### **About This Report**

Samsung SDI hereby presents its 14th sustainability report,

This report is a channel through which Samsung SDI communicates with the stakeholders, and focuses on eight sustainability achievements and activities that we accomplished in 2016. This year's report adopted the Integrated Reporting Framework to convey our comprehensive insight while striving to specify Samsung SDI's business values and risk factors from economic, social and environmental points of view.

#### Reporting Standard

- 1. Global Reporting Initiative (GRI) G4 Guideline
- 2. International Integrated Reporting Council (IIRC) Integrated Reporting Framework
  - Quantitative data not defined by the GRI G4 protocol was reported in line with our management policy.

Reporting Boundary Samsung SDI and its subsidiaries

Reporting Scope Economy (K-IFRS), society and environment

**Reporting Period** 1 January 2016 – 31 December 2016. The report contains certain achievements from 2014 to March 2017.

**Reporting Frequency** Annual (Last Report: June 2016)

Report Verification Financial Information: Samjong KPMG

Non-financial Information : Lloyd's Register AA1000AS (2008) standard (excluding GHG emission and energy use)

Headquarters [17084] 150-20, Gongse-ro Giheung-gu, Yongin-si, Gyeonggi-do, KOREA

#### Significant changes since the last reporting period

- Performances from the Chemical Division were categorized as loss from discontinued operation (disposed on 29 April 2016) and business performances in 2015 were re-considered for reporting.
- Established Samsung SDI(Wuxi) Battery Systems Co., Ltd. (SWBS) (Jan. 2017)

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#### Other Information

Website www.samsungsdi.co.kr

 $\textbf{Sustainability management} \ \ \text{http://www.samsungsdi.co.kr/sustainable-management/index.html}$ 

 $\textbf{Ethics management} \ \ \text{http://www.samsungsdi.co.kr/cyber-audit/ethics-management.html}$ 

#### **VOC System (Customer Inquiry)**

Customers can visit the following website to suggest additional opinions.

http://www.samsungsdi.co.kr/information.html



#### **COVER STORY**

A hexagon is considered the most perfect shape in engineering and geometry. Samsung SDI products were placed in hexagons as icons, emphasizing reliability and excellence. Our corporate vision, "Creative Energy & Materials Solution Leader," and both hands of our employee at the bottom of the image deliver the message that Samsung SDI will continue to create human prosperity and clean environment through its products.

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High 08\_ Energy reduction and utilization of renewable energy

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## CEO Message



"Samsung SDI promises to bring prosperity to humanity, and become a leader of technology and industry through continuous innovation." Dear Samsung SDI Stakeholders,

It is my great pleasure to greet you all through Samsung SDI Sustainability Report 2016.

I would like to express my deepest gratitude towards your unwavering support and interest in us.

As a "creative leader of energy and state-of-the-art materials," every employee at Samsung SDI across the globe is striving relentlessly to achieve innovation that will open a new, prosperous future for humanity.

The year 2016 was a challenging year for us, due to many reasons such as the stagnant economies in the emerging markets, the U.S. interest rate hike, and intensifying competition in technology and cost. Nonetheless, all our employees as a team had a very meaningful year with determination to create the foundation for the next leap.

First, our Automotive Battery Division worked hard to enhance technology competitiveness and customer response. By introducing highly advanced products including batteries featuring high energy density and fast charging technology and light-weighted expansible modules, we were able to take the lead in the battery market. Furthermore, as the construction for the Hungary factory plant geared towards mass production in 2018 H1, has been finalized, we are now able to show a prompter response to European market demands.

Our ESS Business gained a stronger dominance in the market as we were able to satisfy the rigorous safety standards of the U.S market and participated in the Power Supply Chain Project in California.

Although our Small-Sized Battery Division went through difficult period due to safety issues, we took it as an opportunity to upgrade product reliability by solving the issue at an early stage. Also, power tools and electric vehicles helped us strengthen our position in the non-IT industry.

The Electronic Materials Business secured competitiveness in China, the largest photovoltaic product industry, by initiating the operation of the new paste plant in Wuxi. We are now ready to stand not only as the brand with the largest share in the Chinese paste industry but also in the global market.

Many achievements were made to promote sustainability values, including ethics, safety, environment, and community relations. Some of our activities include: our pre-emptive response to the Improper Solicitation and Graft Act; expending the scope of safety environment assessment as one of employee's task goals; industry cooperation for next generation technology development and expansion of research foundation; running the Green Planet Environment School as one of our philanthropic activity. In particular, Our strong will and capability for sustainable management were acknowledged externally, as we were given A-from CDP and listed on the DISI World Index.

Of course, we do expect continuous volatility and uncertainty in our business environment in 2017. Nevertheless Samsung SDI will continue to step forward into the future by enhancing our fundamental competitiveness. In sustainability aspects, by putting a great emphasis on employee communication and engagement, we will create a horizontal and open corporate culture that encourages discussions and steer the company towards the right direction.

Samsung SDI has declared its drive for implementation of sustainable management, starting with our first Sustainability Report in 2003. Currently, sustainable management is an ultimate value that Samsung SDI must pursue as a global corporation. We hope that this report will act as a channel that communicates our achievements and future directions to our stakeholders. We, Samsung SDI, will stay committed to the pursuit of our vision and upholding stakeholder's values through bold innovation and challenges. Do not hesitate to express different opinions that will nurture us to grow together. We ask for your continuous support and interest.

Thank you.

Young Hyun JUN
President and CEO

# Samsung SDI's Value Creating Factor and Their Impacts in each Value Chain

Value creation, an integral factor for Samsung SDI to gain customer trust, is realized through our products and services. We take the initiative in fulfilling social responsibilities and creating healthy values from every step of our value chain, in order to meet customer expectations and contribute to solving social issues.

#### Value Creating Factor

Value chain	R&D	Procurement	Production	Sales /	Business	
Value Criairi	RQD	/ Logistics	Froduction	Service	Management	
Value Creating Factor			O		1	
Brand Credibility						6 7
Market-dominant Technology						<b>1 6</b>
Process Efficiency						<b>8 6</b>
Internal Control						4
Employee Competency						6
Business Ethics						<b>6</b>
Work Safety						<b>©</b>
Partner Selection and Retention						•
Responsible Supply Chain						0
Product Application Scope						0 @
Low Reliance on Natural Resources						80845608
Respect for Bio-Diversity						0
Develop Eco-friendly Product						<b>©</b>
Product Quality Improvement						6
Product Safety Improvement						<b>6 7</b>
Customer Relation Improvement						<b>e</b>
Sustainable Logistics						0
Vitalize Local Economy						8
Procure Top Talents						6
Employee Satisfaction						2457
Cash Generation						1
Partner Capability						0
Compliance						6

Every value creating factor in business is a growth opportunity for Samsung SDI and a risk factor that minimizes the risks, which provides the company-wide direction for organizational management. We identified 23 issues as our management direction to create sustainable values, and we are utilizing them as an issue pool for materiality assessment. Forthemore, we analyzed from an integrated point of view the types of capitals through which management achievements are created for each issue, and the stakeholders who are ultimately provided with these values.

#### Management direction Impact of Value Creation **TBL** Sustainability Major Capital Types Creating Major Stakeholders Enjoying Issue Pool Achievements the Values Created by the Capital Forecasting and responding to fluctuations in the future market Securing market leadership and new market development G Enhancing R&D competency Q Financial Capital O, 4 Transparency in BOD composition and operation Economy Reinforcing product safety evaluation and management G Compliance with laws and global anti-corruption principles Responsible communication with customers G Manufacture Capital Sustainable supply chain support and management G Active labor-management communication Building up workplace safety Respect toward employee diversity and Intellectual Shareholders equal opportunities Investors Capital Improving human right protection for employees and 0 Society Employee competency and career development Work and life balance G. Human **Employees** 8 Community engagement and development Θ. Capital 1 Pollutant emissions management Protecting eco-diversity Energy reduction and utilization of renewable energy Social and Relationship Government 4 Water use management Capital Raw and subsidiary material management and promotion of recycling Environment 0 Handling and managing hazardous chemical substances Environmental impact mitigation throughout product life cycle Natural 8 Waste management Capital Local Communities

## 2016 Samsung SDI Value Creation Results

### Input

# ₩

- Financial Capital
- Listed on Korea Stock Exchange in 1979
- No. of issued stocks (common): 68,764,530
- Financial capital procurement from shareholders and investors
- Disclosure of management status (e.g. general meeting of shareholders)



Capital

- No. of production corporations: 16
- Production capacity (e.g. small-sized Li-ion battery): 1.41 billion

- Polarizing film production capacity: 52,646,000m<sup>2</sup>

- Tangible Asset: KRW 2.50 trillion
- Building and Structure: KRW 992.1 billion
- Equipment: KRW 671.6 billion



Capital

- Intangible Asset: KRW 941.7 billion
- R&D Investment (R&D to Sales Ratio): KRW 552.5 billion (11%)
- Ratio of R&D employment: 2,174 (24%) (to the entire company-wide R&D employees ratio)



- Human Capital
- Total Employment: 19,353
- Internal Director : 4, External Director: 5
- Newly Hired: 4,697
- Training Cost: KRW 7.7 billion
- Average Tenure: 11.1 years

(full-time positions in Korea)



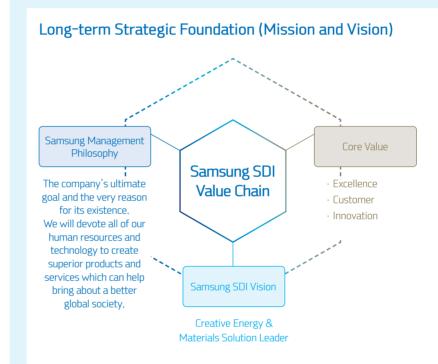
- Social and Relationship Capital
- Operational in 11 countries
- Social contribution and local community activities (e.g. Green Planet Environment School and free eye surgery)
- Social Contribution Investment : KRW 4.9 billion



Capital

- Certified to ISO14001
- Energy Savings Investment: KRW 2.31 billion
- Energy Use: 12,876 TJ

## **Business Activity**



#### Value chain



$\sim$	$\sim$	~		
R&D	Procurement/ Logistics	Production	Sales/Service	Business management
<ul> <li>Research</li> <li>Develop</li> <li>Development management</li> </ul>	Developmental purchasing     Strategic sourcing     Supply chain operation     Warehousing/ shipment management	Production plan     Quality control     Product safety	Demand planning     Sales execution     Sales     management	<ul> <li>Management planning</li> <li>HR</li> <li>Infrastructure support</li> </ul>
<b>6</b>	7	2584	1	84028

09

## Long-term Impact

#### **Business & Products**

#### Small-sized Li-ion **Batteries**

- 4
- ·IT Devices
- · Power Devices
- ·Trans Devices

#### **Automotive Battery**



- ·Battery Cell
- ·Battery Module
- ·Battery Pack



·Battery Pack ·Battery System



#### **Electronic Materials**

- ·Semiconductor
  - ·LCD/OLED · Photovoltaic

#### 2016 Performance and Activities

#### High Material Issue

- uring market leadership and new market development
- Reinforcing product safety evaluation 2 and management
- Forecasting and responding to fluctuations in the future market
- Compliance with laws and global anti-corruption principles
- 0 Building up workplace safety
- **(3)** Enhancing R&D competency
- Sustainable supply chain support and management
- Energy reduction and utilization of 8

#### Medium & Low Material Issue

- Transparency in BOD composition and
- Employee competency and career development, and three other issues
- Community engagement and (3)
- Pollutant emissions management, and two other issue

Please refer to page 16-17 for Samsung SDI's risks and opportunities (incl. external environm

## Output/Outcome



Capital

02 High Material Issue 2016

- Energy Solution: KRW 3.43 trillion
- Electronic Material: KRW 1.77 trillion
- Net Income: KRW 211.1 billion
- · Q-cost: 3.35% (to-revenue ratio)
- -The sum of inspection cost, prevention cost, failure cost, etc.



To improve capital procurements from the shareholders and capital investors, and maintain desirable proportion of the financial capital to achieve both growth and distribution



Manufacture

Capital

- Maior outputs
- Small-sized Li-ion battery, etc: 1,053 million units
- EMC: 6,218 tons
- Polarizing film: 45,023,000m²
- · S-partner certificate: 91 companies
- Purchase cost: KRW 3.77 trillion



Manufacture Capital

To apply our production technology and capability to the manufacturing process efficiently to produce high-quality products and maintain our supply chains



Intellectual

Capital

- Established and approved strategic directions for each business division
- Developed and approved 2017 business plans
- Established and approved mid/long-term strategies
- Patent registration: 11,886



Intellectual Capital

To apply innovative and special technologies to develop new products and services which meet each individual customer's expectations



- Ratio of local recruitments: 57%
- Ratio of female managers: 7.7%
- Ratio of quality management qualification (except for ISO 9001): 29% (to the entire company-wide quality management employees ratio)
- Employee injury/loss rate: 0.40/26.89



Capital

To uphold equality and diversity in recruitment process, and attracting talented employees to help them foster their skills and pursue mutual growth



Relationship

Capital

- · Corporate tax: KRW 57.8 billion
- Terminated partnership due to illegal conduct: 0
- No. of free eye surgery beneficiaries: 218,639 (cumulative)
- · No. of green planet environment school beneficiaries: 8.616 (cumulative)



Social and Relationship Capital

To present products and technologies that contribute to social growth with our customers, and help local communities grow with our tax payments and products



Natural

Capital

- GHG emissions: 747,926 tCO<sub>2</sub>e
- Energy saving results
- Fuel saving: 194TJ/ year
- Electricity saving: 899TJ/year

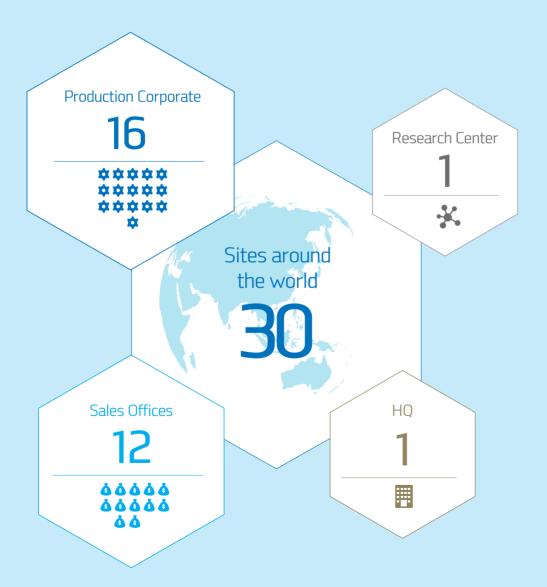


To be a responsible company that not only minimizes the environmental impact of the production process, but also leads to environmental responsibility for customers using the product and the supply chain

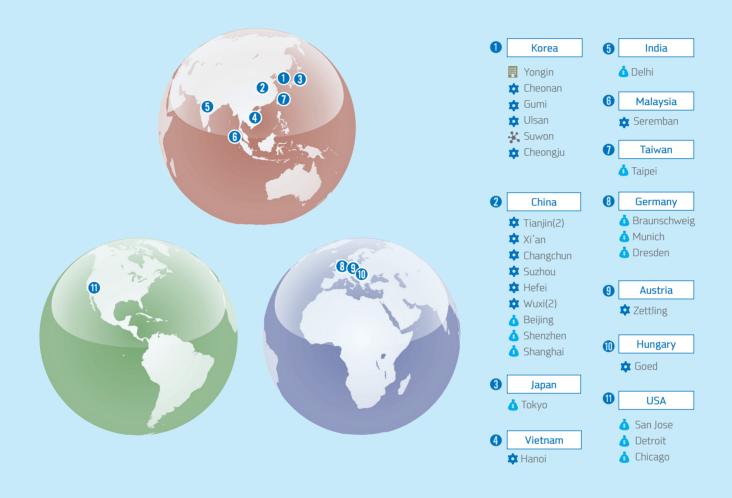
## Samsung SDI Business Overview

Samsung SDI is composed of two main business areas in charge of development, production and sales of a range of products. Our Energy Solution business presents products such as small-sized Li-ion batteries and automotive batteries. Our Electronic Materials business is involved in semiconductors, display materials, etc.

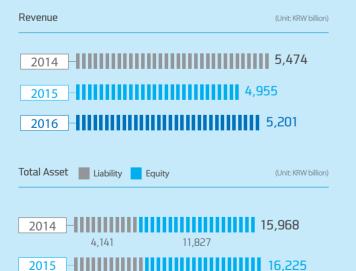
As of the end of 2016, Samsung SDI operates 16 production sites and 12 sales offices around the world, 92% of our batteries are directly delivered to the customers and 8% are sold through the agencies. Electronic materials are 100% delivered to customers via direct channels,



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02 High Material Issue 2016



\* In consolidated financial statement. Revenue and operating income in 2015 was restated due to the disposal of the Chemical Division.

10,964

14,900

4,972

3,936

2016

#### Operating Income and Net Income

(Unit: KRW billion)

	2014	2015	2016
Operating Income	71	-267	-926
Net Income	-80	26	211

Shareholders owning more than 5% of the shares (As of 31 December 2016)



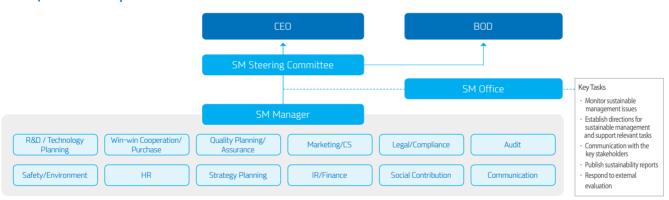
## Sustainability Management System

Our sustainable management is directed towards providing the frame that identifies opportunities and risk factors in terms of the economy, society and environment, Also, it is to solve and improve the issues with our stakeholders. To this end, we supervise sustainable management in an integrated form, based on various policies and conferences. Since 2004, Samsung SDI has operated the SM Steering Committee, a management-level consultative group that plans the company-wide directions, responds to the stakeholder's expectations and makes relevant decisions. The CEO and other key managements participates in the SM Steering Committee to share major issues on sustainable management, goals and directions, in addition to reviewing and approving the key agendas including our Sustainable Reports.

#### SM Office

The SM office is fully in charge of securing the drives behind the entire company's sustainable management, while improving execution capabilities for detailed agendas. Its key roles include identifying domestic and international sustainable management trends. Also that manages and supports sustainable management activities within the organization. In particular, the SM office drafts agendas for discussion and approval at the SM Steering Committee and for reporting to the BOD when decision-making at the management level is required. Lastly, the office cooperates with relevant SM personnel to respond to stakeholder's expectations and requests.

#### **SM Operational System**



#### Stakeholder Engagement and Communication

We believe that understanding and meeting expectations of our stakeholders is the first step to securing sustainability. We define stakeholders as anyone who directly or indirectly influences and is influenced by our management, and classify them into customers, partners, shareholders/investors, employees, the government, external organizations, and local communities. Samsung SDI operates communication channels for different stakeholders and reflects their expectation as well as others business impacts onto the following year's plan. These plans are reviewed by the SM Steering Committee and disclosed to the stakeholders through Sustainability Reports.

Customers	Partners	Shareholders / Investors	Employees	Government	Local Communities and Civil Organizations	Industrial Associations, Universities, Research Institutes
Customer visits     Quarterly Business     Review (QBR) Meetings     Operating website     Operating Focus 119	Purchase portal system     Hosting Samsung SDI     Partner's Association     (SSP)     Holding Partners     Exchange Meetings     CEO and executive     visits to the partners	General meeting of shareholders IR earnings conference call IR road show IR conference Regular public disclosure IR website IR contact Ad hoc meetings	Labor-Management     Council     Open Counseling Center     Management seminars     Satisfaction surveys     Culture Leader     SDI Talk     Publishing newsletters	Participating in national projects     Operating joint cooperation program     Hosting conferences and meetings	Local community council     Social contribution activity     Sisterhood	Membership in different associations or societies (e.g. Korea Battery Industry Association)     R&D (Open innovation)     Joint cooperation program

## Risk Management System

02 High Material Issue 2016

We have established a comprehensive system that manages financial and non-financial risks to realize sustainable growth and development, Our risk management takes a balanced approach towards economic, social and environmental issues and prevents a biased focus on financial achievements from damaging non-financial values, For this purpose, Samsung SDI not only manages liquidity, credit and market risks that may affect capital procurements and operations, but also non-financial risks such as compliance, supply chain and reputational risks through diverse points of view, Conferences presided by the CEO provide a system that reviews response plans and improvements on key risks, facilitating a decision making process that pursues balanced growth of different stakeholder's values.

#### Business Continuity Management (BCM) System

Samsung SDI is inherently exposed to operational risks such as fire due to the nature of the battery industry. In this regard, we operate a business continuity management(BCM) system to prevent risks and make quick responses. We pursue policies that diversify the risks in each stage from product development to operation, and strive to identify in advance risks through risk mitigation and elimination. In order to be ready for unexpected incidents, we set up possible scenarios and conduct regular trainings for all of the employees to internalize risk awareness.



1) ERT: Emergency Response Team 2) BCP : Business Continuity Plan

#### Compliance Risk Management

Samsung SDI operates an IT-based Internal Control System to ensure information transparency and monitor compliance in every management process. The system consists of internal accounting managements that enhance the credibility of financial information, as well as certification and evaluation to protect the assets and prevent fraudulent conduct. To respond to changing compliance environments, we conduct annual reviews on internal policies, regulations, procedures and update the system if deemed necessary.

#### Supply Chain Risk Management

As a manufacturing company, Samsung SDI works with partners across the world. We manage sustainable management risks of the partners by operating the S-Partner Certification Program. The program conducts a comprehensive evaluation on five key areas – labor, environment, health and safety, ethics, and management system – and certifies our partners according to the results. A total of 91 domestic and international partners were certified in 2016. In addition, we strive to mitigate risks on supply chains by helping establish the BCM system for partners that provide raw materials and facilities. In 2016, Samsung SDI provided education programs on implementation of Business Continuity Plan for 43 partners in and out of Korea. We plan to expand these efforts to all of our partners.

#### Tax Risk Management

We are aware that complying with the tax system and strictly managing tax risks is a major contributing factor not only to the national finances but also to maximize our shareholders'benefit. In response to the increasing global efforts to reinforce regulations against offshore/domestic tax avoidance and evasion, Samsung SDI has established documented internal standards and procedures in regards to tax treatments. In addition, we regularly monitor policies of tax authorities in different regions and countries for correct tax payment and declaration, as well as prepare ourselves for possible risks. In particular, we established transfer price policies to monitor whether transfer pricing decisions and applications are appropriate. Furthermore, we inspect whether our global business sites and partner companies comply with our transfer price policy.

#### 2016 Tax Payment by Country (Unit: KRW)

Korea	233,924,173,168	South East Asia	187,705,911
Japan	101,645,720	China	13,216,189,214
America	-9,292,286,188	Latin America	214,231,574
Europe	18,618,372,066	Hong Kong	22,691,580,225

#### Safety Risk Management

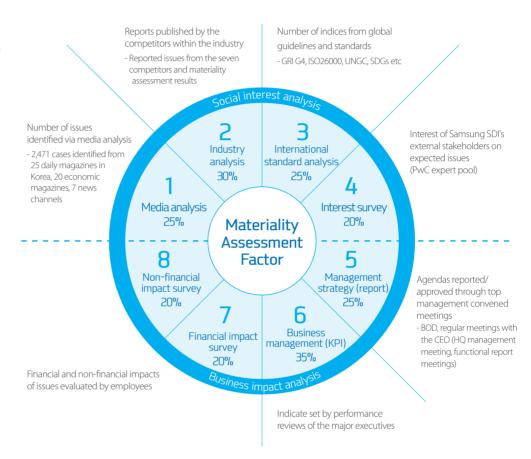
Safety risk management at work sites is a crucial component of business competitiveness and survival. We focus on preventing safety accidents in advance through the operation of pursue various programs such as the Safety Culture Roadmap and regular work-site inspection teams.

After declaring "Safety as the No.1 Management Principle" in 2016, we have been committed to enhancing employees's afety awareness with safety education and safety accident response trainings.

## Materiality Assessment

Samsung SDI engages in a wide array of activities to enhance the organization's sustainability and satisfy stakeholders,

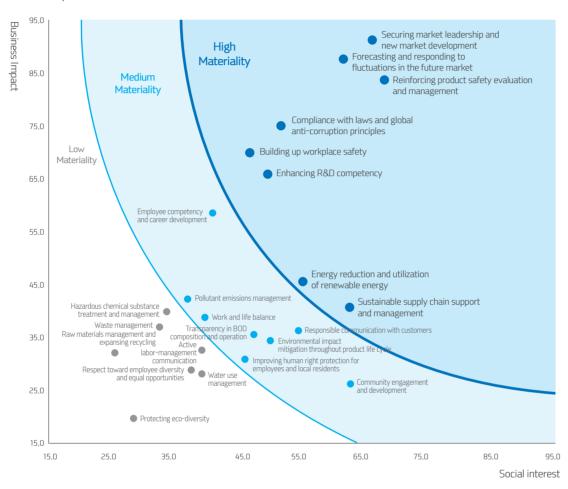
We disclose in detail the results and achievements in detail by publishing the Sustainability Report. In order to determine the core issues that should be covered in the report, we conduct materiality assessment.



#### Financial/Non-financial relevance analysis on High Material Issue

Rank	Issue	Relevance to financial performance
1	Securing market leadership and new market development	Maintaining the existing customer base to strengthen market dominance and discovering new markets is directly related to the revenue, as well as impacts the business growth.
2	Reinforcing product safety evaluation and management	Product safety is an issue relevant to customer's life and health. Customer claims can cause financial loss and terminate business relations.
3	Forecasting and responding to fluctuations in the future market	Business planning that considers market forecasts and responses to regulations for each business and country enables efficient distribution of financial capital.
4	Compliance with laws and global anti-corruption principles	Penalties or fines may be imposed from violating the regulations. In extreme cases, operations might be ceased, causing critical impacts on the business operation.
5	Building up workplace safety	Safety accidents at the business sites cause a substantial operation failure due to a halt in operation. Material loss eventually causes monetary loss.
6	Enhancing R&D competency	R&D can lower expenses by reducing the cost and increase the sales with high-quality products.
7	Sustainable supply chain support and management	Sustainability in supply chain not only affects the revenue influenced by the product quality, but also makes adverse impacts on the business if the partner companies do not fulfill their social responsibilities.
8	Energy reduction and utilization of renewable energy	Inefficient energy consumption increases production cost, causing financial loss from paying penalties in case of environment law or regulation violation during production processes.

#### Materiality Assessment Result



02 High Material Issue 2016

In 2016, a total of 8 were selected as High Material Issues to be the main focus of reporting. We also disclosed additional information on Medium and Low Material Issues that required by international standards and quideline.

#### Relevance to non-financial performance

Maintaining the existing customer base and securing new customers is fundamental factor in building an overall trust-based relationship with the customers.

The first element of customer satisfaction is trust on product, and thorough quality management is fundamental in operating operation.

Market and industry forecast, as well as strategy and response establishment, ensures quick decision making and is crucial for further business development.

Unethical decision making and management directly damages company's reputation and brand value.

The treatment of hazardous and dangerous substances is inevitable given the nature of our business, and securing safety for local communities and employees is the most basic responsibility.

The source behind market leadership is securing R&D capability. For the battery business, excellent technological performance eventually contributes to building an eco-friendly society and guarantees sustainability of the business.

Shared growth with the supply chain is an integral part of CSR and sustainable supply chain management is ultimately related to our competitiveness and regulation

Attention to reducing GHG emissions and energy use is increasing. Therefore, active responses to climate change issues are integral to eco-friendly business and growth.

## Management Approach

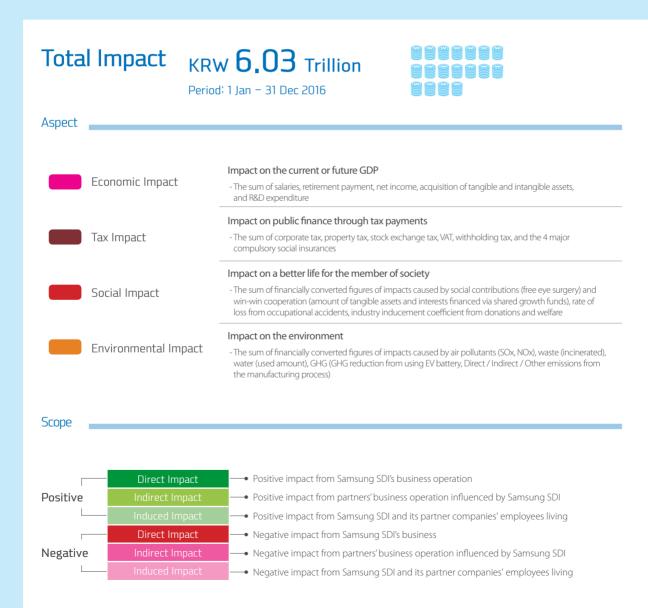
High Material Issue	Definition & Relevance	Opportunity and Risk	Boundary
Securing market leadership and new market development	Expand business by securing new markets and strengthening dominance on the existing markets	<ul> <li>Heightened competition among battery manufacturers</li> <li>Potential market growth slowdown due to low oil price</li> <li>Increasing demand for renewable energy</li> </ul>	<ul> <li>Internally: sales/ marketing</li> <li>Externally: customers, shareholders/investors</li> </ul>
Reinforcing product safety evaluation and management	Strict compliance with specification and strengthened reliability testing management to secure product safety	<ul> <li>Stricter regulations imposed by aviation authorities in regards to loading batteries on aircrafts</li> <li>Securing and applying design and verifica- tion technology to enhance product safety</li> </ul>	<ul> <li>Internally: R&amp;D, manufacture</li> <li>Externally: customers, partners</li> </ul>
Forecasting and responding to fluctuations in the future market	Forecast and manage the market risks such as industrial trends and regulations from different countries	<ul> <li>Higher entry barrier due to protectionism</li> <li>Enhancing end-user perception on electric vehicles following technical improvements</li> </ul>	<ul> <li>Internally: R&amp;D,         purchase, manufacture,         sales/marketing</li> <li>Externally: customers,         partners</li> </ul>
Compliance with laws and global anti-corruption principles	Domestic and overseas - activities to enhance compliance	<ul> <li>Stricter legal sanctions on foreign corporations</li> <li>Continuous compliance trainings and inspections to reinforce compliance awareness</li> </ul>	► Internally : R&D, purchase, manufacture, sales/marketing
Building up workplace safety	Safety management activities and establishment of improvement Targets for Strengthening safety at Korea and overseas workplaces	<ul> <li>Further request to disclose safety and environmental information</li> <li>Sharing and expanding safety culture to the employees and partner companies</li> </ul>	- ▶ Internally : manufacture
Enhancing R&D competency	Investment status for R&D enhancement main direction and performance	<ul> <li>More competitive environment in battery and materials industry</li> <li>Pursuing special capability to obtain future growth momentum</li> </ul>	<ul><li>► Internally: R&amp;D</li><li>► Externally: research institutes</li></ul>
Sustainable supply chain support and management	Supports to enhance the supply chain and promote sustainable management	<ul> <li>Higher economy, environment, society risks due to poor supply chain management</li> <li>Enhancing product competitiveness by Securing more competitive partner companies</li> </ul>	<ul><li>► Internally: purchase</li><li>► Externally: partners</li></ul>
Energy reduction and utilization of renewable energy	Energy saving and GHG emissions management	<ul> <li>Stricter regulations on GHG emission (e.g. emission trading)</li> <li>Promoting an image as a green company</li> </ul>	<ul> <li>Internally: manufacture</li> <li>Externally: local communities</li> </ul>

GRI Aspect	KPI	Major Activities	Responsible Teams
Economic Performance, Market Presence	Revenue, operating income, market share	Number orders and improve profitability Increase market share based on customer trust  **Trust**  **Trust**	Marketing and Planning team of each division
Customer Health and Safety, Product and Service Labeling Marketing Communications	Customer satisfaction, nurturing quality talents, quality improvement achievements	<ul> <li>▶ Quality competitiveness enhancement</li> <li>project</li> <li>▶ Customer satisfaction survey</li> </ul>	Quality Assurance team
Economic Performance, Market Presence	Revenue, operating income, market share	Eco-friendly technology development     Expand production lines and provide region based service	Marketing and Planning team of each division
Ethics and Integrity, Anti-corruption, Compliance Anti-Competitive Behavior	Compliance/ethics training, compliance inspection status, disciplinary action result	Fulfill social responsibility through legal     compliance     Pre-emptive anti-corruption practices	Audit team and Legal Compliance & IP Team
Occupational Health and Safety, Training and Education, Supplier Environmental / Human Rights / Labor / Social Assessment for Impact	Safety environment investment, number of improvement cases on safety environment, employee accident rate	Host safety environment meetings     Monitor compliances of mandatory safety regulations	Safety Environment Infra team
Training and Education	R&D investment amount, R&D staff, patent registration	Build a foundation for new technology     development     Expand industry-academia cooperation	Technology Planning group and Development/ Patent team
Procurement Practices, Supplier Environmental / Human Rights / Labor / Social Assessment for Impact	Shared growth agreements, financial/HR/ Technology investment status, S-Partner certification results	Expand financial, HR, technical support for     shared growth     Active communications	Win-win Cooperation  Team under Purchasing  Strategy Group
Energy, Emissions	Energy use, energy savings, GHG emissions	<ul> <li>Energy saving activities</li> <li>Establish carbon management system in preparation for emissions trading system</li> </ul>	Safety Environment Infra team

## Samsung SDI

## Total Impact Measurement and Management (TIMM)

Samsung SDI is aware of the positive impacts on the economy, society, and environment as well as negative impacts that are inevitably induced by direct and indirect business activities. Samsung SDI, as part of the society that grows and develops hand-in-hand with stakeholders, has measured its impact on the economy, taxes, society and the environment during 2016 by applying PwC Korea's TIMM methodology. We hereby present these results in our Sustainability Report.



Other references: Samsung SDI Business Report (47th), Statistics of South Korea (Statistics Korea), industry inducement coefficient Bank of Korea, Value of Statistical Life (VSL) from Korea Environment Institute, Statistics from World Bank, Statistics from International Monetary Fund, Disability Adjusted Life Years (DALY) from WHO

