



Power to Imagine  
www.samsungsdi.com

Sustainability Report 2007

I SEE SDI



I SEE SDI

Sustainability Report 2007  
Insight of Outlook

SAMSUNG SDI 

**Samsung SDI is a world class company of display and energy products.**

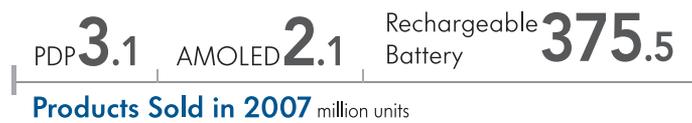
Samsung SDI operates 11 production bases, two R&D centers, two sales offices along with numerous peripheral branches and offices in 11 countries.

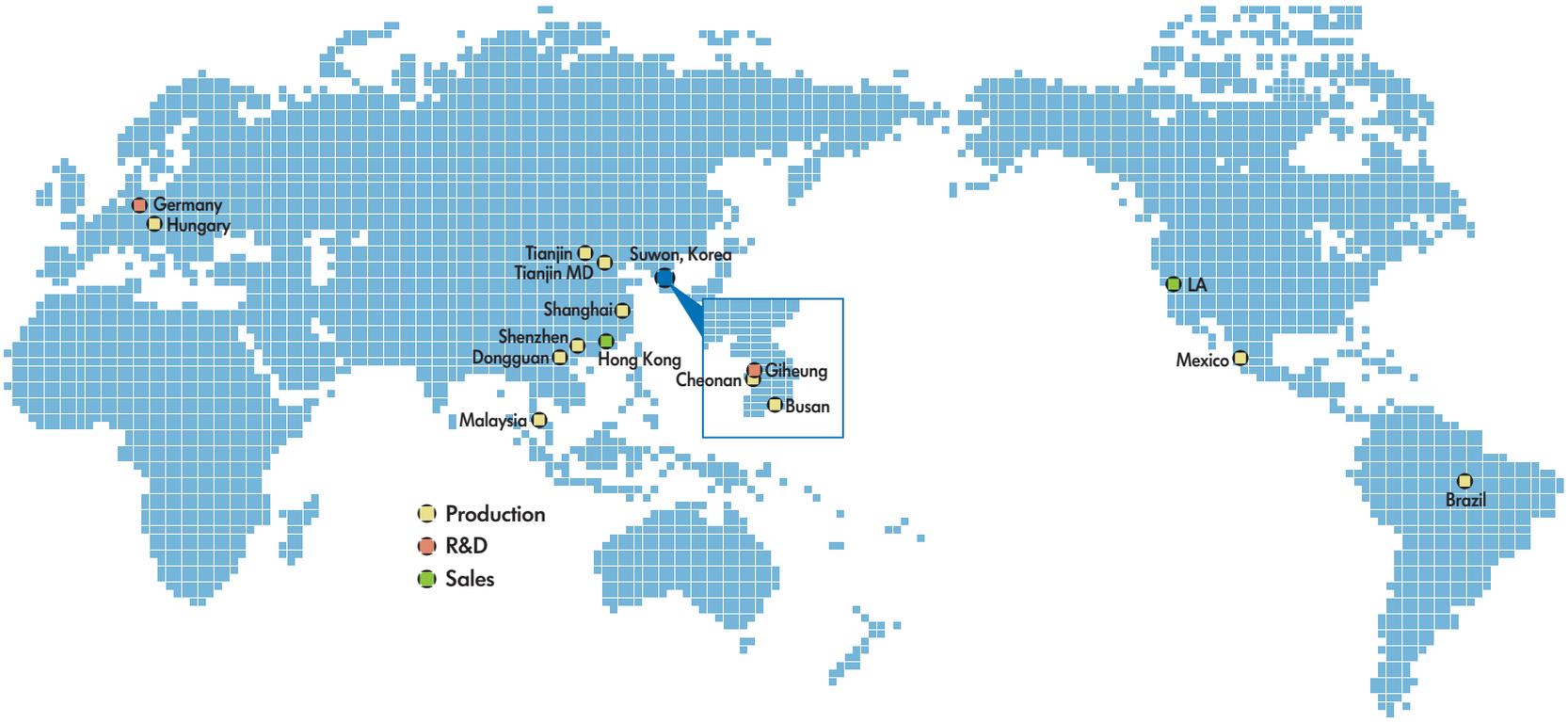
Major production plants are located in Korea, Hungary, Malaysia, China, Mexico and Brazil.

Samsung SDI operates the PDP Division, the Battery Division, the Mobile Display Division and the CRT Division.

R&D centers develop the next-generation displays and energy technologies.

In 2007, Samsung SDI shut down all CRT production lines in Korea and began the phased CRT line restructuring in overseas locations, as had been planned in its Business Reformation Plan. On the other hand, following the Global Base Building strategy, Samsung SDI set up PDP module lines in Mexico, rechargeable battery cell/module lines in Tianjin, China, and battery module lines in Shanghai, China.





Mobile Display  
(LCD, PMOLED)

**169.9**

CRT

**39.5**



**24,563** people

Employees

KRW

**4,750** billion

KRW

**2,370** billion

KRW

**5,150** billion

Total Capital

Sales

img

SDI

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**The 5th Episode On Sustainability**  
Samsung SDI opens its fifth sustainability report this year.

**The reporting period is defined from January 1 to December 31, 2007.**

Any significant changes in activities up to April 30, 2008 from the stated reporting period have been included in this report.

**All production sites, sales companies and offices, and R&D centers**

Details of global Samsung SDI establishments have been included.

**Information on all display products and energy products**

PDP, AMOLED, LCD, PMOLED, rechargeable batteries, CRT, and VFD as well as future products that are under development at R&D centers also have been included.

**GRI G3**

The report has been prepared based on the GRI Guideline G3 for Sustainability Reporting and the Environmental Reporting Guidelines announced by the Ministry of Environment of Korea. Data have been generated based on G3 protocol, and for data which do not have guidelines outlined in the G3, company management standards have been applied.

**The fourth report was made public in May 2007.**

Samsung SDI publishes a sustainability report every year.

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DEAR  
GLOBAL  
PARTNERS



# We Are Making Restless Advancement

## Dear Global Samsung SDI Partners

I express my deepest gratitude for the continuous encouragement and support that you showed for Samsung SDI.

As before, all Samsung SDI members have strived throughout 2007 to maintain a sustainable future which our stakeholders and ourselves will share together.

## Pain of Transformation

But the situation was not favorable. Strong emergence of rival device products, oil price surge, weakening of the dollar and the fall in sales price were all against our favor. In addition the influence of social-environmental issues such as climate change, pollution, labor issues and human rights, and corruption all added to the difficulty. For these reasons Samsung SDI's efforts towards sustainability brought much pain and heartache in the process.

## Continuing Challenges

We can no longer deny that climate change is a result of human activity, and other issues awaiting a solution are population, which has been predicted to hit 10 billion by the end of this century, the aging population, one billion individuals living on less than one dollar a day, the rapid economic growth of developing nations and the appearance of new markets, the persistent gap between the rich and the poor, the spread of internet that has now reached over 20% of the global population, and the information overflow.

All of these factors are interconnected and their influence is increasing accordingly, and calls for global companies to fulfill their responsibilities in cooperation.

## Our Values

Since the introduction of its sustainable management, Samsung SDI has pursued sustainable values.

Samsung SDI is committed to, first, making continuous growth through rapid technological advancement and business transformation, and secondly to pursuing social and environmental values in our businesses and other activities. Thirdly we aim to increase our understanding of the communities we belong to through communicating with them and exist as a unity.

Samsung SDI currently demonstrates these values through our products which are the embodiment of such commitments.

## Restless Advancement

We move forward step by step.

Samsung SDI is the world's first producer of the dream display, AMOLED, and the operator of premium PDP lines. The reasonable price as well as the certified quality of our CRT screens continue to enhance the quality of life of those living in developing countries. Also, Lithium-ion batteries, much preferred for its environmentally friendly quality, have expanded its spectrum of uses by being developed for use in HEVs.

Samsung SDI continues R&D for new technologies of the future. We will open new markets, support the global standard, and contribute to the enhancement of the quality of living in our communities.

Values that Samsung SDI cherishes and its restless efforts will eventually open up a brand-new world, where you can enjoy the fruits.

Just as you are the force moving Samsung SDI, we will be your power engine for your pursuit of a sustainable future.

President & CEO Kim Soon Taek

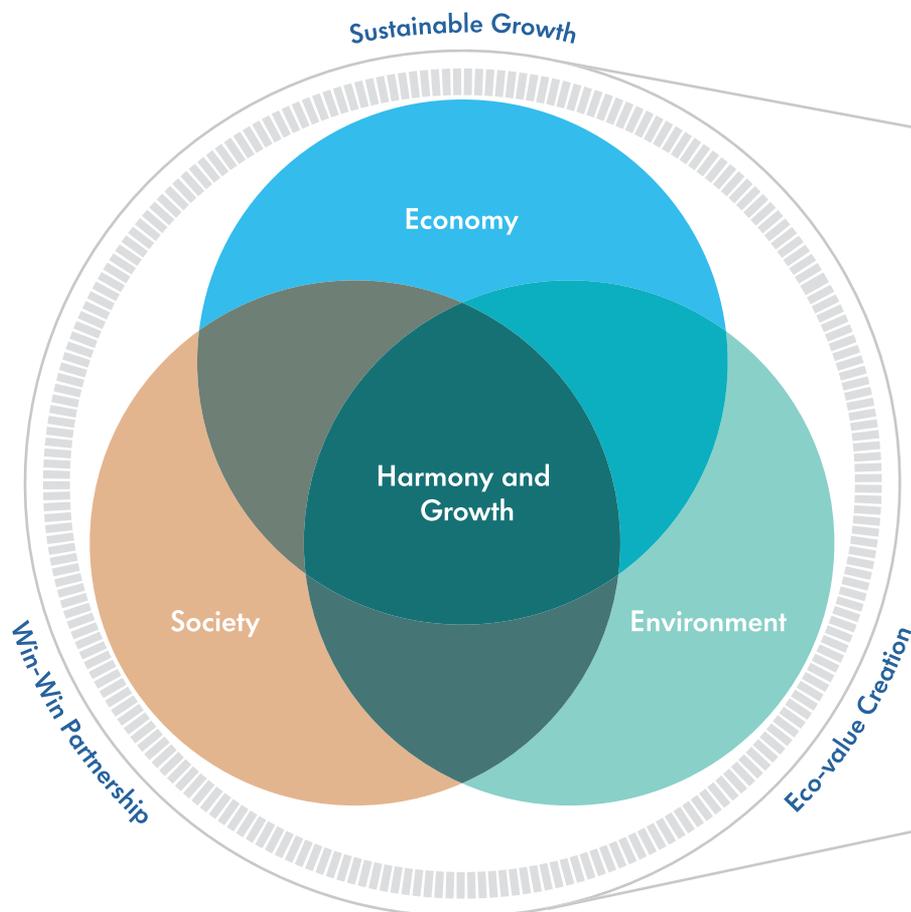


# SDI's Sustainability

What is the function of an enterprise?

Is it to enhance its economic achievements, contributing to shareholder values creation, and its continuation?

The enterprises of today face the huge challenge of fulfilling the broadened social responsibility bestowed upon them. This responsibility is often recognised as an obstacle to the corporate activities, but on the other hand it is an opportunity for success. The reason for this is that satisfaction of such responsibilities is a direct reflection of the society's requirements, and a corporation cannot proceed without considering the needs and wants of the society should it wish to succeed.



For details, see the Sustainability tab at  
[www.samsungsd.com](http://www.samsungsd.com)

In 2003 Samsung SDI published its first sustainability report and has been promoting sustainable management continuously. We recognise the issues raised by our society(sustainability issues) and strive to reflect these through our products and services. By doing so we aim to be a company complimentary to the society, delivering products and services the society really wants, and by doing so we hope to lead the way into a sustainable future.

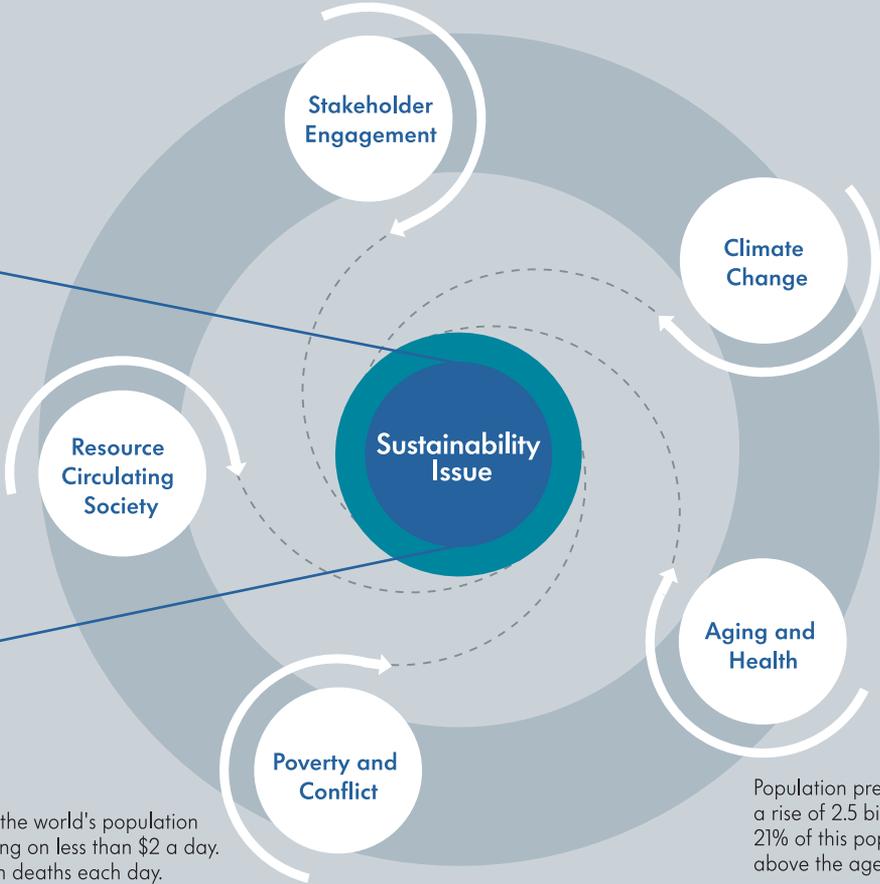
Total number of internet users globally in 2007  
1.2 billion(17.8%).  
In 2010, International standard for  
Social Responsibility is to be announced.

In 2050, global GDP  
predicted to triple that of 2005.  
In 2050, Copper demand to  
reach 1,700Tg, while the  
world Copper reserve standing  
at 1,600Tg

Three billion of the world's population  
currently surviving on less than \$2 a day.  
30,000 children deaths each day.

Energy usage in 2050  
predicted to be twice that of 2005.  
Up to 300 million individuals  
on coastal areas to be affected by flooding.  
50% of living species  
to be affected by climate change.

Population prediction in 2050 - 9.2 billion;  
a rise of 2.5 billion compared to 2007.  
21% of this population to be  
above the age of 60.



# SDI

HOPES AND CHALLENGES

# Insight

The global economy and markets of today change very fast, denying any certainty. To prevail the unpredictable markets, a company is obliged to bring products to markets that can lead the market trend. The ability to lead the market trend and create hi-tech products. That is the insight that Samsung SDI has.

## Sustainability Issue

### Power Shift

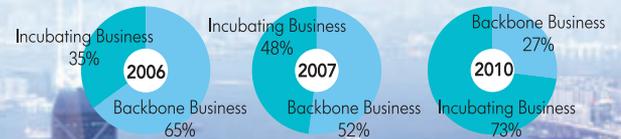
Plagued with 2007 sub-prime crisis and a continued surge in oil price, the global economy is mired in unwavering uncertainty and is expected to remain depressed with economic stagnation in advanced countries including the United States, Europe and Japan. However, despite such forecasts, the economic growth of Asia's developing nations and oil-producing nations is set to continue.

Economic growth of developing countries and oil producers would bring about capital accumulation and capital shift. Global production bases such as China and India are emerging as new consumer markets.

The explosive market growth potentials of these emerging nations have long been predicted by global economic institutions.

The growth of these emerging markets, which account for 85% of the global population, is critical to the display business. The display business is expected to enjoy continued growth thanks to the growing emerging markets offsetting the expected downturn in advanced economies.

Sales Structural Change



## New Axis of Growth

Uncertainties, however, are expected to remain and threaten profitability despite product sales increase. This is accounted for by severe competition.

To overcome the challenge, Samsung SDI must find new growth engines and shift its business structure to a future-oriented one.

Elaborated network activities are segmenting consumer behaviour, which is also becoming bolder and more diverse. Environmental issues regarding climate changes and resource issues will be emphasized more than ever. In addition, the ability to accommodate the new trend of providing services as well as products will determine the success or failure of a company.

Such current situations are in line with Samsung SDI's sustainability issues including climate change, resource-circulating society, stakeholders engagement, the aging population and health, poverty, and conflict.

Samsung SDI observes beyond these immediate issues and is continuing its efforts for a sustainable development that will benefit the company, the community and the human race, and is committed to proving such a dedication.

## The Power of Samsung SDI

Foreseeing such market changes, Samsung SDI has driven for market share expansion of its growing business sectors in PDP, batteries, and AMOLED, as well as capital creation in its backbone business with CRT and mobile LCD. As a result we were able to expand our growth sectors from 35% in 2006 to 48% in 2007.

Now the company is working to enhance PDP growth and discovering survivor models, concentrating on the development of AMOLED and actively expanding the rechargeable battery businesses to establish a balance between the three key business categories. In addition, we are continuing our efforts to discover new business opportunities.

## The Power of PDP

Growth of the PDP sector is expected to continue undisrupted, for Samsung SDI will respond to the growing demand for FHD and displays that are 50" and larger.

Samsung SDI constructed its Premium PDP production line in response to the rapidly growing demand for flat panel displays larger than 50" in order to secure our positions as market leaders. The line has a production capacity up to 2.2 million 50" display units per year. The line began operation in August 2007 and will commence active production of 50" FHD in 2008 with the raised standards of product structure. This will help the company to have better assorted product lines with high-end products. In addition, during the first half of 2008, operation of module lines in Mexico will reinforce market strategies aimed for the American market, and plans to reinforce its global supply network.

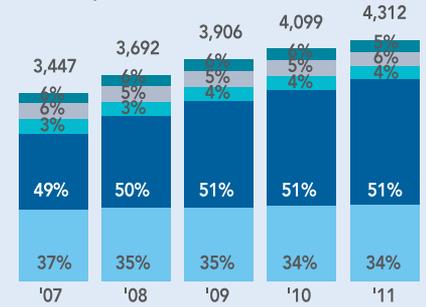
At present there are three key companies(2 Korean, 1 Japanese) competing in the global PDP market. What's more, the commencement of operation of the 8<sup>th</sup> generation TFT-LCD lines is set to extend this competition in LCD and PDP TVs from the 40" category into the 50" category.

Facing such new competition, Samsung SDI aims to maximize our PDP's best attributes of larger display size and expressive moving picture quality, improve its energy efficiency and brightness, and thus present to our customers a continued range of innovative top quality products.

## The Power of Battery

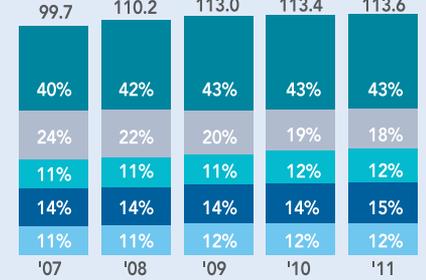
Demand for Lithium-ion batteries is set to continue rising as demand for laptop PC and mobile phones will increase in emerging markets such as China and India, and mobile services get diversified.

Display Business Growth Forecast (CAGR 5.8%)  
: Quantity (Count : million units)



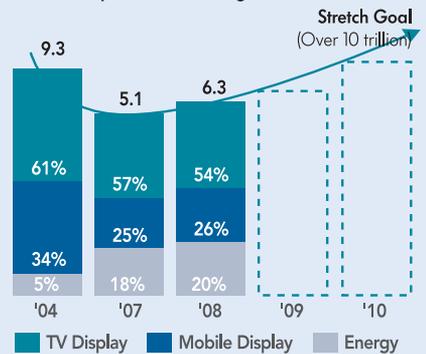
(Source : Display Search, '07. 3Q)

Display Business Growth Forecast (Unit : billion \$)

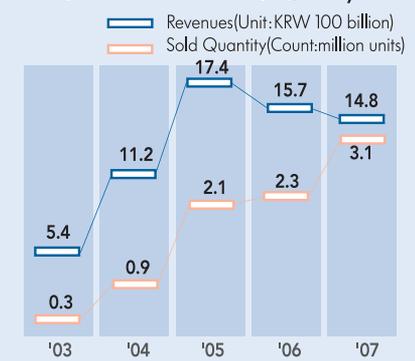


(Source : Display Search, '07. 3Q)

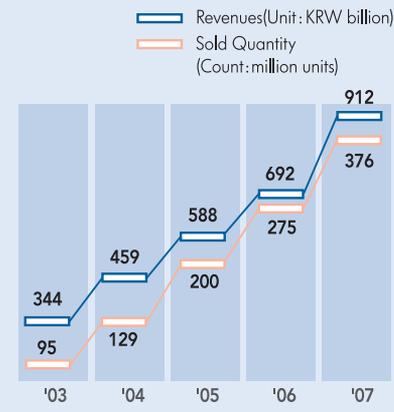
Sales Composition and Target (Unit : KRW trillion)



Annual PDP Revenues and Sold Quantity



### Annual Rechargeable Battery Revenues and Sold Quantity



As environmental regulations on batteries are becoming stricter, As demand for Ni-Cd batteries is set to decrease, with lithium-ion batteries gradually replacing it. In addition, as mobile devices are becoming more diverse and intricate, development of large capacity, variety in exterior body and a high power capacity are also issues needing to be addressed.

In 2008 the demand forecast for Lithium-ion batteries is 2,845 million units; an 18% increase from 2007. In response to this steady growth in demand and rising customer requests, Samsung SDI is extending its production line at Tianjin, China and Cheonan, Korea. Continued rise in fuel prices and stricter international environmental regulations resulted in rising demand for hybrid electrical vehicles. Ni-MH power cells employed in such have been gradually replaced by Lithium-ion batteries. The Lithium-ion batteries are expected to be the main form of power cells incorporated into the new breed of vehicles by 2010 to 2011. Samsung SDI aims to harness this opportunity to market high output power cells including HEV batteries before anyone else, and to lay the foundations of a highly profitable market sector. However, what is regarded as most critical in the battery business is customer safety. To this end, the company established the Battery Safety and Reliability Center and has been maintaining internal criteria stricter than the required level for certification testing. Samsung SDI will be the leader in Lithium-ion battery market with products of the best quality, the longest life cycle and perfect safety.

### The Power of Mobile Display and AMOLED

In the past, the core function of a mobile phone, represented by a mobile display, was voice communication. But now, with the rapid development of the mobile communication sector enabled by High-Speed downlink packet access and Wibro, a mobile phone has been developed into a multimedia tool. Other mobile devices that have adapted to a mobile devices' multimedia and PMP functions have also emerged, examples being navigation devices, MP3 players and Ultra-Mobile PCs(UMPC). Given the situation, steady growth of the market and business as well as consumer demand for high-end displays are expected to continue.

With the expansion of emerging markets, demand for lower price products is also expected to rise. Accommodating both ends of the price spectrum, Samsung SDI adopts dual product strategies for both high-end and low-end products.

Taking center stage among the high-end products is AMOLED, the dream display, which Samsung SDI firstly and successfully commercialized globally. AMOLED without a doubt is the best currently standing mobile multimedia product.

According to external forecast, the AMOLED market is expected to flourish from 2008 and reach 100 million units in sales volume by 2011.

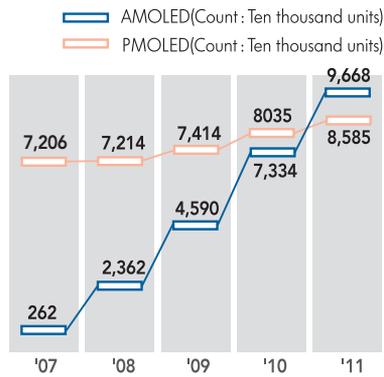
Samsung SDI is the leader of the AMOLED market. In October 2007, for the first time in history, commercial production of 2" displays at volumes of up to 1.5 million units a month was achieved by Samsung SDI. With proactive market exploration and efforts towards product development, Samsung SDI expands the field for AMOLED integration from mobile phones to digital cameras, MP3 players and PMP.

In the future, the company aims to build on the current achievements and place emphasis on development of mid(14") to grand-sized(31") display products. Samsung SDI will differentiate its products from others by enhancing the environment-friendly aspects of its goods such as usage of organic materials, self-light emitting abilities and the low power consumption of its products.

Amidst hesitation from others, Samsung SDI pursued and finally achieved its stretch goal through strong determination and vigor. Just by now peers begin putting their steps into markets. PMOLED and STN LCD belong to the low-end product category. They cater for customers who want to experience mobile life at a reasonable price. These products will maintain their influence over the emerging market for the time being.

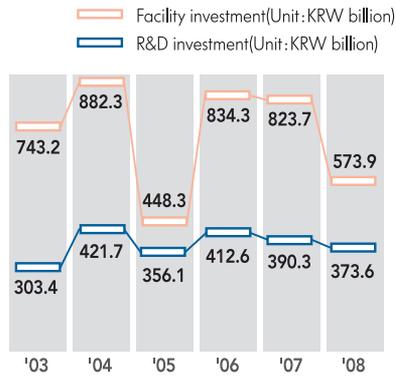


### OLED Market Forecast



(Source : Display Search)

### R&D and Facility Investment



## The Power of CRT

The CRT market has been negatively affected by growing demand for FPD and pressure for price cuts. Market players are focusing on super-slim CRTs and strenuous cost cutting in order to retain market competitor status. They have also undertaken restructuring of less competitive lines and production bases.

Samsung SDI was not an exception. As of late 2007, domestic and European CRT lines were shut down. Globally, the company reduced the number of active CRT lines from 19 at the end of 2006 to 11 at the end of 2007.

CRT has been losing ground to FPD, but Samsung SDI has reinforced its 29" and 21" slim CRT lines through product standardization and simplification in order to continually develop new business opportunities. This was possible because, although CRT demand has been on the decrease in North America and Europe, smaller size CRT has still been the mainstream form of display in emerging markets such as India, South East Asia, and Latin America.

CRT has been with Samsung SDI from the very beginning, and to this day remains a strong contender within the emerging markets.

## The Power for Tomorrow

Samsung SDI strives to strengthen business capabilities and secure future growth facilitators. Whilst preparing the development of HEV rechargeable battery business, Samsung SDI is also ensuring the research and development of key technologies to be applied to next-generation displays and energy products such as flexible displays, 3D displays, and fuel cells. With this goal in mind, Samsung SDI invested KRW 823.7 billion into production facilities and KRW 390.3 billion in R&D in 2007 despite the difficult business environment owing to the deficit of operating profit in 2007. Investment and R&D efforts will continue in 2008 in preparation for another take-off. This is because R&D and investment are the fundamental prerequisites for the products of tomorrow.

Samsung SDI is grateful for the thoughts and support of our stakeholders for the company. Our stakeholders expressed their concern over the business performance of 2007. But Samsung SDI knows that if they observe the company from a sustainability perspective, they will be able to look to the future with less woe.

AMOLED is an extraordinary display. PDP is the largest display ever made whose development is ongoing. Lithium-ion batteries are rapidly replacing all previously existing forms of power cells and are expanding its presence fast, with CRTs and Mobile Display products loyally supporting the growth of products stated above. With these products, Samsung SDI will progress into a brighter tomorrow.



**PDP**

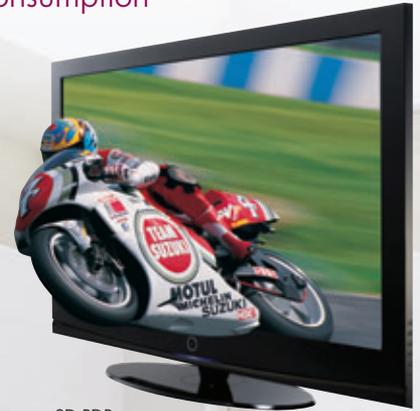
# Prestige Insight

Commencement of commercial operation of the premium PDP line,  
as well as production of grand-size premium PDP displays.

Launch of W3, the essence of W series PDP.

Plans to produce environment-friendly, low-power consumption  
U series PDP in 2009.

S a m s u n g S D I



3D PDP



## Dream Production Line and Large Premium PDP

In August 2007, the premium PDP production line at Samsung SDI's Busan plant was marked with a special ceremony for its the 1,000th product. This has been a great achievement accomplished within 1 year and 2 months since the construction of the premium PDP production line. The increased 50" PDP's share of the whole Samsung PDP range came to stand at 44%. The premium PDP line is also called a dream line for the various new engineering techniques deployed and its cost effectiveness. Samsung SDI expects that the line would contribute greatly to Samsung's hold on the market leadership position in the 50"+ large size TV market. The annual production capacity of the premium PDP production line is three million units(42"). If combined with production capacity of the existing three PDP lines, the production potential of Samsung SDI rise to 7,320,000 units per year.

In parallel, Samsung SDI completed 58" FHD PDP development for the first time in Korea and rolled into full commercial production which enabled enhancement of Samsung's premium PDP TV strategy even further. On top of this, speedy reinforcement of its product line-up allowed Samsung SDI to retain market dominance in the large flat TV market - a sector with added value.

Samsung SDI's 58" PDP commercial production is the first in Korea and the second in the world after Japan. It enabled Samsung SDI to make an active entry into markets in North America including Canada, where demand for large TV is evident, and other emerging markets. 58" FHD PDP has 18% better brightness in actual viewing situation and 2.5 times better contrast ratio in a darkroom than its rival products, resulting in best-optimized emotional image quality, one of the key strengths of PDP TV.

## Brighter and Clearer - W3

Until 2005, Samsung SDI had been producing the V series PDP. In 2006 the W1 was released, followed by W2 in 2007 with color gamut that was improved 512 times further than the W1, and in February 2008 the W3 was released, the most definitive W series PDP by date. Although W3 has the same brightness and contrast ratio as W2, its compound gas content was optimized through varying the helium(He) content, and panel design was also made more efficiently. The developments improved energy efficiency by 20% and moving image brightness by 10%.

W3 was the world's first PDP display to be incorporated with 'Real 100Hz' technology, and this enabled W3 to produce improved image quality with the Phase Alternating Line(European broadcasting standard) technology. This eliminated contour noise and improved motion blurring. In addition, a collaboration with our buyers led to the world's first development of a 120Hz 3D image PDP, which was to form part of the W3 series.

W3 was applied with a new technology called the 'Cell Light Control' that enables expression of deep black as pixels are 'turned off' when signals for black are received. This materialized a 1 million : 1 contrast ratio. The high-tech circuit technology does not shut down power to pixels but maximizes contrast of black and white, making the black contrast close to zero(0). This can be seen as realizing a contrast ratio of infinity( $\infty$ ) to 1.

## Eco-PDP

Various technological developments are underway in Samsung SDI to make its PDP eco-friendlier. In light of the upcoming imposition of regulation on lead oxide(PbO) in PDP scheduled in 2010, which is currently on EU RoHS exemption list, Samsung SDI began lead-free panel material development in February 2007. Late 2007, Samsung SDI succeeded in developing panel materials such as barrier ribs, dielectric layers, electrode and seal frit that were 100% lead-free. In addition, Samsung SDI aims to complete the development of non-Bi lead-free materials by late 2008 to replace Bi type with lead-free materials. And development of replacements for other bromine containing flame retardants and poly vinyl chloride, as well as PoHS(Norwegian hazardous substances regulation) containing materials will be completed in 2008. In addition, W3 which is currently in commercial production, had its PDP glass thickness reduced from 2.8T to 1.8T, which reduced the module weight by 14%.

With the aim of achieving innovative material cost reduction, module productivity innovation, environmental pollution prevention and better user convenience, Samsung SDI succeeded in developing the world's first 50" Full HD Single Scan. With the number of components cut in half, assembly time was shortened by 28%. Upper part circuit module and the board were eliminated, which maximized material cost reductions. There has been a 30% reduction in material costs per unit, and we expect to see a KRW 188 billion of reduction in production costs per year. Efficient design reduced 6.6kg in weight, making the module lighter and the panel slimmer. Ultimately the improvement raised the eco-profile of PDP.

From the second half of 2007, Samsung SDI initiated development for a film packaging technology to seal semi-conductor chip in a smallest possible size to reduce resource consumption. All HD PDP commercial production at the Cheonan plant is incorporated with the technology. This technology minimized the space between films and thus reduced the circuit board width from 70mm to 48mm. This technology will be additionally applied to commercial production of the Premium PDP line at the Busan plant from July 2008.

## Climate Change and Energy Efficiency

Climate change ails the earth. The international oil price is hovering around USD 100. The price of bituminous coals for thermal power generation doubled in just a year. Amidst the global effort to save the earth, the Kyoto protocol became effective, and in response to this, developed countries have launched various efforts to curb CO<sub>2</sub> emission. Nations are supporting and investing into development of new renewable energy sources and new products efficient in energy consumption, and numerous reforms have been passed in aid of such. Flat panel displays are progressively increasing in size, and its energy consumption needless to say is significantly higher than conventional displays. For such reasons Energy Star of the U.S is planning to regulate TV energy efficiency from November 2008, whereas EuP of Europe will monitor power consumption of TV in conjunction with product energy label placement requirements. Not only this, other developed countries such as Australia and Japan are also planning to tighten the energy level requirements of flat panel TV. To comply with these regulations, Samsung SDI concentrates on developing new PDP of lower power consumption rates by enhancing high luminescence efficiency. From 2009, the U series will hit the market following the W series. Details on the U series PDP will be covered in the next sustainability report.

**AMOLED**

# Vivid Insight

World-first commercial production of AMOLED, followed by super slim 0.52mm AMOLED and the world largest 31" AMOLED development.  
Expansion of AMOLED business capacity through development of various merged and combined products.

S a m s u n g S D I



## New Future and the Realization of Dreams

In September 2007, Samsung SDI began the world's first commercial production of AMOLED at its Cheonan plant, Korea, a true breakthrough in the history of the display industry. Announcing the investment plan worth KRW 477.5 billion for the world-first commercial production of 4th-generation, LTPS, front light-emitting AMOLED in November 2005, Samsung SDI built up dedicated production lines on 45,620 m<sup>2</sup> of land within the premise of the Cheonan plant and began installation of facilities. From early 2007, pilot production and market tests were simultaneously carried out as preparation for a full-scale production. So far the lines have been capable of churning out 1.5 million 2" AMOLED units a month. The figure will rise to 3 million units per month in 2008.

## Epoch-Making Thickness of Display

Samsung SDI succeeded in developing the thinnest 2.2" AMOLED in May 2007. The ultra slim AMOLED is as thin as 0.52mm, making it as thin as a business card(0.5mm) but with just as excellent image quality as with all other AMOLED. Samsung SDI's AMOLED is over 1.0mm thinner than commercial TFT-LCD modules which are 1.7mm thin. The newly developed boasts many exceptional qualities. The newly developed 2.2" AMOLED has QVGA(320 x 240) level resolution, a contrast ratio greater than 10,000 : 1 and 100% color gamut.

Another achievement was the world first development of a 31" AMOLED(LTPS type), which was demonstrated at CES(Consumer Electronics Show) in January 2008. Samsung SDI is ready to implement Fine Metal Mask deposition, wiring process, and pixel circuit technologies into its commercial production, which are regarded essential for production of large scale products. 14.1" AMOLED TV will be available for purchase from the second half of 2008.

## Samsung SDI Colors Arrive in Japan!

In October 2007, Samsung SDI and the Japanese telecommunications firm KDDI announced in Tokyo, Japan that the two companies employing the jointly developed AMOLED technology in new KDDI mobile phones. The AMOLED to be employed are 2.6" and 2.8" wide QVGA quality. They were built into four new models of "au," the KDDI mobile phone brand. 2.6" display was used in KDDI's Info bar 2, while three models of 2.8" display were applied to mobile phones of Toshiba, Hitachi, and Sony Ericsson respectively.

## The Versatile AMOLED, Expanding Possibilities

In June 2007 Samsung SDI signed an MOU for technological cooperation with SK Telecom, a major wireless communications service provider in Korea, in order to provide the consumer with a high-quality image streaming service through AMOLED-employed mobile phones. The signing of this treaty is expected to pave the way for AMOLED to position itself as a key integral part of next-generation 3G motion image mobile phones. The partner launched development of GUI(Graphic User Interface) technology which utilizes the special qualities of AMOLED, such as the 100% color gamut and 10,000 : 1 contrast ratio. By doing so, SK Telecom hopes to differentiate AMOLED integrated devices as the premium handsets.

Samsung SDI launched a signing ceremony in October 2007 with iMBC which is the key digital contents provider in Korea for the optimization of online contents service for AMOLED. The two companies agreed to provide AMOLED PMP users with moving image contents of excellent image quality, made possible through AMOLED. In addition, the two companies plan on launching a website jointly developed for the provision of such video contents.

In November 2007, Samsung SDI signed an agreement with Kookmin Bank, a major commercial bank in Korea, for the launch of a multimedia credit card which would have an integrated video playing display unit on its body. Such a product had been unprecedented anywhere in the world. The next-generation multimedia credit card will be equipped with the world's first commercial, super slim AMOLED display to enable video and image displaying abilities. In addition, the new breed credit card will provide custom-tailored services such as a personal credit card transaction record. The bank will execute development of such new-age multi-media card products in the first half of 2008 and its introduction to the market will shortly follow this.

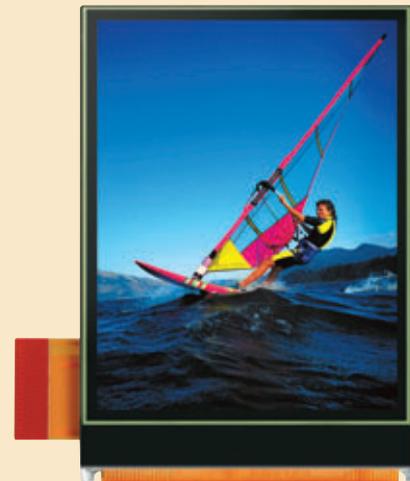
## AMOLED vs. TFT-LCD

AMOLED is a self-light emitting display that works by letting electric currents flow through organic compounds. The self-light emitting feature defines what is called AMOLED. Unlike the TFT-LCD that requires "backlight" for light emission as it can not emit light for itself, AMOLED can be built twice as slim and light as the TFT-LCD because it does not need a backlight unit. By 2011, Samsung SDI is aiming to reduce the thickness of AMOLED to 0.41mm, leaving TFT-LCD far behind. Not only that, AMOLED is far better than TFT-LCD with 1,000 times faster response time, 10 times better contrast ratio, and 20% wider color gamut. That's why AMOLED is called a "dream display" which combines the advantages of both TFT-LCD and CRT. In particular for video playing, which requires a high energy input, AMOLED consumes less than half the energy required by TFT-LCD. The brightness and power consumption of 2.0" QVGA will be improved to 400cd/m<sup>2</sup>, 120mW by 2011 from 250cd/m<sup>2</sup>, 170mW in 2008 respectively.

All in all, it is fair to say that AMOLED is environment-friendlier than TFT-LCD.

But there are also obstacles. First, as a screen gets larger, image quality deteriorates, product life span is reduced by material thermal degradation, and part prices are all increasing. In addition, low-molecule materials can last 20,000 to 30,000 hours of use in small display screens. But high-molecule materials for larger screens can not last that long.

But Samsung SDI is committed to overcome these obstacles based on its experience of developing 31" AMOLED, the world largest in its category.



2.2" AMOLED

# Rechargeable Battery

S a m s u n g S D I

## Charging Insight

Obtaining of the highest safety rating from rechargeable battery safety assessment thanks to the extraordinary product safety management. Maxlim, the cylindrical battery with the world's highest standard capacity and the best power storage and utilization rate.



## Reassured Usage

Amidst a series of rechargeable battery explosion accidents in mobile phones, note PCs, and MP3 players made by other companies, there has been growing interest in the safety of rechargeable batteries. Analysis of the nature of the accidents showed that the most common cause was the abnormal expansion of a battery pack case due to increased pressure within the cell. This was the cause of by ignition, explosion, excessive heating, and breakage. These accidents mostly occurred during usage or during recharge.

In general, mobile phones and laptops are equipped with inside and outside safety features in double and triple form barriers to prevent accidents. Inside of a rechargeable battery are many safety features; a fuse to cut sudden overflow of electric current, a temperature activated fuse device to cut sudden hike of internal temperature, and pressure sensors to detect sudden pressure increases. Electronic devices such as laptop computers and rechargeable power cell packets are also equipped with circuit breakers. However accidents still occur when such safety features are undermined.

In its rechargeable battery safety testing labs, Samsung SDI applies a safety evaluation specification far stricter than those enforced by Underwriters Laboratories Inc. (UL). For example, cylindrical batteries are put through 18 evaluation stages, compared to the nine enforced by UL. Development samples are also applied with stricter standards than UL with the primary focus on safety. The International Information Technology, the Japanese rechargeable battery market research company, evaluated rechargeable battery makers in 11 categories including safety, quality, technology, and price. As if to confirm the extra efforts exerted, Samsung SDI scored 55 points in the comprehensive evaluation, making it the best producer on the list. In the safety category, Samsung SDI was the only maker with full marks.

Nevertheless products incorporated with rechargeable batteries should not be subject to strong external impact or put to any extreme situations as with all other electric and electronic products, and customers' understanding of such is also very important.

## The Best Year

In 2007 Samsung SDI sold 376 million units of rechargeable batteries, generating a sales revenue of KRW 912 billion. This was a 37% and a 32% increase year on year respectively. The growth was a record high in the lithium-ion battery market and is expected to continue. Samsung SDI has continuously expanded the proportion of high-end energy products such as packs and cylindrical high capacity batteries in product sales, successfully increasing profitability.

Samsung SDI has established a second rechargeable battery production base in Tianjin, China which will begin production of commercial products from May 2008. In addition, the company will find new customers in sectors such as electric tools and car navigations and sell highly value added products in order to ensure stable profitability.

The advancement within the rechargeable battery business for next generation HEV batteries will also step into higher gear.

## The Core of Plate Manufacturing Process

The rechargeable battery innovative coating combined dryer system developed by Samsung SDI won the Jang Young Sil prize, the most highly regarded award within the industrial technology sector in Korea. The system is key to the battery plate manufacturing process. The previous one-side coating method was replaced by continuous double-side coating method which improved productivity by more than 200%. Another development for the same process was the drying technology which utilized convection current and radiation energy, and significantly shortened drying time compared to the previous hot air drying method. The shorter drying time contributed significantly to the competitive advantage of Samsung SDI.

## Powerful, Energetic, and Safe

Samsung SDI developed its cylindrical lithium-ion batteries with 2.8Ah and 3.0Ah, which are currently the world's highest capacity level. 3.0Ah batteries were applied with new active materials and density-enhanced compounds (made of active materials, conductive materials, and composite materials). The energy density was improved to 680Wh/L from 580Wh/L, increasing capacity. In addition, the high-voltage method was applied so that batteries require less time for recharge and enable longer usage. 2.8Ah batteries were also equipped with new safety technologies to ensure safety.

## Mobile Phones Get Slimmer and Slimmer

Samsung SDI has led the trend of mobile phones, which is characterized by the continuous miniaturization of a phone's width and size, with the development of Maxlim, the rechargeable battery pack that boasts world's highest volume utilization rate. In Maxlim, energy capacity remained unchanged while the space occupied by battery pack was decreased by more than 40%. The space spared made room for integration of new functionalities such as DMBs, eventually making mobile devices multi-functional and improving their utility.

## Cleaner and Clearer

RoHS, PoHS, China RoHS and the Resource Recycling Act are all examples of hazardous material regulations for electric and electronic products. Samsung SDI has religiously complied with these regulations. In addition, the company has extended the implementation of the halogenated flame retardant-free policy and has established a proactive customer requirements response system that addresses problems before they are raised as issues.



The Cylindrical Battery with the World's Highest Capacity

# Mobile Display

## Moving Insight

High strength, super slim LCD module development and achievement of material and cost reduction

S a m s u n g S D I



## Thinner! Stronger!

Samsung SDI developed its high strength, super slim TFT-LCD modules in 2007. The module was as thin as 1.29T but with a strength factor of 8.85kgf which is the highest achieved in current terms.

To improve the power consumption profile of 2" grade QVGA LCD modules for mobile devices, Samsung SDI shifted the LCD operating method from line inversion to frame inversion, by which output signals are inverted at the frame level, not at the line level. The shift lowered current requirement from 7mA to 3.4mA, which was an improvement by approximately 50%. The shift is also planned for high-end QVGA grade mobile products.

One of Samsung SDI's aims is to improve mobile display performance whilst making products smaller and thus reducing materials and costs at the same time. In line with this aim, Samsung SDI has driven for PMOLED operating circuit optimization and operating IC(Integrated Circuit) size reduction. In particular, Samsung SDI devised a new IC with 46% improvement in size and 45% cost reduction compared to the existing models. The improvement is planned for implementation on other models as well. LSI(Large Scale Integration) used for 1.9" TFT-LCD module was also improved to maintain performance levels but with a 42% reduction in size. Along with this, the parts placed around operating circuits were optimized. Commercial production has been in process since January 2008.

## RoHS + $\alpha$

Samsung SDI's eco-product development is always ongoing not only for compliance with RoHS, but for the elimination of PVCs, halogenated flame retardants and PoHS substances from our products. Samsung SDI has been removing hazardous substances to meet customers' various requirements. In 2007 Samsung SDI delivered halogenated flame retardant-free products to some customers. Such a delivery is planned for further expansion.



Super Slim LCD Module



# Slim Insight

Vixlim, the strategic CRT product with the continued reduction in power consumption, thickness and weight

## The Undying Flame

CRT market share in the display market is declining. The CRT TV took up 70% of the global TV market in 2006, which came down to 55% in 2007. The ratio is expected to drop to the level of 20% by 2010. But there are still markets to be explored. CRT TV is still in demand in BRICs of emerging markets and Vixlim is chosen as a second TV in advanced countries. The demand for Vixlim is continuously increasing by the magnitude of around 50% per year, and Samsung SDI is going to continue the production of 20" grade medium-sized Vixlim, as a strategic product. Vixlim, Samsung SDI is confident that it will be able to respond successfully to the market that is becoming increasingly environment concerned, with its low voltage and low power consumption features. Also continuous efforts to make the product slimmer and lighter would ensure that Vixlim retains the competitive edge.

## Eco-Friendly Design of Vixlim 29"

Samsung SDI renovated the 29" Vixlim through eco-design in July 2007. Applying the new funnel design to reduce deflection angle, the product emerged with a lower degree of deflected electricity. In order to overcome deteriorated brightness caused by lowered voltage, Samsung SDI cut down the thickness of the front glass and optimized the design structure. As a result, power consumption was reduced to 26.5kV from 30kV, which was a 12% improvement. This improvement is translated to 257kWh/unit of power conservation per year based on device daily usage of eight hours. Compared to the old Vixlim, the improved version is loaded with 0.7kg less glass and 25% lighter DY(Deflection York). Based on sales volume of 2008, 600 tons of materials are to be salvaged.



Vixlim

# HEV Battery

S a m s u n g S D I

## Future Insight

Establishment of new markets through development of new generation. HEV lithium-ion batteries, to be employed into Hybrid automobiles. Securing our competitive stand through enhancement of HEV power output, life span and safety.



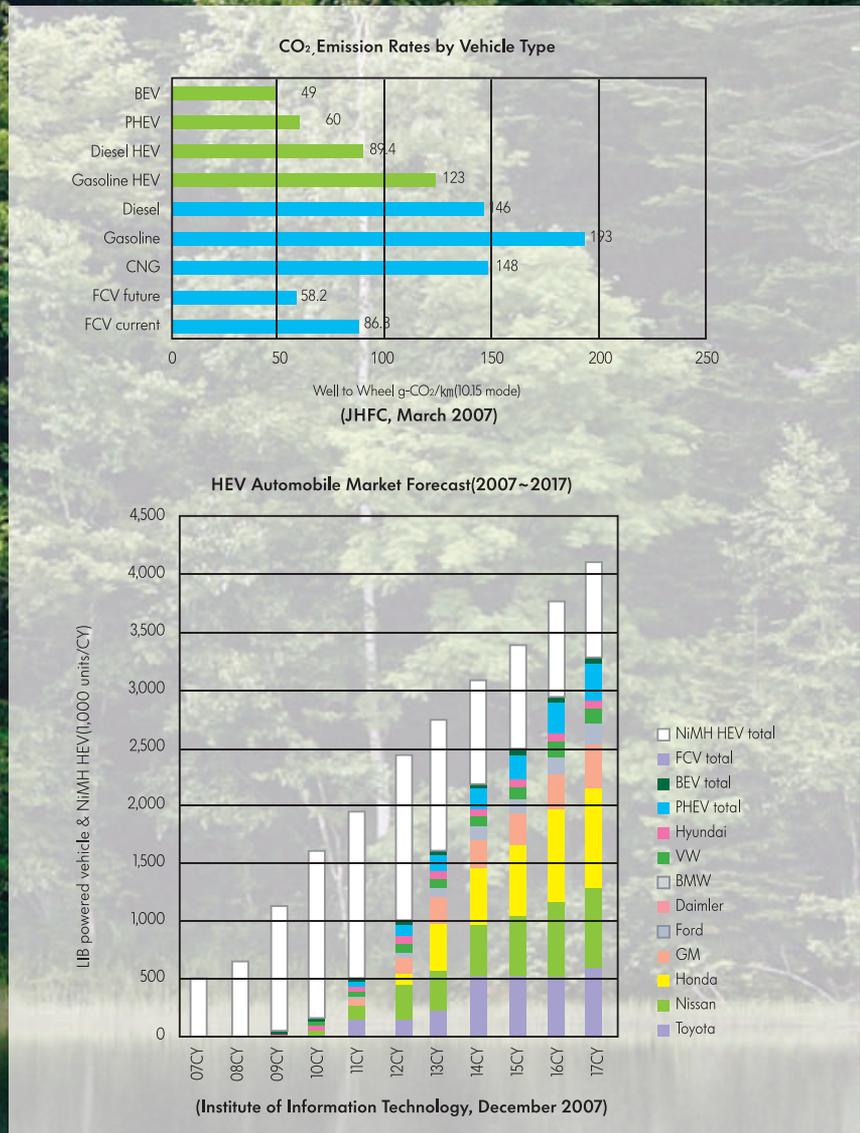
## NiMH vs. Lithium-ion

The recent reinforcement of CO<sub>2</sub> emission and fuel efficiency regulations, such as the EURO (European emission vehicle regulations) and CAFE (Corporate Average Fuel Economy standard in the U.S) is emphasizing the need for the development of high efficiency eco-friendly automobiles. The continuing rise in oil prices is also a factor in the increasing demand from long distance drivers for low fuel consumption vehicles.

Since Toyota's 1997 launch of the first NiMH-powered HEV Prius, major car manufacturers including Honda, GM, and Ford have entered the market, which so far had been dominated by Toyota, and began sales of their own NiMH HEVs. However these days Li batteries are progressively emerging as the dominant product type in the HEV market.

It is true that NiMH batteries have been designed to fit HEV so that NiMH performs better, in terms of safety and quick recharge and discharge. However lithium-ion batteries are more powerful, smaller, and lighter than NiMH batteries which enable improvement in compactness and thus improve fuel efficiency.

The focus of lithium-ion battery development is on obtaining greater degree of safety and cost cut. To facilitate such development, automotive companies and battery producers collaborate in aid of a strategic partnership.





## Cylindrical Battery Development for HEV

Since 2006 Samsung SDI has operated R&D for HEV battery development, a field yet underdeveloped, in collaboration with vehicle manufacturers. In the two years running up to 2007 Samsung SDI achieved compliance with industry requirements for power, life cycle, and safety in its HEVs. Power was enhanced by more than 30% and unused battery life was also improved significantly compared to old lead-acid cells. With improved features in battery materials, poles, and assembly process, product reliability was also improved. Samsung SDI's goal is to incorporate its own batteries in consumers' 3rd-generation HEVs by 2011. The fuel efficiency of the environment-friendly HEV is twice as good as that of a gasoline vehicle, and this is expected to induce a magnificent buzz in the fuel market sector.

## New Market Creation and Future Technologies

In 2008, Samsung SDI plans to improve the cylindrical battery power by another 20%. With development of prismatic batteries for HEV, Samsung SDI aims at finding new customers and expanding markets to supply. Furthermore Samsung SDI plans to secure differentiated technologies by 2009 by utilizing high-power battery source technology, safety technology and material cost cutting enabled by power output margin. As a way of strengthening competitiveness, Samsung SDI will secure additional functionalities through acquisition of pack source technology.

## Fuel Cells, the Environmentally Friendly Energy Source

Fuel cells utilize hydrogen as fuel and consume air. The electrolysis of water results in the emission of oxygen and hydrogen. Fuel cells are based on the reverse reaction of this electrolysis, producing water and electricity from oxygen and hydrogen. Unlike standard chemical cells (a dry cell and a storage battery), a fuel cell can produce infinite amounts of electricity as long as it is supplied with oxygen and hydrogen.

Hydrogen gas is produced in chemical reactions of fossil fuels such as natural gas, LPG, methanol and petroleum. These reactions are artificially triggered by a device called a 'reformer.' Samsung SDI has currently undertaken research to make the reformer more compact, which will serve as the foundation for the development of mobile fuel cells. If the development is successful, the resulting technology will open new scopes for the diversity and mobility of fuel cells. Based on hydrogen generation device and stack technologies, Samsung SDI is looking for fuel cell systems with diversified usage and is reviewing the mobile fuel cell system for the possibility of its commercialization.

In 2007, Samsung SDI succeeded in significantly improving the performance and electric efficiency of a portable LPG fuel cell. Power output improved to 235W, outperforming the target of 200W. Electrical efficiency reached 16%, compared to 8% of conventional combustion engines. Comparing efficiency with domestic fuel cells, which have no volume restriction, the portable battery still holds room for improvement. Samsung SDI's development is aimed at doubling the current fuel efficiency. As another advantage, a fuel cell is very eco-friendly as it emits only a fraction of pollutants, compared to its old counterpart, and the CO<sub>2</sub> content in the emission is also significantly lower. It is considered very suitable for leisure purposes in camping cars and yachts, as well as serving as a secondary source of power.

## Flexible Display

Whilst maintaining normal display abilities, a flexible display can be bent and rolled. It was built on a thin and flexible substrate which made the display light, deformable, and durable.

Samsung SDI ultimately aims to develop flexible OLED displays based on OLED. Samsung SDI will develop optimal process technologies to apply multi-crystalline TFT, organic TFT, and oxide TFT onto flexible substrates and create a new market for ultra-slim large flexible displays.

## Touch Screen Display

We are surrounded by devices incorporated with touch screen technology, such as a mobile phones, ATM machines and train ticket machines. Also in the film 「Minority Report」, the special computers that Tom Cruise conjures up in mid air are based on an intricate type of touch screen technology. But currently available technology involves placing a film or glass on top of a display panel, which is expensive and difficult to produce.

Samsung SDI is currently developing a new type of touch screen technology, which involves an internal light sensor which analyses incoming light intensity in circuit and locates the source of the input. This method does not require additional films or glass on top of the display panel. Such a technology is termed 'Embedded Touch Screen Technology'. The technology is set to provide brighter and less power consuming, and ecological displays.

## 3D Display

Those who have seen the film 「Star Wars」 or 「I, Robot」 will remember the magnificent 3D displays the films presented. Such 3D displays seem closer to realization than had been thought. 3D displays are different from conventional 2D displays in their delivery of spatial realism to the viewer, and take the viewing experience to a whole new level.

Since 2003, Samsung SDI has been developing mobile 3D products incorporating the parallax barrier method. The TFT LCD was employed as the display together with the variable barrier structure, which allowed Samsung SDI to be the world's first creator of a rotating 3D displayer. In addition the company produced a stereoscopic display device which could project both 2D and 3D displays, and released it in 2007 as a first of its kind to be sold in Korea. Development of high definition 3D displays incorporating AMOLED is also currently underway.



# Think Stakeholders

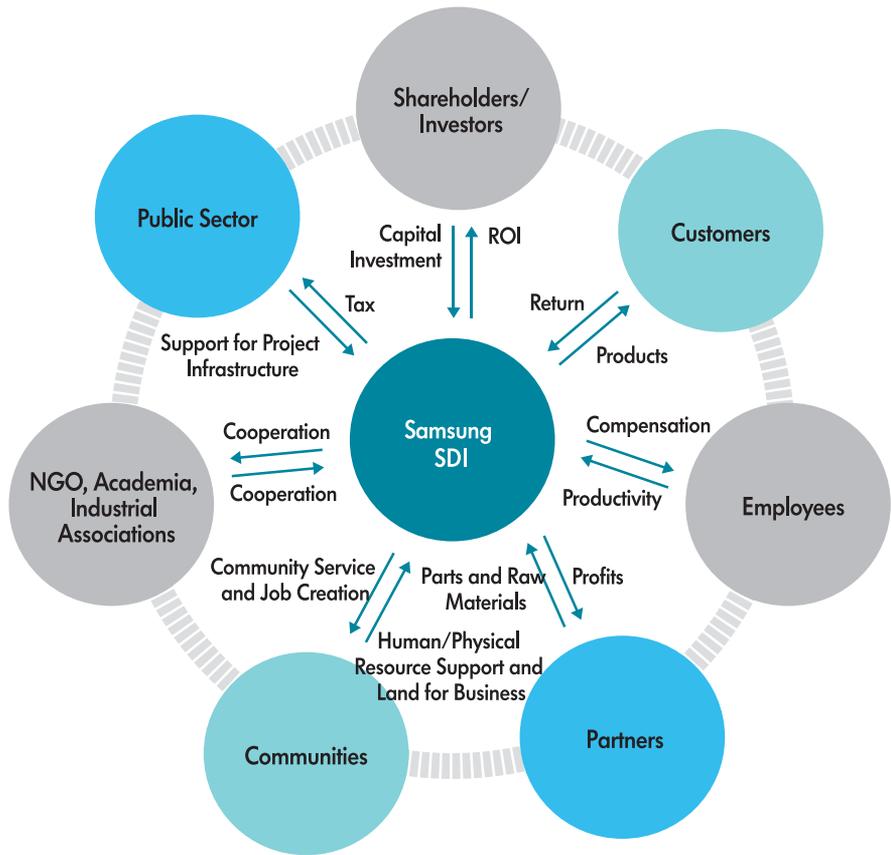
## Samsung SDI Grows Through Communicating with Our Stakeholders

Major stakeholders of Samsung SDI range from customers, public institutions, employees, shareholders/investors, communities, partners, NGOs, academia and industry associations. Samsung SDI exchanges values associated with technology, environment, and society as well as economical values. Samsung SDI is attentive to our stakeholders' opinions and welcomes their involvement in business activities and improvement. Nevertheless Samsung SDI admits with regret the inevitable impossibility of administrating every idea that is presented to us, simply because the vast number of opinions varies to a great degree. Depending on the situation, some opinions are incorporated right away, but others are reconsidered through many reviews and discussions until deemed unsuitable for implying. However one thing we would like to make clear to our stakeholders is that every single one of your ideas and opinions are taken into earnest consideration and never overlooked.

In addition, Samsung SDI promotes various collaborated business activities together with our stakeholders. Such efforts allow sharing of values and opinions towards a sustainable future and motivates such activities.

The future of Samsung SDI lies in communicating with our stakeholders.

**[Relations with Stakeholders]**



For details, see the Sustainability tab at [www.samsungsdi.com](http://www.samsungsdi.com)

## Window of Communication

Samsung SDI adopts various approaches to maintain communication with its stakeholders, this sustainability report being one of such methods. The VOC (Voice of Customers) application on the company website is open to anyone, anywhere, at anytime. Samsung SDI has led customized conversations through various channels to accommodate the different interests among stakeholder groups. Samsung SDI aims to continue its efforts to find and meet more stakeholders whilst maintaining sincere operation of the segmented conversation channels.



## Participation in and Cooperation for Public Policy Formulation

Whilst recognizing and appropriately responding to the trails left by our products, manufacturing and services, Samsung SDI also contributes to rational policy-making in cooperation with industrial associations and academic institutions. Samsung SDI believes that this is a way of minimizing our environmental footprint and ensuring consumer safety.

Samsung's management principles forbid all forms of political involvement in its business practice. In respect of such management ethos, Samsung SDI does not directly involve itself in politics related to business management. But the company expresses its opinions actively through partnering organizations and associations.

Samsung SDI is an active member of KBCSD, Corporate Ethics Committee of the Federation of Korean Industries, the Green Fund, Korea Industrial Technology Association, The Korean Information Display Society, Korea Display Industry Association, The Korean Society for New and Renewable Energy and The Korean Corporate Ethics Society among others.

In addition, although not involved as official members, Samsung SDI involves itself in social activities such as the international standardization, support of small and medium-sized companies as well as undertaking various community services for sustainable development.

## Together with Our Customers

Samsung SDI was nominated the best rechargeable battery supplier by the world's largest electric tool makers, Bosch of Germany, and was awarded the Best Overall Performance award in July 2007. Evaluating 40 vendors supplying nine major components for quality, development and supply performance in the period of 2006 to 2007, Bosch chose Samsung SDI the best vendor of rechargeable batteries. It was a momentous accomplishment in two years and six months after the first contract with Bosch in February 2005. The Purchase Director in Bosch quoted "Samsung SDI was the only company that scored 100% in quality and supply performance. No defects had ever occurred so far, not even once".

In another advancement, Samsung SDI launched an MOU signing ceremony with Hewlett Packard, the world's leading laptop computer maker, for battery supply in September 2007. In the ceremony, HP expressed gratitude to Samsung SDI for additional battery supply in the second half of 2007 and presented an appreciation plaque to mark the successful sales of 130 million battery units from 2001 to August 2007. The two companies also signed an MOU for product supply in 2008 at the ceremony.



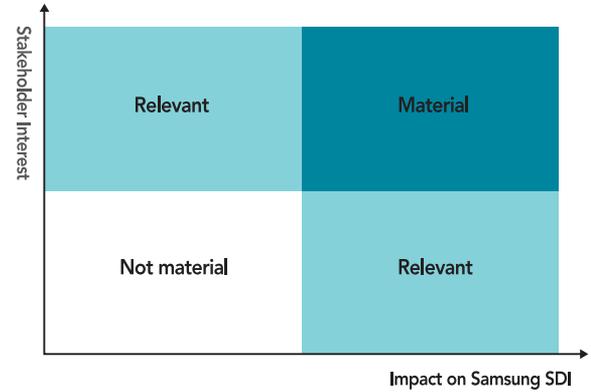
# How to Report What?

For selection of issues to be reported, Samsung SDI not only gathered stakeholder comments, but established a process for critical issue selection, which was intended to capture as much of the stakeholders' input in the report.

This report consists largely of two aspects; one is things that stakeholders may want to know about Samsung SDI; the other is Samsung SDI's sustainability strategy. In order to deduce key issues of our stakeholders and determine topics and indicators for inclusion in the report regarding the two key matters, Samsung SDI conducted the materiality test. The test consisted of three phases. The process for selection of critical issues was developed with reference to AA1000 and GRI guidelines.

## [Stakeholders' Interest by Group]

 Shareholders /Investors	Economic plan and performance. AMOLED vs. LCD AMOLED product features, product liability activities
 Customers	Business restructuring, economic plan, DTV market outlook
 Employees	Economic plan and performance, AMOLED vs. LCD, AMOLED product features
 Suppliers	Economic plan, partner support system, environmen- tal regulation status and outlook
 Public Sector	Environmental plan, response to environment regula- tions, eco-products and technology development
 NGO/Industrial Associations/ Academia	Social contributions, transparency in governance, envi- ronmental plan, stakeholder engagement and conversa- tion, hazardous material management status



[ Materiality Matrix ]

# 3

## Phase 3 : Review

Selected issues were confirmed as important issues after employee review. The contents of a completed sample sustainability report went through independent verification. The details of the independent verification are outlined in the Independent Verification Report on page 57 and 58.

# 2

## Phase 2 : Prioritization

The next step was to create a Materiality Matrix for issue prioritization. The first matrix was created from the results of the survey conducted on internal and external stakeholders. Then the importance of issues was adjusted based on homepage questionnaire and benchmarking results. Finally selected issues will be reported in the printed version due to be published in June 2008. Issues excluded from the report but still deemed relevant will be reported via the webpage. Issues considered irrelevant are not due to be included for reporting.

# 1

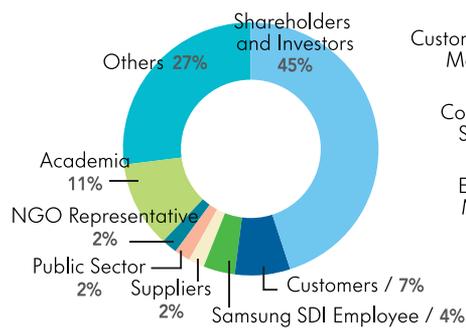
## Phase 1 : Issue Identification

Samsung SDI conducted a survey on external trend and media research to identify issues. Articles and news reports published during the reporting period were analyzed and narrowed down to 79 items divided into 15 groups. The results of this research served as the foundation of the questionnaire which was distributed to internal and external stakeholders. Samsung SDI received valuable responses from 210 individuals.

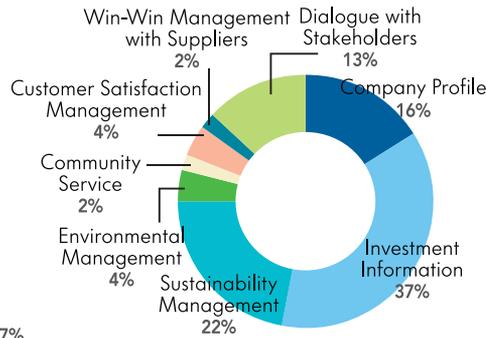
# The Responses

45 stakeholders responded to the questionnaire of "Listening to you" through the Samsung SDI webpage. Samsung SDI tried to harness the voices of our customers and capture it through the Sustainability Report 2007. We express our gratitude for your responses.

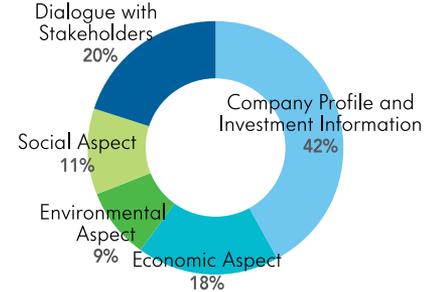
## 1. Composition of Respondents



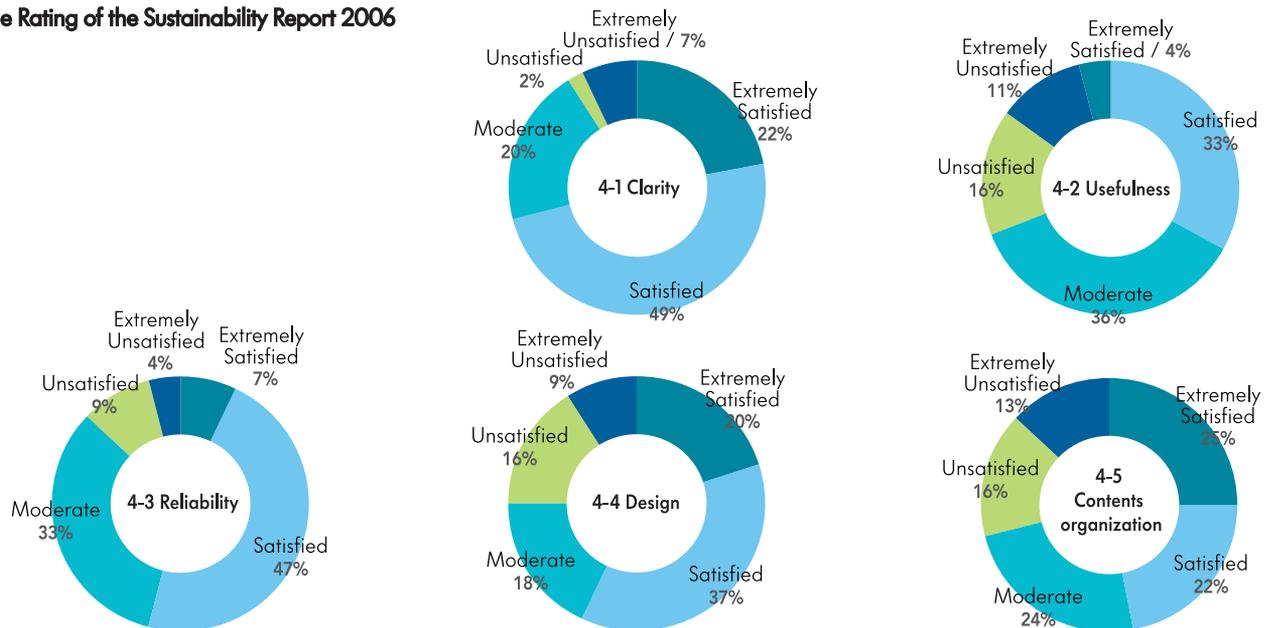
## 2. Type of Information Wanted



## 3. Areas Where Improvement was Sought



## 4. The Rating of the Sustainability Report 2006



- More details on products
- Inclusion of information on Samsung SDI's involvement with local communities
- To devise measures to tackle climate changes and other environmental issues
- More information on Samsung SDI welfare system

Other Issues and Measures Taken In Consideration of Such

- Details of each product increased both in the report and the webpage
- Such details on regional communal activities included in the 'Think Society' section
- Described in the Economic, 'Social and Environmental' sections of the report
- Information available on the webpage extended



# Climate Change

## Climate Change and the Electric and Electronic Industry

What would a company making displays and rechargeable batteries have to do with climate change? On the surface, they seem to have little to do with each other. It is easy to assume that energy-intensive power plants or steel businesses are more directly related to climate change than electric and electronic companies. Such a belief would stand unchallenged if only greenhouse gas emissions from production processes are concerned. This is because the electric and electronic industry emits far less greenhouse gases during the manufacturing process than other industries.

However as electric and electronic products are incorporated with more advanced and far more intricate technologies, their manufacturing process has also become more complex and now involves clean-room processes which have a high energy consumption rate, and complicated processing steps using various chemicals which are increasing greenhouse gas emissions. Indeed the semiconductor and display businesses were pointed out in the Kyoto Protocol as one of the key users and emitters, particularly of the non-CO<sub>2</sub>, which account for the most of the six greenhouse gases outlined in the protocol.

In fact the whole cycle of the electric and electronic industry, from more upstream processes such as raw material gathering to downstream processes of product use and disposal, is closely related to greenhouse gases. Electricity usage during product use is also becoming increasingly important.

For example, assuming that the monthly electricity usage per person is 100kWh, 6.6 billion people on earth spend 7,920TWh of electricity a year and generate 3.4 billion tons of CO<sub>2</sub>. The figures are enormously high. Such figures result from everyday use of lighting, refrigerators, TV sets, washing machines, heating and cooling systems in every home.

If the energy efficiency of all electric and electronic products was improved by 10%, the improvements will result in an annual saving of 729TWh of electricity per year. That figure is almost twice the total annual power generation of Korea (404TWh in 2006) and is equivalent to electricity generated by 160 nuclear power stations (5TWh capacity) or 80 thermal power stations (10TWh capacity).

Improvement of the energy efficiency of electric and electronic products can spare an enormous investment and reduce resources and the threat to the environment.

## Strategy for the Climate Change

Recognizing the significance of climate change, Samsung SDI is initiating ways to minimize the impact of all manufactured products on the climate, throughout the whole lifecycle of those products.

The company reduced the number of components and product weight to minimize the volume of greenhouse gas emission from upstream, whilst trying to reduce energy consumption through improving efficiency of production processes for the same products.

For efficient energy management in manufacturing processes, Samsung SDI implements the Utility Integrated System, which performs enterprise-wide energy management including overseas subsidiaries. For domestic sites, Samsung SDI signed a voluntary energy saving agreement with the Ministry of Knowledge and Economy as part of efforts to save energy.

Samsung SDI continues its development of products with less power usage and longer life cycle in order to minimize greenhouse gas emission from downstream. Development of products that are easy to recycle and have high recycling rate is another way of saving energy at the product disposal stage and improving resource circulation.

On another note, Samsung SDI concentrates on development of fuel cells with high energy efficiency, HEV batteries that can significantly reduce greenhouse gas emission of vehicles, and various types of rechargeable batteries to replace conventional batteries.



## Greenhouse Gas Investigation and Calculation Methods

Greenhouse gas inventory and quantification follows the methods explained below.

### 1. Criteria for Greenhouse Gases

2006 Guidelines for National Greenhouse Gas Inventories of the Intergovernmental Panel on Climate Change, and the 2004 Corporate Accounting and Reporting Standard issued by World Resources Institute and World Business Council for Sustainable Development were the basis of this investigation.

### 2. Conversion Factor by Energy Source

From this edition of the report, Samsung SDI calculated respective calorific values for each energy source with net calorific values (NCVs), one of energy-calorie conversion factors stipulated in the Enforcement Rule of the Framework Act on Energy. The applied NCVs are as following; 7,400 kcal/L for gasoline, 8,450kcal/L for diesel, 8,200kcal/L for kerosene, 9,350kcal/L for residual fuel oil, 9,550kcal/Nm<sup>3</sup> for LNG, 13,800kcal/Nm<sup>3</sup> for LPG, and 11,050kcal/kg for liquid LPG(propane). For carbon emission factor for electricity, Samsung SDI applied 0.1156tC/MWh which was the data calculated by the Energy Economy Institute in 2005.

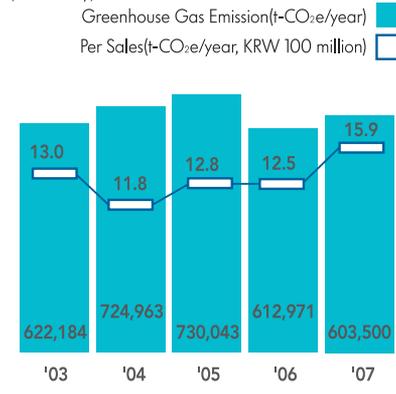
For overseas sites, Samsung SDI applied data from local suppliers of energy to the respective sites, as well as those provided by the local governments. But if a country's standard emission factor by energy source had not been established, or when NCVs of each energy source were hard to survey, Korean emission factors and NCVs were applied.

The NCVs for each type of energy source were used for total energy volume calculation with data from 2006 as well.

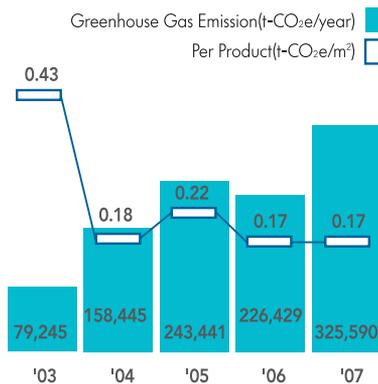
# Greenhouse Gas Data

we take a close look at Samsung SDI's greenhouse gas emission situation and the measures being taken in respect of it.

## Direct and Indirect Greenhouse Gas Emissions (Korea only)



## Greenhouse Gas Emission from PDP Manufacturing



\* 2004 had three operating lines whereas in 2007 four lines were in operation

\* Stationary combustion, process emission, and indirect emission from the Busan and Cheonan plants (mobile combustion and fugitive emission each account for 1% in total emissions).

## Greenhouse Gas Emission

2007 saw a 7% reduction in Samsung SDI's greenhouse gas emission compared to the previous year which had decreased to 1,065,840 t-CO<sub>2</sub>e per year. But this was an increase of 19% per sales. Domestic sites emitted 603,500 t-CO<sub>2</sub>e which was a reduction of 2% in terms in volume compared to the previous year and approximately 27% up per sales. Both overseas and domestic sites emitted less than the previous year in absolute terms but more per sales. The reason behind why overseas sites saw more reduction in total emission volume and less increase per sales than domestic sites was that they had shut down CRT lines, a key source of greenhouse gas emission, while production of PDP modules and battery packs was increased which emit less greenhouse gases.

The company-wide increase in greenhouse gas emission per sales can be explained by the decline in sales due to production restructuring and price fall, which is evident in greenhouse gas emission data of domestic sites. PDP emits more greenhouse gases than CRT per sales. Even though the total greenhouse gas emission dropped owing to the closure of the CRT business, the decrease was offset by PDP line increase and the growing AMOLED business. Newly built AMOLED lines and normalization of PDP lines in the Busan plant, Korea, were one reason for the increase, as production processes of these products consume a lot of energy. But that was only temporary and we expect situations would be improved significantly in 2008.

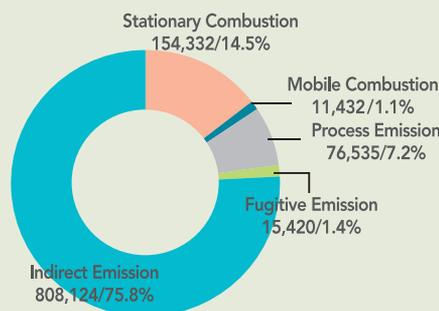
Samsung SDI makes strenuous efforts to cut down energy consumption in production processes. The efforts are represented graphically in the graph showing the ratio of total produced PDP extents against greenhouse gas emission.

Higher production led to higher emission, but emission per product is steadily decreasing.

The decrease was possible as production became more and more efficient as the glass size increased, so that more PDP modules could be produced out of a single glass substrate (multi-panel technology). This meant that the same product could be produced with less energy. As PDP production only emits CO<sub>2</sub>, and no non-CO<sub>2</sub>, GHG that arise from indirect emission (electricity) and stationary combustions (boiler), it is expected that the amount of greenhouse gases emitted will be much less than those of rival displays.

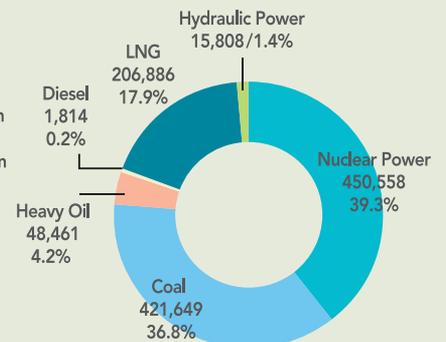
## Greenhouse Gas Emission Sources

(Unit : t-CO<sub>2</sub>e)



## Indirect Energy Use

(Unit : MWh)



\* Korea only, in 2007

\* Estimation made with reference to the energy statistics of 2006 from the Energy Economy Institute

AMOLED manufacturing processes emit non-CO<sub>2</sub> greenhouse gases. Some of these are removed in chemical reaction during the manufacturing process, but others are emitted to the exterior environment. When building AMOLED lines, Samsung SDI installed greenhouse gas catalytic converters in each greenhouse gas-emitting facility. Although the equipments require energy for their own operation, they effectively remove more than 90% of greenhouse gases that are produced.

In addition, Samsung SDI also makes conscious efforts to reduce greenhouse gas emission in our day-to-day operations of the company through operation of company buses and video conferencing which reduces the number of business trips made, as well as deployment of IT systems associated with suppliers.

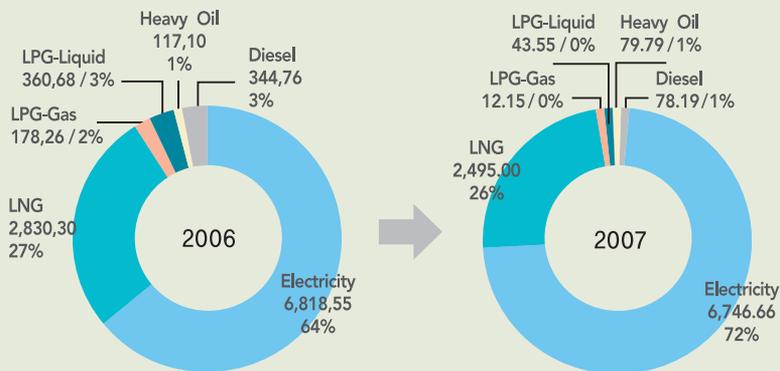
## Energy Use

Now let us take a look at Samsung SDI's energy use that accounts for 98% of all greenhouse gas emission.

In 2007, 9,445TJ of energy was used which was a decrease of 8% from 2006, but was an increase of 18% in terms of units of energy used per sales. Energy usage of 2006 was recorded at 183.6TJ/KRW 100 million. Also 2TJ of renewable energy was used per annum. Samsung SDI has made continuous efforts to improve our processes and facilities, aiming at converting to environment-friendly fuels together with reduction in energy consumption. As a result, 98% of energy used was replaced with clean fuels and 403TJ/year of energy was saved in 2007. Energy savings in 2008 are set to be even larger due to additional energy saving methods, one of them being the heat salvaging from neighboring incinerators.

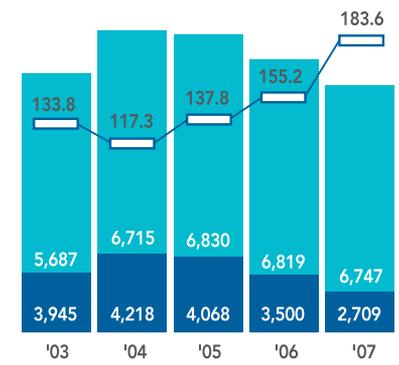
Energy Use by Type

(Unit: TJ)



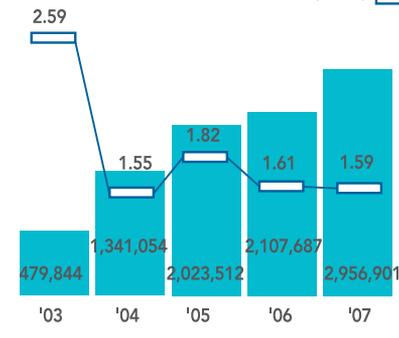
Energy Usage

Direct Energy(TJ/year) ■  
 Indirect Energy(TJ/year) ■  
 Per Sales(GJ/ KRW 100 million, year) □



Energy Use of PDP Manufacturing

Total Energy Use(GJ) ■  
 Per Product(GJ/m<sup>2</sup>) □



# Reduction in GHG Emission

Most of the greenhouse gases emitted as a result of manufacturing and service activities originate from electricity and use of fuels such as LNG. This page describes Samsung SDI's small but significant efforts to cut down energy use and greenhouse gas emission.



[Non-CO<sub>2</sub> Decomposing Equipment]

## [Non-CO<sub>2</sub>, Greenhouse Gas Decomposing Equipments]

As with other semiconductor and TFT-LCD processes, AMOLED processes also generate non-CO<sub>2</sub> greenhouse gases, some of which are eliminated during manufacture processes while a majority are emitted, further contributing to the greenhouse effect. The Cheonan plant in Korea installed the 'Burn-Wet'(a process that uses LPG as fuel to decompose Green house gases) and 'Heat-Wet'(another process that uses electric heaters to decompose green house gases) scrubbers for each facility. These equipments proved to be hugely effective, resulting in approximately 30,000t-CO<sub>2</sub>e less greenhouse gases being emitted a year.



[Chiller Control System]

## [Installation of the Chiller Operation Controller]

The Cheonan plant improved its chiller control system by installing an alarm which is initiated when the number of chillers not being utilized to cool parts and materials exceeds by 1.3 units. By preventing unnecessary operation of chillers, the plant achieved 1,511MWh/year of electricity saving which can also be understood as 753t-CO<sub>2</sub>e, of greenhouse gas reduction.



[Thermal Energy Storage System]

## [Thermal Energy Storage System]

The Busan plant in Korea began the power saving project for the Mobile Display Division in October 2006 and this was completed in April 2007. Research revealed that chillers consumed the most power which were operated for water cooling during summer. Among numerous propositions, the plant decided to introduce the thermal energy storage system whereby power was used to cool water during out-of-office hours, which was then stored and used during the day. This scheme saved 3,828MWh/year of electricity, reduced greenhouse gas emission by 1,623t-CO<sub>2</sub>e, and cut down KRW 330 million from its electricity bill per year.

For more cases, see the Sustainability tab at [www.samsungsdi.com](http://www.samsungsdi.com)

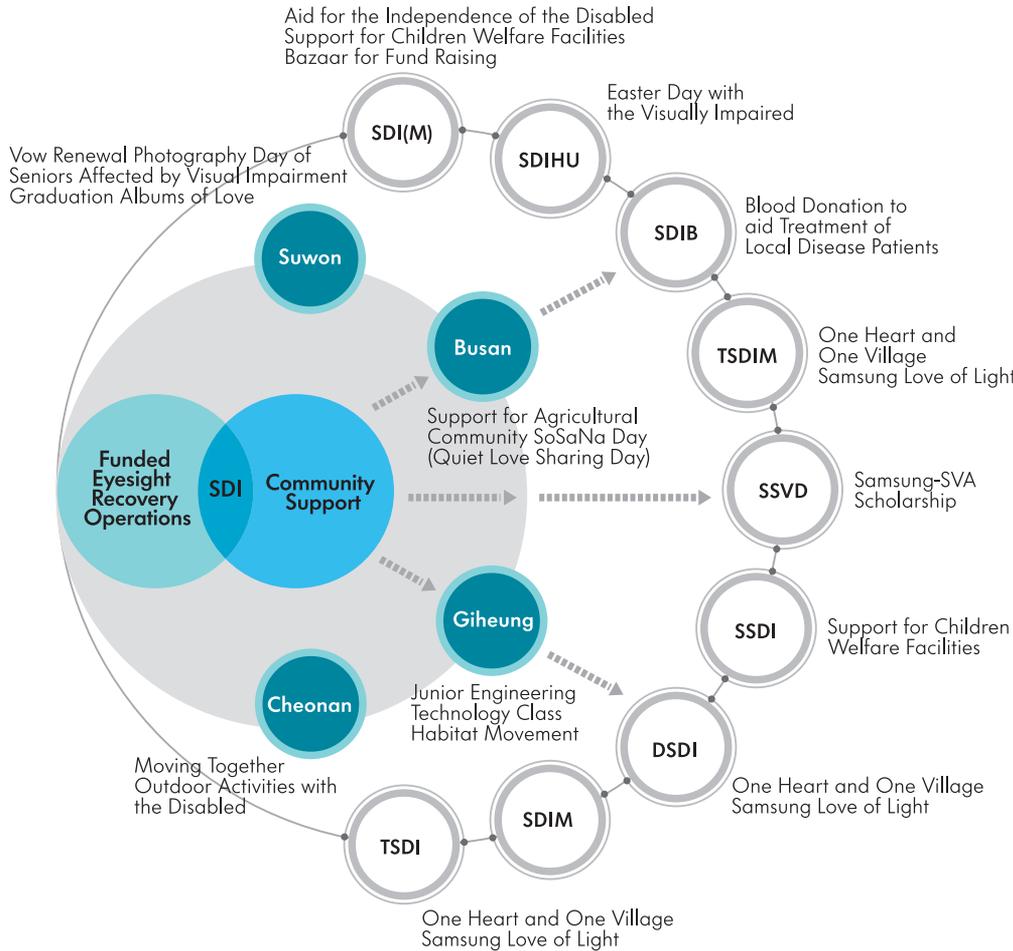
# Think Society

Despite the difficult business environment in 2007, Samsung SDI continued to care and act for the communities. Examples include support for the visually challenged, funding of eyesight recovery operations for the blind and the "Matching Grant"(Light of Love Fund) scheme. The previous 'guide dog for those with auditory difficulties' project was transferred to other companies to maximize its effectiveness.

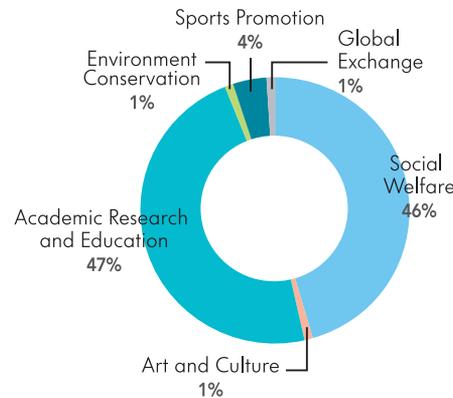
Samsung SDI returned KRW 1,680 million to the society in 2007. KRW 240 million was invested in the operation of mobile eye clinic buses in cooperation with the Siloam Eye Clinic and the free eyesight recovery operations project. Another KRW 130 million was used in supporting the livelihood of the visually impaired with low income and enhancing the state welfare system for such individuals. In addition, KRW 1,250 million was spent towards supporting various activities such as employees' outreach, academic research, environmental conservation and sports promotions.

KRW 560 million was raised for the Light of Love Fund. The total amount was reduced from KRW 950 million in 2006 to KRW 560 million in 2007 as business difficulties forced the reduction in scale of such community aids.

The long-running social contribution project of supporting the blind continued in 2007. Samsung SDI helped the livelihood of over 100 low-income households with the visually impaired and more than 1,000 blind people were able to experience cultural and sporting activities through Samsung SDI's assistance. To help raise fund for the cause, over 600 employees took part in the natural soap making event and 120 employees volunteered to visit the homes of the blind. Aside this, the company hosted the vow renewal photography event for couples affected with eye sight disorders and making of Braille books all in the hope of alleviating such people's hardships and spreading a positive message to the rest of the society. 2007 was the year in which such community activities expanded globally to other subsidiary host countries of Samsung SDI. Next details of the various social contributions made by Samsung SDI will follow.



## Social Investment





## Small Lights that Brighten up the World : Support for the Visually Disad- vantaged

SDI Tianjin was the first overseas plant that began community activities in 2004. The plant donated 100,000 Yuan every year towards eyesight recovery operations for 50 patients. Following the success of the "One Heart and One Village" campaign, the main communal activity of Samsung in China in 2007, the free eyesight recovery operations became the second social contribution activity participated by all Samsung subsidiaries present in China. This second social contribution project was named "Samsung Love of Light". In April 2007, in the presence of Huabei ground troop Chief Commander and people from the Chinese Association Of the Disabled, the signing ceremony for cataract operation support by Samsung Love of Light was held. By signing, SDI Tianjin was able to benefit 400 cataract patients with the 48,000 Yuan raised in donations, which in turn layout the foundations of a full-scale free eye sight recovery operations campaign in Huabei. SDI Dongguan also began the Samsung Love of Light campaign in 2007. In cooperation with the Disabled Association of the Guangdong Province, SDI Dongguan found cataract patients in sister towns of Qingxin, Qingyuan city and provided 270 cataract patients with eyesight operations. SDI Tianjin MD offered free eyesight recovery operations to senile cataract patients living in Hujia village, a sister town. In December 2007, Tianjin eye doctors were invited to observe the rehabilitation of those patients and provided eye check-ups for community residents.

Domestically, besides the free eyesight recovery operations conducted in conjunction with Siloam Eye Clinic from 1995, many other support activities have been executed led by SDI headquarters in Suwon.

In 2007, Samsung SDI supported vow renewal photographing for elderly couples with visual impairments and the making of 'Graduation Albums of Love' for students of schools for the disabled, and hosted numerous cultural and sports activities for them.

Samsung SDI's efforts to restore light to the life of those effected with visual impairments will continue in and beyond Korea for many years to come.

## Become One through Love : Building Relationships with Agricultural Communities

The Busan plant in Korea formed a sisterhood relationship with Sangchun village, Samnam-myeon, Ulju-gun, Ulsan city in 1995. The relationship continued for 13 years, during which the Busan plant laid the foundation for community development which grew in harmonic partnership between a company and a rural community. In 2006 a new sister town was born. It was Taejang 3-ri village, Sunheung-myun, Youngju city. Throughout last year, the Busan plant led and participated in various community activities such as town renovation, providing a helping hand during busy farming seasons, and assisting preparations for traditional holiday preparations and event hosting. Contribution activities did not stop there. The plant helped to open town websites for online marketing of famous local products as well as remodeling their product-processing factories. This was intended to help improve profitability of the farming households. In recognition for such efforts, the Busan plant received the plaque of commendation at the "Love of Ulsan Campaign" in March 2007. The Busan plant has already devised a plan for 2008, which aims to create the "Rural Life Village" as a tourist attraction. The plant is committed to do its best in building a happy community together with the neighborhood.

As part of "One Heart and One Town", the main social contribution activity of subsidiaries in China extended rural area supports in various forms. Employees of the SDI Dongguan visited sister villages in Qingxin, Qingyuan city in January 2007 and donated cooking oils, rice, and other daily necessities to those in need. For the year around, the plant provided health insurances(one year), planting of trees and constructions of 'Samsung Hope Library; Its continuous contribution activities were highly recognized by the Chinese government as well as the village residents. The recognition took form of being nominated as 'Youth Civilization Company' and 'Company to be Successful in Civilization Establishment'. SDI Tianjin MD also launched its own community support activities. The plant formed sisterhood relationships with Hujia Village of Zenghai County and provided various supports. In March 2007, employees of SDI Tianjin MD visited an elementary school in the village and planted 1,000 trees and flowers in the school garden, together with the teachers and students, which was named 'Samsung Garden'. The gardening activity is still continuing jointly by the Tianjin MD and the school, raising environmental awareness and strengthening the good-will tie. Samsung SDI's global sites will continue to form relationships with surrounding communities and fulfill their responsibility as members of those communities.



**Giheung, Korea** Utilizing its technical expertise, the Corporate R&D Center has hosted the "Junior Engineering Technology Class" each month from the second half of 2006 with the purpose of developing elementary school students' scientific knowledge base and interest. Targeting young students from the neighboring Giheung Elementary School and Nagok Elementary School, center researchers demonstrated various science experiments complemented by easy and entertaining explanations. This was accepted and appreciated very well. The Corporate R&D Center also participated in 'Habitat in Korea' in conjunction with the Cheonan branch of Habitat Korea. They had hoped to give hope to people living in poor residential conditions by providing a small but comfortable place to live in. This movement was initiated by individual participation in 2004. As time went by, the participation was extended to the department level, providing good excellent opportunities for department members to enhance comradeship.



**Cheonan, Korea** The Cheonan plant organized the outdoor activities involving the physically disabled individuals who rarely had the chance to experience the outside world. In March, plant employees and 30 members of "Light House" a welfare institution, went for an excursion to a theme park in Youngin, Korea. In April, people with mobility difficulties or mental illnesses hiked the Heuksung Mountain near the plant. In July, the plant organized an outreach program for employees and their families as a leisure and cultural experience event. 55 children from 'Shinawon' a children's welfare facility in the city of Cheonan, were invited to the program and enjoyed the leisure and sports programs that had been prepared for them, along with 50 children of employees.



**Shanghai, China** SDI Shanghai has supported outstanding students of Songjiang 1 Middle School with Samsung-SVA scholarships since October 2006. So far 16 students have received 2,400 Yuan annually so that they could continue their education into high schools and universities. This scholarship project has served as an exemplary movement for other companies of the community.



**Shenzhen, China** Each month SDI Shenzhen visits child-care facilities and welfare institutions for the disabled. Aid is provided not just in material forms but employees also make an effort to play and talk with orphaned children and children with disabilities under care in such facilities, with the wish that they may grow up to be valuable and loved members of the society. This beautiful culture of sharing was covered by the local media in January 2007.



**Brazil** November to March is the rainy season in Brazil, and during this time one must be wary of the yellow fever. Sufferers of yellow fever require vast blood transfusions but demand for blood is very high during this season. The difficulty of receiving blood transfusion is proving to be devastating. SDI Brazil led the blood donation campaign in November 2007 together with HEMON, a blood bank in Manaus, Brazil, to help yellow fever patients. SDI Brazil plans to continue the campaign to save people from the virulent endemic disease.



**Malaysia** SDI Malaysia(SDIM) employees collected goods and articles they did not use at home and held a jumble sale style bazaar in June 2007. They raised 15,000RM by selling goods and additional donations received were all donated to the local child welfare facilities. The money was spent on purchase of painting materials and electric goods for the facilities. In addition SDIM is actively participating in other community activities such as support for the independence of the disabled, forest cleaning and the blood donation campaign.



**Hungary** Marking Easter, the large celebration holiday in Hungary, SDI Hungary visited the National Blind Welfare Center. Employees had a great time with the people of the Center during which Easter gifts were presented. SDI Hungary makes an effort to become closer to the community within which they exist by visiting local welfare facilities whenever holidays arrive. This activity also benefits employees as their awareness of importance of public service and comradeship all enhance.



# Think Workplace

Samsung SDI's consideration for its employees extends beyond the basic welfare and benefits, but also into the workplace. Samsung SDI is passionate about making the workplace a fun place to be, and aims to resolve potential conflicts proactively and facilitate communication through wide range of team building programs.

## Sympathy and Empathy

Lunch hours of Suwon Head Office on one day in June 2007 commenced a little differently. Since then, lunch workshops titled "Sympathy Plus" coupled with MBIT personality tests were held each Wednesday and Friday. In a mellow atmosphere, employees had time to get to know and understand each other, guided by a professional counselor from the Open Counseling Center. The "Sympathy Plus" was held 41 times with a total attendance of 351 people till late 2007. The klatch was held eight times under the different name of "Power Station" in the Corporate R&D Center with 61 people present. The sessions will be upgraded to be "Sympathy Plus Season II" with more advanced programs such as art therapy in 2008 and will be executed across the whole company.

## 108 Angels

Samsung SDI is dispersed with 108 hidden counselors. Named on-site counseling experts, they are together with busy colleagues who retain issues related to work and personal relationships but may find it embarrassing to meet with expert counselors. They listen to their troubled peers.

Samsung SDI selected internal opinion leaders from 2006 to 2007 and trained them in three occasions to become on-site counseling experts. Those who completed the training course returned to their respective work places and have since played the role of advisors to their colleagues in need of advice. The plan for 2008 is to provide the advisors with brush-up sessions, klatches, and news letters and further encourage them to enjoy their role.

## Creative Challenger

Samsung SDI is working to enhance the atmosphere within the organization and secure core competitiveness via expansion of new organization culture in 2008. Under the banner of "Creative Challenger" Samsung SDI seeks to shape its own and specific organizational culture with the five elements of professionalism, open-mindedness, pro-change, execution-first, and organizational engagement. Detailed execution strategies will be devised accordingly by each site. The initiative is set to be extended to overseas subsidiaries in the future. Activities and performances will be covered by the next report.



Jung Hye Kyoung,  
Chemical Combination Division for PDP

## "I Remain Open-Minded for You"

Jung Hye Kyoung, having led 11 years of professional career with Samsung SDI, attended the 3rd on-site counseling expert training in June 2007, where she discovered counseling know-hows and was presented with case studies from professional counselors. After completing the course, she has provided valuable on-site services to her co-workers.

Q) How did you feel after the training and what is your plan?

The 3-day group training gave me an opportunity to reflect on myself. I also picked up on a wide range of counseling techniques including how to put a person at ease and how I should listen to them. My plan is to share with my colleagues what I have learned from my time with Samsung SDI, including both positive and negative experiences, and to use it to assist them with issues and problems.

Q) When was the most rewarding moment as an on-site counseling expert?

There was a female employee who believed that no matter how hard she worked, she would always be outshone by her male peers. She believed that her gender was holding her back, and I believed that resolving this ill thought was key to resolving her issue. The lack of self confidence and belief was the fundamental problem. However I found the magnitude of the issue far too vast and confided in other field counseling experts. Together we inspired confidence into her during a series of personalized sessions. She now engages proactively in work matters and also takes part in company society activities. I myself also ask for help and advice when faced with issues I cannot deal with by myself.

## Choi Nam Seon, Battery Marketing Team

Choi Nam Seon participated in the parent-child relationship enhancement test with all of his family. He and his family received MBTI personality tests which aided understanding of the strength and weakness of each other from a professional interpretation of the test results. After the test, they took time to think of ways to improve their parent-children relations.

### "My Family Are My Top Customer"

I went to the session, thinking that children are the top customers of parents, and I want to be the best dad I can be by understanding my kids better. I am very satisfied with the results. After the counseling, I noticed significant positive improvements at home and more considerate attitude towards each other. A hug from my kids after the counseling was the greatest present I ever received. These days I am always happy on my way home.

## Samsung SDI's Policy on the Work-Life Balance

As employee creativity and innovativeness emerge as valuable resources of a company, the importance of striking a healthy work and life balance of a company member is also growing. Samsung SDI offers active support for employee, work-life balance, seeking for improvement in individual life and productivity of an organization at the same time.

- Operation of a 4-team and 3-shift system to ensure off-days
- Prevention of excessive overtime work via a prevention system
- Designation of Wednesdays as Family Day
- Offering of special 'refresh leaves' in addition to legally mandated leaves
- Granting of leaves in return for overtime and holiday work (limited to researchers at Corporate R&D Center)
- Recommending maternity leave and parental leave
- Operation of the open counseling centers
- Running of female-only common rooms/breast pump stations
- Running of in-house clinics/Wellness Clinics
- Provision of healthcare bills for employees and their spouses
- Provision of financial support to aid employee children's education
- Running of company resorts for use by employees

Choi Nam Seon, Battery Marketing Team, with His Family





## Samsung SDI's Vision for the Environmental Aspect of Sustainability is 'Eco-Value Creation'.

Samsung SDI's pro-environment efforts took off from the early 1990's. Since the introduction of BS7750 in 1995, all manufacturing and R&D sites at home and abroad have eventually established a certified environmental management system, with an exception of the Suwon head office. The environmental management system based on Samsung's Green Management philosophy integrates five strategies of comprehensive environment management system, supply chain environmental management, cleaner production, eco-design and interactive communication. To support the environmental management system, Samsung SDI has been running the SMIS, the Sustainability Management Initiative System, since 2005 across the whole corporation to manage environmental footprints left by Samsung SDI. Approximately 120 internal auditors lead the internal auditing aiming to continue maintenance of the environmental management system.

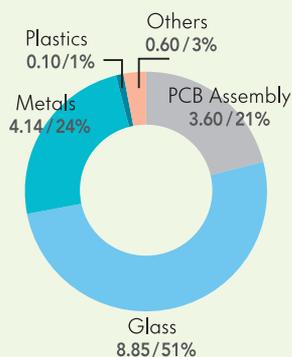
2007 environmental indicators(see page 53) of Samsung SDI show a declining trend in absolute use and emission and an increase in used amount and emission relative to sales. But this was due to a reduction in sales price of products as well as business restructuring, and the situation is expected to eventually improve.

## Resources Input

Samsung SDI are buyers of raw material and component parts who develop and produce products using such materials and finally providing the consumer with the final end product. Such a nature of the business means that Samsung SDI cannot directly monitor the amount of reusable materials being incorporated into the materials we buy, nor can we manage the recycling rate of our end products after disposal. But we recognize resource circulation and recycling as key sustainability issues, and endeavor to develop products which are highly recyclable. In addition to this, we work to maximize recycling rates of waste and are constantly aiming to reuse packaging materials.

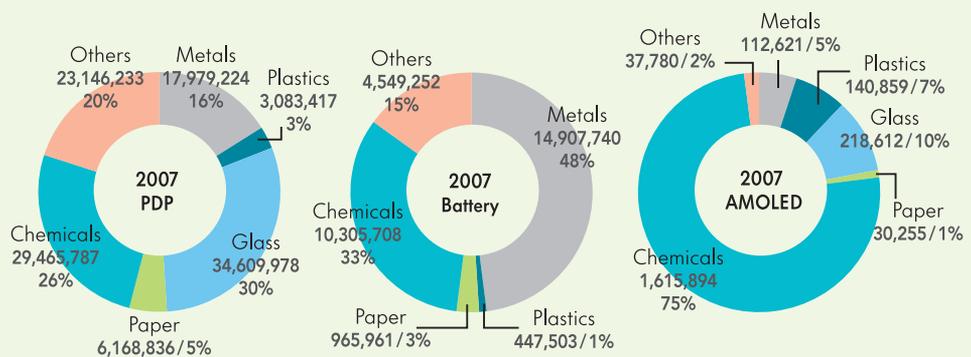
In an effort to conserve the O-zone layer, Samsung SDI removed all Class I substances as defined in the Montreal Protocol from its manufacturing processes. However HCFC(Class 2) is still being used as a refrigerant. In 2007 Samsung SDI's ODS consumption was measured at 10,068kgCFC11eq, 34% less than the previous year.

PDP Recycling Rate(42 Inch Standard) (Unit :kg)



Material Usage by Product Type(Data from the Cheonan Plant, Korea)

(Unit :kg)



The PDP Division of the Cheonan plant recycled 109,000 pieces(13%) of product packing materials after collecting them from customers in 2007. The Battery Division altered the way of packing, which improved the packing capacity of packing materials of a specific customer by over 90% and recycled cell packages provided for external pack processing for packaging for finished packs. The plant also removed plastic bags that had used for redundant double packing. Overall, the Division has concentrated on resource saving through packaging optimization.

Product manufacturing involves water. Samsung SDI used 15,384 kilo tons of water in 2007, 92% being sourced from the surface and 8% being drawn from underground. The total amount was reduced by 10.2%, but relative to sales(per sales), the figure increased by 0.30 ton/KRW million from 0.26 ton/KRW million. Samsung SDI tried in various ways to reduce total water usage such as recycling of 5,381 kilo tons of water. Such efforts are evident in the continued reduction in water usage per extent of produced PDP unit.

## Resources Output

Samsung SDI discharged 10,742 kilo tons of wastewater in 2007. The actual amount released has decreased 14% or 1,692 kilo tons year on year. But in terms of per sales, 2007 saw a 12% increase at 209 tons/KRW 100 million, compared to 2006.

To curb its air pollutant emission, Samsung SDI installed VOC and odor removal devices on newly constructed PDP, AMOLED and battery production lines. Diesel and residual fuel(heavy) oil being used in SDI Shenzhen and SDI Mexico were also replaced with LNG.

Persistent organic pollutants(POP) were not used and emitted at all.

Samsung SDI's waste recycling rate in Korea dropped to 84.29%, declining by 1.76% compared to 2006. The main reason behind the decline was the increase in proportion of construction waste generated by business restructuring, which went for landfill, as well as vast amounts of waste glass that were buried as the capacity of the PDP glass recycling company could not accommodate the amount of waste glass. Across the company, 84.87% of waste was recycled, which was an increase of 0.55%. 8.7% of waste was buried, and 6.1% was incinerated. 0.3% was treated in wastewater consignments. Total waste generated stood at 120,880 tons for the year which was a 12% decrease in absolute terms but a 14% increase per sales at 2.35 ton/KRW 100 million. The recent business restructuring temporarily caused abnormal waste generation, increasing the absolute amount of waste. That increase, unfortunately, offset many other efforts to reduce waste generation. Such efforts are testified in the graph showing waste generation in proportion to produced PDP extent unit.

SDI Hungary and SDI Mexico relocated 2,392 tons/year of CRT glass to other countries for reuse and recycling.

## Biodiversity

During 2007, none of the locations where Samsung SDI is situated underwent major restructuring or saw Samsung SDI commence a new type of business. All of its business sites except for R&D centers remained within the confines that were officially designated as industrial areas. Therefore regions of high biodiversity or animal habitation do not exist in the vicinity. Samsung SDI business sites have never received any special requests regarding biodiversity from local governments or municipal governments. Nevertheless each site monitors the surrounding environment and initiates various environment conservation activities along with its social contribution activities.



## [Environment Conservation Activities]

The Busan plant has undertaken the 'One Company Conserves One Wetland' campaign. The plant monitors and cleans the alpine wetland of Mt. Shinbul nearby together with the Nakdong River Environment Management Office, wetland experts, and other neighboring companies.

The Suwon head office and the Cheonan plant offer environmental technology mentoring to neighboring small and medium-sized enterprises in cooperation with municipal governments and other companies trading in the same community. Their intention is to help minimize community environment pollution by sharing the optimized management methods with SMEs which do not possess adequate environmental technologies.

Chinese sites and SDI Malaysia also execute various environment conservation activities including the 'One Company to One Village' campaign, conservational activities of surrounding areas, tree-planting, and campaigns to conserve drinking water sources.

Water Use of PDP Manufacturing



PDP Waste Generation



## Spill

Absolutely no spill or leakage of oil, industrial waste, and chemical substances resulted from Samsung SDI in 2007.

## Environmental Accounting

It costs to operate environmental facilities, treat waste, measure and analyze, improve and invest in facilities, and to execute general conservational activities. Samsung SDI has used SMIS since 2006 to manage environmental cost. The table below shows the breakdown of conservational expenses applicable only to home business sites.

**[Environmental Accounting Summary Table]**

(Unit: KRW million)

Activity	Investment	Costs	Benefits	Description
Post-Occurrence Treatment	13,427	13,076	35,764	Operation of in-house environmental facilities, consigned treatment, and etc.
Preventive Measures	10,775	8,545	10,236	Environmental training, measurement analysis, audits, waste management, process improvement
Stakeholders	—	203	23,329	Support for environmental groups, community cooperation, environmental events
Legal Compliance	—	704	—	Surcharge on wastes, insurance
Total	24,202	22,530	69,329	

## Legal compliance

Samsung SDI reports one case of violation of environmental regulations which took place in October 2007. A process operator affiliated to another company accidentally spilled part of a waste chemical into a wastewater pipe at the Cheonan plant in Korea, resulting in a temporary surge of waste concentration which exceeded the level allowed for the local wastewater treatment facility. Wastewater discharged by the plant goes through a primary wastewater treatment process internally before being expelled into an external industrial wastewater treatment area where the secondary treatment is performed. Although it was confirmed that the pollution level of the final discharge joining local streams did not exceed the legal threshold, the accident served to highlight the importance and difficulty of preventive management.

In order to prevent a recurrence of such an accident, Samsung SDI assessed the environmental management system and improved the pollutants management system operation and prevention activities.

No other environment regulation violations regarding Samsung SDI products and business sites have taken place.

# Think Partners

Samsung SDI purchased KRW 3,340 billion worth of raw-and sub-materials in 2007, and KRW 2,080 billion worth of which were sourced locally.

## Support for Vendor Management Innovation

Samsung SDI actively involves itself in various innovative initiatives along with suppliers with the aim of raising their global competitiveness. In 2007, Samsung SDI devised a mid to long-term roadmap for suppliers that covered manufacturing innovation, quality innovation, 6 Sigma, logistics innovation and green purchase, and has provided intensive support in aid of its implementation. Target suppliers were selected through preliminary screening. After selection, they received guidance from Samsung SDI's resident experts and external consultants.

The Partners' Innovation Activity Exhibition in the presence of CEOs and heads of departments of partners was held at Samsung SDI Corporate R&D Center in November 2007. This annual event is intended to serve as a place of sharing the best innovation practices and to motivate participants to facilitate their innovation activities.

Samsung SDI's efforts to strengthen partnership with suppliers will not stop.

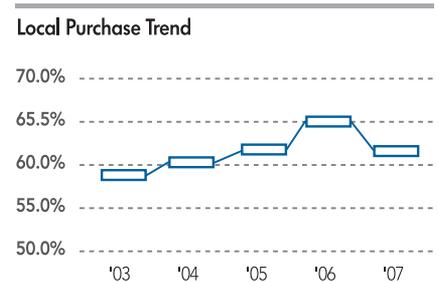


## Sustainable Partnership

Green purchases, which took shape from 2004, began with management of the six key RoHS materials in its early stages. Recently as environmental regulations for products become more complicated and diverse, the areas of management scope continue to expand.

Samsung SDI improved its Supplier Portal and SMIS to further its management of materials subject to environmental management from 2008. PoHS, PVC, brominated and chlorinated flame retardants will be added to the list of materials to be environmentally managed.

In 2007 the social aspect was added to the S-Partner system which had begun operation in 2005. Evaluation of 167 firms was executed last year and the results were reflected in the annual global evaluation of suppliers



## Expansion of the SCEM(Supply Chain Environmental Management) Project

Samsung SDI began the Large and SME(Small and Medium Enterprise) Green Partnership project with support from the Ministry of Knowledge Economy in 2004 and is now expanding the coverage the project to 32 companies, which are its secondary and tertiary suppliers. Through the project, Samsung SDI shares with suppliers its sustainability management and green purchase strategy, educating them of cleaner production, environmental management, the establishment of hazardous material management system within their companies and how to improve them. From 2008, more suppliers who previously did not participate in the project will be provided with the training.



# Think People

Year 2007 proved to be a very difficult year for Samsung SDI due to a severe business depression. Amidst the hardships, the company focused on revising its foundations in time for a resurgence. For a better future Samsung SDI streamlined its administration and renovated outdated practices into new low cost/high efficiency structures.

In 2008, Samsung SDI is going to reinforce its three key competitive strengths in 'organizational culture', 'HR system', and 'employee treatment' on top of its new and improved foundation consolidated through innovation. Simultaneously Samsung SDI will further enhance its 'social responsibility management' by ethical management, human rights management, social contribution, customer satisfaction and supplier support to regain its past glory.

## People

25,229 people work with Samsung SDI, including those at overseas R&D centers and offices. 2007 saw a 10.4% decrease in manpower, compared to that of 2006, the direct effect of business restructuring at home and abroad. The current workforce is comprised of regular employees(96.7%) contractors(0.7%) and outsourced workers(2.6%) under the supervision of Samsung SDI.

For the sake of the company's survival, Samsung SDI undertook a whole corporation restructuring initiative in 2007. The main target was CRT lines at home and abroad, whose competitiveness had weakened significantly. Domestic lines were completely closed and overseas lines were scaled down. During the process, the company kept the discussion channel open



and made a commitment to maintain the current level of employment as much as possible. Voluntary retirees were offered a retirement bonus on top of severance payment. For this reason, the total turnover rate increased to 34.4% from 26.8% of the previous year.

\* The turnover rate was calculated by dividing the total number of retirees in 2007 by the manpower size at the end of 2007 as stipulated in GRI G3. The formula may differ from a conventional formula for turnover rate calculation. Branches and offices with less than 20 employees were not included in turnover data.

## Labor and Management Relation

Samsung SDI respects employee's democratic rights of freedom of association and collective bargaining, but does not have a labor union within itself. However, the company strives to provide the best treatment and working conditions for its employees in terms of labor rights and protection of their interests, as well as the elevation of workers' social and economic status for which a general labor union exists. In the place of a labor union, the labor council operates at each business site, which consists of equal numbers of company representatives and workers' representatives. The labor council handles employees' benefits and workers' rights issues including employee treatment and their complaints. The council gathers their difficulties and complaints and tries to remedy the situation through open discussions. When there are significant changes in the management of the company, such as streamlining and business restructuring, the company puts such plans and ideas through open hearings and agreement processes and notifies employees of such one month before their manifestation.

### Major Activities of the Labor Council in 2007

#### [Key Discussion Agenda]

- Adoption of the compensated leave policy
- Opening breast pumping facilities in female resting rooms
- Scale of the business restructuring movement and negotiation of the retirement scheme for voluntary retirement
- Improvement of employee amenities
- Salary sums, business trip expenses, monetary aid of departmental meetings, financial support for employee's children education, and negotiation of company meal provisions

#### [Joint Cultural Activities by Company and Labor]

- 'Praise for Tonics, Praise Relay': the labor council's selection of the Employee of The Month who is granted with the supply of Chinese herbal remedies, snacks for the department members and a souvenir watch as a present.
- Traditional holiday events: Provision of rice-cake soups and traditional 'luck bags' in time for traditional holidays, and bowing at the main gates
- Consolatory field visits during hot and cold seasons-visiting operation sites in hot and cold seasons and serving in-season foods and delicacies

## [Career Development Center]

Samsung SDI runs its Career Development Center for retirees who feel insecurities about life after retirement, hoping to alleviate the stress and provide assistance whenever it is needed so that they can plan and enjoy a happy second life.

The Center branched out to the Suwon head office, the Cheonan plant, and the Busan plant in 2007, and operates with 10 resources from HR Team.

The Center informs future retirees of how to plan their retirement and also provides active support re-Employment or personal business start-ups. The role played by the Center is critical in building a strong and trusted relationship between the management and the workforce.

In 2007 alone, 250 of the total retirees affected by CRT business restructuring successfully found new jobs and began their own businesses with the valuable assistance of the Career Development Center.



## Training

In quantitative terms, the training performance deteriorated in 2007 compared to the previous year. Even though the average training hours per employee was reduced, Samsung SDI tried hard to make up for the decline with qualitative improvements in training by tailoring it with application of company strategies, and to minimize the loss of human resource.

From 2008 and on, Samsung SDI is going to plans to prepare systemic measures to help employees adapt themselves to their jobs as well as motivate them. In addition, the company will select members of the workforce with the potential to grow them into key individuals and future leaders. This is a grand investment plan to build powerful human resources for the future of the company.

## Human Rights

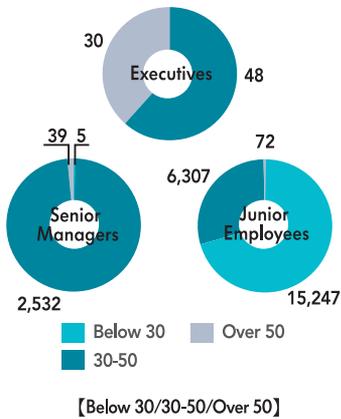
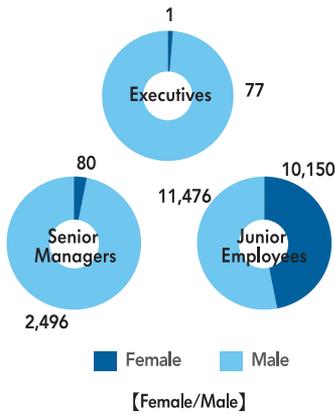
Under the principle of 'Respect for individual diversity and dignity' Samsung SDI gives consideration to human rights in every single business management activity such as investment decision-making as well as transactions with suppliers.

In order to trade with Samsung SDI a supplier is required to be certified S-partners who meet pre-defined environmental and social standards as well as being certified in terms of quality and price. From 2007 social aspect additions were made to the certification categories and matters such as a vendor's human rights situation, labor issues and ethical management were additionally being assessed.

In 2007 Samsung SDI neither made nor signed any investment decisions or capital investment agreements which could be significant from the strategic aspect or in terms of scale.



Population by Gender/Age Group



\* Branches and offices with less than 20 people not included.

## Non-Discrimination and Ban on Child Labor and Slavery

Samsung SDI complies with the ILO conventions and domestic and overseas labor-related laws. Hence child labor and slavery are all banned from practice at our home and overseas business sites. Samsung SDI also bans all forms of discrimination in terms of race, gender, religion, political affiliation, nationality, and other possible factors for discrimination. No cases involving violation of slavery, child labor and non-discrimination policies were reported in 2007.

## Diversity and Equal Opportunities

Samsung SDI makes clear in its business principles and HR policies that the company shall not discriminate people against gender, nationality, religion, social status, and age at time of recruitment, placement, promotion, compensation, training and retirement. To promote female social engagement, Samsung SDI has steadily increased female employment. In accordance with its 'non-discriminatory compensation' and 'performance-based compensation' principle, base salaries are equal for both men and women.

## Employee Health and Safety

The injury rate in 2007 stood at 0.14 throughout the corporation. The rate is steadily decreasing each year. Absentee rate, which is an indication of the severity of accidents, made a steady downfall since its momentary rise in 2005 when a fatal accident was reported. No fatal accidents or deaths occurred in 2007. In terms of occupational illnesses, two cases from the SDI Brazil were reported. Samsung SDI continuously deploys initiatives to eliminate health and safety risks posed to employees. Such various efforts of Samsung SDI to eliminate health and safety risks can be observed from the Samsung SDI homepage.

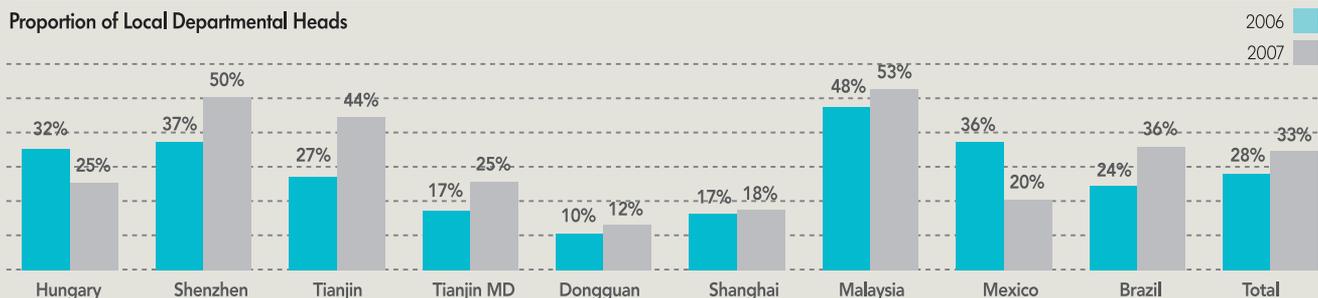
\* From this report and on, Samsung SDI reports health and safety data in compliance with GRI G3 standard. (Refer to economic and social performance on page 52)

\* In this report, Samsung SDI rectified the incorrect presentation of the incident intensity graph. The graph read 58.0 in the incident intensity in Asia(exclusive of Korea). The correct value that should have been stated was 0.21.

## Localization

Samsung SDI employs two locals per 14 management positions in nine overseas subsidiaries. Localization in overseas subsidiaries has long been sought after as Samsung SDI wishes to develop with the communities Samsung SDI operates within. Identifying key posts within organizations, Samsung SDI selects and develops successor groups in accordance with its long-term human resource plan, and increases the proportion of local employees in departmental head positions whilst reducing the number of Koreans dispatched. Local workforces benefit from various training opportunities, developing their job skill and global perspectives whilst working as key individuals within their respective subsidiaries.

Proportion of Local Departmental Heads



## Customer Health and Safety

Samsung SDI thoroughly monitors its safety procedures designed in consideration of customer health and product safety. Safety evaluation of Samsung SDI contains more items than international safety specifications. The evaluation items cover many potentially dangerous factors related to customer safety and health such as explosions, hazardous material, spill, electrocution, fire and injury. In order to protect consumers from such safety threats, Samsung SDI established coded procedures, by which all equipments and products would be reviewed and certified for their compliance of all items with those outlined in the safety specifications. The Battery Division maintains its own safety protocol to ensure safety and reliability of rechargeable batteries and applies stricter specifications than all other safety specifications, including UL.

## Ethical Communication

Samsung SDI applies work policies to trading activities within the corporation and monitors its complete compliance. All sales activities including advertising, sales promotions and sponsorships are made to comply with all related legal obligations and internal regulations, and in addition, it is made clear that all such activities should be ethically unmarred. In particular advertisements of Samsung SDI undergo pre and post reviews internally to ensure their compliance with the legal requirements delivered by the Independent Review Board of Advertisement so that no social or ethical issues are raised in respect of our advertising activities. Samsung SDI reports no cases of violation and subsequent fining for breach of regulation regarding consumer health, safety implications, product information and display of such information, marketing communication or any aspects of product/service supply or use.

## Anti-corruption

Samsung SDI actively practices ethical management through implementation of its 'Samsung Business Principles' based on its core values. Samsung Business Principles regard its legal and ethical compliance, clean organizational culture, respect for stakeholders, consideration for the environment, safety and health and the fulfillment of social responsibility as its fundamental principles, and serve to outline to its employees the standards for valuation and specific codes of conduct on the basis of such principles.

**Training** SDI Campus, the internal cyber training system of Samsung SDI, began running of an Ethical Management course in 2007. This was designed to aid adopting an ethical management style within daily business activities. The course was made compulsory so that all employees were obliged to take the course. In total 3,751 employees completed the course in 2007 alone. Core values and Samsung Business Principles are essential parts of training for those whom have been promoted, entry-level employees, and home employees about to be dispatched overseas. In addition, efforts to prevent internal occurrence of corrupt practices involve running regular group trainings studying actual business case studies associated with corruption, to educate employees of the measures that should be taken when faced with such situations.

**Countermeasures Against Corruption** Samsung SDI performs regular corruption risk analysis on all its business sites both at home and abroad in order to minimize the chances of corruption taking place within its interior. Company departments who hold communication links with external stakeholders(e.g. affiliate companies, customers) are actively inquired and investigated for any indications of corruptions as they arise, and external affiliates are regularly interviewed for the acknowledgement of potentially corruptive behaviors.

In addition Samsung SDI operates the corruption activity reporting facility via its ethical management webpage and the company Intranet to encourage reporting of such incidences. A legitimate corruption activity is highlighted via initial reporting, analysis and final diagnosis, to which Samsung SDI takes immediate action, and the results are informed to the initial informant via e-mail or telephone.

**Legal Compliance** Samsung SDI hereby confirms that no case of violations of the respective country's laws, regulations or international declarations or treaties took place that resulted in Samsung SDI being fined or disciplined for such acts. However investigation into the fair trade practice in CRT trading is currently underway.



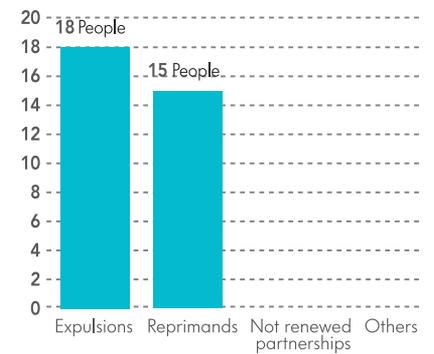
[Safety & Reliability Center of Battery Div.]

[Participation at the Ethical Management Training 2007]

	Management	Non-Management	Total
Participants	8	5,143	5,151

\* Korea only

Countermeasures against Corruption



\* Korea and 4 Chinese Subsidiary Sites (Shenzhen, Tianjin, Tianjin MD, Dongguan)

For more cases, see the Sustainability tab at [www.samsungsdi.com](http://www.samsungsdi.com)



# Governance

Through shareholder empowerment and decision-making that is centered around the BOD, Samsung SDI operates with an honest and responsible management structure, and raises the values of the stakeholders and the company itself.

## Composition of the BOD

In accordance with Business Law and the Securities and Exchange Act, Samsung SDI operates an independent BOD consisting of numerous experts with varied fields of expertise. The current BOD is formed of seven individuals, three of whom are internal directors, whilst the remaining four are external directors. As to harness his managerial expertise and exercise responsible management, the CEO additionally serves as the chair of the BOD. To conserve the autonomy of the BOD, independent directors are appointed following recommendation by the External Directorial Candidate Nomination Committee. Anyone with affiliations with the company does not qualify for an independent directorship. Appointment of both internal and independent directors is finalized at the annual shareholder's meeting.

Three committees operate under the BOD, which are the Management Committee, the Audit Committee and the Nominations Committee. The Management Committee is directly responsible for the company's performance in terms of economic, environmental and social aspects.

## Roles and Operation of the BOD

The BOD retains the authority to deliberate and decide matters defined in the law or articles of association, the audit of basic corporate management policies as well as other critical matters. The BOD holds ad-hoc sessions whenever necessary in addition to quarterly meetings. In 2007, two quarterly meetings and five ad-hoc sessions took place.

To avoid conflict between stakeholders during and after decision-making, BOD members fully review legalities associated with the agenda prior to meetings and also take into account the opinions of stakeholders.

Samsung SDI ensures the derivative litigation right and the right of inspection of books and records pursuant to the Business Law in order to protect the rights of minority shareholders and incorporate their opinions into management decision. However no case of exercise of the constitutional right of minority shareholders took place in 2007.

Employees can also involve themselves in the current management of the company through participating the business briefing sessions and meetings at which they are free to present ideas and opinions regarding the opera-

### [BOD Composition]

Position	Name	Role	Trade relations with the firm
CEO	Kim Soon Taek	Chief Executive Officer, Business administration	-
Int. dir.	Kim Jea Wook	Head of PDP Div.	-
Int. dir.	Lee Jung Wha	Head of CRT Div.	-
Ind. dir.	Jung Gap Young	Vice president of Yonsei Uni.	-
Ind. dir.	Choi Byung Yoon	CEO of C&S Tax and Accounting	-
Ind. dir.	Bae Young Gil	Law Prof. at Bukyung Uni.	-
Ind. dir.	Jang Jun Chul	General business management	-

\* Current directors of Samsung SDI are all males aged 50's and above

tion of the company. Negotiations of issues which may affect employees through their manifestation are conducted through the labor council, which is comprised of the management as well as labor representatives.

## Pay for Directors and Executives

The wage level of directors is determined and approved at the annual shareholder meetings. KRW 12 billion was appropriated for awarding in 2007, KRW 2.6 billion of which was actually paid. For executives, payment is made in accordance with rules and standards outlined in BOD after determination of their contribution to the corporate business performance.

## Shareholders

Samsung SDI is publicly listed on the Korean Stock Exchange as an electric and electronic devices business. The total number of shares issued as of December 31, 2007 was 48,136,237. The major shareholder of Samsung SDI is Samsung Electronics possessing 19.68% of the equity. It is followed by the Korean Investment Trust and the National Pension Corporation with 9.13% and 1.91% respectively.

For more details, see the Investors tab at [www.samsungsdi.com](http://www.samsungsdi.com)



# Risk Management

The Internal and external business environment is a kaleidoscopic one that can change dramatically in a short period of time. Its potential to corner a business into extreme difficulty is so immense that these days business competitiveness is judged by how structured and efficient system a company is equipped with to cope with such changes. Samsung SDI has incorporated risk management into overall business management, based on which the company prepares risk management methods, and assesses and applies them to the day-to-day operations of the company.

## Devising Management Strategies with Risk Factors in Mind

When devising business strategies, Samsung SDI takes into account various risk factors including market changes, exchange rate fluctuations, raw material costs and environmental regulations and calculates their potential impact on the business. At the same time, the company sets up plans to neutralize risks and puts them into action.

## CRO(Chief Risk Officer) System

Natural disasters, terrorism, and conflagrations can inflict massive damages to a company, as they may threaten the continuation of a business. The CRO system was introduced to deploy measures to prevent and eliminate risks threatening social, environmental and safety aspects of the company. The CRO system enables the company to shift the operation mode to a state of emergency and enables control and remediation of the situation to take place quickly so that normal business can be recovered as soon as possible. The Corporate Director of HR is currently co-executing the role of CRO and directly reports its activities to the CEO and the Management Committee.

## Internal Control System

Samsung SDI operates its own electric and electronic system of internal control. The internal control system is devised to enhance reliability and

transparency of information related to the company's business activity. The system includes the Internal Accounting Management Scheme devised to enhance the credibility of financial information, as well as other accreditation and evaluation procedures that protect the company's assets and prevent corruptive activities from taking place within the firm. Through this system the company is able to fulfill its legal certificatory obligations regarding the reasonability of accounting and management information, and proactively looks over all general internal activities to ensure that they take place in full compliance with legalities, policies and procedures.

## Plant Operation Approval System

Samsung SDI runs a Plant Operation Approval System to enable management of potential risk factors that may arise when developing new business opportunities and making investments into the incubating businesses. The Plant Operation Working Committee is centered around nine key departments including development, purchase, quality, manufacturing, environmental safety and utility which monitor the progress of the construction of new or additional production lines and eliminates risk factors proactively from the project planning stage to the very initiation of commercial production. Samsung SDI minimizes its trial and error in the investments it makes through the Plant Operation Approval System and continuously monitors whether standards and processes applicable to investments are being followed and applied correctly.

### [Examples of Plant Operation Approval System]

- **AMOLED production line approval(Oct. '07)** : Nine-category audit of the world's-first AMOLED commercial production line
- **Premium PDP production line approval(Oct. '07)** : Establishment of Risk Management System based on a standardized business settlement and Early Warning Systems.

### [CRO Activities]

- **Utility Inspection(Dec. '07)** : Joint assessment by four domestic sites for the prevention of utility facility failures and malfunction.  
Plan to extend procedure to overseas sites from 2008 to 2009
- **Working Environment Diagnosis(Apr. '07)** : Measurement and evaluation of exposure of operators to potentially hazardous factors in the workplace, with the aim of creating a safe and clean working environment through appropriate improvement of facilities
- **Safety inspections at home and abroad(Mar. '08)** : Safety inspection of a sites' fire extinguishing facilities, disaster prevention measures, management of blind spots and day-to-day management activities with the aim of preventing incidents of fire and safety breaches.



# Eco-value 2010

Eco-value 2010 is the grand aim of Samsung SDI in achieving environmental sustainability. Samsung SDI was unsuccessful in achieving some of its environmental targets in 2007. Actually the continuous business restructuring and improvement efforts enabled the reduction in raw materials usage and energy consumption as well as waste generation. However the vast amount of construction waste was generated in the process. Moreover as new products underwent transitory periods in the process leading up to normal production, and as revenues suffered from market price falls, eco-friendly manufacturing indicators, being revenue dependent, demonstrated a relatively poor performance period. Despite unexpected problems and rapid changes in business environment, Samsung SDI remains faithful to its original intentions and hopes to present a better performance to our stakeholders in our next report.

## [Eco-Friendly Product]

Level : / good → Average \ Poor

Indicator	Description	Goal(2007)	Achievement(2007)	Level	Goal(2008)	Goal(2010)
Removal of toxic chemicals from products	Removal of Six RoHS materials, PVC, halogenated flame retardants	<ul style="list-style-type: none"> <li>To make PDP Lead-free</li> <li>Introduction of RoHS plus products</li> </ul>	<ul style="list-style-type: none"> <li>Development of lead-free PDP Panels</li> <li>Introduction of RoHS plus products</li> </ul>	/	<ul style="list-style-type: none"> <li>PVC free</li> <li>BFRs free</li> <li>Preparation for REACH</li> </ul>	Voluntary and continuous removal of hazardous materials in products
Eco-design	Continuous removal of polluting aspects of products through eco-design	<ul style="list-style-type: none"> <li>Development of product eco-efficiency indicators</li> </ul>	<ul style="list-style-type: none"> <li>In development Due to be covered by PLMs currently being developed</li> </ul>	→	<ul style="list-style-type: none"> <li>Use eco-design process in preparation for EuP</li> </ul>	Development of environment efficiency indicators and continuous efficiency improvement

## [Eco-Friendly Manufacture]

Indicator	Description	Baseline	Goal(2007)	Achievement (2007)	Level	Goal(2008)	Goal(2010)	Remarks
Reduction of greenhouse gas emission	Reduction of greenhouse gas emission(per sales)	2002	5%	△ 25%	\	2%	15%	Modification of the carbon emission factor
Reduction of water usage	Reduction of water usage (per sales)	2001	26%	△ 20%	\	△ 20%	30%	PDP/AMOLED water use increase
Reduction of waste	Reduction of waste generated(per sales)	2001	15%	△ 38%	\	40%	30%	Construction waste generation from Busan and Suwon business restructuring, Lack of local PDP Glass recycling capacity
Enhancement of recycling rate	Improvement of waste recycling rate	-	87%	84%	→	82%	90%	
Decline of landfill rate	Decline of landfill rate of wastes	-	7%	9%	\	10%	1%	
Reduction of toxic material use	Reduction of toxic material usage(per sales)	2001	△ 250%	△ 291%	\	△ 248%	30%	Business restructuring (CRT → PDP, AMOLED)

## [Eco-Friendly Communication]

Indicator	Description	Goal(2007)	Achievement (2007)	Level	Goal(2008)	Goal(2010)
Enhancing the suppliers' environmental management capability	Providing assistance and guidance to improve environmental management capability	<ul style="list-style-type: none"> <li>Guideline revision</li> <li>Certification renewal of suppliers</li> </ul>	<ul style="list-style-type: none"> <li>Revised</li> <li>100%(167/167)</li> </ul>	/	<ul style="list-style-type: none"> <li>Certification renewal in progress</li> <li>Operation of the S-partner maintenance course</li> </ul>	Certification of environmental management quality of social and environmental aspects, operation of support systems

\* Indicators related with Eco-friendly manufacturing are limited to domestic performance within Korea. The coverage will expand to overseas sites in the future.

[52](#) Economic/Social Performance

[53](#) Environmental Performance

[54](#) Financial Statements

[57](#) Independent Assurance Statement

[59](#) GHG Verification Opinion

[60](#) GRI Content Index

[61](#) Glossary

[63](#) Recognitions

# ECONOMIC · SOCIAL PERFORMANCE

Indicator		2003	2004	2005	2006	2007
Sales <sup>1)</sup> (unit : KRW billion)		7,198	9,322	7,883	6,650	5,149
Current net income <sup>1)</sup> (unit : KRW billion)		649	742	242	89	(592)
Current ratio <sup>1)</sup> (unit : %)		150.03	153.15	184.83	149.70	182.12
Liability ratio <sup>1)</sup> (unit : %)		52.70	50.0	41.72	43.62	49.91
Government support(unit : KRW billion)		111	158	101	64	27
Local sourcing ratio(unit : %)		58.4	60.1	62.4	65.5	62.2
Employment(unit : people)		26,276	28,506	27,882	28,168	25,229
Region	Korea	8,296	10,064	10,045	11,449	10,618
	Asia(Excl. Korea)	12,807	13,515	13,591	13,554	12,502
	Europe	2,242	2,219	1,785	1,188	663
	America	2,931	2,708	2,461	1,977	1,446
Type	Regular	25,205	27,120	26,738	27,509	24,385
	Contractual	115	108	152	175	178
	Outsourced	956	1,278	992	484	666
Turnover <sup>2)</sup> (unit : %)		21.4	21.4	22.3	26.8	34.4
Region	Korea	8.0	6.6	8.3	7.8	12.1
	Asia(Excl. Korea)	25.9	24.7	26.7	33.6	49.3
	Europe	23.1	28.4	26.9	81.8	88.4
	America	39.5	56.1	53.0	56.7	50.6
Gender	Female	22.7	22.3	25.5	33.3	49.1
	Male	20.4	20.8	19.7	21.6	23.7
Age	Under 30	27.4	27.2	28.6	30.9	44.2
	30~50	10.4	10.4	11.2	17.3	17.4
	Above 50	13.4	15.5	15.4	121.4	45.4
Per capita hours trained(unit : H) *Korea only		104	107	144	185	110
Position	Executives	N/C	N/C	N/C	25	8
	Senior managers	N/C	N/C	N/C	232	151
	Junior employees	N/C	N/C	N/C	173	99
Injury rate(unit : total injury count/total hours worked × 200,000)		0.53	0.43	0.32	0.29	0.14
Region	Korea	0.09	0.06	0.05	0.08	0.05
	Europe	1.54	1.27	0.87	0.42	0.46
	America	2.13	1.37	0.84	1.26	0.55
	Asia(Excl. Korea)	0.32	0.39	0.36	0.29	0.13
Absentee rate(unit : total absent days/total hours worked × 200,000)		N/C	N/C	N/C	25.33	5.82
Region	Korea	5.92	5.50	59.32	5.99	4.20
	Europe	N/C	N/C	N/C	17.77	19.69
	America	N/C	N/C	N/C	11.08	30.92
	Asia(Excl. Korea)	N/C	N/C	N/C	42.10	3.08
Matching grant(unit : KRW million)		460	736	861	946	564
Employees		230	368	430	473	423
Company		230	368	430	473	141
Cumulative numbers of free eyesight recovery operation beneficiaries (unit : people) *Korea only		85,887	95,416	104,636	110,499	120,672

## ◎ Notes Related to Economic and Social Data Generation

- 1) Data after 2005 were re-classified in respect of the new accounting standards(Refer to page 56 Accounting Standard Changes And the Reason).
- 2) The incorrect turnover data on the last report has been rectified in this report.

# ENVIRONMENTAL PERFORMANCE

	Indicator	Scope	Unit	2002	2003	2004	2005	2006	2007	
Input	Energy	Global	TJ	9,540	9,633	10,933	10,898	10,318	9,455	
			GJ/KRW 100 million	143.80	133.82	117.28	137.78	155.16	183.63	
		Korea	TJ	2,713.18	2,808.51	3,468.50	3,683.71	3,675.79	4,156.48	
			GJ/KRW 100 million	59.26	58.76	56.66	64.41	74.90	109.60	
	Water	Global	kilo ton	17,574	16,816	18,002	18,742	17,449	15,384	
			kilo ton/KRW 100 million	0.26	0.23	0.19	0.24	0.26	0.30	
Korea		kilo ton	5,571	5,284	5,355	6,945	6,591	6,857		
		kilo ton/KRW 100 million	0.12	0.11	0.09	0.12	0.13	0.18		
Toxic Chemicals <sup>1)</sup>	Korea	ton	9,900	12,021	21,688	40,666	42,060	34,286		
		ton/KRW 100 million	0.22	0.25	0.35	0.71	0.86	0.90		
Output	Greenhouse Gas	Global	t-CO <sub>2</sub> e	N/C	N/C	N/C	N/C	1,152,052	1,065,843	
			t-CO <sub>2</sub> e/KRW 100 million	N/C	N/C	N/C	N/C	17.32	20.70	
		Korea	t-CO <sub>2</sub> e	583,446	622,184	724,963	730,043	612,971	603,500	
			t-CO <sub>2</sub> e/KRW 100 million	12.74	13.02	11.84	12.77	12.49	15.46	
	Air Pollution <sup>2)3)</sup>	NO <sub>x</sub> (Korea)	kg/KRW 100 million	0.068	0.073	0.035	0.200	0.080	0.167	
		SO <sub>x</sub> (Korea)	kg/KRW 100 million	0.044	0.029	0.013	0.009	0.003	N/A	
		Dust(Korea)	kg/KRW 100 million	1.011	0.780	0.492	0.340	0.563	0.428	
	Ozone Depleting <sup>4)</sup> Substances	Global	kgCFC11eq	13,587	17,235	17,352	19,392	15,290	10,068	
			kgCFC11eq/KRW 100 million	0.20	0.24	0.19	0.25	0.23	0.20	
	Wastewater <sup>5)</sup>	Global	ton	11,299,710	11,303,015	12,261,189	12,703,178	12,434,419	10,742,076	
			ton/KRW 100 million	170.33	157.03	131.53	160.59	186.98	208.62	
		Korea	ton	4,670,631	4,519,111	4,766,506	5,691,281	5,620,992	5,780,350	
			ton/KRW 100 million	102.01	94.56	77.86	99.52	114.54	152.42	
	Water Pollution <sup>3)</sup>	BOD(Korea)	kg/KRW 100 million	0.841	0.726	0.450	0.471	0.398	0.416	
		COD(Korea)	kg/KRW 100 million	1.654	1.430	0.893	1.235	1.250	1.683	
		SS(Korea)	kg/KRW 100 million	0.556	0.438	0.289	0.205	0.193	0.217	
Waste	Global	ton	132,304	157,509	163,960	140,484	136,504	120,880		
		ton/KRW 100 million	1.99	2.19	1.76	1.78	2.05	2.35		
	Korea	ton	59,234	59,872	62,706	58,092	65,334	64,944		
		ton/KRW 100 million	1.29	1.25	1.02	1.02	1.33	1.71		
	Recycling rate(Global)	Korea	Recycling rate(Global)	%	77.44	79.55	79.22	84.16	84.32	84.87
			Recycling rate(Korea)	%	74.07	71.69	72.30	82.55	86.05	84.29
			Landfill rate(Global)	%	16.83	13.64	13.55	9.56	9.05	8.73
			Landfill rate(Korea)	%	22.53	23.47	21.92	11.86	7.45	8.73

## Notes Related to Environment Data Generation

- 1) Countries have their own management methods of toxic chemicals and for this reason it was hard to establish a universal management criteria. This is why this report covers data for Korea only. To resolve this issue, Samsung SDI plans to develop and apply internal management indicators in the future.
- 2) Air pollutant emission data are different from those recorded in the previous report, because global data were taken for domestic data in the previous report.
- 3) Air and water pollutant emission data are applicable only to Korea as some overseas subsidiaries operate under a different pollution regulations, and emission measurement cycles are different from Korean standards. Such differences made global calculation of annual emissions difficult. To resolve this issue, Samsung SDI plans to develop universal management indicators for use across the company.
- 4) The unit of ozone depleting substance emission which was expressed in per sales was represented incorrectly in the last report and has been rectified in this report.
- 5) Waste water volume refers to the volume of water treated after use in manufacturing processes. It does not include sewage. However Suwon head office and the Corporate R&D Center in Giheung process industrial wastewater together with sewage so their data are inclusive of general sewage.

For more details of each business site, see the Sustainability tab at [www.samsungsdi.com](http://www.samsungsdi.com)

# CONSOLIDATED FINANCIAL STATEMENTS

## Consolidated Balance Sheet

The 38<sup>th</sup> fiscal year : December 31, 2007  
 The 37<sup>th</sup> fiscal year : December 31, 2006

Samsung SDI Co., Ltd and subsidiaries

(unit : KRW million)

		38th(Current)	37th(Previous)
		Amount	Amount
<b>[Assets]</b>			
	I . Current Assets	2,284,617	2,385,708
	(1) Quick Assets	1,788,679	1,807,103
	(2) Inventories	495,938	578,605
	II . Non-Current Assets	4,832,055	4,502,917
	(1) Investment Assets	1,646,479	945,135
	(2) Tangible Assets	2,898,303	3,269,575
	(3) Intangible Assets	94,119	86,351
	(4) Other Non-Current Assets	193,154	201,856
	<b>Total Assets</b>	<b><u>7,116,672</u></b>	<b><u>6,888,625</u></b>
<b>[Liabilities]</b>			
	I . Current Liabilities	1,254,475	1,593,706
	II . Non-Current Liabilities	1,114,996	498,600
	<b>Total Liabilities</b>	<b><u>2,369,471</u></b>	<b><u>2,092,306</u></b>
<b>[Shareholders' Equity]</b>			
	I . Capital Stock	240,681	240,681
	II . Capital Surplus	1,287,595	2,289,528
	III . Capital Adjustment	(208,329)	(219,046)
	IV . Accumulated Other Comprehensive Income	661,727	109,620
	V . Retained Earnings	2,645,768	3,264,312
	VI . Minority Interests	119,759	111,224
	<b>Total Shareholders' Equity</b>	<b><u>4,747,201</u></b>	<b><u>4,796,319</u></b>
	<b>Total Liabilities and Shareholders' Equity</b>	<b><u>7,116,672</u></b>	<b><u>6,888,625</u></b>

This consolidated financial statement is a summary of validated data which underwent review and audit by Samil PricewaterhouseCoopers.

For details, please visit the electronic disclosure system in Financial Supervisory Service or contact Samsung SDI through the VOC system link on the Samsung SDI webpage.

※ The FSS electronic disclosure system : <http://dart.fss.or.kr>

# CONSOLIDATED FINANCIAL STATEMENTS

## Consolidated Income Statement

The 38<sup>th</sup> fiscal year : Year Ended December 31, 2007  
 The 37<sup>th</sup> fiscal year : Year Ended December 31, 2006

Samsung SDI Co., Ltd and subsidiaries

(unit : KRW million)

	38th(Current)	37th(Previous)
	Amount	Amount
I . Sales	5,149,044	6,650,053
II . Cost of Sales	4,869,408	5,691,847
III . Gross Profits	279,636	958,206
IV . Selling and Administrative Expenses	852,204	827,683
V . Operating Profits	(572,568)	130,522
VI . Non-Operating Income	430,691	251,416
VII . Non-Operating Expenses	524,918	283,424
VIII . Ordinary Profits	(666,795)	98,515
IX . Net Income Before Income Taxes	(666,795)	98,515
X . Income Tax Expenses	(63,644)	(3,564)
XI . Net Income	(603,151)	102,079
1. Net Income of Controlling Company	(592,183)	89,345
2. Net Income of Minority Interests	(10,968)	12,734

This consolidated financial statement is a summary of validated data which underwent review and audit by Samil PricewaterhouseCoopers.

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# CONSOLIDATED FINANCIAL STATEMENTS

## Consolidated Cash-Flow Statement

{ The 38<sup>th</sup> fiscal year : Year Ended December 31, 2007  
The 37<sup>th</sup> fiscal year : Year Ended December 31, 2006

Samsung SDI Co., Ltd and subsidiaries

(unit : KRW million)

	38th(Current)	37th(Previous)
	Amount	Amount
<b>I . Cash Flow from Operating Activities</b>	383,657	974,920
1. Net Income	(603,151)	102,079
2. Addition of Expenses Not Involving Cash Outflows	1,117,787	807,121
3. Deduction of Revenues Not Involving Cash Inflows	(165,137)	(46,840)
4. Changes in Assets and Liabilities Resulting from Operations	34,159	112,560
<b>II . Cash Flow from Investing Activities</b>	(317,493)	(1,134,464)
1. Cash inflows from Investing Activities	378,394	247,997
2. Cash Outflows from Investing Activities	(695,887)	(1,382,461)
<b>III . Cash Low from Financing Activities</b>	(173,614)	307,830
1. Cash inflows from Financing Activities	604,867	843,973
2. Cash outflows from Financing Activities	(778,481)	(536,143)
<b>IV . Net Increase(Decrease) from Foreign Currency Translation</b>	28,109	2,037
<b>V . Net Increase(Decrease) in Cash and Cash Equivalents (I + II + III + IV + V)</b>	(79,341)	150,323
<b>VI . Cash and Cash Equivalents at the Beginning of the Year</b>	887,819	737,496
<b>VII . Cash and Cash Equivalents at the End of the Year</b>	808,478	887,819

This consolidated financial statement is a summary of validated data which underwent review and audit by Samil PricewaterhouseCoopers.

For details, please visit the electronic disclosure system in Financial Supervisory Service or contact Samsung SDI through the VOC system link on the Samsung SDI webpage.

※ The FSS electronic disclosure system : <http://dart.fss.or.kr>

### ⊙ Accounting Standard Changes And The Reasons

In accordance with the modifications in the Korea Generally Accepted Accounting Principle and the Korean Accounting Regulations Application Manifesto,

- The net income and loss of the consolidated entity are not broken down into the controlling company's and minority shareholder's returns but specified as a single item.
- Reporting of deferred corporate income tax is revised in relation to investment assets such as investment in equity of a subsidiary, the invested company with equity method, and joint ventures
- Assets stated in balance sheets are divided into current and non-current assets, and liabilities also into current liabilities and non-current liabilities. Capital is divided into capital stock, capital surplus, and accumulated other comprehensive income.
- Of the profit and loss statement, profits and losses generated from an ongoing businesses and from sale or closure of a business are specified separately. Special income and loss are to be excluded.

# INDEPENDENT ASSURANCE STATEMENT

## Introduction

Dear Samsung SDI stakeholders,

BSI and Sd3 have teamed up to create a multi-disciplinary assurance team with a broad range of skills and depth of experience providing a high level of competency for assurance engagements. For the third year running, Samsung SDI commissioned us to provide independent assurance of the Samsung SDI Sustainability Report.<sup>1)</sup>

The assurance followed the AA1000AS standard, based on the following principles:

- **Materiality** : Does the report provide sustainability information that enables its stakeholders to make informed judgments, decisions and actions about the company's management and performance?
- **Completeness** : To what extent can Samsung SDI identify and understand the material aspects of its sustainability performance?
- **Responsiveness** : Has Samsung SDI responded appropriately to the expectations and perceptions of its stakeholders? Is it meeting its policy and standards commitments? Is each material issue being covered adequately?

Additionally, the GRI content index on page 60 was checked to ensure it accurately referenced the GRI G3 reporting guideline standard disclosures.

A third party application level check was conducted.

### Scope:

The assurance covered the whole report and focussed on systems and activities during the calendar year 2007 at selected Samsung SDI sites in Korea with the following exceptions:

- The consolidated financial data on page 54-56 are based on previously published and audited financial data. We checked that this data was consistently reproduced.

The systems and activities used to produce consolidated global data have been assured as has data from selected Korean sites. Primary data from production sites outside Korea has been desk reviewed and not verified at site level. The additional information provided at the Samsung SDI website was not assured.

This statement was prepared in English and translated into Korean.

### Assurance Level:

The assurance provided is limited, as defined by the scope and methodology described in this statement.

### Responsibility:

The sustainability report is the responsibility of Samsung SDI. Our responsibility is to provide an independent assurance statement to stakeholders giving our professional opinion based on the scope and methodology described.

### Independence:

The assurance was carried out in line with the BSI Fair Trading Code of Practice and Sd3's Assurance Code of Conduct. ([www.sd3-global.com/assurecode.html](http://www.sd3-global.com/assurecode.html))

## Methodology

We assessed 198 assertions and data sets included in the report and the systems and processes used to manage and report these using the following methods:

- Reviewed report, internal policies, documentation, management and information systems
- Visited the following sites in Korea: Samsung SDI's headquarters in Suwon, manufacturing sites in Cheonan and the Corporate R&D centre
- Carried out 17 interviews with staff involved in sustainability management, report preparation and provision of report information at Korean sites
- Checked systems, initiatives and documents referred to in the report
- Independently checked materiality using the AccountAbility five-part materiality test, including a brief check on media coverage.
- Followed data trails to initial aggregated source and checked sample data to greater depth during site visits - data selection was based on assurers' assessment of the most material metrics and the risk of errors.

<sup>1)</sup> The team of seven assurers was composed of experts experienced and trained in a range of sustainability, environmental and social standards including AA1000AS, ISO14001, SA8000, GHGEV, OHSAS18001 and ISO9001. BSI is a leading global standards and assessment body founded in 1901, Sd3 is a leading sustainability consultancy with over 10 year's experience in reporting and assurance.

## Our Opinion

Based on the activities undertaken, and subject to our opinion below, we found the report to be a true and fair reflection of Samsung SDI's sustainability policies, strategy, management systems and performance. As well as our findings and recommendations given here, we have provided a management report to Samsung SDI which contains additional detail.

### Materiality

We found that the report covered Samsung SDI's material issues.

We commend the inclusion for the first time of a systematic materiality process using stakeholder feedback to identify and prioritise sustainability issues. This process has been used to good effect to focus this year's report more on the key materiality issues, making the report shorter and more stakeholder focussed. The materiality process would benefit from further integration of established stakeholder engagement channels, such as customer feedback. We also recommend that the materiality process be reviewed at higher levels within the company, e.g. SM committee or BoD, and for the company to further include stakeholders in the materiality assessment process.

### Completeness

Samsung SDI has effective systems to measure, monitor and manage sustainability issues. We found the department responsible for managing sustainability (SM Office) competent and that the electronic Sustainability Management Initiative System (SMIS) provided a good integrated system for measuring and monitoring sustainability issues. We also identified commitment and competency among employees involved with these systems and processes.

We were pleased to see that the S-Partner system has been improved by reflecting social indicators in supply chain management. We strongly recommend further development of social Key Performance Indicators (KPIs) and targets.

We also strongly recommend further development of sustainability governance (clear responsibility within the BoD) and the linkage between sustainability, Samsung SDI's strategy and business planning activities, based on a systematic understanding of the risks and opportunities for the business. This could be enhanced by ensuring the outcomes of the materiality process are embedded into management decision-making processes.

### Responsiveness

The development of a systematic materiality process this year enables us to provide greater assurance that Samsung SDI has in general responded appropriately to material issues.

We have seen good progress in providing information to help stakeholders understand the relative sustainability impacts of its products and the link to future product strategies particularly in relation to eco-product design. We recommend that in the future the report should provide clearer information on how the growth of these products together affect the main sustainability issues identified and the company's plans to manage these.

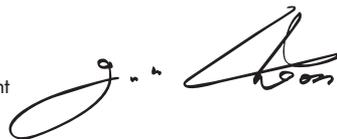
While Samsung SDI's restructuring is clearly stated, we believe the company could have been more responsive by further reporting on the way Samsung SDI manages this issue and related sustainability impacts-in particular on the workforce, local suppliers and the local communities affected.

### GRI Reporting

We have confirmed that the GRI indicators referenced in the GRI index pages are reported either partially or fully. In our opinion the reports meet the criteria within the GRI G3 guidelines to an application level of B+.

19th May 2008

JK Cheon, President  
BSI Korea



Jason Perks, Director  
Sd3 Ltd.



# GHG VERIFICATION OPINION

## **Samsung SDI Co., Ltd.**

Busan Plant, Suwon Plant, Cheonan Plant, Giheung Corporate R&D Center, SSDI, DSDI, SSSD, TSDI, TSDIM, SDIB, SDIM, SDIHU, and SDI(M).

### Scope:

The annual GHG emissions are for 2007 calendar year. The physical scope is within the boundary of the 13 sites mentioned above. GHG emissions for SCOPE 1(Direct-emissions from the plant), SCOPE 2(Indirect-energy related) and partially SCOPE 3(Indirect-emissions from outsourced activities) as defined in WBCSD/WRI GHG protocol Chapter 4 "Setting Operational Boundaries".

### Data Verified:

The Green House Gas Emissions for the period of 2007 calendar year as follows:

Calendar	Year 2007
t-CO <sub>2</sub> e	1,065,843

### GHG Criteria & Protocols used for Verification:

The verification was carried out at the request of the Samsung SDI Co., Ltd. using:

- The Kyoto Protocol to the United Nations Framework Convention on Climate Change - 11December 1997.
  - The GHG Protocol of the WBCSD/WRI - Revised March 2004
  - IPCC Guideline for National Greenhouse Gas Inventories - Revised 2006
  - ISO14064 Part 1&3 - Issued 2006
  - BSI GHGEV Global Best Practice - Issued September 2003
- as the principal reference documents.

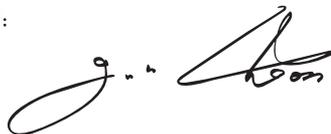
BSI Management Systems standard confidentiality arrangements were in force for all of the activities that were part of the verification.

### Verification Opinion:

As a result of carrying out verification in accordance with the protocols and the best practice mentioned above and the principles of ISO/IEC Guides 65, EA-6/01 and Guide 66, it is the opinion of BSI that:

- No material misstatement in the calculations was revealed, good record keeping was demonstrated and
- Data quality was considered acceptable in meeting the key international principles for greenhouse gas emissions verification.

Signed:



J K Cheon/BSI Korea President

Date : 24th May 2008

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MC4401/ISSUE1/SA/0102/UK/DP

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GRI Application Level													
		C		C+		B		B+		A		A+	
Mandatory	Self Declared			Report Externally Assured				 Report Externally Assured				Report Externally Assured	
	Third Party Checked												
Optional	GRI Checked												

# GLOSSARY

- AA1000 AccountAbility 1000
- BRICs Brazil, Russia, India and China
- FHD Full High Definition
- FPD Flat Panel Display
- GJ Giga Joule
- GRI Global Reporting Initiative
- GUI Graphical User Interface
- HCFC Hydro Chloro Fluoro Carbon
- ISO International Organization for Standardization
- MBTI The Myers-Briggs Type Indicator
- MOU Memorandum of Understanding
- PLM Product Lifecycle Management
- TJ Tera Joule
- VOCs Volatile Organic Compounds

## We would like to hear from you

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※ The VOC system at Samsung SDI website is available for you to express your opinions.



### Listening to You

We capture your invaluable opinions through the sustainability report.  
You can take part in our survey through the enclosed questionnaire of this report and the Sustainability tab at Samsung SDI website.

## RECOGNITIONS

For the reporting period, Samsung SDI was recognized as following;

2007	December	The 4th Korean New Growth Management Awards Presidential Award - 'Winner of most categories'	'Daily Economic Newspaper'
	October	2007 Eco-advancement and Production Cost Reduction Exhibition Awards Best Environmental Management Award	The Hungarian Environmental Management Council
	June	2007 Choong Nam Quality Management Awards 'Best Firm' - Large corporation category	Choong Nam Province, The Korean Standards Association
	March	Ethical Management Award	Corporate Ethics Society

## DJSI, Leader of the Electronic Equipment Industry

SAM is a corporate asset management and investment company based in Switzerland. SAM, along with Dow Jones of the US, is the creator of Dow Jones Sustainability Index(DJSI). SAM assesses top 10% of companies in each industry which are highly sustainable. DJSI is the average stock price of highly performing companies. SAM reviews economic, environmental, and social aspects of companies, and selects the best companies capable of delivering the most benefits to shareholders in the long term. Samsung SDI was selected into DJSI for four consecutive years, and was ranked the top sustainable company in the electronic equipment industry for three years from 2005.

