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THE NEW VALUE FOR TOMORROW

SK chemicals Sustainability Report 2013

THE NEW VALUE FOR TOMORROW

SK chemicals
Sustainability Report 2013

MATERIALITY MATTERS
Global Reporting Initiative™
AT THE TIME OF PUBLICATION THE G4-17 TO G4-27 DISCLOSURES WERE CORRECTLY LOCATED IN THIS G4 CONTENT INDEX AND FINAL REPORT.
2014

SK chemicals

About this report

This is the third and specialized sustainability report of SK chemicals with its corporate mission to promote human health and protect the environment. We strengthened the contents on our CSR strategies which are aligned with the materiality test and complied the report in accordance with the GRI G4 Guidelines.

Reporting period	• From January 1 to December 31, 2013(44th business year)
Reporting boundary	• Limited to domestic business sites: Company headquarters, R&D center, and five plants (Ulsan and Ansan, Osan, Cheongju (S HOUSE), Andong (L HOUSE)) • The Andong vaccine plant to be completed in 2014 was named L HOUSE and the synthetic drug plant in Cheongju was named S HOUSE • During the reporting period, there were no significant changes. However, this report contains some performances (e.g. sustainability certifications) of L HOUSE, which is to be completed and will start operation in 2014. • This report covers all entities included in the consolidated financial statements.
Reporting cycle	• Annually since 2012 (the latest reporting date: June 2013)
Reporting principles	• This report was prepared in accordance with Core option of the GRI (Global Reporting Initiative) G4 Guidelines. • The materiality test, an important part of defining report content, was conducted as suggested by the GRI G4 Guidelines.(A first for a Korean company. Refer to the back side) • See page 86 for the GRI Index • Financial data reported in this report are in accordance with K-IFRS (International Financial Reporting Standards Korea). The 7 core subjects of ISO 26000 and the 10 principles of UN Global Compact are reflected in this report.
Assurance	• Refer to page 90 for the third-party assurance report on this report and greenhouse gas emissions • Verification is independently conducted by an external agency. Every year, SK chemicals receive third-party assurance from external agencies to increase credibility of the report.
More information	• Sustainability Report can be downloaded from SK chemicals' **Official Homepage** www.skchemicals.com / **Environmental Management Homepage** www.skecoweb.com • Contact information **310, Pangyo-ro, Bundang-gu, Seongnam, Gyeonggi-do, Republic of Korea** **SK chemicals Safety and Environment TF Team** **Tel.** +82-(0)2-2008-2645 **Fax.** +82-(0)2-2008-2639 **E-mail.** ksnam@sk.com

THE NEW VALUE FOR TOMORROW

SK chemicals Sustainability Report 2013

2013 Sustainability Recognition

- Included in the DJSI KOREA for 4 consecutive years (SAM of Switzerland)
- Included in the Korea CSR 30 for the first time (Hankyoreh Newspaper)
- Ranked first in the chemical / pharmaceutical section for 3 consecutive years in Green Ranking (Joongang Ilbo/Sustinvest)
- B+ Grade in 2013 ESG Evaluation (Corporate Governance Service)
- Took part in the CDP for 4 consecutive years (CDP in the U.K.)
- Participated in KoBEX SM for 2 consecutive years (Institute for Industrial Policy Studies)

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A Message from CEO

Cheol Kim
CEO
SK chemicals

Dear Stakeholders,

I really appreciate your continued interest in and support on SK chemicals. This year, we have published our third sustainability report.
This year's report details our management's activities during the process of pursuing our corporate mission of promoting the health of humankind and protecting the environment of Earth. These activities are contributing to raising sustainability of the company and entire society within the economic, social, and environmental sectors.

We hope that this report correctly informs our external stakeholders such as shareholders, customers, and partners of the sincerity of SK chemicals' mission.
In addition, members of SK chemicals will be able to understand how the small effort made by us is organically connected and will crystallize into sustainable management activities and, furthermore, contribute to the implementation of our mission and visions.
SK chemicals' efforts to enhance its sustainability and realize its mission in 2013 can be expounded upon in three areas — products, culture, and the production process.

First,
we secured infrastructure needed to produce and sell sustainable products.

Sustainable products minimize resource use and waste generation during their production. In addition, sustainable products hinge less on petroleum-based materials and are free from harmful materials. SK chemicals concentrates on R&D capabilities to make all of its products sustainable and is pushing forward with the immediate commercialization of such sustainable products.
The Green Chemicals Biz. Division established 'Initz' as a subsidiary to assume full charge of PPS, a kind of super engineering plastic. Our technology for PCT, another kind of super engineering plastic, was selected as one of Korea's 10 best new technologies.
The Life Science Biz. Division is developing a cell-culture influenza vaccine and other various premium vaccines in the vaccine business sector, one of its growth engines. In terms of social security, the development of an influenza vaccine based on cell culture technology is consistent with a nation having an independent vaccine sector.

Second,
we are putting sustainable corporate culture into practice with the participation of our company's members.

In 2013, we ran the Green Point Program with all employees participating under the theme of "4G Donation Points". The company matched funds for points that employees accumulated and the money was spent on building 'Happiness Wells' in Kenya. This initiative raised awareness of the value of the environment and expedited our progress toward building a happy society.

Third,
we established a sustainable production process.

L HOUSE, a state of the art vaccine plant built in Andong, North Gyeongsang Province, obtained an LEED Gold grade, the world's first eco-friendly certification for a pharmaceutical plant. Our Ulsan Plant specializes in the production of eco-friendly chemical products. The plant successfully established the Ulsan Steam Highway Project, which contributes to reducing nation's greenhouse gas emissions and energy consumption through supplying surplus steam to companies outside. This is all done while enjoying positive economic effects and ultimately setting up a sustainable production system.

These efforts were duly rewarded.
In 2013, SK chemicals was recognized as a sustainably growing company as it was included in the DJSI KOREA for four years running, came in first in the chemical and pharmaceutical sector for the third consecutive year, and joined the CSR KOREA 30 for the first time.

Looking ahead, SK chemicals will continue to put its utmost effort into ceaselessly focusing on various social issues such as the environment, contribution to communities, and social and economic polarization.

We really aspire to see our small efforts help making society happier. We ask for your interest in our efforts and hope that you will join our efforts to bring happiness to society.

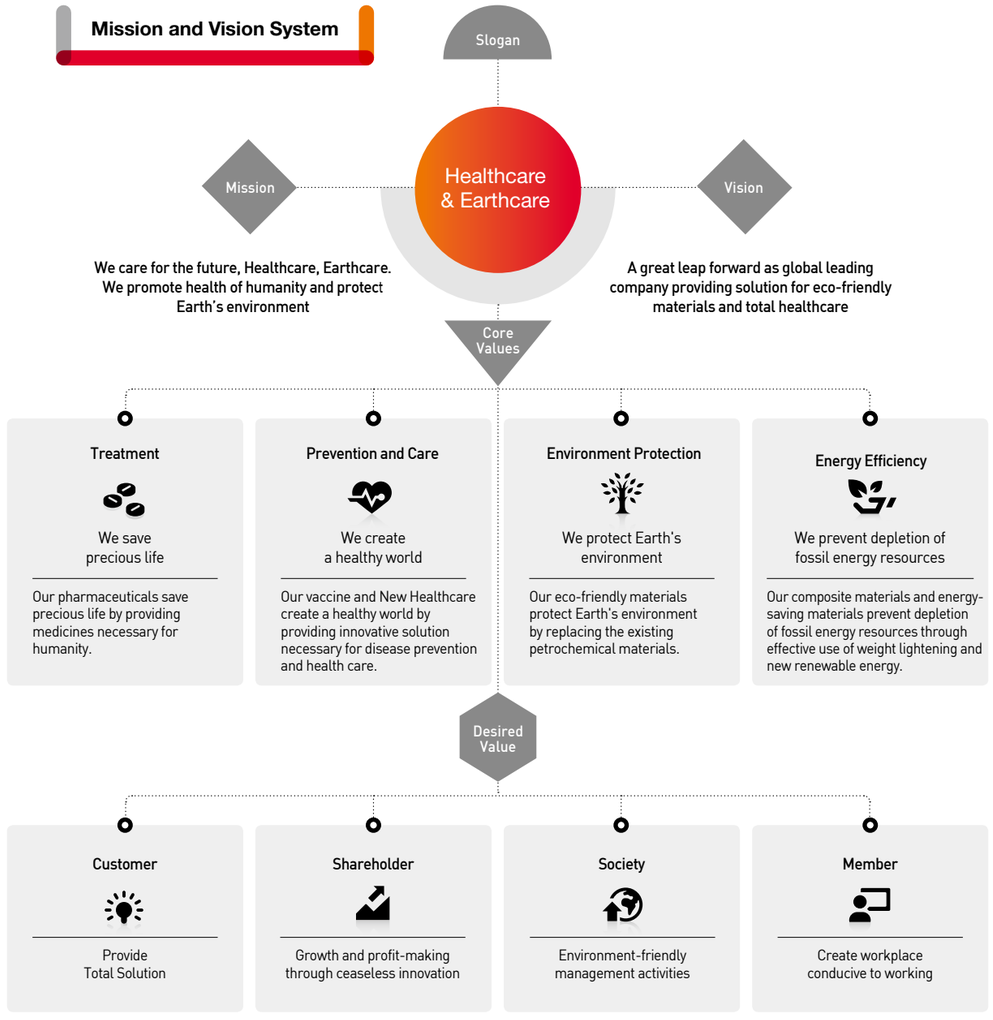
Thank you.

In-Serk Lee
CEO
SK chemicals

Corporate Profile

"Chemistry for nature, manufactured medicine(science) for human, SK chemicals' innovation for tomorrow will never stop." Since its founding as 'Sunkyong Fibers' in 1969, SK chemicals has pioneered change and innovation in the field of chemistry/life science. We have established our mission that (We promote health of humanity and protect Earth's environment) and reorganized our business structure into two major fields, namely Green Chemicals Biz. and Life Science Biz. SK chemicals, having set up a vision of "A great leap forward as global leading company providing solution to eco-friendly materials and total healthcare" provides chemical/life science products and solutions essential for humanity.

Mission and Vision System



Company History

1969
- Sunkyong Fibers Co. was established

1989
- Life Science Research Center was established

1999
- SUNPLA®, a third-generation platinum anticancer drug was developed for the first time in the world (domestic new drug #1)

2001
- SK chemicals Co. was established in Qingdao (a SK chemicals corporation in China)
- Eco-friendly and functional resin sky green (SKYGREEN®) was developed

2002
- JOINS®, anti-arthritis drug developed (first natural drug)

2006
- Biodiesel production technology was developed

2007
- Mvix®, an erectile dysfunction drug was developed
- Bio venture In2Gen was taken over

2008
- UB care health care industry was taken over

2009
- Biomass-containing polyester resin, ECOZEN® was released

2010
- The Company was listed on the DJSI KOREA for the first time as a Korean company.
- Prime biodiesel brand ECOPRIME® picked up Green Technology Award.
- ECOZEN® won the Korea's 10 new technology prize and the silver prize at the Korea Technology Award.
- SK chemicals was selected as an operator of a cell culture vaccine production facility in the final selection (Andong).

2011
- SK chemicals won the Grand Prize in the Green Management Sector of the Global Standard Management Awards.
- CDP Special Prize went to SK chemicals.
- SK chemicals received the Top Prize in the Chemical and Pharmaceutical Sector of the Green Rankings.
- SK chemicals launched the world's first film-type erectile dysfunction drug, Mvix® S.
- Eco Lab obtained a green building certificate (LEED Platinum) and won a prize at the Korea Architectural Culture Awards.
- ECOZEN® won a U.S. FDA certificate

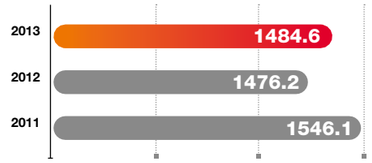
2012
- Environmental management Homepage(ecoweb) opened.
- SK chemicals broke ground for a cell culture vaccine production facility
- NBP601 (hemophilia treatment) was selected as one of Korea's 10 best new technologies and took home Knowledge Economy Minister's Prize

2013
- L HOUSE (vaccine plant in Andong) obtained a green building certificate (LEED Gold)
- SK chemicals PCT material was selected as one of Korea's 10 best new technologies
- SK chemicals established a joint venture, Initz, with Teijin and began to build PPS facilities.
- ECOZEN® and SKYGREEN® obtained a eco-friendly C2C certificate.
- Three flu cell culture vaccines enter Phase 3 of clinical tests.
- Included in the DJSI KOREA for 4 consecutive years
- Included in the Korea CSR 30 for the first time
- Ranked first in the chemical / pharmaceutical section for 3 consecutive years in Green Ranking

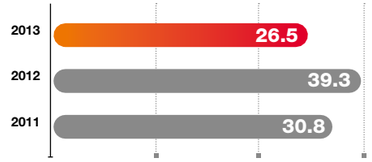
Management Performances

In 2013 SK chemicals posted 1,484.6 billion won in sales by enhancing profitability of its existing business and successfully entering new markets with Green Chemicals Biz. and Life Science Biz as two axles.

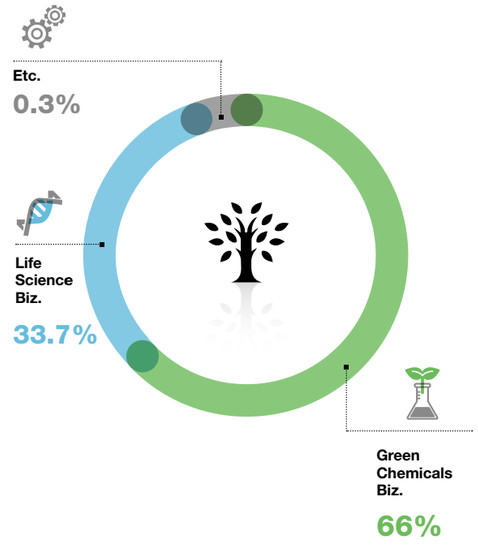
Sales
(Unit: billion won)



Net Income
(Unit: billion won)



Sales proportions by divisions



Global Networks

SK chemicals is operating its head office and 5 manufacturing plants(Ulsan, Ansan, Osan, Cheongju(S HOUSE), Andong(L HOUSE)). In Ulsan plant, fine chemical products(Green Chemicals Biz.) are manufactured; and Osan, Cheongju(S HOUSE), Ansan, Andong plants(L HOUSE) are in charge of manufacturing preventive and treatment pharmaceuticals(Life Science Biz.). Also being operated are manufacturing plants in Suzhou and Qingdao in China, and regional offices in Germany, Singapore, and U.S.

Subsidiaries and Invested Firms

SK chemicals

SK Gas
LPG import, storage, sales, etc.
45.5% ownership

SK Engineering & Construction
Construction and Engineering
28.25% ownership

TSK Water
Operating environment, including infrastructure 25% ownership

Green Chemicals Biz.

Domestic subsidiaries / Invested Firms

ENTIS
Ultraviolet hardening resin for powder coating Polyester resin 50% ownership

SK Syntec
Management consulting
100% ownership

Initz
PPS materials 66% ownership

SKCA
SKYGREEN®, ECOZEN®
100% ownership

Overseas subsidiaries / Invested Firms

SK chemicals (Qingdao)
Prepreg 100% ownership

SK chemicals (Suzhou)
Adhesive polyester, small PETG packaging
100% ownership

ST Green Energy
Biodiesel, trading, etc.
Composite materials, high-performance materials, bio-materials
50% ownership

Life Science Biz.

Domestic subsidiaries / Invested Firms

UB care
EMR Solution, medical equipment distribution, pharmaceutical marketing solution, E-commerce
44% ownership

Overseas subsidiaries / Invested Firms

SK Pharma Beijing
TRAST®, SK Albumin
100% ownership

SK chemicals GmBH
100% ownership constraints

SK chemicals Value Chain And Sharing Performances with Stakeholders

Mission

We care for the future Healthcare, Earthcare.
Promoting The Health Of Humankind
And Protecting The Environment Of The Earth

Vision

Taking Off To Become A Global Leading Company
Which Provides Total Solutions To Eco-Friendly Materials
And Health Care

Green Chemicals Biz.

Business Areas	Material	Research and Development	Production	Sales	Expected Social Effects
High-performance materials	Materials for eco-friendly, high-performance material	• Expansion of application of super engineering plastic and development of compounding technology • Construction of commercial PPS production facilities in progress	Ulsan Eco Lab	Super engineering plastic-based resin, compound products, coating & adhesive products	Building a differentiated high-performance resin market
Composite materials	Carbon fiber, resin	• Strategic business cooperation with Mitsubishi Rayon		Prepreg, high purity solvents, materials for pixels for displays, electrolytes for ultra-high capacity capacitors	
Biomaterials	Biological resources (Biomass)	• Upgrading physical properties of bioplastic		Biodiesel (ECOPRIME®), bio-plastics	Supplying eco-friendly products based on biomaterials
Polyester resin	Bio-resin	• C2C certification		PET resin, PETG resin, ECOZEN®	Supplying eco-friendly resin products

Life Science Biz.

Business Areas	Material	Research and Development	Production	Sales	Expected Social Effects
Pharmaceuticals	Pharmaceutical raw materials, natural substances	Investing 10% or more of sales in R&D	1.757 members are working Ansan plant Osan plant S HOUSE L HOUSE	Synthetic drugs, natural medicines, formulation technology-based products	Supplying drugs and contributing to people's health
Vaccines	Cells, viruses	Commercialization of premium vaccines in progress		Mandatory vaccines	Securing independent vaccine technology
New Health Care	Technology, infrastructure	Research on commercialization of genome analysis, building medical infrastructure		Personal genome analysis	Creating new value by predicting diseases beyond treating them

Distribution of value to stakeholders

Unit: billion won
Compared to sales, %

- Material costs and service fees: **695.4** (46.8%)
- Research and development expenses: **80.7** (5.4%)
- Labor cost: **115.1** (7.8%)

Sales **1484.6** (100%)

Customers

DIRECT ECONOMIC EFFECTS

- Shareholders and Investors: Dividends and interest costs 46.5(3.1%)
- Government: Corporate tax 13.1(0.9%)

INDIRECT SOCIAL EFFECTS

- Community donations 0.4(0.03%)

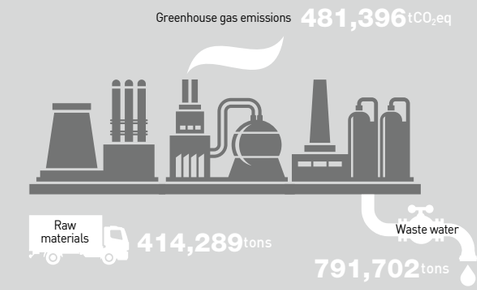
INDIRECT ENVIRONMENTAL EFFECTS

- Carbon Neutrality in 2020

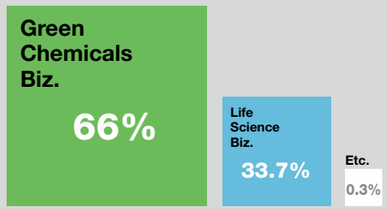
Green Point Program

The Green Point Program, an eco-friendly social contribution program which converts the eco-friendly activities of the Company and employees into money that is combined with the Company's matching funds. The money goes to social contribution activities.

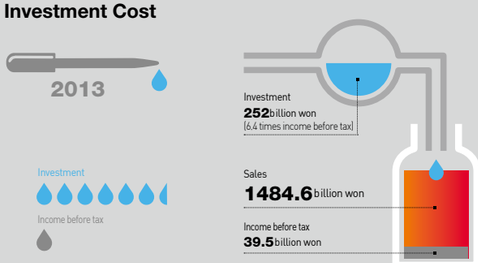
Material Flow



Proportion in Sales



Investment Cost

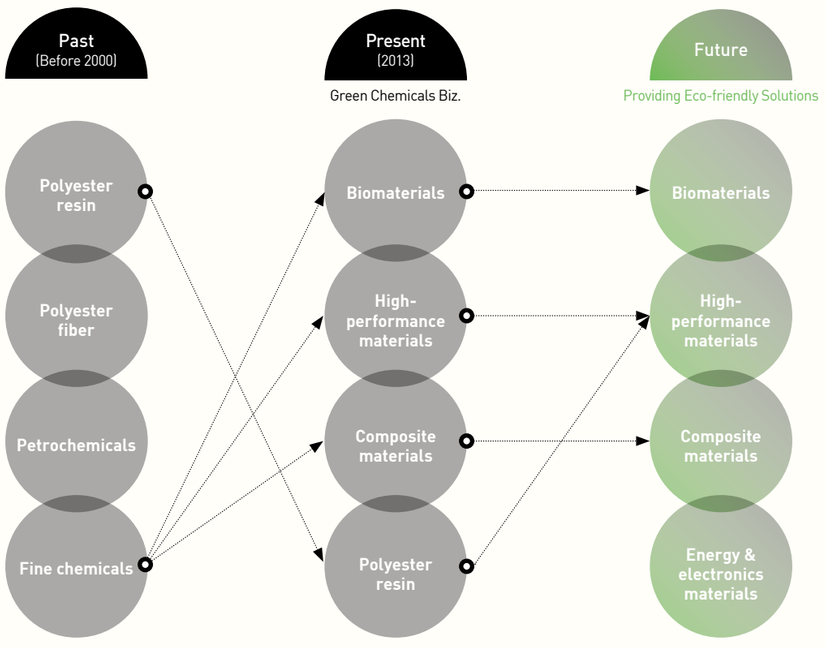


Business Division

Green Chemicals Biz.

The Green Chemical Business Division at SK chemicals seeks to become a provider of all eco-friendly materials and solutions, reinforcing its capability to produce eco-friendly and innovative products. An eco-friendly material has a minimal impact on the environment throughout its life cycle, its production process does not hog fossil fuels or it is natural. In order to concentrate on eco-friendly materials, SK chemicals has boldly restructured its polyester textile and petrochemical businesses, shifting its focus to the development of polyester resins and precision chemicals. The Company is now busy developing new composite and high-performance biomaterials for polyester resins and precision chemicals. In the future, the Company will combine its focus on polyester resins with the focus on developing high-performance materials and add energy storage materials to its business items to diversify its business into four sectors.

Evolution of SK chemicals' Chemical Businesses



Biomaterials

Biomaterials are made from ingredients derived from biological sources. Biomaterials provide effective alternatives for petrochemical counterparts, and can thus help delay the depletion of petroleum. Environmental pollution, climate change and the depletion of oil and natural resources are blamed on the use of fossil fuels. At the same time, these problems cut across the continuity of the chemical material industry that produces materials for human civilization. Thus, a new business paradigm is desperately needed at this time. Recently, bio-materials enhanced in price and quality competitiveness compared to the petrochemical material business. Higher demand from consumers who favor eco-friendly products and governments' policies to promote renewable materials are expected to help the bio-material market to grow 10% every year and finally reach around 80 trillion won in 2020. SK chemicals has been manufacturing ECOPRIME®, a biodiesel derived from palm oil since 2008. SK chemicals is seeking to expand its market into pharmaceuticals, fine chemicals, textiles, automobiles, electronics and consumer goods by developing new business in the bio plastic and biochemical sector.

Biodiesel

Biodiesel is a methyl ester composite obtained by reacting natural animal or botanical fat with methanol. This eco-friendlier option can be used in cars without modifying the existing diesel engines. The fuel has been marketed in Europe, the United States, and Southeast Asia, since the 2000s. A project to popularize biodiesel was launched in Korea in 2002. At the moment, SK chemicals is supplying diesel containing 2% biodiesel (BD2) with 77% or more of biodiesel dissolves in its natural state in just 28 days. This is a great fuel for ships, which can be discharged into the surrounding waters and yet does not cause any pollution. The carbon dioxide that biodiesel emits is absorbed again by oil plants. An article in Chemistry Journal published in June 2010 suggests that each ton of biodiesel reduces carbon dioxide emissions by 2.2 tons throughout the entire plant life cycle from the plant's growth to its consumption as a fuel. SK chemicals has also developed an original manufacturing process that uses by-product from palm oil manufacturing as an ingredient for the biodiesel, ECOPRIME®. This new diesel has been in circulation on the Korean market since 2008. Thanks to the reliable supplies of the raw material from ST Green Energy, a Singapore-based subsidiary of SK chemicals, the Company has been able to maintain competitive price for ECOPRIME® and made it the No. 1 biodiesel brand in Korea.

Bio-plastics and Bio-chemicals

Bio-plastics and Bio-chemicals are based on biomass, a renewable material such as plant based resources and produced through a chemical and biological process. They can replace existing petrochemical-based products and be used for various purposes thanks to their strong applicability.

SK chemicals has chosen eco-bioplastic and biochemical products, which are environment-friendly and highly suitable to the human body, as candidates for new growth engines; and is concentrating on product development and commercialization by applying the existing income and expenditure, and long experience and technological abilities in the field of specialty chemicals. Bioplastics, developed with independent technology by SK chemicals, being differentiated products with physical merits compared to existing petrochemical and competitive bio-materials, are readily applied to higher value-added markets, such as functional film, high-quality packing sheet, household accessories, residential decorations, cosmetics container, stationery, textile, automobile, and electronic goods. Moreover, we are conducting consistent technical development and active technical cooperation with outside firms in order to have a more diverse product portfolio and to secure quality and price competitiveness.

Qs and As : SK chemicals' Bio-plastic

Q How does bio-plastic differ from other polymers?
A Bio-plastic is derived from an origin fundamentally different from the petrochemicals of other polymers. Bio-plastic is obtained by fermenting microbes, and sugars from corns, sugarcanes, and other such plants.

Q What distinguishes SK chemicals' bio-plastic from other bio-plastic?
A SK chemicals' bio-plastic, unlike other bio-plastic, is based on sugars derived from non-genetically modified organisms (GMO), more specifically, plant sources. The fact that the ingredients for SK chemicals' bio-plastic come from non-GMO and non-grain plant sources, makes it a much safer choice with respect to food security. SK chemicals' advanced polymer processing technology enables it to preserves bio-plastic's superior flexibility and durability that overcome the limits of other bio-plastic.

High-Performance Materials

High-performance materials consist of super engineering plastic, SKYTRA™, a compound brand, and SKYBON®, a polyester resin for adhesives. Polyphenylene sulfide (PPS) resins, which SK chemicals has succeeded in developing without the use of harmful substances, such as chlorine, form a super-engineering plastic that is light yet durable in shock and heat. The demands for this material is increasing, especially for manufacturing electronics and automobiles. Chlorine is used as a chemical material for plastics such as PVC or as a bleacher and disinfectant. More and more Manufacturers in the United States and Europe are pressured to find alternatives, since chlorine is classified as a harmful chemical. For electric & electronic industries, strict regulatory standards are applied since chlorine can cause malfunction.

For sufficient production of PPS whose market is expected to grow at an annual rate of 7% until 2020, SK chemicals has established Initz, a joint venture, with Teijin. The construction of the new plant to be capable of producing 12,000 tons of PPS, is scheduled for completion in 2015. The nation's first super engineering plastics PCT (Polycyclohexylenedimethylene Terephthalate) is developed by SK chemicals and it can withstand heat temperature of 260 ℃ or higher. In addition, PCT is used in reflectors for LEDs since it has strong thermal stability, reflectivity, and light resistance. Our PCT technology was duly recognized as SK chemical received the Ministry of Commerce and Industry Prize at '2013 Korea Technology Awards and a "10 best new technologies" certificate.

SKYTRA™, a compounding brand of SK chemicals based on eco-friendly and high-performance resin produced by SK chemicals, offers solutions that satisfy various customer needs. Its sales steadily grow thanks to its use in various business sectors such as automobiles, civil engineering, the electric and electronic sectors, and life and the environment. PET resin, which SK chemicals has begun to produce for making plastic bottles in 1978 has received approval from the U.S. Food and Drug Administration and is still widely recognized around the world for its quality. SK chemicals produces attachable polyester. As the material emits no environmentally harmful substances and is versatile, it is increasingly used in toner binders for laser printers and high-speed photocopiers.

ECOZEN®: Bio-Copolyester That Contains Biomass

SK chemicals launched ECOZEN®, a bio-based plastic, in 2009. ECOZEN® not only remedies the shortcomings of petrochemical-derived plastics, but also significantly reduces dependency on petrochemical ingredients and thereby helps to slash greenhouse gas emissions. Acrylic is a transparent material that is often too brittle. Polycarbonate may be durable, but it contains bisphenol-A, a harmful substance. Polyethylene terephthalate glycol may be transparent and durable, but it cannot withstand much heat. ECOZEN® is transparent and durable and can withstand heat up to 110°C. It has a much wider range of applications, including as washers, microwavable containers, building materials, and so on. ECOZEN® has thus been certified as a safe food contact substance (FCS) by the U.S. Food and Drug Administration; as "Bio-plastic No.1" by the Korea Bio Material Packaging Association; and as a safe and hygienic plastic by the Japan Hygienic Olefin and Styrene Plastics Association. It was also recognized as one of Korea's "Highest Brands" in 2012.

In addition, ECOZEN® and SKYGREEN® won a Cradle to Cradle Gold Level certificate from the Cradle to Cradle Products Innovation Institute, an international certification agency. 'Eco-Friendly Development' on Page 77 has related details.

Composite Materials

A composite material refers to the product of combining two or more substances, often for the purpose of producing a much better and more durable product than using a single substance since 1986 SK chemicals has been producing Prepreg, a composite material mixing reinforced fiber and carbon fiber. Carbon fiber is lighter than aluminum, but stronger than reinforced steel. It is 10 times as strong as reinforced steel, with only 20% of the reinforced steel's weight. Carbon fiber is thus widely used as a key material for building space shuttles and aircrafts. It is now emerging as an effective alternative material for making automobiles, as automakers are seeking ways to lighten the weights of their products in response to stricter regulations on gas emissions. Carbon fiber is also increasingly being used to create lighter and more effective blades for wind energy generators. In 2012, SK chemicals signed an agreement with Mitsubishi Rayon for strategic partnership to supply materials. The Company is planning to increase composite material sales to 200 billion won by 2018.

In addition, among SK chemicals' products, high purity solvents, materials for pixels for displays, electrolytes for ultra-high capacity capacitors, absorption and insulation materials, polyester resin for adhesives are classified as composite materials. The Company is expanding markets for its high-purity solvents into the Asian region including China beyond Korea through its technological ties with Honeywell in the U.S. and its own technologies. The Company is also reinforcing the business of materials for pixels for displays for LCDs and PDPs and electrolytes for capacitors on the basis of organic synthesis technology.

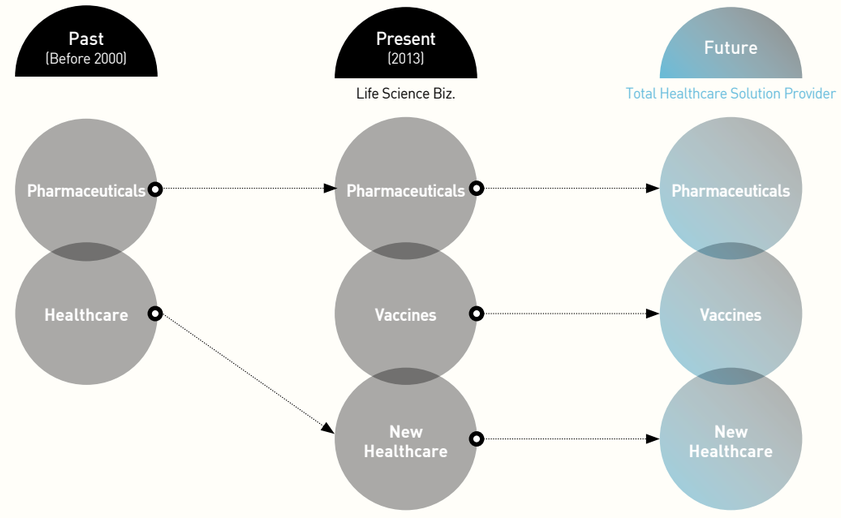
Energy & Electronics Materials

The growing demand for new and renewable energy, as well as smart grid technology, will translate into the dramatic growth of the energy storage material and system industry. In response to this trend, SK chemicals is now actively researching, developing, and commercializing the organic light-emitting diode (OLED) technology and lithium-ion batteries. The OLED is what makes the next-generation flat-screen display technology possible, using organic composites that emit light on their own. The OLED works almost 1,000 times faster than the liquid crystal display (LCD), consumes much less energy, and produces much brighter lights. It is now mainly applied to small electronics. Lithium-ion batteries (LiBs) are rechargeable second batteries. Lighter and more energy-efficient than the nickel-hydrogen battery, LiBs are applied to laptops, mobile phones, and other mobile electronic devices, as well as hybrid or electric vehicles.

Life Science Biz.

To become a global total healthcare solutions provider, the Life Science Business Division at SK chemicals concentrates its R&D capabilities and resources on the three core areas of business: namely, pharmaceuticals, vaccines, and new healthcare. After developing Korea's first original synthetic drug in 1999, SK chemicals has become the company with the greatest number of original drug formulae in Korea. The Company entered the vaccine market in 2006, and has become a leading vaccine provider in Korea. It is now diversifying its product portfolio to include biomedicines and new healthcare solutions. SK chemicals produces TRAST®, GINEXIN®, and other popular and effective treatments whose efficacy and safety have been widely recognized. Based on its outstanding R&D competence, SK chemicals is experiencing promising performance in license out and exports. The Korea FDA allowed SK chemicals to conduct the clinical trials of the cell-culture influenza vaccine, a next-generation technology, a first for a company in Korea. The Company is now building a cell-culture vaccine plant, to be completed in 2013. As SK chemicals expands its product line, focusing on vaccine based bio products, the company is also preparing to enter New Healthcare market to provide diagnostic solution, such as genetic information and blood fingerprints analysis, and medical solution.

Evolution of SK chemicals' Life Science Businesses



Pharmaceutical Division

Synthetic Drugs

In 1999, SK chemicals opened a new chapter in the synthetic drug field by succeeding in the development of SUNPLA®, Korea's first new drug that was internationally recognized. In 2007, the Company went on to launch Mvix®, the most effective erectile dysfunction treatment in Korea. In 2011, the Company also succeeded in developing the world's first orally dissolvable film-type (ODF) erectile dysfunction treatment, Mvix® S. With its advanced research workforce and continued investments in R&D, the Company now boasts the most advanced state of pharmaceutical technology in Korea, and continues to develop new and better drugs for a variety of diseases, including fibrous tumors and the enlarged prostates.

Natural Drugs

Natural drugs refer to the pharmaceutical composites derived from medicinal herbs and standardized for manufacturing and mass consumption. Since developing Korea's first-ever natural drug formula, JOINS®, in 2002, SK chemicals continues to grow in the burgeoning industry. JOINS® helps to treat arthritis with its mechanism of inhibiting cartilage destruction. Not only it is the best-selling treatment in its area in Korea, but it is also rapidly expanding its markets abroad. Korea's first-ever natural drug formula, JOINS®, is recognized as a drug which suggested new possibilities for the development of new drugs by enabling a mechanism of inhibiting cartilage destruction and the fundamental treatment of arthritis. GINEXIN®, an agent that promoted blood circulation has been leading the Korean market since 1991, made its way even to the Middle East, promoting Korea's pharmaceutical technology. SK chemicals also launched RENEXIN® in 2010, which is an enhanced GINEXIN® formula with the improved function of expanding blood vessels. RENEXIN® is cementing its top position in the Korean blood circulation improvement drug market.

DDS Technology

Drug Delivery System Technology refers to a way of minimizing the side effects of existing drugs, while maximizing their efficacy and effectiveness at the same time. TRAST®, a popular patch-type treatment for arthritic knee pain in Korea, is the world's first patch-type arthritis treatment incorporating SK chemicals' advanced DDS technology. Each patch comes with a penetration enhancer that increases the effective delivery of the active ingredients from the patch into the skin, as well as a releasing rate control mechanism that helps to even the rate at which the active ingredients are discharged. OMED®, an innovative gastric ulcer treatment, has been the first Korean complete drug formula exported to the European Union since 1999. The Company also gained approval for distributing SID710, a patch-type dementia treatment across Europe for the first time in the world and exported it to the market.

Vaccine Division

SK chemicals has built an impressive product portfolio through steady investment in research on premium vaccines, blood agents and recombinant pharmaceutical products. Medicine, in the past, focuses' almost exclusively on alleviating symptoms and eliminating diseases, without much regard for medical cost, physical pain, complications, and side effects that can arise. Outgrowing this paradigm on medicine, SK chemicals is making steady investment in developing and distributing vaccines in most economical and easiest way to prevent diseases In partnership with multinational pharmaceutical giants, SK chemicals has developed and launched basic vaccines that are indispensable to public health. These include mandatory vaccines for hepatitis B, chickenpox, diphtheria, tetanus, and pertussis (DTP), polio, measles, mumps, and rubella (MMR), tetanus and diphtheria (Td), and so forth, as well as vaccines against meningitis and influenza.

SK chemical's next-generation cell-culture influenza vaccine, in particular, became the first vaccine to obtain the Korean Ministry of Food and Drug Safety's clinical approval in its area. The Company has completed building a state-of-the-art vaccine plant with an annual production capacity of 140 million doses in Andong. Through the commercialization of premium vaccines, including cell-culture influenza vaccines SK chemicals improved production time, SK chemicals continues to promote the advancement of the Korean medical industry, and is becoming an international leader in vaccine development and distribution. In 2008, the Company acquired In2Gen, a leading biotechnology venture enterprise. This acquisition has helped the Company to expand its biotechnology portfolio to include genetic research and protein engineering. In 2009, SK chemicals became the first in Korea to license out its original genetic-reengineering treatment NBP601 for hemophilia. The drug was selected as one of Korea's 10 Best New Technologies and won the Prize of the Minister of Knowledge & Economy. At present, the third phase clinical test of the drug is being successfully conducted, making the Company wait in anticipation for the birth of Korea's first global new big drug.

New Healthcare

Convergence among diverse areas of science and technology, such as nanotechnology (NT), biotechnology (BT), and information technology (IT), will only become more prominent in the future. In preparing for the future, in 2008, SK chemicals acquired UB care, a leading provider of medical IT solutions, thereby preparing the basis for the Company's U-healthcare projects. In 2012, the Company also signed a partnership agreement with DNA Link, a provider of genetic analyses and diagnoses, launching a research project on the commercialization of genetic analysis ("DNA GPS").

The Company is now developing infrastructure that will facilitate people's access to medical institutions and services. Genetic analysis services analyze individuals' genetic information and provide information such as predicting diseases that are genetically likely to occur, identifying genetic factors relevant to the dissolution of drugs, and other physical characteristics. When completed, these services will help us predict the likelihood of the 22 most common types of diseases that affect Koreans, and also prevent them by making the necessary environmental improvements. DNA Link currently possesses genetic information on more than 40,000 Koreans, and continues to gather more information and data to make its analyses more accurate. Moreover, the National Cancer Center transferred its blood fingerprint analysis technology to SK chemicals which is commercializing it as a diagnosis business item. These and other new healthcare solutions will make disease prevention easier and lead to the development of more advanced medical infrastructure, and thereby, improve the quality of life for all humankind.

※ **U-Healthcare** Standing for "ubiquitous healthcare," these services combining information technology and medical care will enable people to predict, prevent, diagnose, treat, and follow up with their diseases anywhere at any time in the world.

Product Line-up

For the musculoskeletal system

TRAST®
Piroxicam patches/
For arthritis, peritonitis, and muscle pain/
Effect lasts for up to 48 hours

JOINS® (tab.)
Available in tablets/
For arthritis and rheumatoid arthritis/
First-ever natural drug in Korea

For the circulatory system

GINEXIN® F (tab.)
Gingko biloba extract/
Improves blood circulation

RENEXIN®
Cilostazol and gingko biloba extracts/
Treats myocardial infarctions

COSCA® (tab.)
Losartan tablets/
Treats hypertension

For the digestive system

LEVOPRIDE® (tab.)
Improves the movements of the gastrointestinal tract

OMED® (tab.)
Treats ulcers of the stomach and the duodenum

Others

Mvix® S
Mirodenafil ODF/Treats erectile dysfunction/
Developed and produced in Korea

Futhan®
Futhan for injection/
Anticoagulation agent

Blood Products

SK Albumin®(5,20 and 25%)
Made of human serums

LIV-GAMMA®
Globulin for the human immune system

SK Antithrombin III®
Made of human antithrombin

Healthcare

DNA GPS
Genetic Information Analysis Service

Vaccines

Influenza vaccine
Against influenza

Rotatec®
Against rotavirus infection

Gardasil®
Against HPV infection

Prodiax® 23
Against pneumococcus

SK Td®
Against tetanus and diphtheria

First Hib®
Against hib infection

Green Product

SK chemicals, having defined Green Product as products which maintain or improve performance with the added eco-friendly elements, consistently expanding its importance. A corporation may greatly contribute to sustainability with its products. It is owing to the fact that, unlike the limited scope of influence of the improvement activities at workplace, the manufactured product consistently influences human and environment in the process of usage.

Green Chemicals Biz.

-2.2 Tons

Biodiesel

Biodiesel is alternative energy source extracted from plants and reduces 2.2 tons of CO_2 per ton when compared to diesel. SK chemicals contributes to sustainability in production processes as well as the use of products with improved biodiesel ECOPRIME® based not on edible oil but on by-products from palm oil refining processes.

0 %

BPA-Free Toner Resin Gel

Resin gel for toners, a raw material for plastic resin gel for printers and copiers is free from BPA-based raw materials causing endocrine disruption.

98 %

EGB (Eco Green Boiler)

EGB is a boiler that produces steam and coal boilers with waste wood and emit greenhouse gases 98% less compared to coal boilers*. SK chemicals continue to increase the proportion of EGB at its workplaces. Such endeavors enable the Company to reduce the total amount of greenhouse gas emissions in spite of an increase in production.

*The reduction effects are based on a guideline about the management of greenhouse gas emissions and energy targets.

100,000 Tons

Ulsan Steam Highway

SK chemicals sends surplus steam to SK Energy from the production process through Ulsan Steam Highway, a 6.2-km-long supply pipe. The steam supply enables SK Energy to annually save 49 million tons of bunker C oil and 100,000 tons of greenhouse gases compared to the operation of SK energy's own boilers.

100 %

PLA (Polylactic acid)

PLA is bio-plastic based on sugars from plants. PLA reduces greenhouse gas emissions since PLA is based on renewable plants. This material features 100% natural decomposition after its disposal. PLA of SK chemicals' own development is made of plants which were not genetically engineered. SK chemicals' PLA eclipses other PLA in terms of productivity and durability.

50 %+

Bio Toner Resin

A resin that is composed of 50% or more of biomass material and free of BPA-based raw materials.

110 ℃

Bio Co-polyester

ECOZEN®, plastic containing biomass emits less greenhouse gas and supplements the shortcomings of petroleum-based plastic. ECOZEN® boasts excellent transparency and strength and is able to withstand the temperature of 110 ℃. The material does not contain any of BPA's harmful substances. These features allow the material to be used as various items such as containers for microwave ovens, baby goods such as bottles and toys, exterior building materials, and electronic products

30 %+

Bio-polyester

Bio-polyester is a biomass-based green textile and has strengths of polyester, nylon and spandex. The material is very elastic and resilient and feels soft. This also shows clear color and formative stability. Bio-polyester is considered as a next-generation material since it can mix well with other textile materials.

1,000 ×+

OLED (Organic Light-Emitting Diode)

The OLED's response speed is at least 1,000 times faster than that of the LCD. The OLED consumes less power and is brighter than the LCD. Therefore, OLEDs are mainly used in electronic products such as laptops and mobile phones.

0 %

PPS (Polyphenylene Sulfide)

PPS heat resistance and chemical and flame resistance held the advantage in the field of automotive electronics and the demand for PPS is growing for super engineering plastics. SK chemicals was able to secure competitiveness with its successful development of PPS ECOTRAN® without toxic solvents and chlorine. ECOTRAN® causes fewer by-products and does not require water to wash solvents since no toxic solvents are used in the material. The eco-friendly product does not contain chlorine which can cause malfunctions of electrical components and is harmful to human health and the environment.

Life Science Biz.

1.4 million doses

Vaccine (NBP606~608: NBP613~615)

SK chemicals succeeded in the development of an advanced cell-culture influenza vaccine which is a notable improvement from fertile egg-based vaccines which had been used for more than 50 years. The Company is building Korea's largest cell-culture vaccine facilities that can produce 140 million doses a year. As the new vaccine can be mass-produced for a short period regardless of a supply of fertile eggs and be used for those with egg allergies, the new vaccine will come in handy even when influenzas are rampant.

No.1

New Natural Drug
(JOINS® Tablet: GINEXIN® F Tablet: HMP301~305)

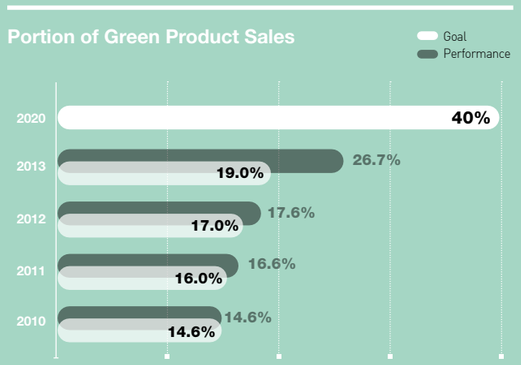
SK chemicals' JOINS® is Korea's first new natural drug and lead the market. In 1992, the Company also launched GINEXIN® based on gingko leaf extracts. The drug is dominating the domestic market.

2 ×+

Recombinant Drugs (NBP601, 604, 611)

SK chemicals developed a genetically modified type A hemophilia treatment NBP601. Compared to existing products, productivity in producing the drug is ten times higher and its stability inside human bodies is more than twice stronger. The drug was selected as one of Korea's ten best technologies at the 2012 Korea Technology Awards.

Portion of Green Product Sales



2013 Highlights

In 2013, SK chemicals has completed its PPS project, a super-engineered plastic containing high heat resistance and chemical resistance, among others properties. So far SK chemicals has taken the lead in developing materials and creating an eco-friendly industrial environment. Special attention has been given to developing new drugs under the objective of 'becoming a global leader in Total Healthcare Solution'. SK chemicals will continue to move forward despite rapidly a changing management environment.

Green Chemicals Biz.

SK chemicals Establishes 'Initz' with Teijin of Japan

SK chemicals held a ground-breaking ceremony to build a specialized production line after establishing 'Initz', a joint venture specialized in PPS (Polyphenylene Sulfide) with Teijin, a leading Japanese chemical company. It was the first time for a Korean chemical company to set up a joint venture with a major Japanese company in the PPS sector. SK chemical's Ulsan Plant will be home to Initz. It is expected that the company will post 300 billion won or more in annual sales and replace its imports of 100 billion or more by 2020. This will also and create 100 or more jobs annually.

PCT Wins 'Industry, Trade, and Energy Minister's Award' and '10 New Technology Certificate'

SK chemical announced on Dec. 18, 2013 that its super-engineered plastics PCT material received the 'Industry, Trade, and Energy Minister's Award' and '10 New Technology Certificate' at the 2013 Korea Technology Awards held by the Ministry of Trade, Industry, and Energy (MOTIE) and The Korea Institute for the Advancement of Technology. PCT (polycyclohexylenedimethylene terephthalate) is a super-plastic developed by SK Chemical for the first time in Korea. It is noted for its outstanding thermal property of withstanding temperatures of 260℃ or higher. Since it requires an advanced level of technology to develop, only two companies in the world – SK Chemical being one of them – are able to commercialize the material.

Steam Highway Completed

The Steam Highway Project, a joint project among the Korea Industrial Complex Corporation, SK chemicals and SK energy, supplies surplus steam from SK chemicals to SK energy. This project saves SK energy building a steam production plant and SK chemicals can generate profits from selling surplus steam, enabling the two companies to enjoy 18 billion won in economic effects annually. Korea Industrial Complex Corp. expected that the Ulsan Complex's transformation into an eco-friendly industrial complex will annually decrease its use of fossil fuels (bunker C oil) by 4,900 tons and greenhouse gas emissions by 100,000 tons.

'ECOZEN®' and 'SKYGREEN®' C2C Gold Label Certificates of U.S.

'The eco-friendly resins 'ECOZEN®' and 'SKYGREEN®' obtained Cradle to Cradle (C2C) Gold Label certificates from the Cradle to Cradle Products Innovation Institute (C2CPII), an international C2C certification organization in the U.S. SKYPET® won a silver label certificate. It was the first time in the world for PETG materials to receive Cradle to Cradle (C2C) Gold Label certificates from the C2CPII. The certificate is also the first for a Korean company. C2C means to send used products not to graves but to cradles for recycling.

Life Science Biz.

New Bio Drug NBP 601 Enters Final Phase of Clinical Test

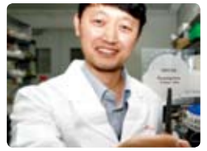
Our new bio-pharmaceutical material 'NBP601' which we have been exporting to CSL Limited in Australia, has entered the third and final phase of its clinical test. 'NBP601' is based on a recombinant molecular structure of SK chemicals' own development. Thus, the new recombinant bio-drug significantly improves the stability and half-value period of Factor VIII, one of the factors related to hemophilia.

Andong L HOUSE Certified as World's Environment-Friendliest Pharmaceutical Plant

L HOUSE, our cell cultivation vaccine plant, obtained the world's first Gold Grade among pharmaceutical plants from the LEED (Leadership in Energy and Environmental Design). Andong L HOUSE was designed to save energy of up to 30% compared to other plants by applying 16 new technologies and introducing eco-friendly living facilities while honoring the GMP regulations.

Vaccine Based on Cell Cultivation Put to Third Phase Test

SK chemicals received the approval of the third phase clinical test for an influenza vaccine based on an animal cell-cultivation technology from the Korea Food and Drug Administration and entered the third clinical test stage. Thus, the company entered the final stage to secure its vaccine independence. Our cell cultivation vaccine technology is a new technology to produce a vaccine after cultivating viruses with animal cells. Overseas countries are approaching this initiative in terms of national security since such technology enables them to quickly deal with pandemics such as new influenza. At the moment, Novartis and Baxter succeeded in the commercialization of the vaccine and many multinational pharmaceutical companies are researching and developing the vaccine.



Dementia Remedy Patch SID710 Given World's First Generic Permission

SK chemicals has successfully developed the world's first generic patch-type dementia remedy. 'SID710' is an improvement to the dosage form of the Exelon Patch, an Alzheimer's treatment skin patch. Although this patent expired in 2012, a barrier of formulation technology has prevented domestic and foreign pharmaceutical companies from developing generic products. Our patch-formulation know-how that we acquired during the process to develop 'TRAST®,' the world's first treatment for arthritis, enabled us to succeed in the development of SID710. SID710 also acquired the first generic sale approval in Europe.

Corporate Overview

'Green Rankings' Ranks SK chemicals First and Employees Reach Green Point Goal

SK chemicals was ranked first in the chemical and pharmaceutical sector in the 2013 Green Rankings held by the Joong-Ang Ilbo, Sustinvest, FnGuide and the Ministry of Industry, Trade and Resources for three consecutive years. Our Green Point Program, a participatory eco-friendly corporate culture system exceeded our goal of 2.6 million points, 62% more than the previous year (the goal of 2012: 1.6 million points) as the points reached 2.74 million. The 2013 theme of the Green Point Program*, a major eco-friendly system was the 4G** Donation Point program. The Company converted points accumulated by employees to matching funds used to build Happiness Wells in Kenya, Africa.

*__The Green Point Program__ SK chemicals has been implementing the Green Point Program, a participatory point system, since 2010. When members accumulate points through environmental activities, the Company offers matching funds. The money is invested in underdeveloped nations.
** __4G__ Points Green (environment), Global (overseas social contribution), Good (public benefits), Give (donation)

Innovation of Its Working System Declared to Pursue Warm Professionalism

SK chemicals has declared to innovate of its working system in order to pursue SUPEX more efficiently by coping with the rapidly changing business environment, reaching its 2013 business goals and further, setting challenging goals and concentrating core work to accomplish its missions and visions. The working system innovation consists of smart working practices, the promotion of communication, the innovation of working environments and the enhancement of job performances. Its goal is to pursue warm professionalism and realize WLB (Work & Life Balance) by putting them into practice.

Corporate Governance

SK chemicals is working hard to establish a management system that is centered on the Board of Directors. Board of Directors centered management system will be necessary to ensure the protection of stakeholders' rights and interests as well as the Company's continued growth in the long run. The Board of Directors presides over the Management Committee, the Auditing Committee, and the Non-executive Director Nomination Committee, that enhance the efficiency of the Board's operations. The Auditing and Non-executive Director Nomination Committees, in particular, are led by independent non-executive members of the Board.

Board Structure and Decision-making System

The Board at SK chemicals consists of four independent, non-executive directors, and three internal directors. The non-executive directors are persons who have been nominated to the General Shareholders' Assembly by the Non-executive Director Nomination Committee who have reviewed their qualifications. The General Shareholders' Assembly decides whether to appoint the nominated candidates as non-executive directors or internal directors to the Board, and also whether to elect the candidates for internal directorship of the Board. To ensure the independence of electing directors, the Board and Non-executive Director Nomination Committee select candidates for internal directors and candidates for non-executive directors to be appointed at a general shareholders' assembly, respectively. The candidates are confirmed by a bill to be turned in to the assembly. The Non-executive Director Nomination Committee take into consideration the careers and economic, environmental, and social specialties of candidates for the three non-executive directors so that they will be able to supervise the management and make decisions. Then the committee checks whether or not they are disqualified in accordance with relevant regulations such as the Commercial Act and its enforcement ordinance and finally recommends them to the assembly. The Management Committee, the Auditing Committee, and the Non-executive Director Nomination Committee belong to the Board. The Board can establish the Finance Committee and the HR Management Committee when necessary.

In five days advance for scheduled meeting, SK chemicals informs all the directors of its agenda and matters to report. Once a meeting is convened, the Company keeps the minutes of the deliberations and records of the resolutions passed. SK chemicals also release any important disclosure if necessary, after each board meeting. In 2013, the Board held 12 meetings in total, and thoroughly discussed and decided major issues. They discussed local and international economic trends, and deliberated counterplans. The average rate of attendance in Board meetings was 91% among non-executive directors in 2013. (The Business Report informs of each non-executive director's rate of attendance and their stances about agendas).

In order to ensure the transparency of the Board's decisions, SK chemicals ensures that more than a majority of its members are non-executive directors. The Auditing Committee, entirely comprised of non-executive directors, also actively checks and prevents the Company from engaging in any illegal activities. SK chemicals takes proper measures to enable the Board timely and accurately identify the Company's achievements in the economic, environmental, and social aspects. The Board is required to convene at least one meeting each month to hear and discuss opinions from shareholders and employees. The Board Secretariat informs all the directors of each meeting, its location, date, and agendas at least five days before the scheduled meeting.

Board of Directors



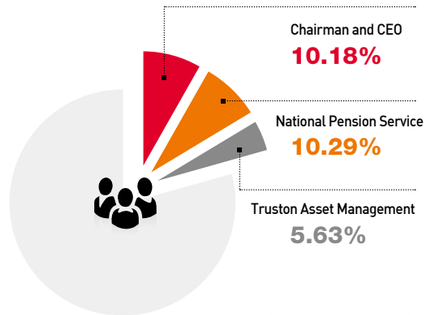
1. Chang-Won Chey, Vice Chairman and CEO
2. Cheol Kim, President
3. In-Serk Lee, President
4. Deok-Geun Ahn, Director
5. Hui-Jip Kim, Director
6. Jeong-Hwan Choi, Director
7. Gi-Ho Huh, Director




	Name	Nominated by	Job Title	Subcommittees	Remarks
Internal Directors	Chang-Won Chey	Board	President and Vice-Chairman		Largest shareholder
	Cheol Kim	Board	CEO (Green Chemicals Biz.)	Management Committee and Non-executive Director Nomination Committee	
	In-Serk Lee	Board	CEO (Life Science Biz.)	Management Committee	
Non-executive Directors	Deok-Geun Ahn	Non-executive Director Nomination Committee		Non-executive Director Nomination Committee and Auditing Committee	
	Hui-Jip Kim	Non-executive Director Nomination Committee		Non-executive Director Nomination Committee and Auditing Committee	
	Jeong-Hwan Choi	Non-executive Director Nomination Committee		Non-executive Director Nomination Committee and Auditing Committee	
	Gi-Ho Huh	Non-executive Director Nomination Committee			

Shareholder Structure

The annual general meeting of shareholders is held as a key communication channel. The CEO reports management status to shareholders and listen to opinions about major decisions and management in the meeting. Comments by shareholders are reflected in the overall management through in-depth reviews by the management and the board of directors. Key management issues related to the interests of investors are disclosed through the Data Analysis, Retrieval and Transfer System of the Financial Supervisory Service System and the websites of the Korea Stock Exchange and SK chemicals. According to the May 15 quarterly report, the largest shareholder of SK chemicals was Vice Chairman and CEO Chang-Won Chey with a 10.18% stake (2,122,761 shares). A stake of 5% or more belongs to National Pension Service (10.29%) and Truston Asset Management (5.63%), respectively.

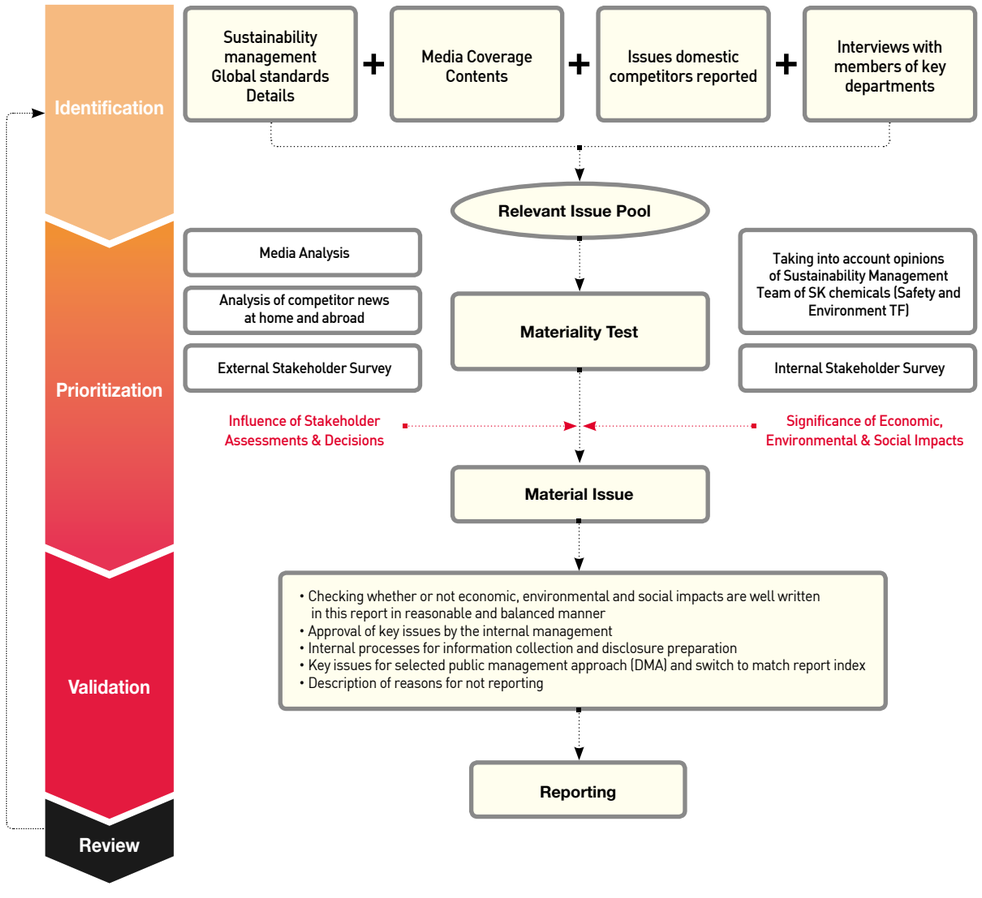


(in terms of common shares)

Stakeholder Engagement and Defining Reporting Content

This report, "The NEW VALUE FOR TOMORROW", contains SK chemicals responses to various stakeholders' needs and interests, and transparently discloses relevant performances. To select the key issues that need to be disclosed to stakeholders, the Company conducted a materiality test to define the report content. As suggested in the GRI G4 Guidelines, the company defined the report content, by first understanding the issues significant within and outside the company, prioritizing the issues, and validating them. The identified issues are reported in accordance with DMA and reporting indicators. This process will be followed by a review and affect the reporting contents of the following year.

Decision Process for 2013 'THE NEW VALUE FOR TOMORROW' SK chemicals Sustainability Report



STEP 1. Identification

SK chemicals conducted a survey on the core subjects of ISO 26000, a global guide about social responsibility on the basis of GRI G4 guidelines that serve as a global standard for the purpose of collecting issues worthy to be included in the report. In addition, the company reflected the assessment items regarding ESG (Environmental, Social, and Governance) which is used by various specialized organizations, as well as the DJSI (Dow Jones Sustainability Index) and CDP (Carbon Disclosure Project). Furthermore, the Company identified its own issues by reviewing key issues that the media exposed in 2013 and the previous year's reports of its domestic and foreign competitors in the chemical and pharmaceutical industries. The company interviewed the leaders and staff members of major departments involved in the preparation of this report in an effort to lose any issues. This process broke down the issue pool into a total of 15 issue groups. These issues are designed to meet SK chemicals' operating system so that they can be used not only as part of the decision process but also minimum units that diagnoses the levels of its future sustainability. SK chemicals will continue to manage these issues to grow into a global best-in-class company by drawing matters for improvements through the regular diagnoses of its level. (15 issues were reclassified into 14 areas of sustainability management to diagnose the level of our sustainability management. See page 31 for information on level diagnoses.)

Process for Preparing Issue Pool

❶ Details of Global Sustainability Standard	❷ Contents on Media	❸ Issues Reported by Domestic and International Competitors	❹ Interviews with Employees at Major Departments
• The analysis of the main contents of global sustainability standards such as the GRI G4 Guidelines and ISO 26000 (international standards of social responsibility)	• The analysis of SK chemicals-related stories that the media delivered in 2013 (from January 1 through December 31) • We searched internet portal sites, found out 1,249 stories except for brief stories such as stock quotes and obituaries and analyzed them.	• The analysis of issues in the sustainability reports of two global leading companies in the Green Chemicals Biz. sector (chemical industry), two global leading companies in the Life Science Biz. sector (pharmaceutical industry), two Korean chemical companies and an SK Group subsidiary.	• HQ : Legal, Public Relations, HR, Pharmaceutical Information, and Procurement Teams • Ulsan Plant : Quality and Safety & Environment Teams • Osan Plant : QA and Operation Support Teams • Cheongju Plant(S HOUSE) : Management team • Andong Plant(L HOUSE) : QA and Technology Support Teams

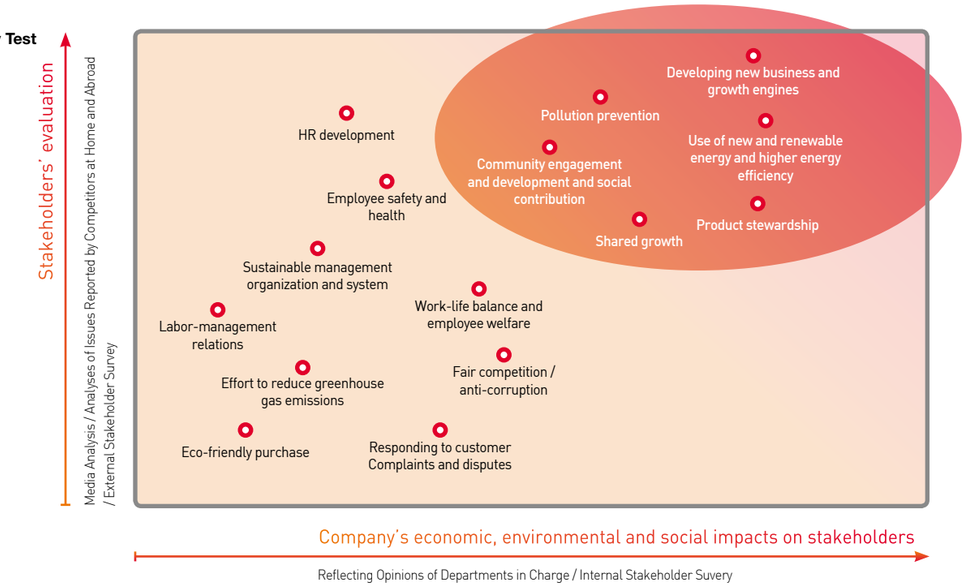
STEP 2. Prioritization

SK chemicals prioritized issues on the basis of two criteria stakeholders' evaluation and the Company's economic, environmental and social impacts on stakeholders. In other words, the company identifies key stakeholder groups' various opinions by applying the principles of stakeholders' participation. This enabled the Company to make decisions about the contents of the report. On the other hand, we decided to prioritize results of by measuring the sizes of our business activities' positive and negative economic, environmental and social impacts. The results of the materialist test permitted us to picked out new business and new growth engines, Product stewardship, and renewable energy use and energy efficiency, pollution prevention, community involvement/development and social contribution, and mutual growth with partners as six key issues.

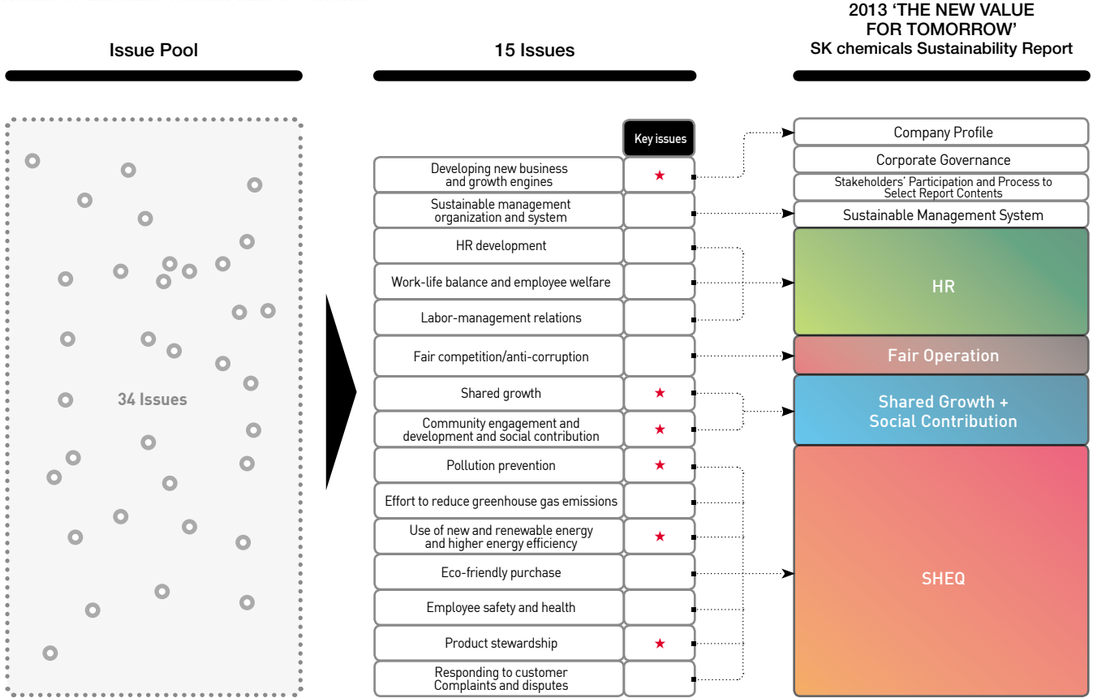
Methods to Survey Stakeholders

	Main Contents
Survey Methods and Targets	Utilizing an intranet poll function (The survey results survey of a total of 431 people were reflected) • Internal stakeholders: All members (direct survey) • External stakeholders: Receiving the opinions of external stakeholders through members in charge. (indirect survey)
Survey Period	February 4 to February 10, 2014 (one week)
Survey Contents	The evaluation of the importance of a total of 14 sustainability management issues

Results of Materiality Test



Results of Materialist Test and Table of Contents



STEP 3. Validation

Validation is a process of checking material issues selected through the materiality test to insert them into the report. The Sustainability Report Production Team identified reporting boundaries about the relationship between each issue and SK chemicals' stakeholder groups and made final checks about whether each key issue meets the reporting period and was drawn in a reasonable and balanced manner. Then the key issues were approved by the management. The team transformed the issues into DMA types and reporting indicators as suggested by GRI G4 Guidelines to collect data and write reporting contents. The team transformed the issues into DMA types and reporting indicators as suggested by GRI G4 Guidelines to collect data and write reporting contents. During the process, the team replaced the contents of unfinished activities in 2013 with future implementation plans.

		Material Aspect Boundaries for Key Stakeholders				
Key Issues	Page	Shareholders and Creditors	Partners	Employees	Customers	Local Communities and Government
Developing New Business and Growth Engines	p.12~19	○		○	○	
Shared Growth	p.54~55		○	○	○	○
Community Engagement and Development and Social Contribution	p.56~59			○		○
Pollution Prevention	p.62~64		○	○		○
Use of New and Renewable Energy and Higher Energy Efficiency	p.65~71		○	○		○
Product Stewardship	p.77~79		○	○	○	

STEP 4. Review

SK chemicals reviewed the 2012 Sustainability Report as part of the preparation for 2013 report. In addition, through the diagnoses of the level of its sustainability management, the company checked activities to increase and neglected issues compared to benchmarked companies to discuss them in planning the contents of the report. In the review, the company takes feedback from stakeholders into consideration. The results served as a chance to check the overall report progress by affecting the phase to identify issues to report. SK chemicals checked whether the report contains the Company's various influences and the performances of its sustainability management in a reasonable and balanced manner and whether the intentions of the reporting principles were fully reflected in the report through a process to fix the contents by encouraging the participation of internal and external stakeholders. This method made the report satisfy the needs of stakeholders.

Readers' Feedback Corner on Homepage

Bring up possibility

Humanity and nature are inseparable.
As babies are born, grow up, and become adult members of society, small seeds put forth buds and grow into big trees.
Both humanity and nature have valuable lives, breathe and grow together.
SK chemicals pursue a future where humanity and nature co-exist and grow side by side so that seeds will make a beautiful forest of big trees that can bear fruit and babies grow into adults who can contribute to society and the environment.

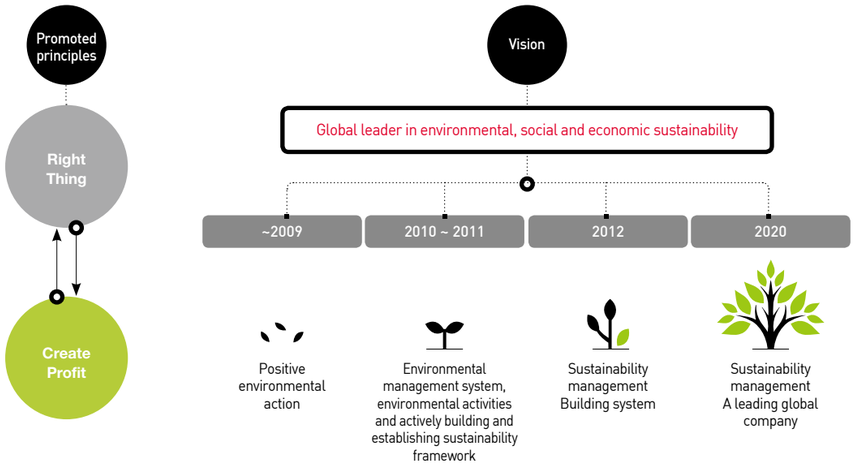
Corporate Sustainability Management

The SK Management System(SKMS) is a management system unique to SK, which was established in 1979, through agreement between all the members of SK Group. It contains management in a systematic way, and it also reveals management doctrine and philosophy which values stability and growth as well as generating values for customers, employees, and shareholders, playing a core role in social and economic development. The philosophy is consistent with SK chemicals' mission of promoting the health of humankind and protecting the environment of the Earth in light of sustainable management. SK chemicals seeks to become a leader in sustainable management considering environmental, social, and economic aspects through a virtuous cycle in business that generates profits through business activities that create common value.

Sustainable Management Strategy and Implementation

SK chemicals' sustainable management is driven by its strong commitment to the SK Group's management philosophy, "human oriented management." We believe that a sustainable society is realized when individuals can raise happy families and are happy with their work at good companies. Individuals are the foundation for a sustainable society. People's happiness and corporate growth are contingent on solving environmental problems and doing away with social polarization. SK chemicals set the strategic directions of its sustainable management on the basis of its strong recognition of justification for and goals of sustainable management and is putting efforts into building an enterprise-wide system. The three directions of SK chemicals' sustainable management strategy are the development, production and supply of Green Products on the basis of Green Culture and Green Processes. SK chemicals organized dedicated teams to ensure the sustainable management in the economic, environmental and social sectors and monitors progress on a continued basis in light of the core tasks it achieves to enhance its implementation. In 2013, we set 14 areas of sustainability management to systemize the Sustainability Management System, plan future tasks through interviews with working-level departments. An IT system for integrated environmental information management was built to strengthen important information management and ensure data consistency and accuracy

Sustainability Management Roadmap



Tools to Diagnose Level of Sustainability Management

There are 14 areas where SK chemicals manages its Sustainable Management System in a systematic way: talent development, work-life balance, labor-management relationships (social dialogues), ethical management, fair trade, supply chain support, social contribution, pollution prevention, the efficient use of resources, efforts to reduce greenhouse gas emissions (coping with climate change), workplace health and safety, Product stewardship, and customer satisfaction. The Company subdivided six sectors — a sustainable management system, HR, process management, shared growth, strategic social contribution, and SHEQ — into the 14 areas. They were specialized by the organizational system, internal roles and responsibilities of SK chemicals. (Stakeholders' participation and a process to fix reporting contents clarify grounds for the 14 areas. (page 24))

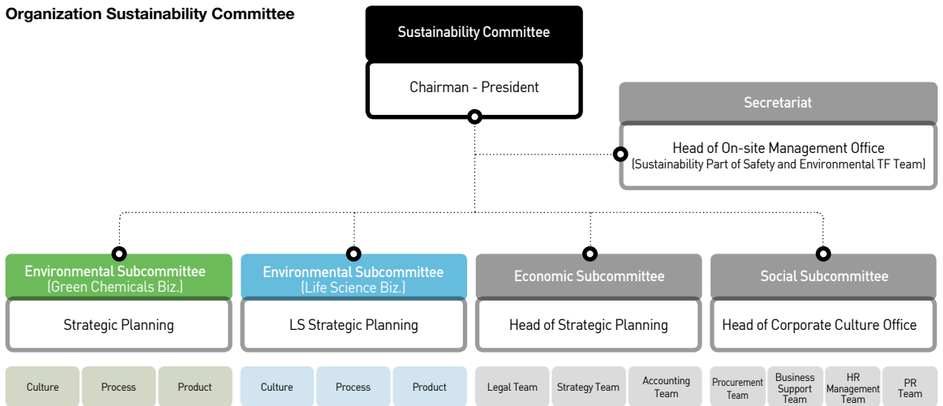
Diagnosis of SK chemicals' Sustainability Management

SK chemicals' Sustainability Management Department assesses the maturity, systemicity and connectivity of 14 areas to check strategies, programs and monitoring activities in each of the 14 areas are implemented in terms of Plan-Do-See. For more accurate diagnoses of the levels, the department presents specific examples through interviews with employees at relevant departments and research on and analyses of the management of benchmarked companies. The annual diagnoses of the levels of the same items raise employees' awareness of sustainability management and contribute to making it a well-established organizational culture. The diagnoses also aim to draw KPIs for future tasks by departments through the sharing of the results of the diagnoses and hints during the diagnosing process. These diagnosing activities seek to realize our corporate visions and missions by enabling SK chemicals to implement sustainability management with a specific and practical orientation beyond keeping it as a mere declaration.

Sustainable Management Implementation Organization

SK chemicals operates the Sustainable Management Committee with the CEO as its chairman which formed the Secretariat as an action group in January 2012. The Secretariat has been managing each division's sustainable management. The Secretariat delivers stakeholders' opinions on issues related to sustainability management to head of the Office of MBWA (Management by Wandering Around) and if necessary, the CEO. The Secretariat also helps the CEO or the head of the Office of MBWA decide missions and visions related to sustainability and supports them so that they will be able to make right decisions about sustainability-related performances and risk management. To this end, the Environmental Subcommittee under the Sustainable Management Committee meet every quarter to share related contents, review progress and make improvements to measures on implementation. In addition, the Company systemized sustainability management so that meetings are presided over and interviews are carried out to make the CEO and the head of the Office of MBWA (Management by Wandering Around) learn more about sustainability management and devise countermeasures when major sustainability management issues take place. The Sustainability Management Part of the SKMS Implementation Team ran the Secretariat up until December 2013. The Sustainability Management Part of Safety and Environment TF team has been in charge of sustainability management since January 2014. Managers and their staff manage sustainability management activities at each of the five business sites (Ulsan, Ansan, Osan, Cheongju(S HOUSE), Andong(L HOUSE)) at the working level. The Secretariat manages enterprise-wide Green Culture-related planning and work. The department in charge of Green Culture of each business site implements Green Process and Green Product. In addition, the Secretariat quickly identifies external trends to suggest the direction of companywide sustainability management and settle systems within the organization and support collaboration between relevant departments. At the same time, the Secretariat performs the role of a communication channel to inform of sustainable management internally and externally.

Organization Sustainability Committee



※ **Departments by Worksites Safety & Environment Team** Safety and Environment at Ulsan Plant / Management Team at Ansan Plant / Support Team at Osan Plant / Management Team at Cheongju Plant (S HOUSE) / Support Team at Andong Plant (L HOUSE) / HQ Sustainability Part of Safety and Environmental TF Team
Staff member in charge of sustainable management at Secretariat Sustainability part of Safety and Environmental TF Team

Education on Sustainable Management

In an effort to raise employees' awareness of sustainablity and environmental management and help them develop their capabilities, SK chemicals provides training and education programs. These programs are mainly divided into three levels — introductory, regular, and level-up (advanced). Introductory courses educate new employees on the basic concepts of sustainable and environmental management, help them understand its importance, and inform them of SK chemicals' visions and major achievements. Regular courses are provided to build company-wide consensus on special issues of sustainable and environmental management, and encourage communication and participation. Level-up courses turn employees of specific ranks and with specific jobs help them become internal specialists through workshops. These systematic courses help SK chemicals' members internalize the green culture and improve their capabilities for making efforts for green processes and products. These drive employees to voluntary participation in sustainable and environmental management.

2013 Training Performance

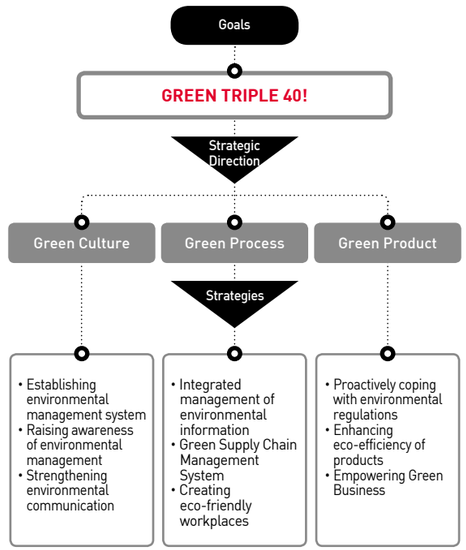
Key Issues	Time	Training time	Details
Introduction Education	New / Experienced Employees Sustainability Education	6hr	• Sustainability education of new employees in the first half and the second half • Conducted for experienced workers in in-house new employee education
Regular Education (Intensive Education for Managers and Staff)	Education in 1Q	4hr	• Training to cope with greenhouse gas and energy target management • Environmental education based on integrated management system
	Education in 2Q	6hr	• New issues on global sustainability • Tasks of the Park Geun-hye government and sustainability agendas • Sustainability report • Strategies for new systems
	Education in 3Q	2hr	• Regular maintenance of plant training and online education in summer vacation • Sharing operation of Green Point and recent issues
Level-up training (Manage and Staff Workshop)	Education in 4Q	8hr	• Sustainability management business review in 2013 and Work Plan for 2014 • R&R new corresponding environmental laws in 2015 • Demonstration of integrated environmental information management system • R&R emission trading system • 2014 Green Point Program

Environmental Management

We need to muse over the sustainability of the global environment for future sustainable society. SK chemicals is putting numerical environmental management into practice with its goal to achieve "Green Triple 40!" by 2020 and has been operating the Environmental Management Committee since 2010.

Goals and Strategies

SK chemicals is promoting environmental management to achieve the goal of 2020 "Green Triple 40!" by 2020. The Company is managing its sustainable management performances in conjunction with its three strategic directions — Green Culture, Green Process and Green Product — which were expanded into the concepts of sustainable management. SK chemicals raises employees' awareness of environmental management and promotes a green corporate culture in light of culture and focuses on building a green plant through an improvement in company-wide environmental management in terms of process. Our focus in terms of products is on building up eco-friendly business capabilities through the establishment of eco-friendly business strategies and new business development. "Green Triple 40!" is an environmental management goal to increase social contribution per employee to 40 hours, reduce greenhouse gas emissions by 40% and raise the proportion of eco-friendly products to 40% by 2020. The Company enhances the sustainability of products, minimizes environmental loads from production processes and business activities and promotes various environmental protection activities through quantified target strategies. These activities enable SK chemicals to seek green growth that creates new value.



Progress in and Plans for Green Triple 40!

Hours of Social Contribution Activities: 40hr/person

(Unit: hr)

	2010	2011	2012	2013	2015	2017	2020
Goals	2.5	6	10	13	20	30	40
Results	2.5	2	2	8	-	-	-
Strategies	Made addressing social problem an issue and defined social contribution	Developed social contribution activities	Established social contribution activities	Expanded social contribution activities companywide	Establishing team-by-team social contribution activities	Social contribution activities with the participation of families	Establishing monthly social contribution activity culture

※ **Plan to reach targeted hours of social contribution activities** Reaching challenging goals through the steady development of programs.

40% Reduction in CO_2 Emissions (compared to BAU)

(Unit: tCO_2eq, %)

	2010	2011	2012	2013	2015	2017	2020
BAU emissions	-	500,000	520,000	545,000	780,000	800,000	830,000
Target decrease	-	4.4	7.2	12.6	22.5	24.2	40.0
Actual emissions	490,265	495,204	467,163	481,396	-	-	-
Actual reductions	-	0.8	11.9	13.2	-	-	-
Strategies		EGB running on wood wastes	Additional use of liquefied and gasified biomass	Increasing use of liquefied, gasified, and solidified biomass	Increasing use of wood wastes	Continuing to find new sources of biomass energy	

※ **Issue in 2013** The start of the Ulsan Steam Highway (to sell steam to outside buyers) in November 2013 increased energy use but the disuse of B-C oil and the expansion of the use of biofuels minimized the increase of greenhouse gas emissions.
Standards on BAU Emission Calculation We added expected emissions taking into consideration expected annual increases in CO_2 from 2010 and expected emissions from new and expanded facilities until 2015 (a sharp increase in emissions due to the energy sales business in 2015).

Eco-friendly sales account for 40%

(Unit: %)

	2010	2011	2012	2013	2015	2017	2020
Goals	14.6	16.0	17.0	19.0	25.0	30.0	40.0
Results	14.6	16.6	17.6	26.7	-	-	-

※ **Issue in 2013** Increased proportion of vaccine sales
Plan for annual production of environmentally friendly products The start of production of PPS, a sort of super-plastic and commercial production of vaccines at Andong Plant(L HOUSE) in 2015 and premium vaccine production in 2017

Environmental Management Organization

The Environmental Management Unit at the HQ plays the role of the enterprise-wide PMO (Project Management Officer) while the manager and staff of each business site plays the role of a PMO at each business site. The HQ PMO, business site managers and staff members share major environmental issues and the progress of each business environment at a quarterly meeting and are pushing forward environmental management activities through active communication. The Company placed the Environmental Subcommittee under the Sustainability Management Committee and is running it in tandem with the Social and Economic Subcommittees.

Roles of Members of Environmental Subcommittee

Key Role	Culture	Process	Product
Part Leader	**Part Leader**	**Part Leader**	**Part Leader**
• Taking the lead in having more interest in the issue, encouraging members and putting environmental management into practice	• PR manager • Encouraging executives to engage in environmental management activities • Managing social contribution activities	• Checking if employees abide by process-related regulations and systems • Building inventory and certification processes • Being in charge of reducing process data within business sites (green house gas and energy target management scheme)	• Suggesting strategic directions for environment-related new business • Internal communication about product-related regulations and systems
Manager	**Manager**	**Manager**	**Manager**
• Playing the roles of the Safety and Environment TF Team within each business site (Sustainabilty Management Part)	• Close cooperation with the Sustainable Management Part of the Safety and Environment TF Team at each business site. • Playing a PR channel for communities • Conducting the education of employees at business site	• Dealing with the Basic Act on Low-Carbon Green Growth • Building and verifying greenhouse gas inventories • Managing environmental performances by business sites	• Preparing materials on carbon credits for business sites • Tackling regulations on products • Searching for and sharing new environmental business information.

ecoweb

In November 2012, SK chemicals launched a new website, ecoweb contains share the outcomes and goals of sustainability and environmental management with stakeholders. The company updated and renewed the website to communicate more effectively in late 2013. ecoweb is a combination of "eco" meaning the environment and "web" meaning a website. ecoweb is loaded with information on the objectives of and strategies for our sustainability and environmental management and the results of environmental management at out business sites.

eco.web

www.skecoweb.com

Happy birthday

A company
begins from people.
Ideas for a sustainable society of
each and every person are accumulated
and become a corporate culture.
The culture becomes the beginning of
sustainability management.

Small seeds need
people's efforts to bud.
Members of SK chemical have
been making every effort for
the harmony of humanity and
the environment.

HR

DMA
(Disclosure on Management Approach)

Why It Matters

The SK Group believes that the foundation of corporate competitiveness is human resources. In this context, SK chemicals is carrying out large-scale activities to create a corporate culture to create a 'genuinely enjoyable workplace.' In addition, the chemical and pharmaceutical industries are based on state-of-the-art technology, making global human resources management really matter. In this respect, the Company takes HR-related matters seriously.

HR Management System

SK chemicals strives to create a corporate culture where employees can work happily and passionately in a genuinely enjoyable workplace while looking out for warm professionals. To this end, the Company respects the diversity of employees and runs a fair recruitment process regardless of gender, religions and races. Our systematic education enables our employees develop their talent. In particular, we pay attention to the female workforce and honor domestic regulations on equal employment and work-life balance. In addition, SK chemicals' fair assessment and compensation systems motivate its employees. The company gives the same and fair benefits to all employees to enhance their welfare and quality of life.

SK chemicals understands and supports labor union activities and builds trust through steady dialogues and cooperation between labor and management. Moreover, the Company is running sophisticated systems and educational programs to create safe working environment.

Evaluation Methods

SK chemicals reflects annual Culture Survey for employees as one of the KPI (Key Performance Index) and steadily manages it to create good workplaces. The Character Point System motivates employees to develop a habit of complimenting or encouraging one another to encourage them to become "warm professionals". For this goal, SK chemicals inserted compliments into annual guidelines for executives and team leaders based on SKMS, the business philosophy of the SK Group.

2013 KEY FIGURES

Growth rate of educational investment compared to previous year (2013 Educational Investment: 3.7 billion won)	Number of humanities lecture in 2013	Number of classical performances in 2013	Strike-free company for 44 years since its inception
8.8 %	21	13	0

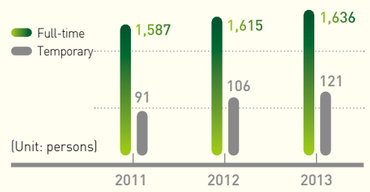
Human Resources Development

SK chemicals pays special attention to developing what its motto calls 'warm-hearted professionals', SK chemicals has put forth its utmost efforts to create a healthy company culture by running various educational and award programs. To that purpose, SK chemicals is running mid/long-term education programs to train people equipped with world-class ability and a warm heart. The 'Assessment Process', which is designed to help its members to achieve their objectives that will also lead to the company's progress, is worth your attention.

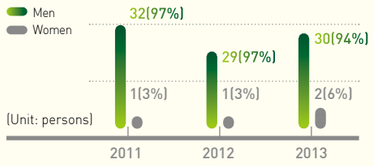
※ as of Dec. 31, 2013

Number of Employees by Gender (Full-time)

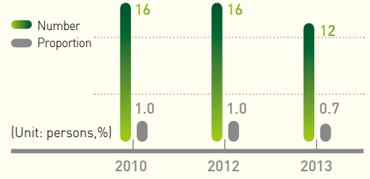
Number of Employees by Employment Type



Number of Executives by Gender



Employment of the Disabled



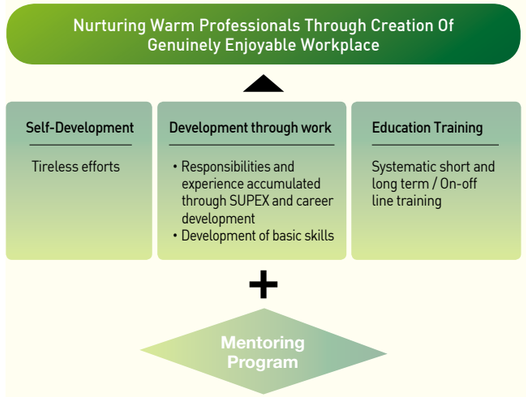
Number of New Hires

Retirees and Turnover

Human Resources Development

SK chemicals are pushing forward with creating a genuinely enjoyable workplace to encourage its employees to become "warm professionals." "Warm professionals" have such noble traits as a sense of attachment to one's community and sincere respect for all its members. They are professionals at their work. They set challenging goals, work hard and happily to achieve the goals. They transfer their experiences and knowledge to their teams. With the aim of securing such talents, we hire people through a wide HR pool and are putting efforts into helping them develop their capabilities with belief that people are the foundation for corporate competitiveness.

Employees Education System



• **SUPEX (Super Excellent)** SUPEX means the highest level which human beings can reach. Relying merely on conventional thinking or activities makes SUPEX elusive. SUPEX requires thinking outside the box, making diverse new attempts, and perfecting jobs.

Strategies to Secure Talented People

SK chemicals forms diverse human resources groups to secure excellent human resources. The Company avoids recruitment methods to favor stereotypes. A specially designed method thoroughly evaluates job applicants in various talent pools to select talented people with potential. The Company also trains job application form reviewers and interview specialists to develop its recruitment capabilities. SK chemicals provides various internship opportunities, allowing job candidates to explore a greater range of work and to find their fits. These internships also give the Company opportunities to secure talented people. The Company's recruiting policy also gives preferences to local job seekers in communities where Company's plants and offices are located.

HR Development Program

The HR mission of SK chemicals is based on sustainable performances. The Company has been steadily investing in employee training and education even during its restructuring process and economic recessions. SK chemicals provides equal education and training programs for all employees, regardless of their employment types. Its curriculum allows at least 10% of its employees to always receive training and education. A new employee is given one to four months of introductory training depending on his or her job. During this period, new employees learn not only job-related skills, but also the skills of communication and exchange with other employees, leadership and cooperation, and the importance of trust. In addition, opportunities for diverse volunteering activities and self-reflection help employees become all-rounders. Diverse short- and long-term programs centered on on-the-job training (OJT) help breed "Warm professionals. Mentors, senior employees with exemplary records, guide and help younger and less experienced employees to make the most of their training programs.

Education Program

General courses	• Eligible persons: All members • Information on requirements for duties through on/off-line training
Selection process	• Target: Selected subjects • Providing a variety of high-quality education • In particular, salaries and education costs for those who study at home and abroad for long time (Intensive language training, qualification certificates, competency development of global education, degree programs)

Training time and investment

(Unit: hours, billion won)

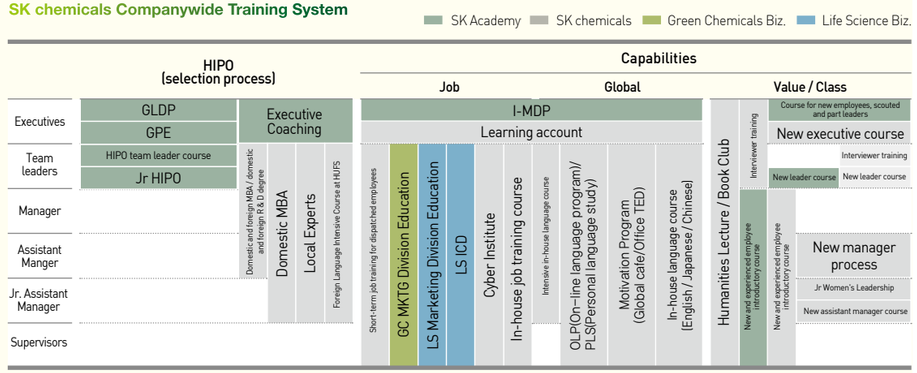
	2011	2012	2013
Average hours of training per person	192	185	172
Education Investment	3.6	3.4	3.7

Fair Evaluation and Reward

The performance evaluation and reward systems at SK chemicals aim to motivate employees into setting up challenge goals for themselves with a vision of "sustainable performance-orientation," and motivating employees to develop their capacities to achieve their goals.

Evaluation Process

SK chemicals Companywide Training System



Fair Evaluation

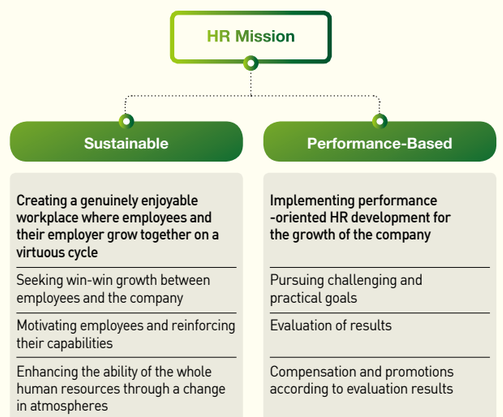
SK chemicals is running the Performance Evaluation & Coaching System (PECS), which provides a comprehensive performance management tool that helps to enhance the performance of both individuals and the organization. The Company lets evaluators and those who are evaluated communicate with each other since a reasonable and fair evaluation system should be in place in order to realize a sustainable performance-based compensation system. Evaluation is conducted in accordance with a system to calculate general performance grades by taking into account the achievements and capabilities. Since the grades are used for promotions, employee training and education programs and salary hikes, a variety of assessment tools are provided to evaluators to enhance fairness and objectivity and step-by-step adjustment periods are given and evaluation audits are carried out. After evaluation, the Company analyses strengths and weaknesses of those who were evaluated and provides the results through face-to-face feedback, so that they will be able to map out their capability development plans. Moreover, the Company provides training to evaluators to enhance their evaluation capabilities and encourage employees to take part in education to understand evaluation systems.

Fair Rewards

New employees at SK chemicals receive equal wages regardless of gender. Only the results of performance evaluation can decide compensation for employees. As employees advance in seniority and experience, they become subjected to a rational, yet strictly differentiated scheme, providing greater goals and rewards for more productive employees, and health stimuli and motivations for less productive employees to enhance their potential and capacities.

SK chemicals takes a sustainable performance-based compensation system for the basic philosophy of its remuneration policies. The Company strives to keep its reward system competitive, depending on how well it fares on the market. These rewards include not only financial or monetary forms (e.g. increases in wages, bonuses, etc.), but also non-monetary forms (e.g. pride, a sense of fulfillment, recognition from others, the sharing of vision, etc.) that enable employees to enjoy their work more and lay the foundation for the stability of their lives. The Company also provides legally mandatory insurance policies, refreshing breaks, support for personal congratulations or condolences, health examinations for all employees regardless of their employment types.

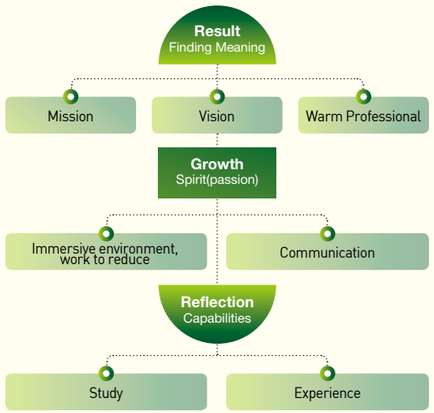
Evaluation and Compensation System



Work and Life Balance

SK chemicals is making endeavors to create enjoyable workplaces. The Company is taking the lead in building a corporate culture that allows members to take pride in their jobs, enjoy fulfilling their duties and responsibilities to achieve their goals and achieve the goals of sustainable growth. SK chemicals implementing a variety of programs in order to create great working environments. This allows SK chemicals to improve members' lives at workplaces and ability to enhance its productivity and ultimately to strengthen its competitiveness, thereby increasing corporate value.

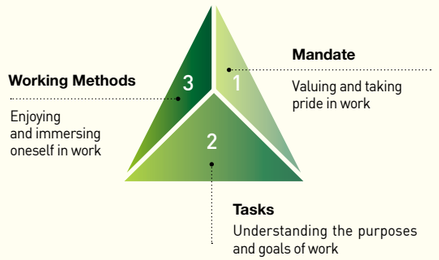
Direction of Corporate Culture



Building Environment for Creating Genuinely Enjoyable Workplace

Creating Genuinely Enjoyable Workplace

Better Workplace, Greater Workers



Activities for Work-Life Balance

Support for Leisure and Family Life

Every Wednesday is the day on which all employees leave right on time so that they can invest more time and efforts into their family lives and self-development. Refreshing programs are given not only to an employee but also to his or her teams and groups. In addition, employees are given tickets to use leading condominiums across the nation for four days a year. Extra tickets are given during peak seasons. This allows employees to improve the quality of life and work harder through the efficient use of time. Since 2004, SK chemicals runs a loan program for house purchases and rent through its labor welfare funds. In addition, we support the education of employee's children and economic stability by paying admission fees, tuition and school operating costs for the children.

Childcare Support and Maternity protection

SK chemicals implements maternity protection policies such as maternity and parental leaves, strives to create a culture for work-family harmony and gives male employees parental leaves. The parental leave can run for one year when combined with vacations shortly before or after delivery. In 2013, such leaves were given to 11 female workers. None of the male workers took them.

SK chemicals operates a day care center at the Pangyo Global R&D center to let working moms work without worrying about their childcare. The day care center is operated jointly with other companies in the Pangyo area. We are planning to expand the number of children at the center every year. Pureuni runs the center on behalf of the companies and offers age-specific programs in which the developmental needs of young children is reflected.

Health Care

The UB care program aims at prevention diseases and healing as a personalized health care program and is offered to all employees. The UB care Fortune Service diagnoses overall health through health check-ups and habit analysis. Customized health care based on the results keeps employees healthy. Steady health care education and events at all of our business sites encourage employees to pay attention to their health matters. Moreover, our mental and physical training courses give employees' families opportunities to maintain their health and peaceful mind.

Support for Cultural Life

• **G.rium Program** SK chemicals is proud to present its G.rium ("Green Auditorium") Hall, a jewel of Eco Lab in Pangyo that accommodates 209 people for special humanities lectures and classical music concerts. The humanities lectures, inviting renowned scholars and lecturers twice a month, provide in-depth discussions on a variety of subjects, including literature, history, philosophy, and the arts. The monthly classical concerts also invite not only employees, but also their families. 93 humanities lectures and 54 classical music concerts had been held until 2013.

• **Italy Arete Tour Program** As part of the Company's efforts to create a genuinely enjoyable workplace, members with good participation and academic records in the humanities lectures are also given a chance to go on a grand tour to Italy with Professor Kim Sang-geun of Theology at Yonsei University which is home to the humanities. The Company has been running a program entitled "Italy Arete Tour", a tour to Italy to take a look at relics and achievements of geniuses of Renaissance and draw cases that can be applied to the corporate culture of SK chemicals every year since 2011. Participants learn about the essence of humankind (Dante), the importance of support and mentors (the Medici family) and the appreciation of excellent art works of genius artists and a case of honest poverty (St. Francis and Sabonarolra) in the hold land of the humanities. The tour inspires participants to have a keen insight into their roles and duties to accomplish the corporate mission.

Management Systems for Genuinely Enjoyable Workplaces

Happiness Index Management

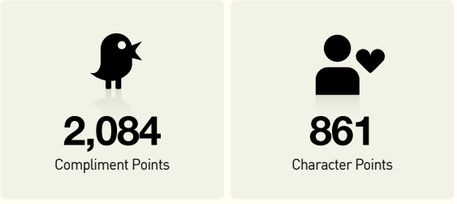
SK chemicals conducts a variety of cultural activities in order to steadily improve the results of the results of the SK Group's annual happiness level diagnoses.

In particular, the Company manages the happiness indices by taking Culture Survey into account as a Key Performance Index to manage employees' happiness levels with goals and intentions like management activities. This enables all executives to be aware of employees' levels of work-related and personal happiness at organizations under them and to help employees remove stress and work happily through interviews (coaching), can meetings, recognitions and outdoor activities.

Character Point System

Introduced in March 2012, the Character Point System promotes certain virtues and qualities in employees that are characteristic of "Warm professionals." The system motivates employees to develop a habit of complimenting or encouraging one another, which is necessary to make the workplace genuinely enjoyable. The points are accrued to employees who compliment others and whose compliments are accepted. Employees may also thank and praise their superiors and win the Character Points in turn, so that encouragement and compliments are shared not only top-down, but also bottom-up. Recipients of compliments are immediately notified by online notices of the exact comments they have received. In 2013, a total of 2,945 comments were made about compliments and characters.

Accumulation of Character Points



Labor-Management Relationships

Since its inception in 1969, SK chemicals has had no instance of violent labor-management struggle in its 44 years of history thanks to steady and honest dialogues based on mutual trust between the management and labor.Our best efforts are made to drive steady labor-management exchanges to breed harmony between labor and management and among labor unionists.

Labor-Management Cooperation through Dialogue

The labor union of SK chemicals, which assumes a central role in the stable growth of the company, has dealt smoothly with such events as the large-scale layoff in 1996, the spin-off of the fiber business unit, which is now HUVIS Corporation, in 2000 and the withdrawal from the textile industry for business advancement, all through agreement with the management. In addition, it has established a highly stable yet performance-centered labor-management relations model to set the stage for closer labor-management cooperation for business goals. Also, it has provided various communication channels in order to pursue co-prosperity based on dialogue. These include the joint mountain climbing contest and retreat, joint discussion sessions and working-level conferences, online bulletin and in-house newsletter as well as official ones such as the labor-management council. These tools have contributed greatly to the development of the bilateral relations by allowing ongoing and continuous communication. Both of the parties continue learning about the relevant trends and issues to share common perspectives and directions in their relations and apply these to the entire company. Furthermore, they have held joint workshops to better understand each other concerning the directions of the corporate and labor union management. A labor-management task force has been run as well, on an ongoing basis, for higher understanding of on-site issues and each other's difficulties. Various matters proposed by the labor union to the company and vice versa have been put on the discussion table for more effect solutions and determination of the priorities. Such close cooperation and mutual trust have resulted in the Labor-Management Co-prosperity Declaration last year, when the union entrusted its requests regarding the collective wage bargaining to management in an effort to tide over the global financial crisis.

Assurance for Unrestricted Union Activities

The first two chapters of the articles of association of SK chemicals, which cover the general rules and union activities each, stipulate that it guarantees the rights and activities of the union based on mutual agreement. It strives to protect the rights of the members by assuring the activities specified in the related statues, for example, the Trade Union and Labor Relations Adjustment Act and the Act on the Promotion of Worker Participation and Cooperation. In addition, the company gives a three months' notice to the union in the event of any change that could have any effect on employment.

History of Labor-Management Harmony

2013.07	Declared shared growth
2012.04	• Chairman Kim Chang-geun won the 2012 Best CEO Prize from Forbes • Selected as the Best CEO in communication-based management
2009.10	No disputes over collecting bargain agreement
2009.04	Declaration of labor-management harmony
2007 ~2012	Declaration of labor peace
2006.09	Forbes Quality Management Award Prize in the industrial harmony category from Forbes
2006.02	Korea Labor-Management Cooperation Award from the Korea Employers Federation

Declaration of mutual growth between labor and management

Management of Labor-Management Relationships

SK chemicals runs labor-management harmony programs in terms of 'Study with', 'Health with', 'Communicate with' and 'Discuss with'

Study with

SK chemicals believes that its stable and performance-centered labor-management relations can be sustainable only when the relations are rooted in logical and rational models. This is why the company runs & works on a variety of associated training programs in the form of joint and collective training, Global Labor Relation (LR) sessions, special graduate courses at home, working-level workshops, among other special programs.

Health with

To improve the health of the employees, SK chemicals operates various sports facilities such as meditation place, fitness center, table tennis area. It also holds numerous sports events, mountain tracking, fishing, marathon, to meet the current "well-being" trend. Additionally, it has been engaged in in-depth healthcare and food culture improvement programs to benefit the workers as the "well-being" trend becomes popular.

Communicate with

SK chemicals runs grievance settlement procedures as well as direct communication channels for better interaction between the employees and the employers. The procedure has been functioning very well for gathering opinions on activities and relations of the company and the union. Also, in operation are position-specific discussion sessions, those dedicated to female employees are the "Can Meeting" and the e-Bulletin. All of the members of SK chemicals are enjoying free and open communication with these various online and offline communication channels.

Discuss with

SK chemicals has established a healthy discussional corporate culture, where the members of company exchange their opinions freely in formal and informal way, and study labor management related practices. To facilitate this culture, SK chemicals holds regular meetings, factory councils, and integrated labor-management council.

SK chemicals works
towards clean and
transparent management.
We put honesty and trust before
anything else and pursue
the happiness of all of
our stakeholders.

To get A dream

SK chemicals strives
to create a fair competition culture.
Our ethical management aims for
a fairer and better future.

Fair Operation

DMA
(Disclosure on Management Approach)

Why It Matters

SK chemicals puts sound corporate culture first based on transparent and ethical management of the SK Management System (SKMS), the unique foundation of all of its management activities. The SKMS, the unique business management framework of SK chemicals, can be defined as a business philosophy and methodology established through the agreement among the entire members. In this framework, they renew and practice fair competition in the interest of transparent and honest management.

Management System

In May 2013, the representatives of the executives and staff members adopted a declaration of ethics to comply with the law across all business activities and better promote ethical management and fair trade. The company, in fact, has been consistent with its pursuit of ethical management since as early as 2006 with its Compliance Programs and Compliance Guide, a set of codes for the cause, as a guideline for such endeavors. Moreover, it has been operating self-observation systems for ethics and fair competition, which are the basis of any form of ethical management, while providing continuous ethics education for higher awareness of the members. As the result, SK chemicals has not been involved in unfair competition and monopoly allegations since 2013. The company puts its put utmost effort to set an example of ethical management by refusing any of unfair business processes, requests, corruption, fraudulent acts and politically motivated misdeeds.

Assessment Method

SK chemicals practices the zero tolerance principle to the violation of the laws relating to ethical management, compliance, anti-corruption and fair trade. Its internal regulations are applied more strictly than the related law so the sound culture of fair business can take root in the corporate culture and systems.

2013 KEY FIGURES

The number of violations of law and regulations on fair trade and monopolies in 2013	The number of partners which signed win-win growth agreements with SK chemicals	An ethics oath was taken and compliance with laws was checked
0	60	Year 2013

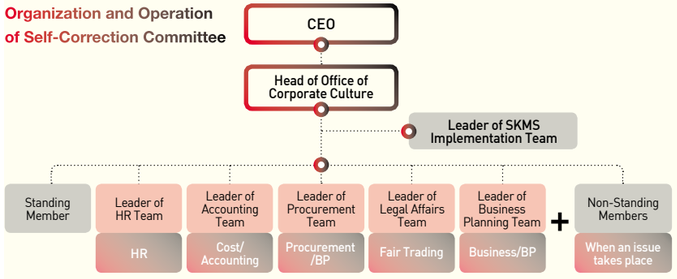
Ethical Management

SK chemicals runs various programs such as SKMS, the code of ethics, the guideline of the code, FAQ, and a self-regulatory program to provide employees with guidelines to help realize fair trade. To help lead to the best practice of the ethical rules, SK chemicals runs an ethical office in the company's culture management department. We also run an ethical counseling office to deal with counseling and tip-offs. We can promise to spare no effort in realizing fair and transparent management.

Self-Correction, Consultation and Reporting

SK chemicals' efforts for ethical management begin within the Company. SK chemicals has been running the Self-Correction Committee since 2009. The Committee, working directly under the CEO, is chaired by the Director of the Corporate Culture Office and consists of the heads of the Human Resources, Accounting, Purchase, Legal, and Strategy and Planning Offices of both divisions as permanent members. The Committee conducts semi annual assessments of the Company's ethical practices across five areas: human resources management, accounting, purchases, budget management, and business management. In 2013, self-regulatory inspections found no violation. SK chemicals are putting much effort to meet the needs of society by establishing a sound corporate culture within the Company through the operation of the Committee and spreading an ethical management culture. In addition, the Online Reporting System is in place. The system receives feedback about the Company's and members' ethical management-related activities from internal and external stakeholders. The system made public principles on reporting source protection to collect more valuable opinions. Programs are provided to protect the anonymity of reporting sources so that reports could be filed without worries about possible disadvantages. Online reporting can be done in the ethical management consultation and reporting corner of the homepage of SK chemicals (http://www.skchemicals.com/kr/manage/advice.asp).

Organization and Operation of Self-Correction Committee



		Normal Situation	When an Issue Arises
Chairman	Head of the Office of Corporate Culture	• L/H/C of the Self-Correction System by areas • Reporting the results of the operation of the systems (Quarterly reports to the CEO)	Convening a meeting of the Self-Correction Committee
Manager	Leader of the SKMS Implementation Team	• Observing the HC guideline of Committee • Collecting and compiling the results of operation	Reviewing reported matters → Submitting matters to the committee
Standing Members	Leaders of the HR, Accounting, Legal Affairs, Procurement, and Divisional Planning Teams	• Establishing, improving and running self-correction processes • Checking current states • Quarterly operation reports	• Verification /research • Suggesting opinions to the Personnel Management Committee, when necessary
Non-Standing	Leaders of Teams in Charge	• Following the guideline of the system • Suggesting ideas to improve the system	Working as a member of the committee after being appointed as a member

Compliance Assistant System

SK chemicals introduced the Compliance Assistant System in 2012. The board appointed the Head of the Legal Affairs Team as the Compliance Assistant in June 2012, and began the implementation of the system in July 2012 after adopting the Compliance Control Standard(CCS).

In addition, the Company built compliance support infrastructure to make the compliance assistant support compliance control activities in more details. The Compliance Assistant implements education and training programs on compliance according to the CCS, and reports its results to the board once a year according to the compliance control standards which are a basic framework for the Compliance Control System and the highest regulation within the Company. So far compliance support activities have led the Company to introduce an internal accounting management system, draw up documents on the objective and concrete internal regulations related to financial statements, regularly evaluate and report financial appropriateness and improve the accuracy and transparency of financial information. Moreover, prevention, monitoring and post management is being carried out. The Company successfully solved internal and external disputes and promoted the establishment of a compliance culture through the spread of the contents of new and revised laws and fair trade news and various compliance education programs involving internal and external experts. In 2013, the Company established regulations on the management of subcontracts and reviewed legal risk about new projects and major contracts. In addition, SK chemicals and its partners checked the observance of the Compliance Control Standards. In the future, SK chemicals will establish R&R and collaboration systems in compliance support-related organizations including fair trade and ethical management. SK chemicals will build a system that manages all compliance activities in systematic and standardized way.

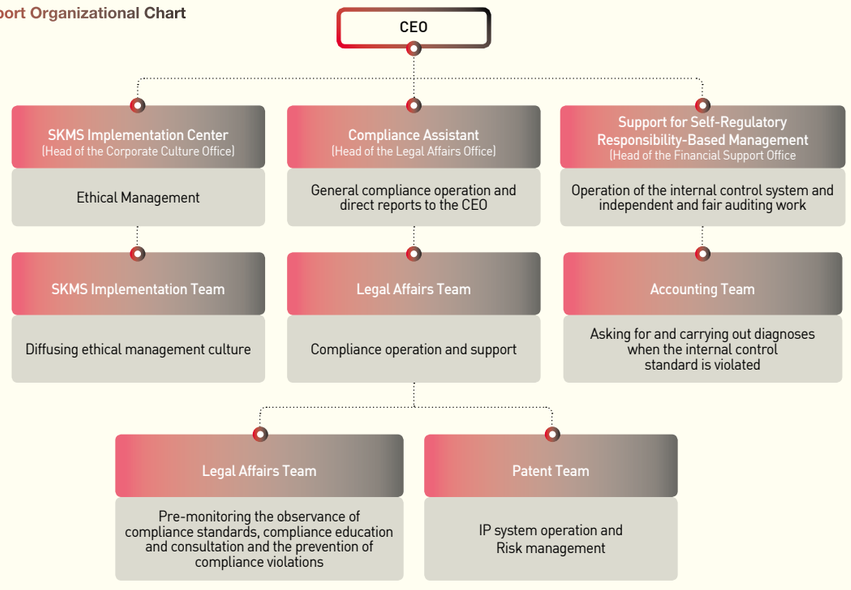
Compliance Support Process

	Main Work	Details and Results
Prevention	Constant advice	• Making the examination of contracts obligatory • Preventing and solving disputes • Informing of important laws and so on
	Support for major projects	• Checking legal risk that can happen during PPS, bio-material and vaccine projects
	Advancing the Ethical Management System	• Sharing the guideline of ethical management • Appointing auditing executives • Internal audit and post-audit management • Developing ethical management FAQ content for leaders
Monitoring	Checking whether members abide by compliance standards and laws and regulations	
	Inspecting legal risk and compliance issues	• Setting subcontracting, declaring the expansion of competitive bidding, going ahead with new business, fair trade, IP-related risk management • Ethical management (SK Code of Ethics and implementation guidelines), internal control, receivable management, • Inventory inspections and the management of registered seals as issues and inspecting compliance
Post-Activity Management	Analysis of compliance activities	
	Running compliance program	• Contract education, fair trade education, contractor education, education on the U.S. competition law • IP education, participating in the external education of compliance support units • Fair trade compliance forums operations and ethics pledge

2014 Operation Plan

Plan	Details
Monitoring System Operation	• Drawing up and distributing compliance checklists befitting the characteristics of business departments • Selecting departments to be intensively supervised and monitoring them regularly or when necessary. • Giving orders to take measures to correct or improve matters according to the results of monitoring
Reinforcing Training Programs	• Implementing compliance education at departments to be intensively supervised • Giving fair trade, contract management, IP, fair trade training education for new employees • Developing compliance education programs by job ranks and business sectors
Compliance Checks	• Building a collaboration system among compliance support units • Preparing a job manual for compliance assistants • Inspecting the observance of relevant laws and internal regulations and making up for the weak points. • Reporting the results of compliance checks to the Board

Compliance Support Organizational Chart



Fair Trade

SK chemicals tries to enhance its company image and brand value by realizing profit through fair competition. For that purpose, we introduced, in 2006, the self-regulatory program to observe fair trade rules. The introduction of the program was to prevent company losses that may arise from a breach of law. We are now trying to spread the ethical management system to the whole of the company. Such an endeavor will continue until the fair and transparent management culture will settle down.

Compliance Program

SK chemicals is spreading efforts to build the Ethical Management System through the Compliance Program introduced in 2006. The compliance officer is in charge of the program and is appointed through the Board's resolution. The compliance officer promotes ethical activities in terms of a working level through the program and monitors overall work through the management of checklists. The internal monitoring system also requires consulting specialist departments regarding the Company's activities with implications of violating the law.

Bulletin Board for Fair Trade

In 2006, SK chemicals opened up a bulletin board for fair trade on the Company's intranet through which the company delivers amendments to laws and court decisions and news about external fair trade organizations to its employees.

Handbook on Fair Trade and Compliance Guidebook

Handbook on Fair Trade was published to make fair trade efforts obligatory and bulletined on the intranet. Therefore, employees are advised to follow the ethical work system by checking it whenever necessary. Compliance Guidebook was also produced and distributed to members of the Company with Handbook on Fair Trade to raise their awareness of ethical management.

Legal Affairs Newsletters

Since 2007, the Company has instructed the employees to post the latest fair trade events and legal knowledge via the monthly Legal Affairs Newsletters. Since signing the Fair Trade Agreement with Subcontractors in 2008, SK chemicals has also been monitoring whether the rules on fair trade with subcontractors are complied with or not. In July 2012, the company signed agreements on fair trade and shared growth with about 60 small or mid-sized corporate partners. SK chemicals is carrying out supporting activities such as financial, technical and educational support, and the protection of technology while researching various measures to grow together with its small to mid-sized partner companies. In 2013, SK chemicals expanded the proportions of competitive bids and direct orders to its small to mid-sized companies to support their development and increase trading opportunities.

Fair Trade Education Programs

SK chemicals provides various educational programs in order to raise members' awareness of compliance along with the introduction of the Compliance Program. Since 2009, SK chemicals has been providing companywide online education. The Company developed an online education system in partnership with SK Telink Co. Ltd. In October 2011, the Company updated its educational contents by taking into consideration amendments to the Fair Trading Act. In 2013, SK chemicals has made its new employees to receive fair trade and compliance education so that they will be able to join our efforts for ethical management and fair trade. Furthermore, the Business Team in charge of subcontracts has given education about prohibited and obligatory matters including a ban on unfair price cuts and returns.

Fair Trade Education Program

Internal Education	All members (when necessary)
Education through Visits to Departments	Departments prone to violations of the Fair Trade Act such as the marketing, purchasing, and sales departments (semiannually)
Workshop	Fair trade expert at each team (semiannually)
New Employee Training	New employees (at any time)

cheer up

People grow together.

Our value grows steadily while we help one another.

Shared Growth
+
Social Contribution

One leaf is almost worthless.

But scads of leaves provide a big pleasant shade.

SK chemicals grows happiness together

with partners, communities and the marginalized.

DMA
(Disclosure on Management Approach)

Why It Matters

The importance of relations with partners is becoming vital in today's business world. This is because the responsibility of a company for its social and environmental impacts has to be spread to the entire supply network. At the same time, the demand for a balanced growth between major corporations and small and midsize enterprises is rising in Korea as well as across the world for the soundness of business environments and enhancement of the national competitiveness as a whole. SK chemicals is in pursuit of joint growth with its business partners based on the philosophy of "benefits" for all parties concerned.

Management System

SK chemicals is well aware of the fact that the competitiveness of its partners is directly related to its own competitive advantage. In this context, it has selected expanded technical support, financial support and human resources support as its key tasks for joint growth and moved ahead with specific measures for these goals, improving its financial assistance systems and settlement practices while training employee with of various courses. This, along with joint R&D activities with partners that own excellent advanced technology, has led to the increase in sales and profits and better services suiting the needs of the partners. In 2012 and 2013 alike, SK chemicals fulfilled the assistance programs specified in the joint growth agreement concluded in 2012 so as to help address the difficulties of its business partners.

SK chemicals is also focusing on setting an example of the culture of joint growth by adhering to the major tasks for the cause and striving to form an organic partnership through the sharing of the culture with its affiliates. For example, the humanities courses and classical music concerts provided for SK chemicals employees are open to the employees of the partner companies as well. This provides an opportunity to cultivate their liberal arts knowledge and share a variety of cultural activities for better mutual understanding, which is sure to result in shared growth with vigor and vitality.

Assessment Method

SK chemicals applies its own strict internal regulations so that no unfairness occurs during the course of the conclusion of contracts and day-to-day business activities with its partners. Moreover, it seeks to expand the Shared Growth Fund each year.

2013 KEY FIGURES

Shared Growth Fund

Total amount of funds	Total amount of loans	Partners that received loans
7.5 Billion won	5.9 Billion won	15

SK Partnership Academy

CEO seminars	MDP*	SK Capability Education
47	6	2

*MDP Management Development Program

Supply Chain Support

As a way of realizing the basic philosophy of 'seeking happiness for all stakeholders', SK chemicals seeks co-growth with suppliers by practicing fair trade and strengthening competitiveness; thus we have signed an co-growth agreement to realize a self-regulatory, fair trade culture between big businesses and small/medium-sized businesses as well as to strengthen the support. We will continue in our effort to support our suppliers with management stability and stronger competitiveness.

Supporting Business Partners' Stability

SK chemicals supports partners so that they can stably implement their business activities. In 2013, the SK Mutual Growth Fund increased to 7.5 billion won from 2012. Partners received 5.9 billion won in loans as of the end of 2013. The number of the partners rose by 15 compared to 2012. SK chemicals has built a loan support system linked to other financial institutes for loans as a result of measures to expand financial support pushed for in 2012. As part of its measures to support partners, the Company has improved payment conditions and has paid subcontractors all in cash, raising the cash payment rate to 100%. In addition, the Company paid subcontractors within 10 days of issuing bills so as to improve the cash flows of small business partners.

Enhancing Partners' Competitiveness

SK chemicals seeks measures to enhance the competitiveness of both SK chemicals and its partners. Increasing partners' competitiveness brings positive results to both. In particular, educational support grants partners opportunities to steadily increase their competitiveness. Moreover, SK Shared Growth Job Fair was held to help partners secure excellent human resources with employees of other SK Group subsidiaries in Ulsan. The job fair successfully bridged partners and talented people, preparing a platform to help partners hire talented people while helping jobseekers to find jobs.

SK Shared Growth Fund (Unit: billion won)

	2011	2012	2013
Shared Growth Fund	6.7	7.1	7.5
Total loans	5.9	7.1	5.9
No. of partners that received loans	10	10	15

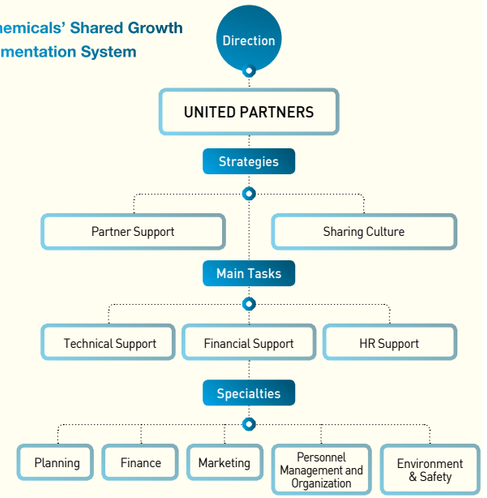
SK Partnership Academy

Title	No. of Participating Corps. and Workers	Theme	Contents
CEO Seminar	47 companies / 47 people	Cultivating the qualities of CEOs, management, economics, organization and change management, domestic and international markets	
MDP	6 companies / 6 middle managers	Planning, finance, marketing, HR organization	8-week semiannual program, Pararelled online education, and 22 courses

SK Capability Education

Title	No. of Participating Corps. and Workers	Theme	Contents
SK Capability Education (In addition to SK Partnership Academy)	3 working-level employees from 2 companies	Strategy, finance, and global competency	To be given semiannually in 2014

SK chemicals' Shared Growth Implementation System



DMA
(Disclosure on Management Approach)

Why It Matters

SK chemicals regard social contribution activities as activities for creating the shared value through eco-friendly materials and total health care activities to achieve its its missions and visions rather than simple social contribution activities. The Company makes endeavors to take the lead in promoting the participation of other companies while spreading our strengths as a positive culture in society with leading strategies for narrowing social gaps and social support.

Management System

As part of such efforts, SK chemicals will select core business items in the areas of social contribution such as environment-friendliness, social well-being, bringing happiness to people in an effort to actively contribute to the development of communities. In addition, the Company formed the Social Contribution Committee consisting of executives and social contribution subcommittees by each site in order to devise more efficient and specific action plans and develop ability. The subcommittee consists of working-level employees and discusses requirements for communities. SK chemicals' philanthropic activities include community participations in the process of prioritizing issues. Its social contribution corporate website for the active participation of and communication with members is used to manage volunteer work, organization, activities, performances, and cost. Thus, SK chemicals is going ahead with strategic social contribution activities while realizing transparent donation management. The Company makes efforts to achieve 40 hours of annual social contribution activities in line with Green Triple 40 Strategy established in 2010. Such efforts will enable SK chemicals to implement social contribution, turning its eyes to communities' environments, poverty, and marginalized groups and paying attention to the humanities and culture and art .

Evaluation Methods

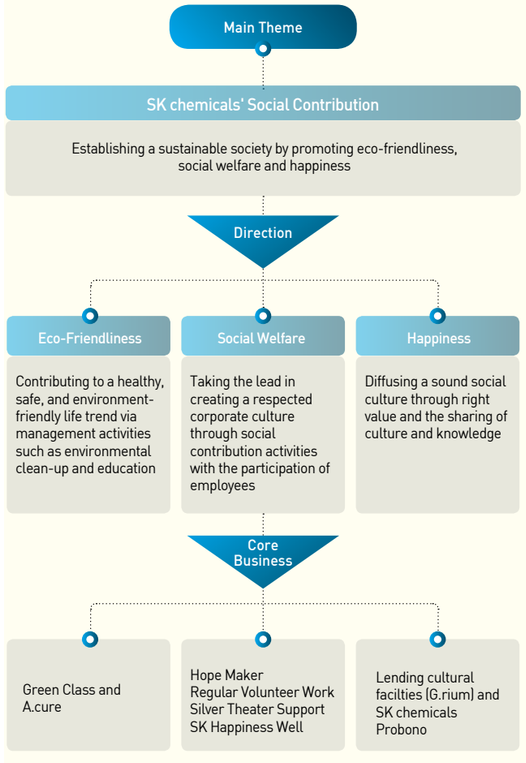
To achieve the Green Triple 40 Strategy goals, SK chemicals evaluates members' commitments to social contribution activities through key performance indicators in connection with all service activities and the in-house Green Point Program. The Green Point Program is annually managed as part of the KPI items. In addition, we will further develop strategies of the previous year and improve social contribution-related systems through evaluation processes.

2013 KEY FIGURES

Cost for social contribution activities in 2013 (Year-on-year increase of 20%)	Hours of volunteer work in 2013 (Volunteer hours per capita)	The number of local people who receive potable water from five Happiness Wells and repaired pumps in Kenya in 2012 and 2013	The total number of people who used Korea's first theater for senior citizens
1.8 Billion won	8	14,000	750,000

Social Contribution

According to the Company's mission to promote human health and protect the environment, we focus on three sectors- healthy environment, social welfare, and expansion of happiness. We realize the importance of our social contribution by expanding our welfare system to include more low-income families. Using the same perspective, we seek out gifted people in cultural fields and help them realize dreams. We spread our 'green message' to all parts of society by taking the lead in preserving the earth.



Social Responsibility Mission System

Activities and Results

Eco-Friendliness

• **Protecting Rivers (A.cure)** SK chemicals considers local rivers as a major part of its drive for environmental protection. A.cure is a combined word of "aqua" with "cure." The name represents SK chemicals' determination to preserve water resources and create a healthy ecological space. The highlights of our river protection activities are to clean up areas near the Unjung Stream near Eco Lab in Seongnam as well as the Mipyeong Stream in Cheongju, and Cheoyong Park, the Ganjeol Cape and Solmaru Path near our Ulsan plant.

• **Environmental Education (Green Class)** SK chemicals runs the Green Class Program for elementary school students. The program prometes the importance of the environment in an interesting manner to draws more attention from schools and students. The employees visit schools and conducts environmental classes with videos and teaching materials, encouraging students to pay more attention to the environment. The Company plans to expand the education into elementary schools near its business sites in Ulsan, Cheongju and Osan beyond Seongnam and Bundang by making use of updated educational materials in 2014.

Progress in Green Class Program

	2012	2013
No. of participating elementary schools	8 classes from 4 schools	40 classes from 10 schools
No. of participating students	240	1,200

Social Welfare

• **Hope Maker** As part of its social contribution activities, SK chemicals supports the future of our children and teenagers through direct mentoring social contribution programs such as Hope Maker, matching funds and regularly sponsoring Compassion. Almost 1,524 employees or 87% of all of SK chemicals' employees form their own volunteer teams and are participate in the program, supporting 152 children and teenagers at 14 local welfare centers near the Company's plants and offices. The program is planning to involve over 95% of the members in 2014. Each team is given at least one child or teenager to support and mentor through the Hope Relay Program. SK chemicals is also raising matching funds to give its members and sponsored children and teenagers a wide array of culture tour programs. The matching funds are raised to reach as much as funds raised by members and are used for three to seven special programs a year and to support medical costs for sponsored people and their families who are not healthy. These activities illustrate SK chemicals' efforts for the development of children's and teenagers' characters. The Company has expanded its social contribution activities into foreign countries. Thus, employees regularly donate to Compassion, an international child aid organization, to support 300 children in poor countries. The Company also keeps funds matching the amounts of donations from employees to support children in poor countries. SK chemicals is currently in the process of measuring the economic impact of these activities that support local communities, and will include the results in future reports.

• **Silver Theater** SK chemicals provides support for the welfare of the elderly, main customers of TRAST® and GINEXIN®, its flagship products, in addition to social welfare activities for children and teenagers. Since 2009, SK chemicals has been funding and supporting Silver Theater, providing 600 million won in total (or 120 million a year) for the theater's operation and additional support for its various events. Silver Theater, a social enterprise accredited by the Ministry of Labor attracted 250,000 viewers in 2013 and 750,000 viewers in total so far, becoming a platform for culture and entertainment for the elderly. SK chemicals plans to diversify the programs and events organized at this venue in the future.

• **Happiness Wells** SK chemicals digs wells in Kenya to bring clean water to people through Happiness Well activities. In 2012, the Company dug three wells in Tarasa, Wachuoda, and Selieh of Kenya. In 2013, the Company dug two wells and repaired eight pumps. The wells thus provide drinkable water for about 14,000 people. The Company intends to expand the project into other areas, contributing to enhancing people's quality of life in the future.

Sharing Knowledge

• **Talent Support** G.rium performances, provided by SK chemicals, have been only available to the employees of SK chemicals and their families, but in 2013, the performances will also be available to those who are supported by the Hope Maker Program. SK chemicals makes great efforts to share the benefits of culture and the arts to all. The Company also intends to provide continued support for young people with artistic talent. The first recipient was young pianist Son Yeol-eum, who received 67.6 million won in 2013 for her training. The Company also sponsored her piano quartet concert at the G.rium Hall.

• **Volunteer Work**

Offering free Meals and Delivering Lunch Boxes - SK chemicals' employees volunteer for various activities, mainly engaging in the local communities in which they work. Each plant or office organizes volunteer groups to help with distributing free meals at local charity organizations or delivering meals to the needy.

Making and Sharing Winter Kimchi - Employees volunteered in making and sharing winter kimchi, organized by the SK Group, in 2013, delivering 2,000 sauced and pickled heads of cabbages to a charity organization in Seongnam. SK chemicals is steadily participating in social contribution activities managed by the SK Group with a sense of responsibility as a SK Group subsidiary.

Bazaar of Love - Bazaar of Love was held to raise funds for free meals for poor children also saw large quantities of goods donated by employees as well as by the Company.

SK Probono - SK Probono, one of SK's social contribution activities, is voluntary talent donation program through which employees donate their knowledge or technology to social companies and groups. The program shares the SK Group's expertise on marketing, human resource development, accounting, and legal affairs with smaller companies.

2013 Social Contribution Activities

Eco-Friendliness	**River Protection (A. Cure)** Clean-up and protection of rivers near major business sites
	Environmental Education (Green Class) Running the Green Class Program for 1,200 elementary school students in Seongnam and Bundang
Social Welfare	**Hope Maker** Supporting 152 marginalized children and teenagers in Korea and 300 children and teenagers abroad financially and culturally
	Silver Theater Support Annually donating 120 million won to Silver Theater, Korea's first theater for the elderly which draw 250,000 viewers a year and supporting its events
	SK Happiness Well Carrying out the Happiness Well Project in Kenya with trouble in securing clean water and supplying clean water to about 14,000 people through 13 wells
Knowledge Share	**Talent Sponsorship** Supporting pianist Sohn Yeol-eum for cultural development and a piano quartet concert at G.rium Hall.
	Volunteer Work Carrying out volunteer work such as free meals and lunch box and taking part in SK Group's social contribution activities

Green Point Program

To improve environmental awareness of employees and settle the environmental management system as the company's culture, SK chemicals has operated Green Point Program since 2010. In the program, the results of the employees' green activities will be saved as points that are used for the employees' social contribution. The company supports the social contribution by means of Matching Funding. The program has been practiced since 2013 under the topic of 〈4G* Donation Point〉 providing 'Happy Wells', Water Cone, Solar Energy Cooker, and other types of life infrastructure in Africa and developing countries. The Green Point Program expanded from the management of Key Performance Indicator per organization in 2012 to that of individual Key Performance Indicator in 2013. Intending to spread the system to the whole industry beyond our internal success, we made a patent application for the system in August 2013.

*__4G__ Environmental (Green), Social Responsibility(Global), Public(Good), Contribution(Give)

How To Accumulate Green Points

- Wider use of Green Points
- Purchase organic farming products
- Watch movies about environment
- Collect ideas to maintain green management
- Watch environment-related performances or participate in the study of ecosystem with the family members
- Calculate the family's or individual's carbon emissions
- Participate in activities to help clean environment

Objective and Result of Green Point Accumulation

(Unit: points)

	2010	2011	2012	2013
Target	600,000	900,000	1,600,000	2,600,000
Performance	1,049,519	1,463,216	2,398,615	2,744,522

Proud of you

SHEQ

People's kind hearts for
nature can create a sustainable world.
We wish for a cleaner and brighter future through
science for the environment and life.

DMA
(Disclosure on Management Approach)

Why It Matters and Management System

SK chemicals treasures safety, health, the environment and quality on the basis of SHEQ Management Policy. Systems geared to them are in place.

SHEQ Management Policy

- SK chemicals sets and achieves management and detailed goals for steady improvements in health and safety, the environment and quality.
- SK chemicals honors standards required by laws related to health and safety, the environment and quality and set internal control standards stricter than laws to elevate its levels.
- All employees assess environmental impacts and risk and make a steady improvement to the management system and operational performances by taking account of the whole process including production, service and disposal.
- By proactively identifying and removing health and safety, environmental hazardous risks. SK chemicals focuses on preventing employees including those of partners from becoming injured or ill and devise measures against their injuries and illness.
- SK chemicals decides the level of product qualities that customers want and makes products which are higher than the level and purses a zero-defect rate.
- SK chemicals steadily carries out education and training which change employees' awareness and encourages their active participation in relation to safety, health, the environment and quality.

① Environment (Prevention of Environmental Pollution, Efficient Use of Resources and Efforts to Mitigate Climate Change)

SK chemicals consumes a large quantity of energy due to the characteristics of the chemical business. Moreover, SK chemicals are engaging in the energy supply business to supply steam to five companies in its Ulsan Complex*. This business forces SK chemicals to consume additional energy about three times more than its energy use for production and to emit additional greenhouse gas emissions about three times more than its greenhouse gas emissions for production. Accordingly, provided that SK chemicals' worksites produce goods and supplies eco-friendly steam by making its energy use efficient and adopting new and renewable energy, companies which receives the steam can make their worksites environment-friendly, producing a virtuous circle. Moreover, SK chemicals does everything it can do to enhance its carbon neutrality by making steady efforts with a sense of responsibility as a manufacturer and an energy supplier to transforming its energy use structure from a nonrenewable fossil energy-oriented one to a renewable energy-oriented one.

*SK chemicals Ulsan Complex comprised of five companies receiving steam and electricity from SK chemicals, i.e., SK chemicals, HUVIS, SK petrochemical, SK CYTEC, and Eastman Fiber Korea Limited (EFKL).

② Safety and Health (safety and health at workplaces)

Employees at all worksites consider safety and health a key element for the Company's steady growth and stability. Therefore, we put safety and health before anything else in our production activities and endeavors to respect the value of human lives and to protect employees' health.

③ Quality (Product stewardship and Customers)

SK chemicals' products are closely linked to its mission of promoting the health of humankind and protecting the environment of the Earth. SK chemicals carefully manages product development processes to make products more meaningful and keep in mind its responsibilities for products. Then the Company listens to the voices of customers to ultimately satisfy the customers. The Company built and is managing processes and systems about Product stewardship and environments in accordance with the characteristics of customers of Green Chemicals Biz. and Life Science Biz. With a view to monitoring possible customer complaints, SK chemicals are running them through a systematic customer complaint remedying process. Its principles in thorough customer information protection are as important as its product management.

Evaluation Method

SK chemicals sets annual goals and makes plans about SHEQ and turned them into KPIs and takes them into consideration when evaluating executives and organizations.

2013 KEY FIGURES

Annual sales of SKYVIVA, an eci-friendly acoustic material based on renewable materials. **34.7** Billion won	Growth of renewable material use in 2013 compared to 2012 **55.9** %
Waste recycling rate **72.5** %	Hazardous chemical-leaking accidents **0**
Growth rate of alternative energy use (346TJ in 2009 to 1,887TJ in 2013) **4.5** times bigger	Number of registered clinical trials after introduction of IND Application System. **52**

Pollution Prevention

With its philosophy 'save the earth and promote human health', SK chemicals is taking the lead in the movement to minimize the contamination of the environment. Thus we treat the wastes, arising from the production plants, in a hygienic manner. We also operate a monitoring system of self-measurement. We will not spare investment to make improvements in air pollution, water pollution, issues with stench and noise, and other issues that may arise. SK chemicals always put humans and a healthy earth before anything else.

Managing Waste Material

SK chemicals disposes of all wastes generated at its plants in a legal and hygienic manner according to the Wastes Control Act, seeking fundamentally to eradicate any possibility of secondary contamination. The Company, in observing the Basel Convention that restricts the international transportation of hazardous waste materials, also strictly forbids the transfer of waste materials abroad. In 2013, the Company raised its waste recycling rate to 71% by 11% in 2013 from 61% by operating a filter press in the Water Quality Control Office and commercializing fly ashes.

Using Water and Managing Wastewater

SK chemicals draws the water it needs for its operations from local water supply systems. SK chemicals' plants exert little impact on the sources of water in their respective regions. The Ulsan plant and the Company headquarters use groundwater. The Company HQ and Andong Plant (L HOUSE) also makes use of rainwater. Wastewater from the plants is processed at either the plants' own wastewater treatment facilities or the local wastewater treatment facilities. Osan Plant built and is utilizing ethanol distillation facilities in order to minimize ethanol content in high-concentration wastewater and reduce purchasing costs. In addition, the plant is proactively dealing with complaints from surrounding apartment through noise silencers and noise barriers by taking account into account the characteristics of worksites in residential areas and writing water quality and air quality ledgers. The terminal wastewater treatment center in the Cheongju Industrial Complex handles waste water from S HOUSE in Cheongju.

In 2013, the Company reduced wastewater by making improvements to wastewater treatment facilities and water purifying systems. Eco Lab, which houses the SK chemicals' headquarters and R&D center, gathers rainwater and groundwater in a reservoir tank capable of carrying 48.9 tons of liquid and uses them for watering plants and other general purposes. The system helps the building save water resources by 23% in comparison to other similar buildings, while also reducing risks of floods.

Reuse of General Drain Water

Ulsan Plant signed an agreement to reuse and supply general drain water for its eco-friendly activities in October 2012. A total of six billion won was invested in this project from 2012 through 2013 to run the facilities at the beginning of 2014. The R/O-based facilities will reuse 4,000 tons of drain water (water from cooling towers and rainwater) after purifying it. Thus, the facilities enable SK chemicals to recover 75% of 5,330 tons of general water a day and reused water to account for 62% of 6,500 tons of purified water a day.

Controlling Air Pollutants

Using automatic detectors, SK chemicals always keeps track of the air pollutants its plants emit. Its tele-monitoring system (TMS) also keeps watching over these facilities around the clock. By signing a voluntary environmental agreement to lessen air pollutants, the Company is putting forth its efforts to NOx, SOx and VOC emissions and dust by 15% during the first period from 2006 to 2010 and by 16% the second period from 2011 to 2015.

※ See the "Performance Data" in the Appendix section for the types and concentrations of air pollutants that each plant emits.

Volatile Organic Compounds (VOCs)

None of the plants or offices of SK chemicals are subjected to the special regulation on the monitoring and control of volatile organic compounds (VOCs). Yet the plant at Osan gathers and recycles some of the VOCs from its manufacturing activities. The Ulsan plant established the Five-Year Plan for the Management of VOCs in 2012, and included it in its Report on the Voluntary Implementation of Environment Conventions on the Reduction of Air Pollutants. Of the VOCs defined by the Ministry of Environment in July 2012, the Ulsan plant generates methanol, chloroform, toluene, normal hexane, and xylene. In 2013, the materials are the same as in 2012. The amounts of discharged VOCs are as follows.

Amount of Discharged VOCs (Unit: ton)

	2011	2012	2013
Amount of Discharged VOCs	10.0	9.0	9.0

Ozone Layer-Depleting Substances

SK chemicals uses R-123, R-12, and R-22 as coolants for its air conditioning and refrigerating systems. The fire extinguisher fillers also include halon -1301 and halon-1211. These substances contribute to the depletion of the ozone layer. Small amounts of these substances are naturally discharged into the air. SK chemicals employs no manufacturing process that directly uses or generates ozone layer-depleting substances, and has no independent plan to reduce the amounts of these substances that are naturally leaked in tiny quantities. Nevertheless, the Company, according to its greenhouse gas inventory system that was introduced in 2009, keeps records of the amounts of ozone layer-depleting substances such as HCFC and CFC, used or leaked at each of its plants.

※ All the plants together generate approximately 1,500 tCO_2eq in total.

Soil Contamination Control

SK chemicals has reinforced its monitoring system designed to prevent the contamination of soil around its plants. The plant at Osan has shut down the boiler fuel storage system in an effort to eradicate risks of future soil contamination. The plant has also replaced bunker C oil with liquefied natural gas. A survey of the chemical facilities at the Cheongju plant by the Korea Occupational Safety and Health Agency also revealed that the plant was free from any possibility of soil contamination. The Ulsan plant also passed the soil contamination test by the Korea Testing Laboratory.

Controlling Noises and Odors

SK chemicals has established and implemented its own noise and odor control standard at its plants. It also employs services of specialized agencies to share the relevant information with local communities. The Osan plant installed new facilities for the prevention of noises and odors in response to the complaints local residents raised regarding the noises and odors the plant's freezer containers and research units generated. The plant surveyed whether the level of noise around the plant's boundary exceeded the legal maximum, and installed a noise meter, a soundproof room, and an active carbon tower (capable of processing 80Am^3/minute) as a result.

Investments in Environmental Facilities

In an effort to maximize the efficiency of investments in environmental protection efforts and improve environmental performance, SK chemicals divides its environmental facilities into multiple categories by purpose, including: preventing air pollution; controlling water quality; controlling odors (and VOCs); controlling noises and oscillations; managing wastes; preventing soil contamination; controlling toxic chemicals; forming green spaces; and developing environmental technologies. The Company systematically manages investments using these categories. It invested 6.38 billion won in 2013.

Environmental Investment by Years (Unit: billion won)

Year of investment	Main Content	Investment	Improvement (Reduction efficiency)
2012	Fuel switching and improvement in wastewater treatment plant	7.14	Reduce environmental load
2013	Reuse of general drain water	6.38	Recycling resources
2014(planned)	Preparing for tougher discharge standards	6.84	Reducing air pollution load
2015(planned)	1st-phase wastewater treatment plant expansion	7.12	Improving water treatment efficiency
2016(planned)	2nd-phase wastewater treatment plant expansion	7.71	Improving water treatment efficiency

※ This table was produced based on Ulsan Plant with the biggest environmental facilities and does not cover Osan and Ansan Plants and S HOUSE since their invested items are treatment chemicals and expendables and their proportions are small

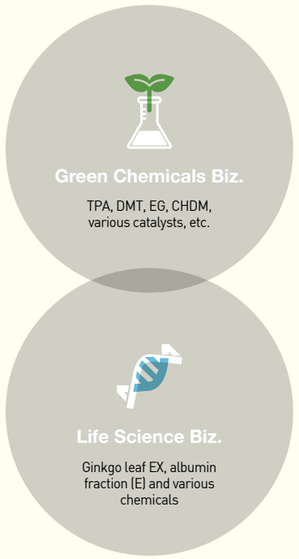
Efficient Use of Resources

Unlike the conventional method, wastes are recycled at SK chemicals to save limited resources. We also take the lead in the movement to reduce greenhouse gas emission with a road map towards carbon neutrality by converting the industrial type waste into low-carbon, resource-recycling industrial type waste. Such a movement is a result of our conviction that using limited resources economically is a way to co-exist with the earth.

Building Eco Green Plant

SK chemicals set the creation of Eco Green Plant by switching to a low-carbon resource circulation industrial structure as an environmental goal in the production phase. Therefore, the Company integrated and implemented the management of resources and materials and activities to enhance energy efficiency and productivity. The Company formulated the Carbon Neutrality Roadmap on the basis of environmental goals and replaced fossil fuels with non-fossil fuels. These efforts allow us to focus on reducing greenhouse gas emissions. In addition, we aggregate the input and output of a year to check and improve our performances and report the results to internal and external stakeholders.

Materials by Divisions



Resource Cycle

SK chemicals works hard to establish a system of comprehensive resource recycling in order to make its plants eco-friendlier. Resource recycling refers to recycling and reusing resources throughout the production and life cycle of a given product. Recycling resources throughout products' life cycles is crucial to ensure a better use of available natural resources and minimize impact on the natural environment. To this end, SK chemicals reduces the amounts of raw materials it uses for production, and improves its facilities and processes to minimize the amounts of raw materials being wasted. Waste raw materials, in turn, are recycled or reused, while final waste, wastewater, and by-products, are discarded in a legal and safe manner. No reports have been made in 2013 concerning the Company's violation of any law on environmental protection.

Managing Raw and Subsidiary Materials

SK chemicals strives to improve the efficiency of using raw and subsidiary materials by ensuring a thorough control of their delivery, inventories, storage, and release out of the warehouse. Making efficient use of these limited resources is vital to saving natural resources and minimizing impact on the environment. The automobile material division of the Ulsan plant uses recycled materials from affiliates of SK chemicals to produce SKYVIVA, an eco-friendly soundproofing material used in automobiles and building. SKYVIVA (www.skyviva.com), made with recycled materials from SK chemicals, HUVIS, and SKC, generates approximately 34.7 billion won in revenue each year. SK chemicals continues to look for and develop similar profit sources based on recycling waste materials. In 2013, SK chemicals used 414,289 tons of raw and subsidiary materials in total.

Use of Materials and Recycled Materials (Unit: ton)

	2011	2012	2013
Materials	435,697	371,028	414,289
Recycled materials	1,311	2,245	3,500

Efforts to Respond to Climate Change

SK chemicals made a carbon neutrality roadmap in 2009 and is replacing fossil fuel-based boiler systems with alternative ones that do not use fossil fuels. The carbon neutrality rate that began at 19% in 2010 increased to 24% in 2013. The rate will be steadily raised by the Company every year. SK chemicals is planning to run Ulsan Plant which is responsible for manufacturing 90% or more of the Company's products with alternative energy in 2020.

Carbon Neutrality Goals and Management Plan

Carbon neutrality refers to the state in which an economic activity generates zero carbon emissions. There are two ways to achieve this: namely, either fundamentally eliminating the use of all fossil fuels internally, or offsetting, externally, the amounts of carbon emissions already generated with carbon-absorbing, oxygen-producing forests, green spaces, and so on. Seeking to achieve perfect carbon neutrality by 2020, SK chemicals has opted for the former method and is now replacing fossil fuels at its plants with alternative sources of energy. The Ulsan plant, which produces over 90% of all SK chemicals' products (in terms of weight) and delivers steam to the companies making up the SK chemicals Ulsan Complex, plans to increase its carbon neutrality rate to 47% by 2015, and to 100% by 2020, completing its Carbon Neutrality Energy System.

Establishing Carbon Neutrality Roadmap

In 2009, SK chemicals established its Carbon Neutrality Roadmap, announcing its plan to replace fossil fuel-based boiler systems with alternative ones that do not use fossil fuels. The carbon neutrality rate that began at 20 percent in 2010 will be steadily raised by the Company every year. SK chemicals is planning to run Ulsan Plant, which is responsible for manufacturing 90% or more of the Company's products (in terms of weight) and emitting 95% or more of the Company's greenhouse gases only with alternative energy in 2020.

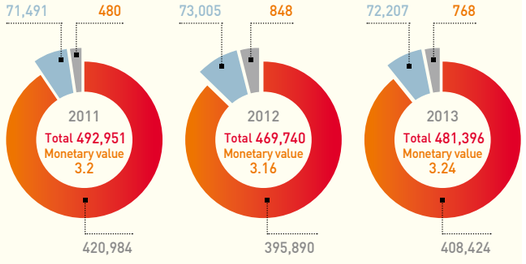
Management of Carbon Neutrality Roadmap

With an eye toward boosting the implementation of its Carbon Neutrality Roadmap, SK chemicals has mapped out an action-oriented management plan that that controls the carbon neutralization ratios of the SK chemicals Ulsan Complex and SK chemicals separately since 2009. Since 2013, the Company has upgraded its strategies to integrate its dual Carbon Neutrality Roadmap into one single complex-oriented roadmap by taking into consideration the fact that the Company actually consumes about 30% of its total energy and sells the remaining amount to the Ulsan Complex and SK energy. At the same time, SK chemicals is improving management methods for the better implementation of the roadmap by deciding and adjusting yearly targets each year in the light of the previous year's performance and circumstances.

In 2013, the Company reached 24% as its carbon neutralization rate, failing to reach the original target of 35% in 2013. This was attributed to the fact that the use of fossil fuels increased considerably as the operation of waste heat collection facilities as a project to burn biomass in a coal boiler were put off and the Steam Highway project began to supply energy to SK energy in 2013. The Company also encourages employees to participate in efforts for saving energy on a daily basis. The Company has installed bicycle racks and user ID systems to encourage more and more employees to commute to and from work by walking or bicycling. We are also running the Green Point Program through which employees can accumulate their points for commuting to and from work by walking or bicycling on the PC or mobile homepage of the program.

Greenhouse gas emissions ● Scope1 ● Scope2(electricity) ● Scope2(heat)

(Unit: tCO_2eq, tCO_2eq/billion won)

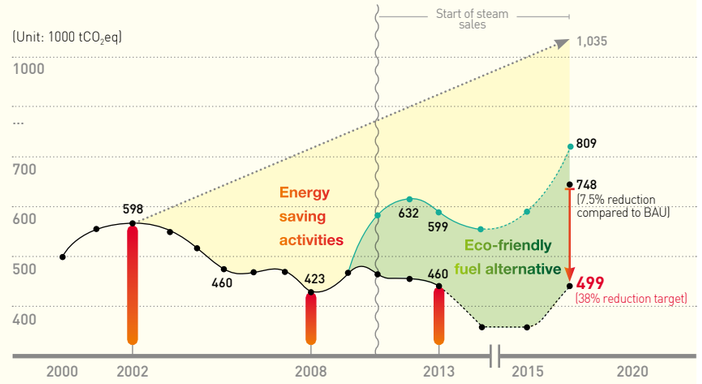


※ The greenhouse gas emissions and total energy use are from statements in the greenhouse gas and energy target management system. Processing decimals may result in different totals.

Detailed Reduction Activities in 2013 (Unit: tCO_2eq)

Preheating boiler make-up water with heat from processes	Preheating boiler feed water with exhaust gas heat	Using methane gas from organism fermentation as energy
5,352	6,390	967

Greenhouse Gas Emissions from Ulsan Plant



Management of Carbon Neutrality at Ulsan Plant

SK chemicals is steadily monitoring the greenhouse gas emission flow at Ulsan Plant that emits 95% or more of the Company's greenhouse gases and produces 90% or more of the Company's products (in terms of weight) and implementing detailed reduction strategies for the plant. An increase in production and others since 2000 compelled the plant's greenhouse emission BAU* to steadily increase. But energy saving activities and the introduction of eco-friendly energy (the introduction of a boiler running on waste wood, the utilization of bioliquefied products and gas emissions from water treatment facilities) enabled SK chemicals to reduce greenhouse gas emissions from Ulsan Plant by about 30% compared to 2002. The utilization of alternative biomass energy has offset an increase in greenhouse gas emissions due to the sale of steam to outsiders since 2009. The Company is steadily developing strategies to reduce greenhouse gas emissions since emissions are expected to increase thanks to the start of the mass sale of steam via the Steam Highway project in 2013. Through this, we will secure emission rights in a cap and trade system scheduled to begin in 2015.

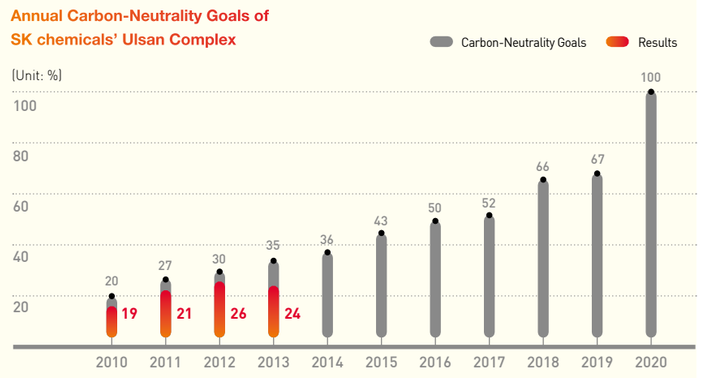
*BAU Business As Usual which means the projected amounts of greenhouse gas emissions when there are no additional reduction activities.

Future Plan for Carbon Neutrality Roadmap

In 2014, SK chemicals will invest in facilities to mix waste wood with coal and burn it in a coal boiler in order to reach 100% carbon neutrality although energy use to supply to outsiders increased. The Company will expand eco green boilers and discover additional bio-gases by 2015. A company pursues steady growth. During this process, production increases naturally. SK chemicals will offset greenhouse gas emissions that increase with production with the use of alternative energy and spread the effects to five companies in its Ulsan Complex to help slow down climate change.

$$\text{Carbon neutrality rate} = \frac{\text{Amount of greenhouse gas emissions from biomass}}{\text{Total amount of greenhouse gas emissions}}$$

Annual Carbon-Neutrality Goals of SK chemicals' Ulsan Complex



※ **Carbon neutrality** a state in which an economic activity produces zero carbon in effect. Carbon emissions can be neutralized or completely eliminated either by not using fossil fuels at all, or by offsetting the amount of carbon emissions generated with the carbon-saving effect of forests and other such green spaces and features. SK chemicals uses non-fossil fuels to achieve carbon neutrality.
SK chemicals Ulsan Complex comprised of five companies receiving steam and electricity from SK chemicals, i.e., SK chemicals, HUVIS, SK petrochemical, SK CYTEC, and Eastman Fiber Korea Limited (EFKL).

Promoting Carbon-Neutral Roadmap

Business sites including the Ulsan plant use bio-liquefied oil and wood waste, by-products of bio-gas and biodiesel from Wastewater treatment and production processes as fuels. Eco-Lab including the headquarters and research institute is steadily increasing power output through solar and geothermal power generation systems.

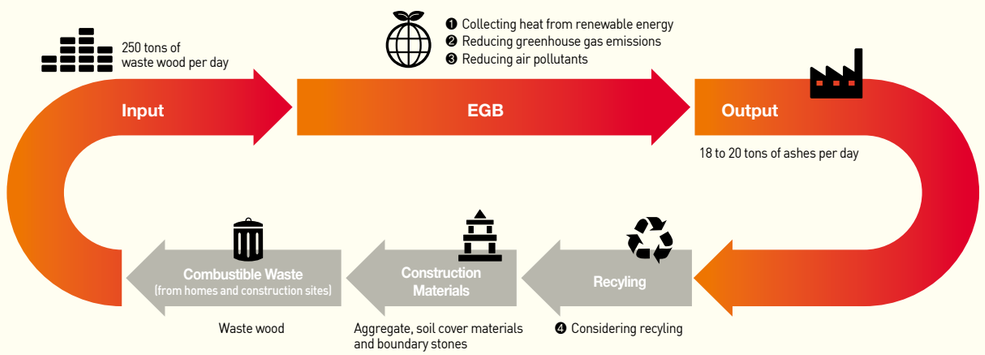
Recycling Biogas and Bio-Liquid Oil

Recycling biogas helps reduce the use of fossil fuels and also handle methane from processing animal waste. In 2013, SK chemicals capture methane emissions from expanded anaerobic waste water treatment facilities (CH_4 emissions: 150Nm^3/hr) and sold 341.96 tons of them to SK petrochemicals in the Ulsan Complex and used some of them as a boiler fuel. This allowed the Company to replace 319,492 Nm^3 per of LNG and saved the Company 706 tons of greenhouse gas emissions a year. Methane gases generated from a sewage treatment plant in Yongyeon of Ulsan are used as fuel for a bunker-C oil boiler as well. SK chemicals enjoyed the largest share of the Korean biodiesel market and is slashing greenhouse gas emissions and waste by replacing fossil fuels in the boiler plant with bio-liquid oil generated during production of biodiesel. We lessened 4,220 tCO_2eq of GHG emissions by using 1,633 tons of bio-oil in 2013.

Eco Green Boiler

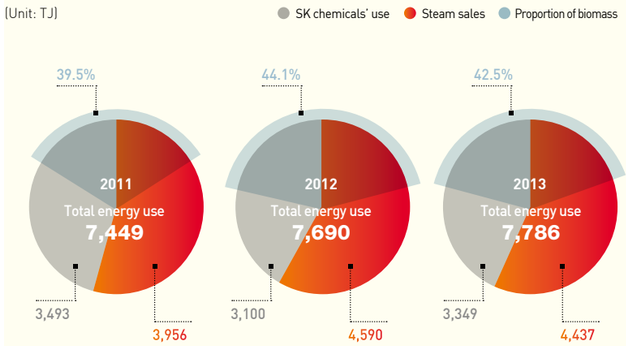
SK chemicals operates the Eco Green Boiler (EGB), at the Ulsan plant, which runs on combustions of wood wastes to generate steam. This boiler system helps to reduce the annual amounts of air pollutants and greenhouse gas emissions by 440 tons and 55,000 tons, respectively. By replacing the soft coal boiler with the EGB and the diesel, traditionally used to resume operations after a halt with refined biomass-based oil, SK chemicals uses 181 tons less diesel and emits 470 tons less greenhouse gases each year.

Eco Green Boiler's Flow and Effects



❶ 40 tons of steam per hour ❷ Replacing fossil fuels: 55,000 tons per year ❸ 0.1ng or less dioxin (building prevention facilities in accordance with the waste treatment facility standards) ❹ Incinerating test, ash analysis and recycling test (strength)

Proportion of Biomass Use in Energy Use at Ulsan Plant



Climate Change Data Management System

Greenhouse Gas Emission Control System

In order to ensure a thorough control of greenhouse gas emissions from its plants, SK chemicals has completed the development of a greenhouse gas inventory system on the latest information technology, thus providing for efficient energy management in line with the Framework Act on Low-carbon Green Growth. The system has been in place at the Ulsan plant since 2009, and was extended to the plants in Cheongju(S HOUSE), Ansan, and Osan, which together produce the products of the Life Science Business Division. The Company completed the registration of the Andong plant (L HOUSE) as a source of greenhouse gas emissions by confirming its source and emission calculation methods in 2013. Therefore, greenhouse gas emissions will be managed on production of vaccines after the completion of the plant in 2014. In response to the carbon emission rights trade that is to come into effect in 2015, SK chemicals has also established the emission rights trade trial project plan, seeking to develop an effective response strategy by accumulating relevant experience over the next three years.

Integrated Environmental Information Management System

Many recent examples of disclosing environmental information and a drop in the reliability of data provided by companies are demanding a need for the integrated and centralized management of environmental information. Also, the inefficiency in reporting similar environmental data in different standards have led SK chemicals to develop and implement a company-wide "Environmental Information Management System". The system inputs all data related to energy and the environment such as raw materials, air and water pollutants, energy, greenhouse gas, safety, health and environment-friendly procurement at the beginning of each year. This will thus enable the Company to effectively tackle a series of evaluations and public regulations through a single channel such as the Sustainability Report, the DJSI (Dow Jones Sustainability Index), CDP (Carbon Disclosure Project) and the Environmental Information Disclosure System.

Receiving Chairman's Prize from Green Growth Commission

The Ulsan plant has been praised for taking the lead in green growth through the use of new and renewable energy such as wood chips, bio gas and bio liquefied oil, a reduction in greenhouse gas emissions, production of eco-friendly products such as Ecozen and bio diesel and clean-up activities at Ganjeol Cape, Cheoyong Park and Solmaru Path. These endeavors earned the Ulsan plant a prize from the presidential Green Growth Commission (chairman: the Prime Minister) on February 20, 2013.

Eco Lab

Eco Lab is the new office building in Pangyo completed in November 2010. It became the first office building in Korea to receive the Level 1 Energy Efficiency Certificate from KEMCO, in addition to receiving the highest score on the Korea Green Building Council' GBCC survey. Eco Lab also became Korea's first office building to win the highest level of recognition on the LEED evaluation by the USGBC. It even went on to win the Grand Prize at the Korea Architecture Award. Eco Lab tours, organized to improve the public's understanding of eco-friendly architecture, have so far attracted 3,195 visitors from Korea and abroad (as of the end of December, 2013).

Eco Lab was designed to significantly reduce energy by 44% and water consumption by 63% and greenhouse gas emissions by 33% in comparison to other office buildings. SK chemicals monitored the building's performance every year. The building decreased energy consumption by 35%, water consumption by 23%, and greenhouse gas emissions by 27% in 2013. The building generates part of the energy it needs from its own solar and geothermal energy systems. In 2013, the building generated 8.25 MWh and 1.78 Gcal from these sources, respectively.

Number of Eco Lab Tour Participants

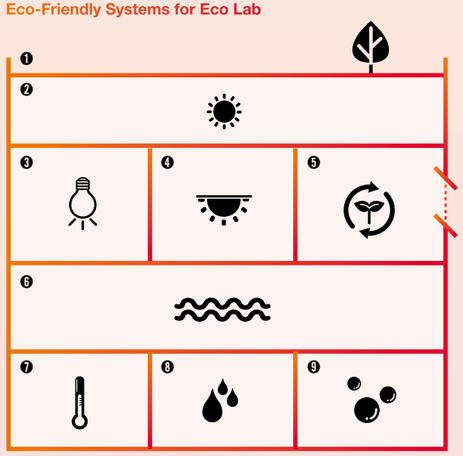
(Unit: persons)

	2010(from Nov. to Dec.)	2011	2012	2013
Number	183	1,062	1,135	815

Comparison of General Building and Eco Lab in Terms of Environmental Impacts

-35 % Electric Power (MWh)	8,562 Eco Lab	<	13,266 General Building
-23 % Water Resources(m^3)	70,642 Eco Lab	<	91,776 General Building
-27 % Greenhouse Gas Emissions (tCO_2eq)	5,225 Eco Lab	<	7,177 General Building

Eco-Friendly Systems for Eco Lab



Exterior

❶ The rooftop park reduces the heat island effect, while also saving the amount of energy used on air-conditioning by more than 10%.

❷ The solar cell module installed on an outer wall of the building generates energy for the building's activities.

Interior

❸ The luminosity detectors automatically adjust the brightness of the energy-efficient LED lights

❹ The roll screens on the windows that automatically adjust themselves depending on the movements of the sun help to keep the lighting in the office spaces optimal.

❺ Eco-friendly interior finishes have been used and CO_2 meters were installed to improve the quality of indoor air.

❻ The streams of water flowing down a wall in the lobby provide a cooling effect during the summer and a humidifier effect during the winter

❼ The heat pump system ensures energy efficiency by utilizing ground heat (approximately 15℃) to run the air-conditioning system.

❽ The water-gathering system collects rainwater and groundwater, while the middle-water processing system recycles used tap water for flushing toilets and watering plants outdoors.

❾ Air-conditioning and fire-extinguishing systems inside the building are free of such ozone-depleting substances like halon and Freon.

L HOUSE

L HOUSE, a cell culture vaccine plant is the nation's first large-scale plant that can produce influenza vaccine through a cell culture system. The plant is able to flexibly adjust production and can be used as an emergency production facility. The plant is free from fertilized eggs required for vaccine production in the past. Thus, no external contaminating materials such as avian influenza can penetrate the plant, one of its many strengths. The plant helps Korea to become more independent in terms of vaccines and at the same time, minimizes the discharge of pollutants by dramatically reducing the use of energy compared to existing systems. This earned the plant a Gold rating from LEED (Leadership in Energy and Environmental Design), a U.S. green building certification system, a first for a pharmaceutical plant in the world. Recently many companies in Korea introduced eco-friendly elements to their plants but the highest grade had been silver. Particularly no pharmaceutical plant received the certificate since a pharmaceutical plant has to pursue perfect seals and hygiene to honor the GMP for production of excellent drugs. L HOUSE is designed to save up to 30% of energy compared to existing plants. Its eco-friendly technologies are largely divided into the following five.

Eco-Friendly Technologies Applied to L HOUSE

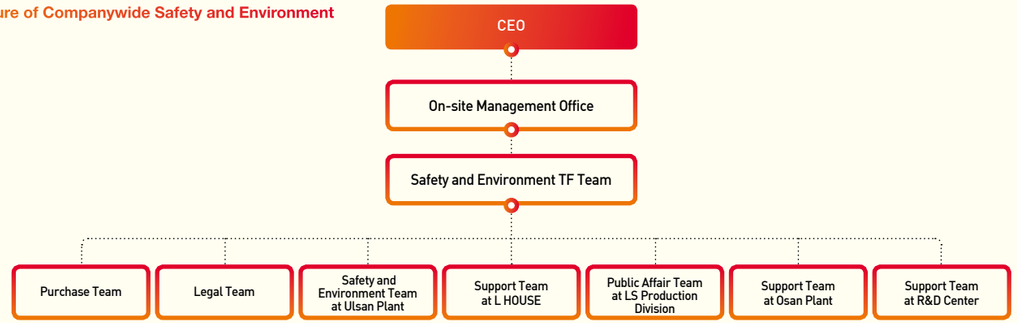
	Major Applied Technolgies
Sustainable Sites	• Parking space for eco-friendly cars, special floor treatment for parking space and bicycle racks • Eco-friendly landscape planning and maximized open space (Six times bigger than the standard size) • Rainwater tank to control the amount of rainwater when rain pours and facilities for non-point source pollutants • Measures to cope with erosion and disposition and to control dusts at construction sites • Materials to slash heat island effects on roofs and paved surfaces
Water Efficiency	• Sanitation instruments for bathrooms with water-saving products and the recycling of wastewater from plants (Bathroom and RO water tank room) • Utilizing rainwater through a rainwater tank and eco-friendly vegetation planning for saving water (Reducing water use by more than 50%)
Energy & Atmosphere	• Reducing water use by over 10% by using energy-saving equipment and LEDs • Eco-friendly refrigerants against the depletion of ozone layers and global warming • Enhanced commissioning and verification of the energy use system
Materials & Resources	• Outside garbage separation site and containers for recycling • Formulating and executing a construction waste management plan • Utilizing recycled materials (over 22%) and reflecting a reduction of 25% or more environmental load of recycling
Indoor Environmental Quality	• Making fresh air from outside account for more than 30% of the entire air in the rooms. • Various facilities to control and blcok internal pollutant sources • Applying eco-friendly glues and paint (less than VOC standards)

Workplace Safety and Health

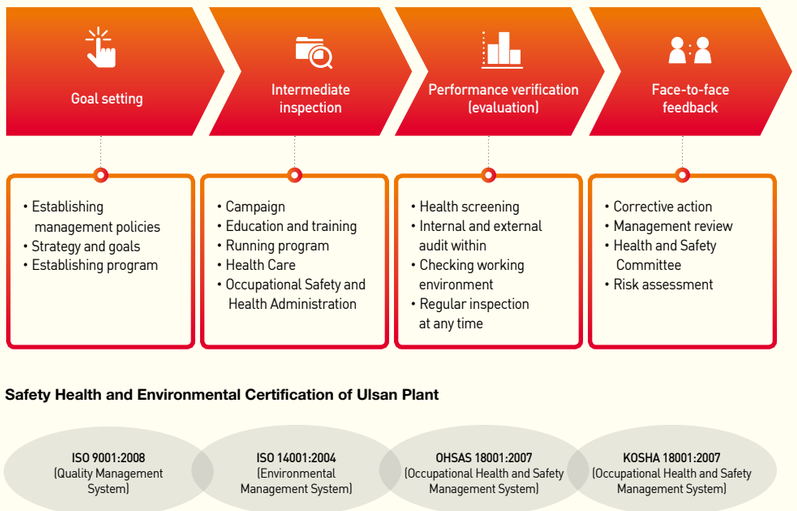
The Ulsan Plant has already established a safe and healthy management system on the basis of OHSAS 18001, an international standard for safe and healthy management, and a received certification. We are increasing the credibility of our safe and healthy management by getting diagnosed by the Korean Occupational Safety and Health Agency once a year. On top of all of this, SK chemicals runs the Safe and Healthy Committee and arranges for a medical checkup each year to promote the safety and health of the employees.

Occupational Health and Safety Management System

Structure of Companywide Safety and Environment



Flowchart of Health and Safety Management System



Safety Health and Environmental Certification of Ulsan Plant

Safety and Health Control System

With higher social demand for safety at work and a need for better internal control system, SK chemicals' Ulsan Plant has established and practiced a safety control system for all stakeholders.

• **Safety Green Card System** This Green Card System has been in place since May 2013 for the safety of workers in the Ulsan Plant, construction sites, and associated companies. The system implements a Green Card –for excellent management, a Red Card for those with one strike-out for the violation of one of the four key items, and a Yellow Card for the violation of one of the 20 priority control items. By clarifying awards and punishments, we have intensified our safety control system.

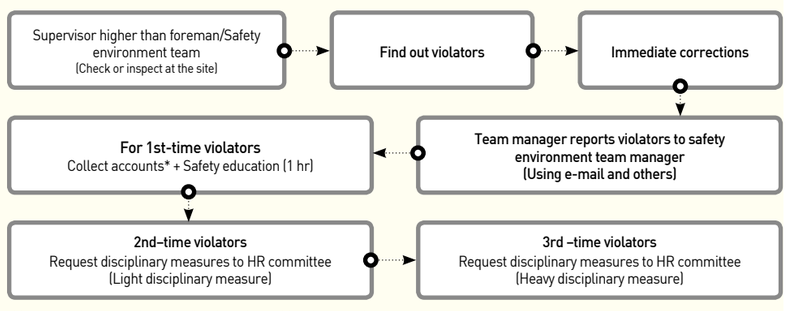
Title	Description	
Green Card	☐ Safety environment rule observer	
One Strike Out (Red Card)	☐ Not wearing individual protective device	☐ Not completing safety education
	☐ Drunk(blood alcohol content: 0.05% or higher) & violence	☐ Smoking at designated place
Yellow Card	☐ Unsuitable for using ladder	☐ Unsuitable for falling prevention device
	☐ Unsuitable for conventional or hand tools	☐ Unsuitable for device against falling materials
	☐ Unsuitable for grounding electric tools	☐ Signal man not positions
	☐ Insufficient spark prevention device	☐ Unsatisfactory in dealing with dangerous substances
	☐ Insufficient in fire prevention	☐ Unsatisfactory in dealing with high pressure vessels
	☐ Removal of protective device without permission	☐ Closing up work not performed
	☐ Lifeline not installed	☐ Grounding not performed
	☐ Unsuitable for handling heavy materials	☐ Illegal waste dumping
	☐ Unlicensed work for safety	☐ Flow out waste water into common drain
	☐ Unlicensed access to prohibited places	
	☐ Other unsuitable acts that may lead to accidents ( )	

• **Seven Safety Rules** Established in October 2013, this safety control system for the personnel of our Ulsan Plant (including its associate companies) consists of seven safety rules to prevent accidents that may occur during operations. With the observation of the seven safety rules, the Ulsan Plant is playing a pivotal role in setting the tone for safety culture. For an even more effective practice of the safety rules, we have intensified the function of site patrol and checks as well as other measures through the monitoring of the safety control sector with strict punishments for violators.

7 Safety Rules

1. Wear protective device
2. Smoking only at a designated place
3. Observe permitted work conditions
4. Block electricity (power)
5. Check oxygen level in closed spaces
6. Do not remove protective device
7. Immediate report of accident

Performance Flow



*Account A document that describes how the accident happened.

Safety and Health Level Evaluation

We conduced thorough evaluations safety, health, and environment based on objective data clarified by company-wide KPI Guidelines. With the KPI evaluation of each production line, objective points calculated through objective items and a quantified formula concerning safety, health, and environment are controlled by considering the conditions of the production site.

Evaluation Items for Safety and Health Level

Cut in marks according to accident damage → Manager factor → Cut in marks due to indicated items → Additional points for improvements → Additional points for merit and best practices

KPI		Guideline
P Team Manager	Operation Index	**Quality Control** • Define beforehand the items of quality control and the level of spec-in; set defection rate or 1~2 core conditions of spec-in as an objective. **Safe Environment** • Points are deducted when a safety/health related accident happens (Example at Ulsan Plant) - 90 Points when no accident happens - Deducted points❶ x 100/number of team members❷ + Material loss (10poins/KRW10,000,000)
	Manufacturing cost ratio in O/I matters	• Definition: Manufacturing cost ratio per product or U/T unit (Power Team: UT basic unit) • Result: Manufacturing cost per unit ± Main material/Power price increase ± Effect from Product mix change
R Team Manager	Patent amount/Higher organizational capacity	• Sate in detail on the attached sheet the number of major patents and the effect of the activities for higher organizational capacity.

❶

Title	Deduction points	Safety	Environment
Slight accident	5	Loss equivalent to 1~7 days' labor	Leaks from plants
Light accident	15	Loss equivalent to 8~14 days' labor	Administrative penalties, fines
Serious accident	30	Loss equivalent to over 15 days' labor	Media reports, fines

❷ Ansan Plant, Osan Plant, S HOUSE, and L HOUSE set each standard in accordance with the above criteria.

• For good results coming from a special effort to prevent safety / environment related accidents, additional points are given.
(**e.g.** Receiving awards from an outside institution; license related to safe work environment that may lead to profit; safety/ environment control system update; developing standardization manual or developing/practicing education programs.

Inspection and Self-inspection Programs

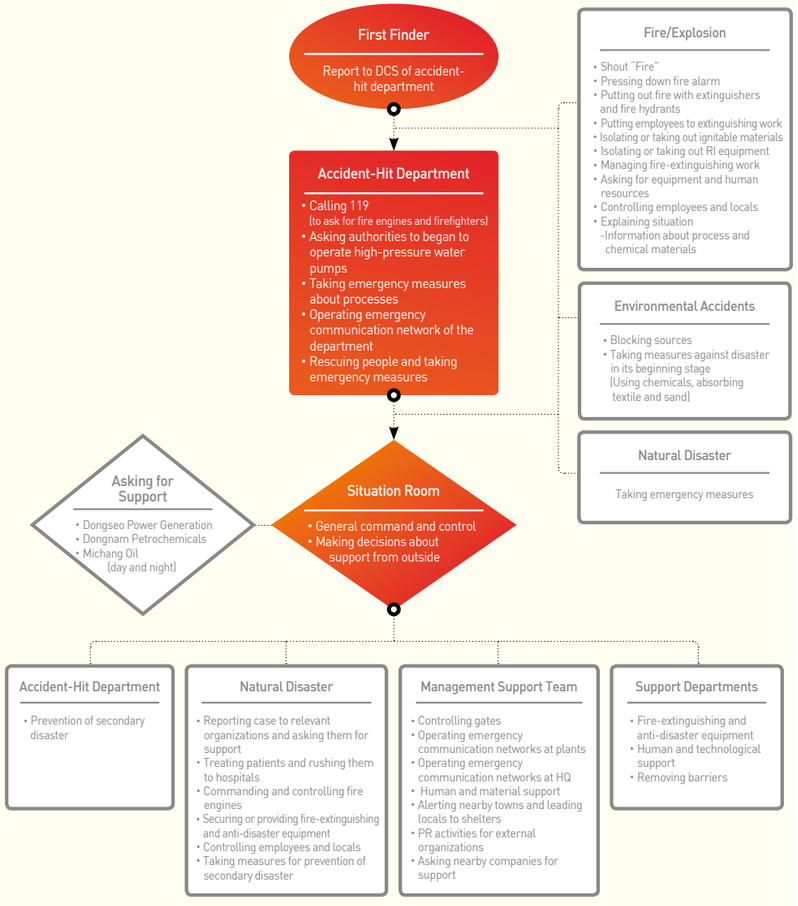
• **SHE Inspection Program** We operate a program to monitor the state of safety and health at our workplaces in accordance with our internal inspection regulations. Our inspection team for SHEQ executes its inspections twice a year and operates a program to improve the detected problems.

• **Inspection Program for Process Safety Report** This program includes process experts as evaluators and checks safety factors, from general to technical, to improve detected risk elements.

Emergency Control System

Each SK chemicals plant operates a fire control system to cope with emergencies that may occur at work. SK chemicals has action manual to minimize the environmental impact, personnel injury, and property loss as a result of a mishap such as fire, explosion, natural disaster, or other circumstances.

Emergency Action System



Control of Hazardous Chemicals

SK chemicals offers information regarding various hazardous substances used in the workplace under the Chemicals Management Regulation and SHEQ System. The SHEQ System is a comprehensive information system regarding safety/health environment quality management established in 2005. This system manages various indices of safety/health environment such as disaster statistics, environment impact, education and training, as well as other methods. The hazardous chemicals used by SK chemicals, to name a few, include methyl alcohol, sodium hydroxide, ethyl acetate, toluene, chloroform, and xylene. Such chemicals are used for the purpose of mixing with another substance, making a reagent or pH control. Each relevant sector manages these hazardous chemicals with responsibility and authority under the standard for a hazardous chemicals storage facility. For stricter control and management, we appoint multiple administrators and give instructions to check the facility and equipment once a week. We have also established and observed the waste treatment regulations to prevent environmental contamination and to ensure the safety of the testers or those in the lab. Chemicals for reagent are discarded after being used and cleansing water is treated at our wastewater treatment facility. The amount of hazard chemicals we used in 2013 was 33,637 ton, a little up from the previous year, and no accident occurred in 2013 from hazardous chemicals in any of the plants run by SK chemicals.

Toxic Chemical Use

[Unit: ton]

	2011	2012	2013
Toxic Chemical Use	27,279	30,238	33,637

Health Promotion Program for the Personnel of SK chemicals

We are now preparing the "9988 Health Promotion Program", a method to live actively until the age of 99. Here '99' stands for 99 years of age, and '88' pronounced 'pal-pal' in Korean which means 'a healthy, active life'. With that in mind, we operate a program to promote a smokeless, no-alcohol, reduced salt lifestyle. As a result of the program, SK chemicals was awarded the "Certification of Superior Health Promotion Company" from the Industrial Safety Agency in November 2013.

Health promotion program

No-Smoking Program
- No smoking inside the building since July, 2013
- Decreasing outdoor smoking space
- In-house non-smoking clinic

↓

8 out 21 people succeeded in stopping smoking (38%)

Sobriety program
- Anti-heavy drinking movement

↓

Running Group Dinning-Free Friday Program

Anti-obesity program
- Exercise and eating guide
- Regular monitoring
- Selecting and awarding Diet King

↓

34 out of registered 45 succeeded (74%)

Low-salt meal program
- Salinity of soup and seasonings Step-by-step reduction in amount of sodium

↓

Current salinity: 0.7%

Product-related Responsibility and Customer Satisfaction

SK chemicals is making every effort fulfilling its responsibilities for products for the purpose of safeguarding the environment by protecting valuable life and creating a healthy world and realize its corporate value to prevent the exhaustion of fossil energy. On top of that, the Company is working hard for customer satisfaction with a determination to analyze and understand customer needs and offer safe products.

QAQC Strategy and Others

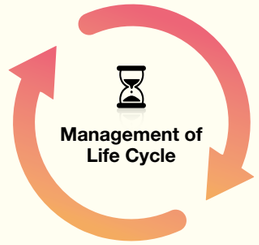
Green Chemicals Biz.

SK chemicals aims to provide products that customers can rely on by supplying safety certified products. As the product line is expanded, the procedure and system to control product safety is constantly supplemented and intensified. With increased authority, the quality control team of the Ulsan Plant performs the work by leading, helping, and checking reliable product quality. Recently, SK chemicals is paying concentrated efforts to maintain the purity of the products by prevent the intake of impurities in the process of product packaging.

• SHEQ System at Ulsan Plant At our Ulsan Plant, all members, through the SHEQ System (Safety Healthy Environmental Quality System), are engaged in the business of evaluating and improving the environmental impact, the outcome of administration, and the hazardousness of chemicals in the process of production, service, and discarding of products. The SHEQ System for the Ulsan Plant has ISO 9001(Quality Management System), ISO 14001(Environmental Management System), and OHSAK/KOSHA 18001(Safety/Healthy Management System) applied, to minimize the damage of environmental pollution and to realize zero defect in production by detecting and improving hazardous elements regarding safe and healthy environment.

• New CRM System The Resin Business Sector of the Green Chemicals Biz has managed the Customer Relationship Management (CRM) system since September 2013. The purpose of introducing the CRM is to accumulate the information regarding customers and product development. The 'Chatter' program has been actively operated for real-time communications among the marketing, production, R&D, departments and its global staff. Especially when sharing information regarding the products, rivals, markets, etc. with its global staff has become more convenient through the group activities by the theme of the 'Chatter'. Through the CRM, we expect to be able to establish and realize business strategies earlier than our rivals.

• Environment-friendly Products In April 2013, we attained 'Cradle to Cradle (C2C)* Gold Level' from the Cradle to Cradle Products Innovation Institute ('C2CPII'), a global certification institute in the United States, and received credit for our environment-friendly resins such as 'ECOZEN®' and 'SKYGREEN®'. SKYPET® also won a silver label certificate. Receiving the C2C certification from C2CPII for PETG material was the first such case in the world. It was mainly because of the environment-friendly property of the resins and the environment-friendly production system. ECOZEN® and SKYGREEN® are also not harmful to the human body as they do not emit environmental hormones. They can be recycled so the resins received high evaluation points in the categories of health, recyclability, and others.



CERTIFIED cradle to cradle GOLD

CERTIFIED cradle to cradle SILVER

*C2C is a new environmental paradigm with the slogan of 'From Cradle to Cradle', a play on 'From Cradle to Grave'. It means the products, after use, can be reborn in the cradle as new products instead of being discarded to the grave.

Life Science Biz.

The quality control of SK chemicals is not a simple matter under GMP certification; it is a quality-related philosophy of the company focused on the whole processes of the production, development, and management of production. So the whole outcome index has been managed products specifically to cope with the customers' complaints. SK chemicals continuously maintains the quality of its products by accurately analyzing, understanding, and managing the customers' complaints. SK chemicals is in cooperation with diverse clinical test institutes both at home and abroad to ensure the safety, quality, and efficiency of its products. In each product we make, we highly regard the rights and opinions of our customers and stake holders. SK chemicals aims to steadily produce goods that meet the needs and demands from customers through the management and regular reviews of product life cycles.

Product Management System	• External Audits • Internal Audits • Quality Deviations related to GMP • Non-conformities • Customer complaints • Failure • Out of specification results • Periodic Product Review

Management of Product Life Cycle

• Developing Reliable Products through Clinical Test Institutes
SK chemicals is a domestic pharmaceutical maker that performs comprehensive clinical tests. We always consider the safety and efficiency of our products first. For more effective clinical tests, we are in cooperation with multiple domestic test institutes and overseas CRO's. SK chemicals produces safe and effectively working products abiding by domestic and overseas laws and regulations including the Investigational New Drug (IND) application system, etc.

• Status and results of clinical trials SK chemicals has currently secured highly safe materials. We are now preparing for clinical tests for drugs to treat dementia, asthma, irritable bowel syndrome, and other medical problems. By developing natural substances instead of chemical compounds that are conventionally used for drugs, we have minimized the drug's impact on human body and have maximized the safety of the drugs. We have secured our technical competitiveness by obtaining an approval from the Ministry of Food & Drug Safety for the development of a vaccine to treat influenza, herpes zoster, and other diseases quicker than our rivals.

• Ethical Clinic Test SK chemicals carefully manages the risks that may occur in the course of clinic tests. With top-level domestic personnel in clinic tests, we have raised the level of clinic tests and poured our energy into the safety of our products by observing the laws and regulations at home and abroad. With the Pharmacovigilance System introduction, we now have a system to collect and analyze the various hazardous elements of the drugs that might appear after they are marketed. We also do our best to solve ethical problems arising from animal tests by minimizing the pain and use of animals in clinic tests. SK chemicals has operated the Ethics Committee of Animal Test in our Bio-science Research Institute since 2009, and submits reports on the animal experimentations to the Ministry of Food & Drug Safety and Quarantine Agency.

• Minimized Environmental Impact SK chemicals safely disposes & minimizes the wastes generated in the process of design, production, and development of products. For this purpose, we are preparing a way to minimize the waste of production by designing efficient experiments applying Design of Experiment (DOE). In principle, the waste or spin-offs are recycled, otherwise, we purify the waste with our own processing facility before it is disposed of.

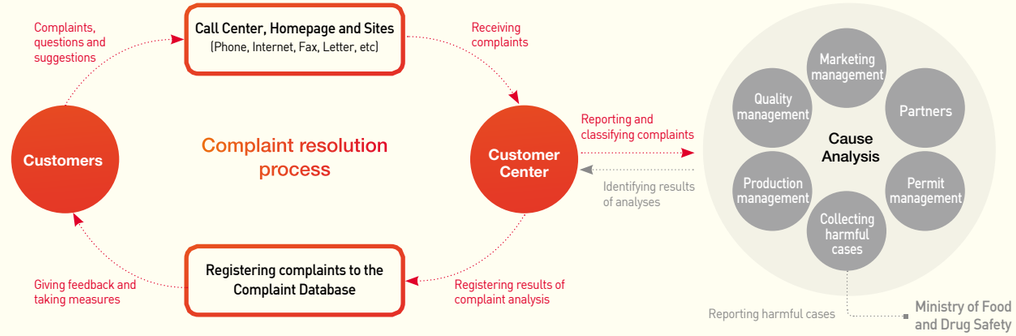
• Disposal of Unused Chemicals SK chemicals follow strict rules to dispose or manage unused chemicals. Generally we entrust the disposal work to a professional company for disposal licensed by the government to minimize the environmental impact of the chemicals. From the collection throughout disposal, each person in charge checks at each phase under governmental guidelines.

Customer Satisfaction

Process to remove customer complaints

The motto of SK chemicals is, "the company has to be trusted by customers with unvaried customer satisfaction, and has to advance with the customers." With this motto in mind, SK chemicals directly communicates with the customers through the customer service center or the reception window of our website. Also we are accumulating the reliability results from customers by effectively solving the difficulty or complaints of the customers in using the drugs. Resolving complaints is managed through the customer service center. The complaints accepted at the call center or homepage are classified and sent to related business sectors. A solution plan is made on the basis of the cause analysis and the feedback is made through the reception place. The contents of the solutions or consultations are recorded and managed at the complaint database. The details of the complaint management are reported every month to the top manager by way of the director of marketing headquarters, director of production headquarters, and the director of bio-science research institute.

Complaint resolution process

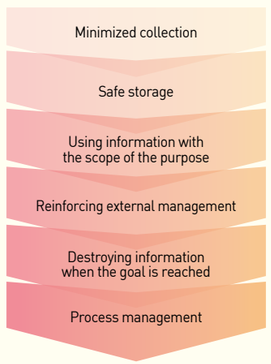


Protection of Customer Information

SK chemicals always does its best to prevent the leakage or misuse of customers' information by keeping six principles in mind with the collection and use of personal information. Except for unavoidable cases[1], we receive the customers' consent before using their information. We also reveal the purpose and items of information to be used along with the period in which the sensitive information[2] or personal information[3] will be used. We have intensified the education for staff since 2013 in connection with the management of customers' information, and have also checked the management situation. Pursuant to the laws, we will not collect customers' personal information from August 2014 and information which has already been collected will be discarded immediately. If the maintenance of the information is unavoidable, such information will be discarded by the end of July 2016 at the latest.

1. **Unavoidable case'** may include cases in which we need the customers' information to abide by acts or other obligations by law or the case that we need the information to perform the terms of the contracts with the customers.
2. **Sensitive Information** It means the information related to political affiliation, religious belief, the joining or disjoining from a union or political party, sex life, genetic analysis, the information related to a customer's criminal records, etc.
3. **Unique identifying information** social security numbers, passport numbers, driver's license numbers, alien registration numbers

Six Principles in Collecting Personal Information



Performance Data

Economic Data

	Scope	Unit	2011	2012	2013
Production					
PET	Green Chemicals Biz.	ton	150,402	79,164	73,917
PETG	Green Chemicals Biz.	ton	59,368	80,156	85,359
BON	Green Chemicals Biz.	ton	8,473	7,506	7,665
Biodiesel	Green Chemicals Biz.	ton	115,210	100,066	140,986
Blood products	Life Science Biz.	Bottle	888,529	945,125	1,266,733
Vaccines	Life Science Biz.	Dose	4,837,267	7,058,231	6,321,279
Solutions	Life Science Biz.	kℓ	315	228	248
Tablets	Life Science Biz.	Tablet	625,005,351	738,803,555	699,888,209
Patches	Life Science Biz.	Patch	14,992,312	17,907,672	38,994,351

Social Data

	Scope	Unit	2011	2012	2013
Social contribution					
Social contribution cost	Company-wide	100 mil. won	10	15	18
Employees who participated in volunteer activities	Company-wide	person	1,650	1,710	1,592
Volunteer hours per capita	Company-wide	Hour	2	2	8
Health check-up			Examinee	Examiner	Not Examined
General health examination	Eco Lab	person	432	425	7
	Ulsan Plant	person	350	350	0
	Ansan Plant	person	15	15	0
	Osan Plant	person	36	36	0
	S HOUSE	person	29	28	1
	L HOUSE	person	101	101	0
Common health examination	Eco Lab	person	609	609	0
	Ulsan Plant	person	350	350	0
	Ansan Plant	person	53	53	0
	Osan Plant	person	61	61	0
	S HOUSE	person	68	67	1
	L HOUSE	person	42	42	0
Special health examination	Eco Lab	person	122	122	0
	Ulsan Plant	person	158	158	0
	Ansan Plant	person	43	43	0
	Osan Plant	person	30	30	0
	S HOUSE	person	60	58	2
	L HOUSE	person	0	0	0

Environmental Data

		Scope	Unit	2011	2012	2013
Raw materials						
Raw materials consumed		Ulsan Plant	ton	433,038	370,189	413,210
		Ansan Plant	ton	84	121	124
		Osan Plant	ton	293	380	613
		S HOUSE	ton	2,282	338	342
Energy use						
Energy Consumption	Coal	Company-wide	ton	161,338	152,086	159,577
	B-A	Company-wide	kℓ	136	159	187
	B-C	Company-wide	kℓ	10,423	4,809	0
	Waste wood	Company-wide	ton	84,003	85,954	82,119
	Gasoline	Company-wide	kℓ	103	110	80
	Diesel	Company-wide	kℓ	566	212	159
	Biodiesel	Company-wide	ton	5,999	2,742	0
	Refined oil	Company-wide	ton	1,958	1,678	1,633
	LNG	Company-wide	1,000m^3	3,721	8,851	1,788
	LPG	Company-wide	ton	20	39	16
	Biogas	Company-wide	1,000m^3	8,433	11,188	11,140
	Electricity	Company-wide	MW	153,331	156,579	154,867
	Heat	Company-wide	Gcal	18,434	28,359	26,797
Energy Sales	Electricity	Ulsan Plant	TJ	1,951	2,218[1]	2,310
	Heat	Ulsan Plant	TJ	3,493	3,100	3,349
Water use and wastewater discharge						
Water use		Eco Lab	ton	56,304	66,128	65,760
		Ulsan Plant	ton	6,995,230	7,580,928	7,076,053
		Ansan Plant	ton	11,155	12,013	11,809
		Osan Plant	ton	29,091	34,783	67,550[2]
		S HOUSE	ton	46,304	59,922	53,588
Self-developed groundwater		Eco Lab	ton	867	2,181	4,882
		Ulsan Plant	ton	0	0	0
		Ansan Plant	ton	0	0	0
		Osan Plant	ton	65,861	60,010	29,920[3]
		S HOUSE	ton	0	0	0
Recycled water		Eco Lab	ton	0	0	0
		Ulsan Plant	ton	4,658,395	4,167,642	3,946,126
		Ansan Plant	ton	0	0	0
		Osan Plant	ton	0	0	0
		S HOUSE	ton	0	0	0
Wastewater (final discharging site)		Eco Lab (Pangyo Water Quality and Health Center)	ton	22,615	37,188	22,957
		Ulsan Plant (East Sea)	ton	590,570	673,010	694,519
		Ansan plant (Ansan Sewage Treatment Plant)	ton	2,790	2,930	2,890
		Osan plant (Osan Sewage Treatment Plant)	ton	52,097	49,680	39,420
		S HOUSE (Industrial Complex Wastewater Treatment Plant)	ton	27,734	31,831	31,916

1. 9.6 TJ/Gwh of calorific value of power (in terms of consumption) was applied in accordance with a guideline changed after 2012
2. Including self-developed underground water since 2013 3. The use of one of the two holes was stopped in May 2013

Environmental Data

		Scope	Unit	2011	2012	2013
Air and water qualities	Legally allowable standards					
Dust concentration at discharge	100	Ulsan Plant	mg/Sm^3	5	4	4
	50	Ansan Plant	mg/Sm^3	10	12	12
	100	Osan Plant	mg/Sm^3	7	0	10
	50	S HOUSE	mg/Sm^3	9	8	6
Sulfur oxide (SOx) concentration at discharge	200	Ulsan Plant	ppm	50	64	41
	180	Ansan Plant	ppm	17	17	18
	180	Osan Plant	ppm	0	0	0
	Not applicable	S HOUSE	ppm	0	0	0
Nitrogen oxide (NOx) concentration at discharge	180	Ulsan Plant	ppm	79	48	61
	200	Ansan Plant	ppm	169	167	166
	200	Osan Plant	ppm	0	0	0
	Not applicable	S HOUSE	ppm	0	0	0
Amounts of VOCs generated	Not applicable	Ulsan Plant	ppm	10	9	9
	Not applicable	Ansan Plant	ppm	0	0	0
	Not applicable	Osan Plant	ppm	0	0	0
	Not applicable	S HOUSE	ppm	0	0	0
Water pollutant (BOD) concentration at discharge	10	Ulsan Plant	ppm	4	5	4
	120	Ansan Plant	ppm	21	25	12
	120	Osan Plant	ppm	5	10	3
	250	S HOUSE	ppm	132	17	36
Water pollutant (COD) concentration at discharge	40	Ulsan Plant	ppm	20	20	13
	130	Ansan Plant	ppm	30	21	30
	130	Osan Plant	ppm	10	15	7
	250	S HOUSE	ppm	114	23	53
Water pollutant (SS) concentration at discharge	10	Ulsan Plant	ppm	4	4	4
	120	Ansan Plant	ppm	21	35	48
	120	Osan Plant	ppm	9	15	25
	50	S HOUSE	ppm	135	24	25
Waste generation and treatment						
General wastes		Ulsan Plant	ton	38,449	40,164	32,816
		Ansan Plant	ton	95	124	118
		Osan Plant	ton	102	103	106
		S HOUSE	ton	99	185	12
Designated wastes		Ulsan Plant	ton	14,062	16,251	19,180
		Ansan Plant	ton	6	8	13
		Osan Plant	ton	21	37	56
		S HOUSE	ton	0.5	2	1,169*

		Scope	Unit	2011	2012	2013
By treatment methods						
Incinerated wastes		Ulsan Plant	ton	72	230	311
		Ansan Plant	ton	81	120	115
		Osan Plant	ton	127	115	101
		S HOUSE	ton	27	52	40
Buried wastes		Ulsan Plant	ton	10,578	11,282	6,948
		Ansan Plant	ton	0	0	0
		Osan Plant	ton	762	22	36
		S HOUSE	ton	31	85	68
Reuse		Ulsan Plant	ton	31,717	34,336	37,904
		Ansan Plant	ton	20	12	34
		Osan Plant	ton	48	51	48
		S HOUSE	ton	41	49	56
Discharged to sea		Ulsan Plant	ton	10,096	8,765	6,831
		Ansan Plant	ton	0	0	0
		Osan Plant	ton	0	0	0
		S HOUSE	ton	0	0	0
Recycling rate		Ulsan Plant	%	59	61	73
		Ansan Plant	%	20	9	26
		Osan Plant	%	5	5	30
		S HOUSE	%	41	26	5
Renewable energy						
Renewable energy generated	Solar	Eco Lab	MWh	8.26	7.54	8.25
	Geothermal	Eco Lab	Gcal	11.16	34.29	1.77
Vehicle						
Emissions from Cars Driven by Employees	Gasoline	Company-wide	kℓ	103	110	80
		Company-wide	GJ	3,441	3,580	2,592
		Company-wide	tCO_2eq	230	240	174
	Diesel	Company-wide	kℓ	41	30	86
		Company-wide	GJ	1,552	1,135	3,249
		Company-wide	tCO_2eq	109	80	229
Accidents	No. of accidents	Company-wide	accident	1	2	3
	No of deaths	Company-wide	person	0	0	0
	No. of work days lost	Company-wide	day	300	217	160

*A method to treat waste from material production facilities has been changed since May 2013 (Wastewater that had been treated by a partner was treated as a waste solvent, one of the designated waste items)

Financial Performance(Abridged)

Financial Statements

(Unit: KRW)

	2011	2012	2013
Assets			
I. Liquid assets	631,159,236,354	642,506,626,344	677,638,720,410
Cash and cash equivalents	48,384,852,240	36,412,291,229	15,691,222,908
Short-term financial assets		42,954,882	104,429,100
Trade and other receivables	339,676,084,121	362,284,138,557	385,787,464,841
Inventories	224,972,274,622	239,855,145,705	252,481,702,888
Non-current assets held for sale			13,979,249,119
Other current assets	18,126,025,371	3,912,095,971	9,594,651,554
II. Fixed Assets	1,402,592,304,383	1,551,759,080,995	1,725,769,319,173
Long-term financial assets	20,021,238,741	13,969,568,985	14,938,439,505
Long-term loans	985,351,492	964,578,498	716,225,355
Security	7,528,477,341	9,269,831,341	9,889,643,700
Investments in associates	321,455,021,891	325,955,021,891	455,213,369,891
Investments in subsidiaries	367,819,420,691	360,691,420,691	372,265,420,691
Tangible assets	547,945,079,731	690,136,182,542	718,917,001,136
Intangible assets	27,850,538,457	41,845,834,327	38,393,473,290
Investment property	108,578,276,039	108,517,742,720	115,026,845,605
Other non-current assets	408,900,000	408,900,000	408,900,000
Assets	2,033,751,540,737	2,194,265,707,339	**2,403,408,039,583**
Liabilities			
I. Current Liabilities	480,244,409,216	476,538,657,736	648,375,977,495
Trade and other payables	244,642,793,452	211,194,215,522	230,995,101,678
Short-term borrowings	160,030,617,802	120,831,701,288	145,956,949,060
Current portion of long-term borrowings	59,902,000,000	123,610,111,638	241,495,233,528
Income taxes payable	280,102,528	1,854,558,606	6,561,250,728
Other Current Liabilities	15,388,895,434	19,048,070,682	23,367,442,501
II. Term Liabilities	631,381,127,130	769,469,070,324	791,927,332,630
Debentures	528,209,078,198	658,145,508,911	608,351,350,224
Long-term borrowings	49,013,300,000	70,314,200,000	156,430,000,000
Defined benefit liability	17,355,712,733	18,691,741,597	23,738,204,217
Deferred income tax liabilities	35,382,401,108	21,381,482,852	2,601,142,712
Provisions	1,420,635,091	936,136,964	806,635,477
Liabilities	1,111,625,536,346	1,246,007,728,060	**1,440,303,310,125**
Capital			
Capital	118,300,860,000	118,300,860,000	118,300,860,000
Capital surplus	145,530,430,546	145,530,430,546	145,530,430,546
Other capital items	(98,068,499,377)	(98,068,499,377)	(98,068,499,377)
Accumulated other comprehensive income	1,632,274,167	1,369,992,555	2,370,977,641
Retained earnings	754,730,939,055	781,125,195,555	794,970,960,648
Total shareholders' equity	922,126,004,391	948,257,979,279	963,104,729,458
Total equity and liabilities	2,033,751,540,737	2,194,265,707,339	**2,403,408,039,583**

Income and Loss Statement

(Unit: KRW)

	2011	2012	2013
Sales	1,546,107,694,525	1,476,191,492,605	1,484,565,400,695
Cost of sales	1,245,669,454,486	1,188,949,912,636	1,170,887,086,595
Gross profit	300,438,240,039	287,241,579,969	313,678,314,100
Selling, general and administrative expenses	235,789,777,579	238,851,298,084	242,387,066,868
Operating profit	64,648,462,460	48,390,281,885	71,291,247,232
Other income	15,311,190,684	22,084,239,553	15,466,141,638
Other expenses	22,358,393,477	12,012,635,028	16,861,466,216
Financial income	19,380,120,301	20,274,808,240	21,955,941,684
Finance costs	45,153,131,277	48,395,945,686	52,272,033,054
Income before income taxes	31,828,248,691	30,340,748,964	39,579,831,284
Income tax expense (income)	992,431,188	(8,983,813,070)	13,111,994,351
Net Income	30,835,817,503	39,324,562,034	26,467,836,933
Other comprehensive income	(6,460,419,481)	(4,882,303,296)	(3,310,802,904)
Other comprehensive income not to be reclassified to net income	(7,135,363,902)	(4,620,021,684)	(4,311,787,990)
Remeasurement elements of defined benefit plans	(7,135,363,902)	(4,620,021,684)	(4,311,787,990)
Other comprehensive income to be reclassified to net income	674,944,421	(262,281,612)	1,000,985,086
Gains(Losses) on valuation of available-for-sale financial assets	602,555,421	(262,281,612)	936,175,255
Gains(Losses) on valuation of derivatives	72,389,000		64,809,831
Total comprehensive income	24,375,398,022	34,442,258,738	**23,157,034,029**
Earnings per share			
Basic earnings per share	1,679	2,162	**1,431**

GRI G4 Index

■ Core option ※ This report received external assurance for all the GRI G4 indicators listed in p.86-87

Classification	Indicator	Profile	Page	External Assurance
Strategy and Analysis	G4-1	Statement from the most senior decision-maker of the organization (e.g.,such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy for addressing sustainability	4-5	●[p.90-91]
	G4-2	Description of key impacts, risks, and opportunities	10-21	●[p.90-91]
Organizational Profile	G4-3	Name of the organization	2	●[p.90-91]
	G4-4	Primary brands, products, and services	12-17	●[p.90-91]
	G4-5	Location of the organization's headquarters	2	●[p.90-91]
	G4-6	Number of countries where the organization operates, and names of countries where either the organization has significant operations or that are relevant to the sustainability topics in the report	8	●[p.90-91]
	G4-7	Nature of ownership and legal form	22-23	●[p.90-91]
	G4-8	Markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries)	8	●[p.90-91]
	G4-9	Scale of the organization	7, 39	●[p.90-91]
	G4-10	Total number of employees by employment contract, employment type, employees, supervised workers, region, and gender; Work scopes of non-regular workers and significant variations in employment numbers	39	●[p.90-91]
	G4-11	Percentage of total employees covered by collective bargaining agreements	44	●[p.90-91]
	G4-12	Organization's supply chain	10-11	●[p.90-91]
	G4-13	Significant changes during the reporting period regarding the organization's size, structure, ownership, or supply chain	No significant changes were made	●[p.90-91]
	G4-14	Whether and how the precautionary approach or principle is addressed	30-35	●[p.90-91]
	G4-15	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses	3, 89	●[p.90-91]
	G4-16	List of memberships of associations (such as industry associations) and national or international advocacy organizations	3	●[p.90-91]
Identified Material Aspects and Boundaries	G4-17	List of all entities included in the organization's consolidated financial statements or equivalent documents	2	●[p.90-91]
	G4-18	Process for defining the report content and the Aspect Boundaries	24-27	●[p.90-91]
	G4-19	List of all the material Aspects identified in the process for defining report content	26	●[p.90-91]
	G4-20	Material Aspect Boundaries within the organization	27	●[p.90-91]
	G4-21	Material Aspect Boundaries outside the organization	27	●[p.90-91]
	G4-22	Effect of restatements of information provided in previous reports, and the reasons for restatement	81-83	●[p.90-91]
	G4-23	Significant changes from previous reporting periods in the Scope and Aspect Boundaries	2	●[p.90-91]
Stakeholder Engagement	G4-24	List of stakeholder groups engaged by the organization	27	●[p.90-91]
	G4-25	Basis for identification and selection of stakeholders for engagement	24-27	●[p.90-91]
	G4-26	Approach to stakeholder engagement by type and stakeholder group	24-27	●[p.90-91]
	G4-27	Key topics and concerns raised through stakeholder engagement, and how the organization has responded to them, including through its reporting and the stakeholder groups that raised each of the key topics and concerns	24-27	●[p.90-91]
Report Profile	G4-28	Reporting period (such as fiscal or calendar year) for information provided	2	●[p.90-91]
	G4-29	Date of most recent previous report	2	●[p.90-91]
	G4-30	Reporting cycle (such as annual, biennial)	2	●[p.90-91]
	G4-31	Contact point for questions regarding the report or its contents	2	●[p.90-91]
	G4-32	'In accordance' option the organization has chosen and the GRI Content Index for the chosen option	2, 86-87	●[p.90-91]
	G4-33	Organization's policy and current practice for seeking external assurance for the report, scope and basis of any external assurance provided, relationship between the organization and the assurance providers, whether the highest governance body or senior executives are involved in seeking assurance for the organization's sustainability report	2, 27	●[p.90-91]
Governance	G4-34	Governance structure of the organization, including committees of the highest governance body and any committees responsible for decision-making on economic, environmental and social impacts	22-23, 32	●[p.90-91]
	G4-35	Process for delegating authority for sustainability topics from the highest governance body to senior executives and other employees	32	●[p.90-91]
	G4-36	Whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental and social topics	32	●[p.90-91]
	G4-37	Processes for consultation between stakeholders and the highest governance body on economic, environmental and social topics	22, 32	●[p.90-91]
	G4-38	Composition of the highest governance body and its committees	23	●[p.90-91]
	G4-39	Whether the Chair of the highest governance body is also an executive officer	23	●[p.90-91]
	G4-40	Nomination and selection processes for the highest governance body and its committees, and the criteria used for nominating and selecting highest governance body members	22	●[p.90-91]
	G4-41	Processes for the highest governance body to ensure conflicts of interest are avoided and managed, and whether conflicts of interest are disclosed to stakeholders	22	●[p.90-91]
	G4-45	Highest governance body's role in the identification and management of economic, environmental and social impacts, risks, and opportunities	22, 31-32	●[p.90-91]
	G4-46	Highest governance body's role in reviewing the effectiveness of the organization's risk management processes for economic, environmental and social topics	22	●[p.90-91]
	G4-47	Frequency of the highest governance body's review of economic, environmental and social impacts, risks, and opportunities	22	●[p.90-91]
	G4-48	Highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material Aspects are covered	27	●[p.90-91]
	G4-49	Process for communicating critical concerns to the highest governance body	22, 32	●[p.90-91]
Ethics and Integrity	G4-56	Organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics	48-49	●[p.90-91]
	G4-57	Internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity	48-51	●[p.90-91]
	G4-58	Internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity	48	●[p.90-91]

Category	Aspect	Indicator	Profile	Page	External Assurance
Economic	Economic Performance	G4-EC1	Direct economic value generated and distributed	7, 10-11	●[p.90-91]
		G4-EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	66-69	●[p.90-91]
	Market Presence	G4-EC5	Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation	39	●[p.90-91]
	DMA		DISCLOSURES ON MANAGEMENT APPROACH	56	●[p.90-91]
	Indirect Economic	G4-EC7	Development and impact of infrastructure investments and services supported	56-59	●[p.90-91]
		G4-EC8	Significant indirect economic impacts, including the extent of impacts	56	●[p.90-91]
Environomental	DMA		DISCLOSURES ON MANAGEMENT APPROACH	62	●[p.90-91]
	Materials	G4-EN1	Materials used by weight or volume	65	●[p.90-91]
		G4-EN2	Percentage of materials used that are recycled input materials	65	●[p.90-91]
	Energy	G4-EN3	Energy consumption within the organization	81	●[p.90-91]
		G4-EN4	Energy consumption outside of the organization	81	●[p.90-91]
	Water	G4-EN8	Total water withdrawal by source	81	●[p.90-91]
		G4-EN9	Water sources significantly affected by withdrawal of water	63	●[p.90-91]
		G4-EN10	Percentage and total volume of water recycled and reused	81	●[p.90-91]
	Emissions	G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	92	●[p.92]
		G4-EN16	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	92	●[p.92]
		G4-EN19	Reduction of greenhouse gas (GHG) emissions	62	●[p.90-91]
		G4-EN20	Emissions of ozone-depleting substances (ODS)	64	●[p.90-91]
		G4-EN21	NOx, SOx, and other significant air emissions	82	●[p.90-91]
	Effuluents and Waste	G4-EN22	Total water discharge by quality and destination	81	●[p.90-91]
		G4-EN23	Total weight of waste by type and disposal method	83	●[p.90-91]
		G4-EN24	Total number and volume of significant spills	No spills	●[p.90-91]
		G4-EN25	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, , II, III, and VIII, and percentage of transported waste shipped internationally	63	●[p.90-91]
		G4-EN26	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff	63	●[p.90-91]
	Products and Services	G4-EN27	Extent of impact mitigation of environmental impacts of products and services	18-19	●[p.90-91]
	Compliance	G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	62	●[p.90-91]
	Overall	G4-EN31	Total environmental protection expenditures and investments by type	64	●[p.90-91]
Labor Practices and Decent Work	DMA		DISCLOSURES ON MANAGEMENT APPROACH	38	●[p.90-91]
	Employment	G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	39	●[p.90-91]
		G4-LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	41	●[p.90-91]
		G4-LA3	Return to Work and retention rates after parental leave, by gender		●[p.90-91]
	Laber/Management Relations	G4-LA4	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	44	●[p.90-91]
	Training and Education	G4-LA9	Average hours of training per year per employee by gender, and by employee category	40	●[p.90-91]
		G4-LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	40-41	●[p.90-91]
		G4-LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	40-41	●[p.90-91]
	Diversity and Equal Opportunity	G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	39	●[p.90-91]
	Equal Remuneration for Woman and Men	G4-LA13	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	41	●[p.90-91]
	DMA		DISCLOSURES ON MANAGEMENT APPROACH	62	●[p.90-91]
	Occupational Health and Safety	G4-LA5	Percentage of total workforce represented in formal joint management-workerhealth and safety committees that help monitor and advise on occupational health and safety programs	73-76	●[p.90-91]
		G4-LA7	Workers with high incidence or high risk of diseases related to their occupation	80	●[p.90-91]
		G4-LA8	Health and safety topics covered in formal agreements with trade unions	73-76	●[p.90-91]
Human Rights	Freedom of Association and Collective Bargaining	G4-HR4	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights	44	●[p.90-91]
	Child Labor	G4-HR5	Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	Not applicable	●[p.90-91]
	Forced or Compulsory Labor	G4-HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	Not applicable	●[p.90-91]
Society	DMA		DISCLOSURES ON MANAGEMENT APPROACH	48	●[p.90-91]
	Anti-Corruption	G4-SO3	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	49	●[p.90-91]
		G4-SO4	Communication and training on anti-corruption policies and procedures	49	●[p.90-91]
	Anti-Competitive Behavior	G4-SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	48	●[p.90-91]
	Compliance	G4-SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	48	●[p.90-91]
Product Responsibility	DMA		DISCLOSURES ON MANAGEMENT APPROACH	62	●[p.90-91]
	Customer Health and Safety	G4-PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	77-78	●[p.90-91]
	Product and Service Labeling	G4-PR5	Results of surveys measuring customer satisfaction	79	●[p.90-91]
	Customer Privacy	G4-PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	79	●[p.90-91]

ISO 26000 Index

SK chemicals strives to conduct responsibility-based management activities on the basis of the guideline of the ISO 26000. We included the contents of the ISO 26000 and related pages to help stakeholders understand the seven core subjects and SK chemicals' policies and progresses related to the seven core subjects.

Core Subjects	Issues	Page
1. Governance	Decision-making processes and structures	22-23, 30-32, 35
2. Human rights	Due diligence	Complied
	Human rights risk situations	Complied
	Avoidance of complicity	Complied
	Resolving grievances	Complied
	Discrimination and vulnerable groups	38-41
	Civil and political rights	Complied
	Economic, social and cultural rights	42-43
	Fundamental principles and rights at work	40-43
3. Labor practices	Employment and employment relationships	40
	Conditions of work and social protection	40-43
	Social dialogue	44-45
	Health and safety at work	72-76
	Human development and training in the workplace	40-41
4. The environment	Prevention of pollution	63-64
	Sustainable resource use	65
	Climate change mitigation and adaptation	66-71
	Protection of the environment, biodiversity and restoration of natural habitats	33-35, 77-78
5. Fair operating practices	Anti-corruption	49-50
	Responsible political involvement	49
	Fair competition	51
	Promoting social responsibility in the value chain	51
	Respect for property rights	50
6. Consumer issues	Fair marketing, factual and unbiased information and fair contractual practices	48-51
	Protecting consumers' health and safety	77-79
	Sustainable consumption	18-19
	Consumer service, support, and complaint and dispute resolution	79
	Consumer data protection and privacy	79
	Access to essential services	
	Education and awareness	78
7. Community involvement and development	Community involvement	56-59
	Education and culture	56-59
	Employment creation and skills development	38-40
	Technology development and access	56-59
	Wealth and income creation	7, 10-11
	Health	56-59
	Social investment	56-59

UN Global Compact(UNGC) Index

SK chemicals became a member of the UN Global Compact in February 2011. The Company endorses the 10 principles of the UN Global Compact on human rights, labor, environment, and anti-corruption. This report also provides information on the efforts and practices of SK chemicals that seek to pursue and embody these 10 principles.

Category	Principles	Page
Human rights	1. Businesses should support and respect the protection of internationally proclaimed human rights	Complied
	2. make sure that they are not complicit in human rights abuses.	
Labour	3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining	38-40, 44-45
	4. The elimination of all forms of forced and compulsory labor	
	5. the effective abolition of child labor; and	
	6. the elimination of discrimination in respect of employment and occupation.	
Environment	7. Businesses should support a precautionary approach to environmental challenges;	62-71
	8. undertake initiatives to promote greater environmental responsibility; and	
	9. encourage the development and diffusion of environmentally friendly technologies.	
Anti-Corruption	10. Businesses should work against corruption in all its forms, including extortion and bribery.	48-51

SK chemicals became a member of the UN Global Compact in February 2011.
The Company endorses the 10 principles of the UN Global Compact on human rights, labor, environment, and anti-corruption.

Third-party Verification Report

Assurance Statement related to SK chemicals Sustainability Report 2013, for the calendar year ending 31st December 2013

We were engaged by SK chemicals to provide independent assurance on the information presented in SK Chemical's 2014 Sustainability Report ('the Report'). SK chemicals is responsible for preparing the Report, including economic, social and environmental qualitative and quantitative performances. Our responsibility is to provide an opinion on the Report.

Context and scope

Our engagement was designed to provide limited assurance on whether.

1. SK chemicals has applied the "GRI Principles for Defining Report Content"
2. The information in the Report is fairly stated in all material respects, based on the reporting criteria set out in 'About This Report'

The scope of our engagement conforms to the KPMG Sustainability Assurance Manual(KSAM)™[1] , including the aspect of "materiality". With regard to the financial data stated on pages 84-85, our procedures were limited to verifying that they were correctly derived from SK chemicals' audited financial statements. To obtain a thorough understanding of SK chemicals' financial results and position, the audited financial statements of SK chemicals for the fiscal year ended 13 March 2014 should be consulted.

Criteria

The report was prepared in accordance with the Core Option of the Global Reporting Initiative(GRI) G4 guideline, and referred to ISO 26000 and UN Global Compact's ten principles. (Amount of Energy Use and GHG emissiosn was assured separately in 2013)

Assurance standards

We conducted our engagement in accordance with the ISAE3000[2]. This standard contains requirements regarding to independence and competency of the assurance team.

Independence, impartiality and competence

We conducted our engagement in compliance with the requirements of the IFAC (International Federation of Accountants) Code of Ethics for Professional Accountants which requires, among others, that the members of the assurance team (practitioners) as well as the assurance firm (assurance provider) be independent of the assurance client. The Code also includes detailed requirements for practitioners regarding integrity, objectivity, professional competence, due care, confidentiality and professional behavior. KPMG has systems and processes in place to monitor compliance with the Code and to prevent conflicts regarding independence.

We conducted our engagement with a multidisciplinary team including specialists in stakeholder engagement, auditing, environmental, social and financial aspects, and similar engagements in the related industries.

Work performed

Our work included the following procedures:

- Evaluation of SK chemicals' stakeholder engagement process
- Selection of key material issues in preparation of the report
- Reference to media analysis and internet search on SK chemicals during the reporting period
- Interview with responsible teams and site visit to Eco Lab to verify qualitative and quantitative data
- Review the source of non-financial information including internal documentation and data base
- With regard to the financial data included in the key figures on pages 84-85, verified they were correctly derived from 2014 SK chemicals' audited financial statements
- Based on the GRI Content Index on pages 86-87, checked whether Core Option of the GRI G4 Guideline is properly applied

Opinions and conclusions

During our engagement, we discussed the necessary changes to the Report with SK chemicals and reviewed that these changes were adequately incorporated into the final version.

On the GRI Principles for Defining Report Content

In relation to the principle of Stakeholder Inclusiveness:

- SK chemicals operates communication channels with customers, employees, suppliers/dealers, shareholders/investors and local community through the stakeholder engagement process.
- We are not aware of any key stakeholder group which has been excluded from dialogue in the Report.
- In relation to the principle of Sustainability Context:
- SK chemicals explains how its 'Green Chemical Biz' and 'Life Science Biz' contributes to reducing environmental impact and solving social challenges
- We confirmed that SK chemicals recognizes sustainability comprehensively and applies this understanding to management and stakeholder communication.

In the relation to the principle of Materiality:

- SK chemicals conducts a materiality test in determining material issues.
- We are not aware of any material aspects concerning its sustainability performance which have been excluded from the Report.

In relation to the principle of Completeness:

- SK chemicals applies reporting scope, boundary and temporal criteria.
- In terms of criteria mentioned above, we confirmed the Report is suitable for stakeholders to assess the sustainability performance.

On the Content of the Report and GRI G4 Guideline Application

We confirmed that the content of the report includes explanations of selected material issues and key requirements of the GRI G4 Guideline's Core Option are properly applied.

Recommendations

Without prejudice to our conclusions presented above, we believe the following matters can be considered for improved sustainability reporting of SK chemicals:

- SK chemicals is implementing evaluation of sustainable management to use the result in decision making process of sustainable management advancement and sustainability report content. It is recommended that SK chemicals continuously implement programs to advance sustainability strategy and performance in the future.
- SK chemicals explains sustainability impact and mitigation efforts of its products in detail. It is recommended that SK chemicals further report how products and services bring economic, environmental and social values and the how these values are intervened.

We have discussed the reporting process and observations with SK chemicals. They were receptive to our comments.

삼정 KPMG
cutting through complexity

Seoul, May 2014

KPMG SAMJONG Accounting Corp. CEO **Kim, Kyo Tai**

Kyo Tai Kim

1. To improve assurance quality of Sustainability report, KPMG developed standard methodology in accordance with ISAE3000, on the basis of the expertise of accounting firm
2. **International Standard on Assurance Engagements 3000** Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by International Auditing and Assurance Standards Board

Greenhouse Gas Emissions Verification Report

No.: AS_PRJC-496692-2014-CCS-KOR-EN

DNV ASSURANCE STATEMENT

< Introduction >

DNV Certification, Ltd. ("DNV") was commissioned by SK Chemicals to verify the SK Chemicals' Greenhouse Gas Inventory Report for the calendar year 2013 ("the report") based upon a reasonable level of assurance. SK Chemicals is responsible for the preparation of the GHG emissions and Energy consumption data on the basis set out within the guidelines on the operation of greenhouse gas and energy target management scheme (Notification No. 2012-211, Korean Ministry of Environment). Our responsibility in performing this work is to the management of SK Chemicals only and in accordance with terms of reference agreed with them. DNV expressly disclaims any liability or responsibility for any decisions, whether investment or otherwise, based upon this assurance statement.

< Scope of Assurance >

The GHG emissions and energy consumption data covered by our examination comprise Direct emissions (Scope 1 emissions), Energy indirect emissions (Scope 2 emissions) and Fuel, Electricity, Steam Energy consumption :

- Reporting period under verification : Calendar Year 2013
- Organizational boundary for reporting : SK Chemicals

< Verification Approach >

The verification has been conducted by DNV from February to March 2014 and performed in accordance with the verification principles and tasks outlined in the guidelines on the operation of greenhouse gas and energy target management scheme (Notification No. 2012-211, Korean Ministry of Environment). We planned and performed our work so as to obtain all the information and explanations deemed necessary to provide us with sufficient evidence to provide a reasonable verification opinion concerning the completeness of the emission inventory as well as the reported emission figures in ton CO_2 equivalent. As part of the verification process:

- We have reviewed and verified the SK Chemicals' greenhouse gas report for the calendar year 2013
- We have reviewed the greenhouse gas emissions and energy consumption for the calendar year 2013
- We have reviewed and verified the process to generate, aggregate and report the emissions and energy data

< Conclusions >

As a result of the work described above, in our opinion nothing has come to our attention that would cause us to believe that the greenhouse emissions and energy consumption set out in SK Chemicals' report are not fairly stated. The greenhouse gas emissions and energy consumption of SK Chemicals for the year 2013 were confirmed as below;

Greenhouse Gas Emissions and Energy Consumption of SK Chemicals from Yr 2013

GHG Unit: ton-CO_2 equivalent
Energy Unit: Terajoule(TJ)

Operational Boundary (Period)	Direct emissions (Scope 1)	Indirect emissions (Scope 2)	Total GHG emissions	Fuel Energy	Electricity Energy	Steam Energy	Total Energy
Year 2013	408,423	72,974	481,396	6,703	1,486	26	8,215

* In order to report the GHG emissions as an integer, the rounded number on the statement might be different from the number on the system value

21st May 2014

Duk-Keun Oh
Lead Verifier

In-Kyoon Ahn
Country Manager
DNV Certification, Ltd.

This Assurance Statement is valid as of the date of the issuance (21st May 2014). Please note that this Assurance statement would be revised if any material discrepancy which may impact on the Greenhouse Gas Emissions and Energy consumption of SK Chemicals is subsequently brought to our attention.
In the event of ambiguity or contradiction in this statement between English version and Korean version, Korean shall be given precedent.

Sustainability Report TF

Company Overview	Mission and Vision Systems	Joon-Ho Jung Ro-Min Shin	Corporate Relations Team
	Global Network / subsidiaries and invested firms		
	SK chemicals' value chain and sharing performances with stakeholders	Kyung-Soo Nam Hee-Bum Lee	Safety and Environment TF Accounting Team
	About business areas	Joung-Eun Lee Seong-Hae Roh Chang-Hee Lee In-Chang Choi Mi-Oak Kim	Bio-based Materials Team Specialty Polymers Export Team 2 Corporate Strategy & Planning Team #1 Bio-based Energy Team Life Science Strategy Planning Team
Corporate Governance	Board composition and operating system / Shareholder breakdown	Jung-Min Kim	Legal Affairs Team
HR	Human Resources Development	Shim-Ohn Lee Dong-Soo Kim Hee-Young Lee	HR Team
	Work-life balance (WLB)	Young-Jun Mun Ji-Hun Kang	SKMS Implementation Team Procurement Team
	Labor-management relations (social dialogue)	Jin-Soo Ryu	HR Team
Fair competition	Ethical management	Eun-Jung Lee	SKMS Implementation Team
	Fair trade	Mi-Ran Kim Kyung-Hee Han	Legal Affairs Team
Shared growth + social contribution	Supply Chain Support System	Jeong-One Lee	Purchasing Team
	Strategic social contribution	Kawung-Hun Kim	Corporate Relations Team
SHEQ	Pollution Prevention / efficient use of resources	Myung-Kyo Seo Jae-Joong Kim Dae-Chul Kim Dae-Bok Kim Jae-Ha Jeong Sung-Shup So Sung-Hun Park Kawung-Ho Lee	Ulsan) Safety & Environment Team Ansan) Engineering Team Ansan) Administration Team Osan) Management Support Team Osan) Management Support Team L HOUSE) Maintenance & Engineering Team S HOUSE) Administration Team S HOUSE) Engineering Team
	Climate change mitigation efforts	Ik-Whan Kim	Ulsan) Safety & Environment Team
	Workplace health and safety	Young-Kyu Park Jeong-Ruhl Park	Ulsan) Safety & Environment Team
	Product stewardship and customer satisfaction	Ran-Joo Lee Sung-Hyun Nam Hong-Tae Chun Han-Wook Kim Yu-Sun Jeong Tak-Soo Kim Yun-Young Lim Sun-Kyo Hwang	Osan) QA Team Ulsan) Quality Assurance & Technical Service Team Ulsan) Quality Assurance & Technical Service Team L house) QA Team Medical Information & Communication Team Drug Evaluation and Analysis Team Clinical Research Team #1 Marketing Supporting Team