labormanagement 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 phsychological 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 wellbeing.

# **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.

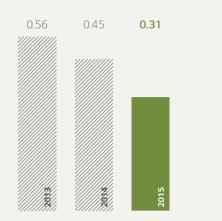
Program	Major Activity	Details	No. of Sessions
Specialized	Support to address	Individual level (Healing/prevention/growth)	173
EAP	job stress and	- Psychological stability	
counseling	personal issues	- Reduce stress and improve resistancy	
		Organizational level (job engagement)	
		- Improve communication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

#### **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.

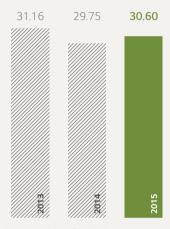


# Occupational Injury Ratio (Unit:%)\*



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  $(\mathsf{Unit}:\$)^*$ 



- 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 regualry 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



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



## 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 Plar

- 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

# 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.



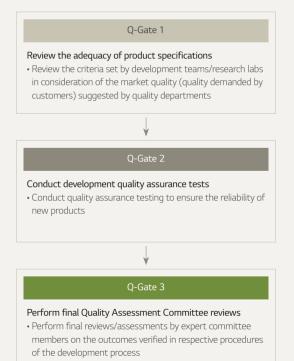
2) CTQ : Critical to Quality 3) C&C : Claim & Complaint

# **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.



## • New product planning and development

- Set the direction to develop new products
- Discover ideas for product development

#### Marketing strategy

- Reflect in advertising and promotional
- Efficient showroom operations, etc.
- Manage business areas, differentiate by social level/region
- Customer meetings, seminar operational

#### Distribution policy

- Operate B2B, B2C, B2R distribution policies

#### • Quality improvement

- New product development quality (Q-Gate)
- Hold meetings to share information on market quality
- Use quality inspections
- Manage quality indicators
- Improve process through quality assessments
- Improve the quality of services and manufacturing & construction

## 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.

### Operated market quality meetings (2014)

- Windows, decorative materials, high-functional materials
- Attempted to hold bi-monthly/quarterly meetings on a regular basis

- Expanded the new distribution area
- Total Interior shops, VOC, etc.
- Strengthened monitoring and follow-up activities

# Strengthen quality management

- Manage service level at customers' contact points
- Improve the responsive speed to VOC

# **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.

- 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)

# 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.

# 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 executional capability as a way to strengthen our information protection system and organization.

#### S P E C I A L I S S U E

# 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' perpective



They are content creators who are knowlegable 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.



- Continuously fulfill LG Hausys' social responsibility by using its strengths
- Move beyond mere donations to pursue mutual benefits by creating social value
- Improve LG Hausys' relationship with local communities

# Investment in Local Communities (Unit: KRW million)



In-house programs (KRW 392 million)

- Dokdo Natural Preservation Zone Jikimi
- Make a Happy Space
- · Space Sharing Campaign
- Social-giving initiatives for patriots

## Support/sponsorship (KRW 50 million)

- Support for local cultural/sports/ environmental events
- Local social-giving initiatives by overseas corporations

# Cash donations (KRW 905 million)

- $\bullet$  Fund raising and designated donations
- Initiatives aligned with LG Foundation

# In-kind donations (KRW 192 million)

• Renovation of welfare facilities

## Volunteerism (KRW 12 million)

- $\bullet$  Volunteerism by the Employee Council
- In-house volunteer teams

# Achievement & Goal

# Facilitate representative programs

#### 2015 Achievement

- Make Dokdo Green (2009-present, 7 years)
- Dokdo Love Youth Jikimi (2010-present, 150 participants)
- Space Sharing Campaign
   (2011-present, 5 years, 30 locations)

# 2016 Goal

- Improve the quality and operation of programs
- Assess and improve on social-giving initiatives

# Diversity social-giving initiatives



2015 Achievement

- Improved the living environment for men of national merit
- Renovated the Seo Jae-Pil Memorial Hall

## 2016 Goal

- Discover/undertake new programs
- Include social-giving initiatives in conducting impact assessments

# Undertake sharing programs for local communities



#### 2015 Achievement

- 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

#### 2016 Goal

- $\bullet$  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 'Woozen')

#### 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



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

## → 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.

# 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-previleged 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	Provide minimum living expenses to children from low-income families in alignment with ChildFund Korea
families	
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

# 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



Third-Party Assurance Statemen
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

<sup>\*</sup> 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

# 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

# Growth Indicators (Unit:%)

2013	2014	2015
9.2	4.3	△0.8
12.3	14.1	11.9
153.5	△12.0	11.9
9.8	5.4	9.5
	9.2 12.3 153.5	9.2 4.3 12.3 14.1 153.5 △12.0

# 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	84.6	81.6	79.5
and long-term liabilities			
Ratio of net worth to net capital	40.1	40.4	39

<sup>\*</sup> 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.

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# 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-derivaties 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.

Appendix

# **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 fairy 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	306	593	414
	(KRW 100 million)			
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

<sup>\*</sup> 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	-	-

<sup>\*</sup> 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)

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

# Energy Consumption (Unit: TJ)

Category		2013	2014	2015
Energy	LNG	890.4	990.9	995.2
Consumption	Diesel	10.2	12.9	12.4
	Gasoline	1.8	0.5	0.4
	Electricity	1,445.1	1570.9	1,558.9
	Steam	189.3	154.0	62.7

# Plant-Specific Environmental Data

			Ulsan			Cheongju		Oksan
Category		2013	2014	2015	2013	2014	2015	2015
Energy	Direct energy (TJ)	877	928	860	46	77	17	131
consumption	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 consumpti	on (ton)	721,708	593,324	708,963	93,238	93,445	54,493	99,767
GHG emissions	Scope1 (tCO2eq)	45,181	47,305	43,874	2,332	3,923	893	6,636
	Scope2 (tCO2eq)	44,738	49,309	48,034	31,107	31,625	11,505	17,596
	Total emissions (tCO₂eq)	89,919	96,614	91,907	33,439	35,549	12,397	24,232
Air pollutant	NOx (ton)	62.1	60.4	55.1	-	0.4	0.2	0
emissions								
Discharge of	Wastewater (m³)	52,897	47,560	44,414	1,107	3,606	584	8,688
wastewater	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	General waste (ton)	18,631	14,019	14,897	12,364	14,190	3,168	17,393
waste	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

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

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 $<sup>\</sup>ast$  Consumption of recycled materials : 24,007 tons

# 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-S0 7
Broaden global market presence	N/A
Establish workplace safety	DMA-Occupational health and safety, G4-LA 5, LA 6, LA 7, LA 8

<sup>1)</sup> 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.

<sup>2)</sup> 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.





/ Long Som Jich

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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.

Appendix

# 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

ullet Fully reported ullet Partially reported ullet Not reported

Aspect	Indicator	Contents	Page	Note	External
Strategy and	G4-1	Provide a statement from the most senior decision-maker of the organization about the relevance of sustainability to the	4-5	_	•
Analysis		organization and the organization's strategy for addressing sustainability			
	G4-2	Provide a description of key impacts, risks, and opportunities	4		•
Organizational	G4-3	Report the name of the organization	6		•
Profile	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	7		•
		significant operations or that are specifically relevant to the sustainability topics covered in the report			
	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	7		•
		products or services provided			
	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	2, 21-23, 72		_
		supply chain			
	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	58, 80		•
		organization subscribes or which it endorses			
	G4-16	List memberships of associations and national or international advocacy organizations	80		•
Identified Material	G4-17	List all entities (subsidiaries and joint ventures) included in the organization's consolidated financial statements or equivalent documents	Business Report 3		•
Aspects and	G4-18	Explain the process for defining the report content and the Aspect Boundaries	10-11		•
Boundaries	G4-19	List all the material Aspects identified in the process for defining report content.	11		•
Douriuaries	G4-19	For each material Aspects report the Aspect Boundary within the organization	10		•
	G4-20 G4-21	For each material Aspect, report the Aspect Boundary outside the organization	10		•
	G4-21		2		-
	G4-22 G4-23	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements  Report significant changes from previous reporting periods in the Scope and Aspect Boundaries	2		
6. 1. 1. 1.1					•
Stakeholder	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		•
	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	10, 11		•
	G4-27	preparation process Propagation process	0.10.11		
	G4-Z/	Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has	9, 10, 11		•
D . D CI	C4.20	responded to those key topics and concerns, including through its reporting			
Report Profile		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		•
	G4-33	Report the organization's policy and current practice with regard to seeking external assurance for the report	2, 74-75		•
Governance	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	47		_
	07 70	for nominating and selecting highest governance body members	77		•
	G4-44	Report the processes for evaluation of the highest governance body's performance with respect to governance of economic,	47 Business		
	04-44	environmental and social topics	Report 188		
	G4-45	Report the highest governance body's role in the identification and management of economic, environmental and social	47		
	G4-45		47		•
	0.4.47	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	17 Business		•
	U4-0Z		47, Business		•
		remuneration and whether they are independent of management. Report any other relationships which the remuneration	Report 188		
		consultants have with the organization	10		
Ethics and	G4-56	Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics			•
Integrity	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	49		_
	O4-20	related to organizational integrity			

# GRI G4 Specific Standard Disclosures

lacktriangle Fully reported lacktriangle Partially reported lacktriangle Not reported

Aspect	Indicator	Contents	Page	Note	External
Environmental			-	- <del></del>	
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	G4-DMA	Management Approach	50		
Waste	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	51, 52	-	•
		affected by the organization's discharges of water and runoff	,		_
Products and	G4-DMA	Management Approach	25		_
Services	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	
Labor Practices ar				-	
Occupational Health		Management Approach	31		
and Safety	LA5	Percentage of total workforce represented in formal joint management—worker health and safety	59	-	
and Sarety	D 13	committees that help monitor and advise on occupational health and safety programs	33		•
	LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of	32, 59		_
	LAU	work-related fatalities, by region and by gender	32, 33		•
	LA7		31, 33, 59	-	
	LA8	Workers with high incidence or high risk of diseases related to their occupation	31, 59	- ·	
Training and	G4-DMA	Health and safety topics covered in formal agreements with trade unions  Management Approach	35		
-	LA9		37	-	
Education	LA11	Average hours of training per year per employee by gender, and by employee category			
	LATI	Percentage of employees receiving regular performance and career development reviews, by gender and	57		•
<u> </u>		by employee category			
Society	C 4 D 44		20		
Anti-competitive	G4-DMA	Management Approach	39	- N	
Behavior	S07	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their	41	No relevant	•
B 1 4 B 2	-	outcomes		violations occurred	
Product Responsil			2.5		
Customer Health	G4-DMA	Management Approach	25		
and Safety	PR1	Percentage of significant product and service categories for which health and safety impacts are	16, 25		•
		assessed for improvement			
	PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health	-	No relevant	•
		and safety impacts of products and services during their life cycle, by type of outcomes		violations occurred	

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# 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
Economy		·			
Economic	EC1	Direct economic value generated and distributed	72		•
Performance	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	EC7	Development and impact of infrastructure investments and services supported	64-68		•
Impacts	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		•
Environmental					
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		No such non-	•
Transport	EN30	environmental laws and regulations	54	compliance occurred	
Transport		Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce			
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		•
Labor Practices					
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	LA12	Composition of governance bodies and breakdown of employees per employee category according to	56	-	•
Opportunity	1.4.10	gender, age group, minority group membership, and other indicators of diversity	- ·		
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		•
	LA16	Number of grievances about labor practices filed, addressed, and resolved through formal grievance	59		
Grievance Mechanisms	D 110	mechanisms	33		
Human Rights		THECHAINSTIS			
	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	<u> </u>	•
	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	HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and	58		•
Labor Assessment	HR9	measures to contribute to the elimination of all forms of forced or compulsory labor  Total number and percentage of operations that have been subject to human rights reviews or impact	40, 41, 58		•
		assessments			
Supplier Human Rights Assessment	HR10	Percentage of new suppliers that were screened using human rights criteria	40, 41		•
Grievance Mechanisms	HR12	Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms	59	none	
Society Local Communities	S01	Percentage of operations with implemented local community engagement, impact assessments, and	64-68		•
	503	development programs	E4 E3		
	SO2	Operations with significant actual and potential negative impacts on local	51, 52		_
A +1 1	S03	Total number and percentage of operations assessed for risks related to corruption and the significant risks	49		•
Anti-corruption		identified			
Anti-corruption  Compliance	S04 S08	identified  Communication and training on anti-corruption policies and procedures  Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with	41, 49		•

# GRI G4 Specific Standard Disclosures-Other Disclosures

● Fully reported ● Partially reported ○ Not reported

Aspect	spect Indicator Contents		Page	Note	External
Supplier Assessment	S09	Percentage of new suppliers that were screened using criteria for impacts on society			
for Impacts on Society	,				
Product Responsibili	y				
Product and Service	PR3	Type of product and service information required by the organization's procedures for product and		http://www.lghausys.com/	
Labeling		service information and labeling, and percentage of significant product and service categories subject to			
		such information requirements			
	PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product		No such incidents confirmed	
		and service information and labeling, by type of outcomes		in 2015	
Marketing	PR6	Sale of banned or disputed products		No such cases occurred	•
Communications	PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing		No such incidents confirmed	•
		communications, including advertising, promotion, and sponsorship, by type of outcomes		in 2015	
Customer Privacy	PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of	63		•
		customer data			
Compliance	PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the		No such non-compliance	•
		provision and use of products and services		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	
abor Practices	Employment and employment relationships	40-41, 56, 58, 72, Business Report 187	
	Conditions of work and social protection	57, 59, Business Report 187	
	Social dialogue	58	
	Health and safety at work	31-33, 59	
	Human development and training in the workplace	37,57	
The Environment	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	
	Protection of the environment, biodiversity and restoration of natural habitat	51-52	
air Operating Practices	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	
	Education and awareness	None	
Community Involvement and	Active community involvement	72	
Development	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	

Appendix 79

# 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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