

SUSTAINABILITY REPORT 2011

ASEAN Sustainable Business Leader





HRH Princess Maha Chakri Sirindhorn's Trophy for Thailand Corporate Excellence Awards 2010 from Thailand Management Association (TMA) and the Sasin Graduate Institute of Business Administration of Chulalongkorn University

Sector Leader in Building Materials & Fixtures from Dow Jones Sustainability Indexes (DJSI) by Sustainable Asset Management (SAM) and ranked highest level in Gold Class for the 4th consecutive year

SET Award of Honor in Best Corporate Social Responsibility for the 4th consecutive year from the Stock Exchange of Thailand (2008-2011)

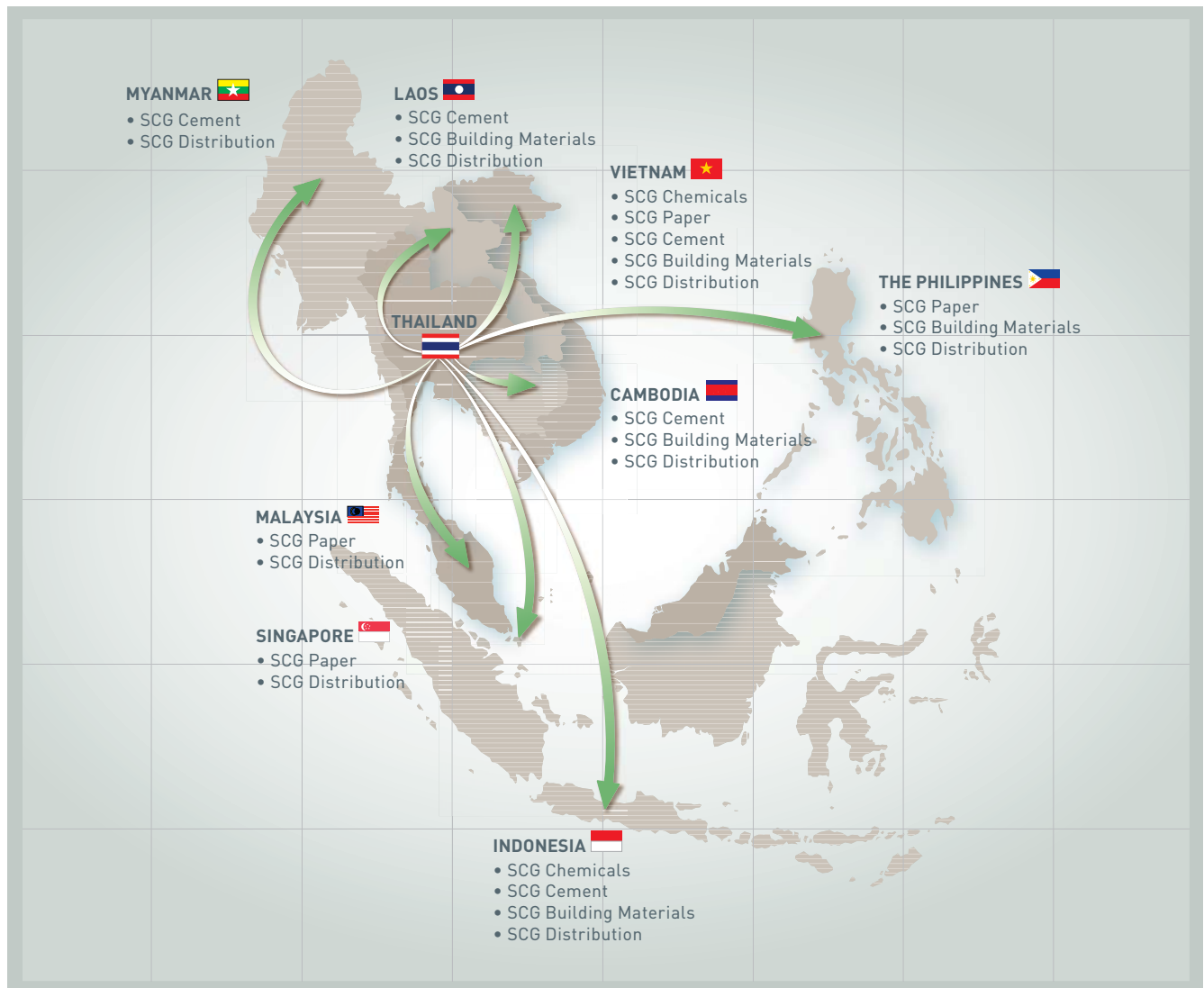


Adopted UN Global Compact Initiative, a principle-based framework for businesses in the areas of human rights, labor, the environment and anti-corruption

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About SCG



SCG, a conglomerate of business operations, is working to serve as a leading company in ASEAN on the way toward establishing its competitiveness in the global market. SCG conducts its businesses in line with good corporate governance and the principles of sustainable development. The Group commits itself to its longstanding tradition of organizational and employee development, which helps drive innovation in products, services, work processes and business models, all of which creates higher value to all parties concerned. Beyond this, SCG pledges its commitment to contributing to the sustainable progress of the communities where it operates.

SCG believes that as ASEAN nations work toward becoming an integrated ASEAN Economic Community

(AEC), their efforts will contribute significantly to the region's economic development and enhanced competitiveness. SCG is committed to expanding within ASEAN to further build its trading and investment network and to rise to the challenges of regional economic integration in the years to come.

SCG was established in 1913 following a royal decree of His Majesty King Rama VI to produce cement, a main building material for infrastructure projects that greatly contributed to the progress of the country during that period. The Group has diversified into five core businesses which include SCG Chemicals, SCG Paper, SCG Cement, SCG Building Materials, and SCG Distribution.



SCG Chemicals manufactures and supplies a complete range of chemicals products encompassing upstream chemicals including olefins; intermediate chemicals including styrene monomer, PTA and MMA; downstream chemicals including polyethylene, polypropylene, polyvinyl chloride, polystyrene and PET resin.

SCG Chemicals has entered into a joint venture agreement with a number of global chemical companies including Dow Chemical of USA, Mitsui Chemicals Inc. and Mitsubishi Rayon, Japan as well as studying in the Petrochemical Complex in Vietnam, and acquiring PT Chandra Asri Petrochemical Tbk (CAP) in Indonesia. Currently, SCG Chemicals is one of the largest producer of chemicals in Thailand and a leader in the Asia-Pacific region.

In addition, SCG Chemicals has cooperated with its business partners according to the Building Success Together concept to create and produce (Co-Creation) products that effectively meet customer's real needs such as packaging for frozen foods with Betagro, which is resistant to low temperature, tough and has stronger protection during transportation, special grade polypropylene resin for syringe plungers and coating for woven bags and EL Green plastics compound which is 100% compostable and eco-friendly.



SCG Paper is one of the largest integrated manufacturer of paper products in Thailand and ASEAN. It comprises a wide range of products including pulp, printing and writing paper, packaging paper, and corrugated container. The products have gained wide acceptance in both domestic and international markets for their world quality standards. SCG Paper is also a member of The Sustainable Forest Products Industry (SFPI) of The World Business Council for Sustainable Development (WBCSD).

SCG Paper has invested in several countries to achieve sustainable growth in the region. In the Philippines, United Pulp and Paper Co., Inc produces high quality packaging paper. In Vietnam, Vina Kraft Paper Co., Ltd. produces high quality packaging paper whereas, Alcamax Packaging (Vietnam) Co., Ltd. and New Asia Industries Co., Ltd. produce corrugated container. In Malaysia and Singapore,

TCG Rengo Subang (M) and TCG Rengo (S) produce corrugated container.

SCG Paper also strives to remain a leader and enhances its competitiveness by continually investing in the enhancement of production efficiency. Its forest management, pulp and paper production received FSC (Forest Stewardship Council) standard of FM (Forest Management) and the first CoC (Chain-of-Custody) recognition in Thailand. The environmentally friendly products, Green Series and Idea Green, are made from EcoFiber and used agricultural materials while Green Carton corrugated container reduces paper use, yet still maintains the same or higher strength compared to the typical corrugated container.



SCG Cement manufactures and supplies cement, ready-mixed concrete, concrete products, white cement and refractory as well as provides technical services and consultations on plant installation to customers both within and beyond SCG. It is the only Thai member of The World Business Council for Sustainable Development-Cement Sustainability Initiatives (WBCSD-CSII), which is a cooperation among cement industrial members around the world to show their willingness to adopt Cement Sustainability Initiatives to their operational excellence.

SCG Cement has expanded its investment in both domestic and regional markets comprising a cement plant in Kampot, Cambodia, an establishment of a ready-mixed concrete plant network in the ASEAN countries, including Cambodia, Vietnam, Laos, Myanmar and Indonesia, an acquiring of Buu Long Industry & Investment Joint Stock Company to produce cement in Vietnam, a joint venture with Anhui Conch Cement Company Limited in China to build a refractory brick factory in Anhui province, Wu Hu district.

In addition, SCG Cement has developed a variety of innovative products, including ready-mixed concrete for under water construction, External Color render mortar with a special quality in reducing efflorescence. Super Skim Coat and Premium Color Skim Coat for decorative rendering. New Tiger White cement allows better adhesion of the cement texture, suitable for tile and sanitary ware installation.



Leader in building materials in the ASEAN countries, SCG Building Materials offers a various range of products addressing all construction-related needs; these include roofing materials, ceramic tiles, ceiling and wall, faucets, paving blocks, insulation products, sanitary wares and landscape products. It provides a full range of products and services to customers in the form of complete solutions via Roofing Center, COTTO Studio and Home Solution Center, which serve customers under the concept of 'One Stop Shop, One Stop Service'

SCG Building Materials has expanded its operations in the ASEAN region such as acquiring PT Keramika Indonesia Assosiasi Tbk (KIA) in Indonesia, establishing a showroom in Hanoi, Vietnam, and operating CPAC Monier Philippines, Inc. and Mariwasa Manufacturing, Inc. in the Philippines, and CPAC Monier (Cambodia) Co.,Ltd. in Cambodia respectively.

SCG Building Materials has also introduced innovative products that are environmentally friendly and responsive to customers' needs in all aspects such as a modular home through a joint venture with Sekisui of Japan, innovation of SCG House Cooling Systems that save energy, and such products that enhance the well-being of the elderly under the concept of Universal Design as COTTO Water Closet 'For All' Series.

Laos, and has also entered into renewable energy business. The joint venture with a waste management company in the Philippines has developed Refuse Derived Fuel (RDF) facility to generate energy from waste.

SCG Distribution has developed IT systems which includes e-Auction, e-Trading, e-Clearance, and e-Catalog to enhance distribution and customer service as well as adopting the latest Safety Monitoring System for effective real time delivery tracking.

It has an extended area of 58,000 square meters as the integrated Export Service Center at Laem Chabang, Chonburi province. Future extension of the area is also planned.

SCG Investment

SCG Investment is in charge of corporate investment both domestically and internationally in non-core businesses ranging from the automotive business, agricultural machinery business, and steel business. These investments are joint ventures with well-known partners such as Kubota, Aisin Takaoka, Musashi Seimitsu, Toyota Motor, Yamato Kogyo, Hayes Lemmerz and Michelin.

Details of key products and services, subsidiaries, joint ventures, location of offices and facilities within Thailand and other countries, and changes in its shareholdings are presented in the 2011 Annual Report.



SCG Distribution is responsible for both domestic distribution through its dealer network nationwide and international trading through its network worldwide. There are currently 34 overseas offices in 21 countries around the world (excluding Thailand). This also involves its logistics business, which serves the transportation, distribution and warehousing.

SCG Distribution has strengthened its distribution channels covering the ASEAN countries including SCG Marketing Philippines in the Philippines, SCG Authorized Dealers in Cambodia and Myanmar. It acquired PT Kokoh Inti Arebama Tbk (KOKOH) to strengthen its distribution network in Indonesia. It has expanded its logistics services in the ASEAN countries, namely Cambodia, Vietnam, and

Message from President & CEO, SCG



The collaboration between region-specific countries, currently the Mega Trend for economic development, can lead to growth and create value-added for products of the same market or production base. The introduction of the ASEAN Economic Community (AEC) in 2015 is, therefore, vital for the world's economy, especially when developed countries, such as the United States and European countries, are facing economic meltdown. While ASEAN members are continually advancing in both trade and investment, another important factor that these countries need to cooperatively consider is a shift in paradigm to a business model that balances all aspects of economic, social and environmental growth and propels the growth of ASEAN towards a sustainable future and create a competitive advantage in the long term.

SCG is playing an integral part in the development within the region by expanding its business to other countries such as Indonesia, Vietnam and the Philippines, creating a network of trade and investment and operating a standard management system that take into account environmental and social responsibility and corporate governance in all countries where it operates.

SCG is committed to our vision of becoming a role model in sustainable development and intends to enhance our performance with that vision in mind. In recent years, our accomplishments in sustainable development include:

- The development of environmentally friendly products and services under the SCG eco value label with 47 certified products, contributing 13 percent of the revenue from sales.

- The Green Procurement, which SCG was the first organization in the country to adopt in 2004, encompasses general office supplies and expands to raw materials and supplies. 484 models are now registered under this scheme and have a combined purchasing value of 2,669 million Baht.

- Zero Waste to Landfill policy that reduces the amount of hazardous waste to landfills to 1 percent

- The implementation of the Business Continuity Management (BCM) to prepare for any unexpected event, such as the recent flood crisis, in order to ensure the continuity of all businesses and operations.

- The promotion of sustainable development concept to other organizations. For example,

- The expansion of 'Community Partnership Association' in the Map Ta Phut Industrial Estate, Rayong province to 'Cement Partnership Initiative' in Kaeng Khoi, Saraburi province, enabling each facility to help the other become more environmentally friendly facility as well as strengthening the communities in terms of health, education and livelihood.


- The organization of the Thailand Sustainable Development Symposium for the second consecutive year to disseminate experiences and know-how on the worldwide acceptance sustainable development. This event was widely attended by both public and private sectors, academicians, NGOs, and both local and foreign media. This event also presented an opportunity for all stakeholders to find any mitigation by applying the concept of sustainable development as a key strategy in business, which will in turn help propel the growth of the economy and build the balance among economic, social and environmental growth.

- The collaboration and networking with world-class organizations. SCG has become a member of the World Business Council for Sustainable Development (WBCSD) since 2000 and joined WBCSD-Cement Sustainability Initiative (WBCSD-CSI) to organize WBCSD-CSI Forum 2011. This event was attended by 24 members from world cement producers and related organizations around the world to share experiences and know-how in sustainable business practices.

- The organization of an Expert Opinion Panel for the second consecutive year as a forum to receive comments and suggestions from leading experts on the implementation of sustainable development principles.

- Sector Leader in Building Materials & Fixtures by Dow Jones Sustainability Indexes (DJSI). The assessment was carried out by Sustainable Asset Management (SAM) and SCG has been awarded with Gold Class honor, Best in class, for 4 consecutive years.

Even though SCG has been operating in accordance with sustainable development principle for a long period of time and is widely recognized as the leader, SCG still firmly believes in encouragement of the Green Business Society model that starts with the development of guidelines that yield acceptable and measurable results by an organization and then the expansion to its upstream and downstream business partners and finally the expansion to other businesses through a wide array of knowledge and network of partners. SCG believes that following such pathways, together with cooperation from all sectors, will ultimately lead to a Green Business Society and Sustainability.



Kan Trakulhoon
President & CEO, SCG

Business Philosophy and Code of Conduct

SCG's business philosophy and code of conduct have always emphasized our responsibility to our stakeholders. This philosophy has been consistently adopted and practiced throughout the organization, ranging from the Board of Directors to employees at all levels, and has helped SCG to propel business growth and acceptance from all circles. SCG business ethics are aligned with internationally recognized principles of Corporate Governance.

Business Philosophy

- **Adherence to Fairness**

SCG is committed to the concept of fairness to all parties concerned.

- **Dedication to Excellence**

SCG earnestly focuses on right performance with effort to provide consistently excellence.

- **Belief in the Value of Individuals**

SCG believes that employees are the most valuable assets.

- **Concern for Social Responsibility**

SCG fully performs its duty as a good corporate citizen by contributing to communities and countries where it operates.



Code of Conduct

The Board of Directors firstly consolidated employee code of practices into written documents, so called 'SCG Code of Conduct' in 1987 in order to provide consistent practices throughout the organization and to align with SCG Business Philosophy. The SCG Code of Conduct was amended to reflect the evolution of SCG and the changes in economic and social situations. The amendment of the SCG Code of Conduct was carried out through compiling, grouping and categorizing previous version, and also adopting and elaborating practices from business units, for example, mutual treatment under rights and freedom, provision or acceptance of any forms of assets and benefits that affect a decision making, conflicts of interest, management of information and assets, trading competition, and money laundering prevention.

In Addition to the publishing of the SCG Code of Conduct, best practice role model by the Board of Directors, management, and the promotion of working environment for employees and relevant personnel to believe in the value of the Code of Conduct practices, there was an ongoing campaign to raise awareness in following via SCG

Connect journals, intranet and e-mail. These provide information and responses to any questions and concerns relating to the SCG Code of Conduct, and serve as channel for reporting any incidents of non-compliance with the SCG Code of Conduct.

SCG has a process in place to handle complaints covering receiving, compiling, analyzing and responding mechanisms. Any employee who reports the issues related to corruption and non-compliance with laws, regulations, company's rules and the SCG Code of Conduct, is protected under the Whistleblower Policy. When employees have any doubt or questions, they have the right to consult with any levels of their supervisors that they trust or personnel assigned for overseeing the conformance to the SCG Code of Conduct by using any channels defined. SCG also expects that all employees adhere to the SCG Code of Conduct as the principles to carry out their duties. In other words, employees perform their duties with virtue and integrity.

Details of the SCG Code of Conduct, SCG Corporate Governance and SCG Whistleblower Policy can be obtained from www.scg.co.th

SCG Vision

SCG upholds a strong belief in the value and potential of its employees who will be working together innovatively in an open, transparent, and energetic work environment. Each and every employee lives according to SCG's cardinal business principles and faithfully adheres to SCG Code of Conduct, resulting in clear, consistent operations of all functions to accomplish the shared goal of becoming an ASEAN leader.

In 2007, SCG defined a vision statement that indicates the business operational direction and goals. Our vision is that by the year 2015, SCG will be recognized as an innovative workplace of choice and a role model in corporate governance and sustainable development in the ASEAN region. We are committed to contributing to the sustainable progress of ASEAN and the local communities

where SCG operates. At the same time, we pledge ourselves to creating value for our customers, employees, and all stakeholders and enhancing the quality of life and well-being of people in society. To accomplish the goals, a two-pronged approach is taken towards creating growth: expanding into the ASEAN region, and building competitive advantages through high value added products.

SCG will be an innovative organization that carries out business, using the comparable business practices and capabilities of leading international corporations under corporate governance principles and uncompromising safety standards to ensure continually excellent operating results, transparency, and fairness with concern for safety, the environment and community in tune with the sustainable development principle.

2011 Highlights

HVA Products and Services	32 percent of revenue from sales	Page 37
'SCG eco value' Products and Services	13 percent of revenue from sales	Page 37
Registered under SCG Green Procurement List	484 models	Page 36
Alternative Fuel	12 percent	Page 28
Hazardous Waste to Landfill	1 percent	Page 33
Carbon Label Certified (Carbon Reduction Label and Carbon Footprint Label)	40 items	Page 29
SCG Contractor Safety Certification System (SCS)	73 percent	Page 49
Enhance Safety Performance of Transportation Contractors through 'Safety Driving Training Program'	over 11,000 truck drivers trained	Page 50
Number of Check Dam	34,004 units	Page 57
Sharing Opportunities, Drawing the Future Program	258 projects, 26.6 million Baht	Page 60
Social Contribution	712 million Baht	Page 68
Flood Relief Spending	200 million Baht	Page 63
GRI Application Level	A+	Page 78
Dow Jones Sustainability Indexes (DJSI) / Sustainable Asset Management (SAM)	Sector Leader and Gold Class	Page 5

Our Sustainability Approach



Thailand Sustainable Development Symposium 2011

SCG has organized Thailand Sustainable Development Symposium, which was held for the second year as the national forum to promote sustainable business concept on the basis of balancing the triple bottom line under corporate governance.

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Thailand Sustainable Development Symposium 2011

"Today, our world is faced with grave threats including natural disasters, and pollution as a result of the imbalanced utilization of the scarce natural resources whilst the world population grows at a tremendous rate. Therefore, the concept of sustainable development that focuses on achieving a balance among the economy, society, and the environment under the principle of corporate governance will be the answer that enables mankind to live together sustainably and happily", said **Mr. Pramote Techasupatkul, Chairman of SCG Sustainable Development Committee**, referring to the organization of the Thailand Sustainable Development Symposium 2011, which was held for the second year.

Having been ranked as Sector Leader in the Building Materials & Fixtures by DJSI, SCG firmly believes that if every sector including the government, business, and community operates in accordance with the sustainable development approach, it will lead to economic growth alongside a better quality of life for people in the community, a strong society, and a good environment. Better yet, it will restore a balance to our world, allowing mankind to live sustainably and happily.

This year's symposium was honored by H.E. Ms. Yingluck Shinawatra, Prime Minister of Thailand to give an opening speech, and was graced by executives from the world's leading organizations who shared best practices and tangible examples that can be used as guidelines in operations. Chief among them were Dr. Surin Pitsuwan, Secretary General of ASEAN, Mr. Björn Stigson, President of The World Business Council for Sustainable Development (WBCSD), Mr. Stuart L. Dean, President of GE ASEAN, and Mr. Davide Vassallo, Global Practice Leader, DuPont Sustainable Operations. Attended by over 600

participants, the symposium was built around the concept of the Carbon Neutral Symposium with the goal of minimizing carbon dioxide (CO₂) emissions and negative impact on the climate. This was achieved through various efforts. For instance, the attendees were asked to travel to the venue via mass transportation and dress without a suit and tie while the room temperature was also set at 25°C. The calculation of the carbon footprint of the symposium was 9,204 kilograms of CO₂ emissions less than other normal practice events. SCG offset the CO₂ emissions caused by the event with our Carbon Credit from the alternative fuel project. In addition, SCG donated 100,000 baht to the energy fund of the 'Energy Ashram' to match the amount of CO₂ emissions reduction.

The organization of the symposium fostered cooperation from all sectors where they shared and learned about the sustainable development approach which would be implemented and shared on a broader scale. This would be another step toward achieving balance in economy, society, and the environment in a sustainable way.

In addition, SCG pledges to encouraging other organizations and agencies, particularly small and medium enterprises (SMEs) to adopt the sustainable development concept through various efforts. Examples include sharing experience and management approaches, preparing sustainability reports, and building a cooperation network with several organizations and agencies to improve industrial standards. Central to this is the establishment of 'Community Partnership Association' at Map Ta Phut Industrial Estate, Rayong which subsequently led to the setting up of 'Cement Partnership Project' in Saraburi to develop eco-friendly industry alongside taking care of the community.



“ The concept of sustainable development that focuses on achieving a balance among the economy, society, and the environment under the principle of corporate governance will be the answer that enables mankind to live together sustainably and happily. ”

Pramote Techasupatkul
Chairman of SCG Sustainable Development Committee

Management Approach to Sustainability

Vision of SCG is to be a role model in corporate governance and sustainable development by the year 2015. For almost 100 years, our organization has consistently and uniformly adhered to the 4 core values of our business philosophy that are in line with principles of sustainable development and corporate governance. To achieve more effective sustainable development, SCG has restructured the committees and their responsibilities for a better collaboration as follows:

- **CSR Committee for Sustainable Development** comprises 5 delegates from the Board of Directors, and 3 delegates from SCG top executives. The committee is in charge of defining policy and operation guidelines for undertaking social activities as well as considering linkages and progress of operation plans under responsibilities of SCG Sustainable Development Committee and SCG Foundation.

- **SCG Sustainable Development Committee** comprises Presidents of all business units and Vice Presidents. The committee is to set policy, and strategic plans, as well as to monitor the sustainable development results regarding business operations and to support the local communities where SCG operates.

- **SCG Foundation** comprises 5 top executives who define policy, and strategic plans along with monitoring the social and community service results as a whole. The foundation focuses on the development of human resources, particularly the potential of children, youths, and in the areas of occupation.

In order to expand the implementation of sustainable development to cover the corporate headquarters in Bangsue that houses a large number of employees, a SCG Head Office Sustainable Development Committee has also been established.

For activities that require specialized know-how and capabilities, various committees and task force have been set up such as the SCG Energy Committee, SCG Waste Management Committee, SCG Green Procurement Committee, SCG eco value Committee and SCG Green Building Committee to help achieve the set targets.

SCG has established the SCG Foundation that carries out public welfare activities for society and community without business return expectation. The foundation focuses on the development of human resources, particularly on children and youths which covers areas of education, skills and environmental and social awareness. It also undertakes other public support activities and emergency assistance as deemed necessary.

The structure of all organizations, committees, and task force has been set up with the objective of creating improvements and balance between business operation and the environment conservation together with a better quality of life for communities. We count on cooperation from all employees, business partners and stakeholders to help lead to the sustainable progress of our nation.

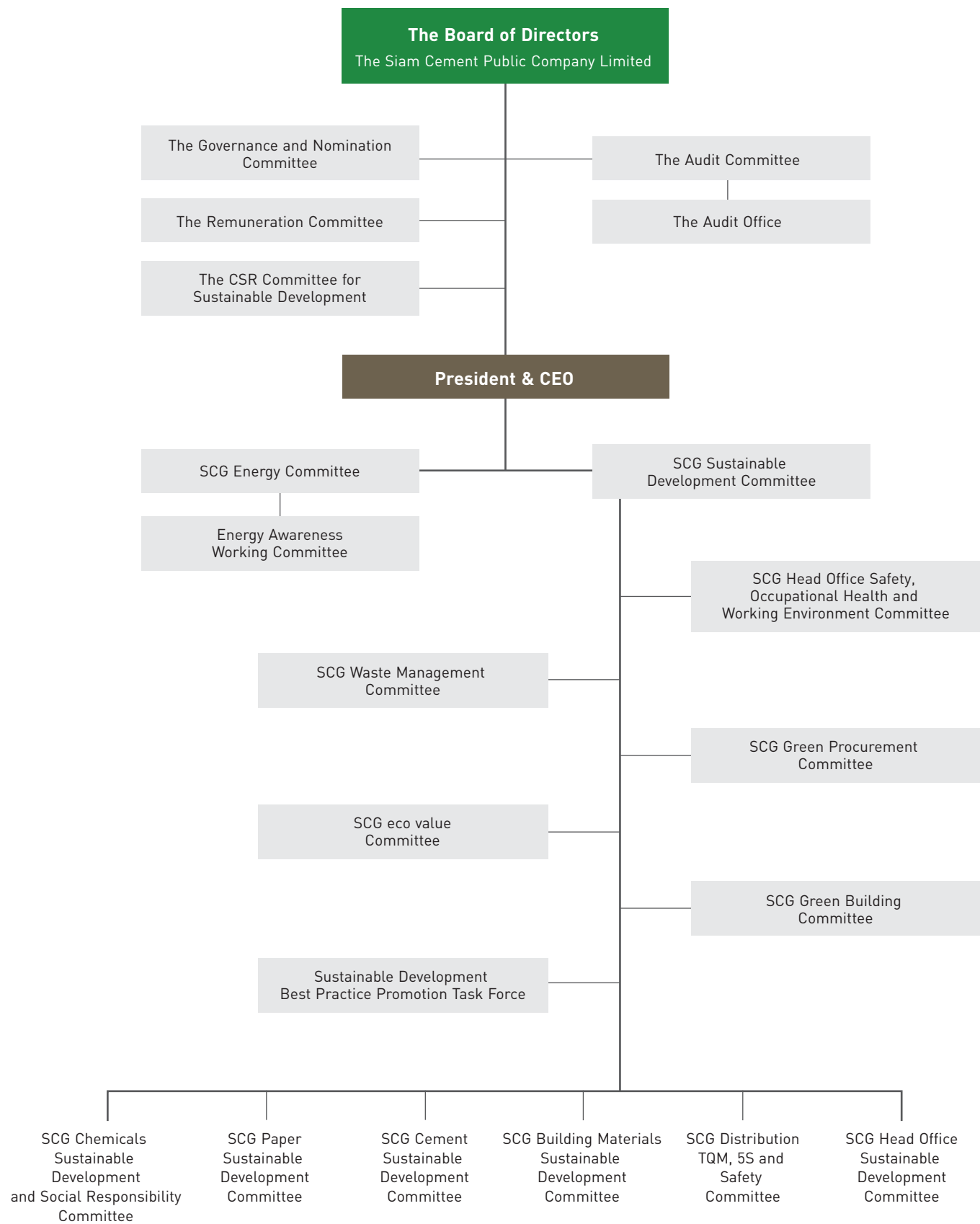


“ We expect that all employees and stakeholders shall participate in striking a balance between business operation, the environment, and society to achieve sustainable growth in line with SCG 4 core values of business philosophy and corporate governance consistently. ”

Cholathorn Dumrongsak

Secretary of CSR Committee for Sustainable Development and Secretary of SCG Sustainable Development Committee

Sustainability Management Structure *



* Exclude SCG Foundation



Numpol Limprasert

Sustainable Development Manager
SCG

SCG has been in existence for over 98 years and has a history of a culture and business practices that are based on principles of sustainable development and within the framework of corporate governance. We therefore have utmost confidence in our staff and believe they are a vital resource in driving us to achieve our goals, not only in the country but also in all the other countries where we operate, in accordance with our vision of being a role model of sustainable development.

At present and the near future, there are significant changes that are taking place both in terms of natural disasters and threat from people. As a result, the risk to business is not readily predictable. The way to prevent, alleviate, or correct such risk is the implementation of sustainable development principles. SCG is, therefore, committed to action as well as to promote the concept of sustainable development to other organizations, agencies, and entrepreneurs.



Chatree Chuenchomsakun

Sustainable Development Director
SCG Chemicals

SCG Chemicals designs and operates safety equipment that is in line with global standards in order to help prevent accidents that may occur especially in relation to fire. We have, therefore, created a strict culture of awareness and safety while our employees are required to fully comply with the Safety Observation Program. We have also invited international experts to help advise and evaluate the results of our implementation. In addition, the development and implementation of a facility that is environmentally and community friendly, such as creating a protection strip between the border of the facility and community, the zero VOCs emission project, the building of a enclosure ground flare and undertaking community impact assessments for all operations, are some of the activities that have been undertaken to build trust with the community and ensure a sustainable future.



Prakob Pikulkarntalerd

Sustainability Organization Development Manager
SCG Paper

SCG Paper is committed to continually operating an environmentally friendly business according to the following 3G principles:

Green Product which is focused on the development of environmentally friendly products and those that are certified as eco products, for example, the Green Carton boxes that consume 25 grams per square metre less paper but still maintain the same integrity.

Green Process which is focused on the reduction of natural resources by using a more efficient combustion in the steam generator, and reducing steam consumption in the drying process by installing a closed hood system.

Green Mind which is focused on the participation of communities and employees. This includes a dialogue with the community and using the opinions and suggestions received as input in creating technical plans that work towards sustainable communities. In addition, there is a youth development program for those living around the plant via the Green Academy program.



Kidakorn Angkanarak

Sustainability and Organization Development Director
SCG Cement

SCG Cement has created a sustainable learning process for local communities to help them appropriately manage their waste through variety of campaigns that help communities segregate recyclable wastes to create maximum benefit. For example, glass and plastic bottles can be sold to help supplement income; organic wastes can be used to make compost or biogas; combustible wastes can be sold to SCG Cement for using as an alternative fuel and help reduce fossil fuel usage; and hazardous wastes such as batteries are properly disposed of. In addition, there was a large volume of waste generated during the recent mega flood crisis and SCG has partnered with relevant community agencies to help promote segregation of wastes such as wood furniture, books and foam products that can be reused or recycled to minimize landfilling.



Narin Chucharoen

Sustainable Organization Development Director
SCG Building Materials

With a business vision of 'Create Better Habitat Solutions for All', SCG Building Materials has therefore developed innovative building materials for environmental friendly housing under SCG eco value label. This combines taking into account the environmental effects from product lifecycle and environmental footprint reduction by utilizing environmentally friendly manufacturing processes (Eco Process) and creating environmentally friendly products (Eco Product) along with creating awareness and encouraging environmentally conscious behavior. This in turn will help mitigate the effects of global warming and of pollution as well as promoting efficient energy usage. In addition, we have established a Green Building Center that is responsible for setting strategy to expand the market and the creation of the Green Building consultant to promote the development of more sustainable architecture.



Chalat Wonsanguan

Managing Director, SCG Skills Development Co.,Ltd.
SCG Distribution

SCG Distribution is involved in the transportation and distribution of goods and raw materials, particularly coal, in volumes of more than 2 million tons each year. The challenge is to manage business operations in a way that is accepted by the community, ensuring harmonious existence and without affecting the environment. At the same time, it is also necessary to enhance the performance of business partners to meet the same standards since we all use the same distribution networks whether land or water. To date, activities that have been undertaken include the storage of coal according to international standards, control of the transport process, providing safety driving training to create awareness regarding the environment and preventing spillage of products and raw materials during transportation to avoid having an impact on communities along the distribution routes. We also work with relevant agencies to improve traffic signals and roadways to help prevent accidents and create a safe environment for communities.

Risk Management

Risk management is an important tool for eliminating or mitigating any damages from unexpected events that might occur and enables an organization to overcome any risks and crisis by utilizing a systematic and continuous analysis process. There are internal risks such as from high production costs, insufficient production capacity, customer dissatisfaction, as well as those risks that occur as a result of external factors such as changes in technologies, trade liberation, foreign investments, political issues, changes in legislation. In the past, economic risks have had considerable impact on the organization’s operations. However, at present, increased environmental awareness in communities who have begun to pay more attention to their health and safety, has resulted in the environmental and social risks (both in financial and non-financial terms) that we can no longer overlook. For SCG, environment and society are a crucial element contributing to our sustainable growth under the framework of corporate governance.

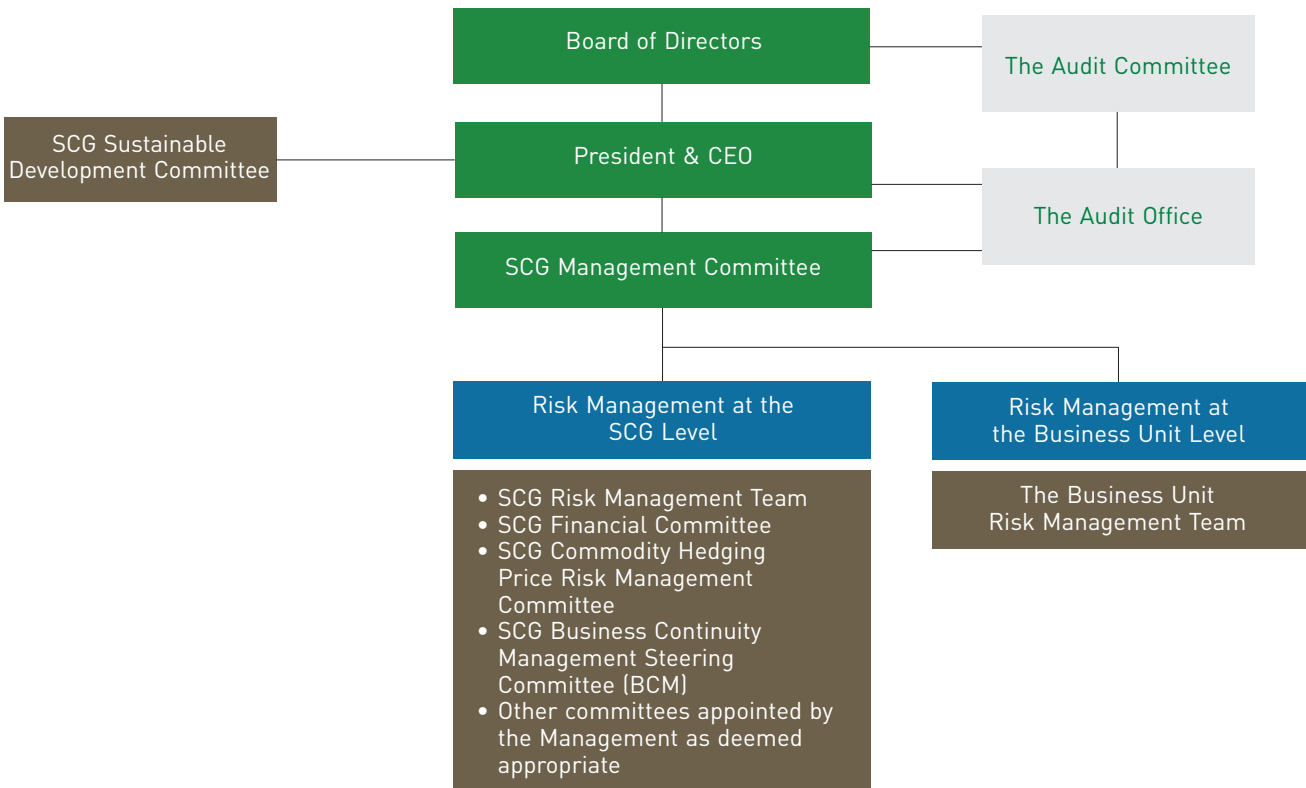
SCG Risk Management Structure and Responsibilities

SCG has categorized risks that might impact the organization into 2 levels - SCG Level and Business Unit Level. All risk management is under the overall supervision of the Board of Directors and SCG Management Committee. In order to effectively and appropriately manage such risks, SCG has established a Risk Management Structure as follows:

1. Board of Directors: define policies and risk management framework, oversee the risk management process to ensure that it operates in consistence with the said framework. At every quarterly meeting, the Board consider all risks which could significantly impact SCG operations. In the event of any significant issue that needs to be addressed, the Board of Directors will convene an immediate meeting to determine appropriate management measures.

2. SCG Management Committee: determine risk management structure, evaluate risks that may impact the organization both at corporate and business unit levels, assign responsibilities for managing risks at each level, monitor and assess results of risk management and the performance on a quarterly basis.

SCG Enterprise Risk Management Chart



Risk Management at the SCG Level

The **SCG Risk Management Team** comprises SCG top executives. The team is responsible for determining policy, and setting targets and strategies for managing significant risks that could potentially impact SCG's business operations on a broad scale, at the global level, regional level and in the countries where SCG operates. Some examples of significant risks include risks arising from volatile global economy, foreign exchange rate, political violence, natural disaster, costs of raw materials and fuels, business disruptions, and community resistance, and environmental risks. The working committees assigned for assessing and managing such risks include

- **SCG Sustainable Development Committee:** define policy and action plans for sustainable development, assess risks that might impact sustainability and determine overall management measures for SCG.
- **SCG Financial Committee:** define policy and arrange financial structures, assess a currency risk and define strategies for managing financial risks.
- **SCG Commodity Hedging Price Risk Management Committee:** define policy and guidelines for monitoring situations and determine strategies for managing risks arising from fluctuating costs of major raw materials and fuels used in production processes.
- **SCG Business Continuity Management Steering Committee (BCM):** define policy and implementation programs for Business Continuity Management (BCM), assess a business interruption risk as well as define preventive and response measures.
- **Other committees appointed by the Management as deemed appropriate.**

Risk Management at the Business Unit Level

The Business Unit Risk Management Team of each business consists of top executives and is responsible for evaluating risks, defining strategies, controlling and monitoring results of risk management to ensure that the process performs appropriately and in line with business nature and ever-changing situations. They are also responsible for reporting results of risk management and performance to the SCG Risk Management Team, Audit Committee and the Board of Directors. Examples of significant risks at the Business Unit Level include risks from competition, changes in technology and new invention, customer satisfaction risk, and risks pertaining to overseas investment project, etc.

Risk Management Process

SCG's risk management process consists of 6 main steps.

1. Establish 'common language' as a strategic communication tool to ensure that all involved parties

have the same perception of the risks. The Management Committee has clearly defined policy and guidelines for risk management that consists of responsibility structure, responsible personnel, process, reporting, and evaluation of risk management effectiveness. These policy and approaches will be adopted by every enterprise in SCG, both domestic and international.

2. Identification of risk. A process for assessment in order to determine potential risks that might impact SCG's short and medium term business goals by considering risks factors both from inside and outside the organization. SCG has classified risks into three categories:
 - 2.1 Environment risks arising when changes in external forces impact firm's performance
 - 2.2 Operation risk
 - 2.3 Information for decision making risk concerning information used in decision making e.g. sufficiency and accuracy of information
3. Risk assessment consists of 3 major steps for determining whether the risks have been effectively and efficiently managed in order for management and responsible personnel to review techniques and strategies as appropriate.
 - 3.1 Analyze risks and establish a 'Risk Analysis Document' by taking into account the sources and causes of situations or uncertainties in terms of likelihood and significance (considered for both opportunity and threat) and define a risk indicator. Impacts need not only be measured in financial terms but could include impacts on reputation, corporate image and credibility of SCG.
 - 3.2 Risk prioritization by employing a Risk Map taking into consideration the level of likelihood and impact. Risks that have a low level of likelihood but which would cause a severe impact when it does occur will need to manage first such as risks from flooding. SCG had assessed that the impacts from such a risk will be significant and therefore had established a contingency plan that included protecting facilities, temporarily relocating office, providing aids to flood victims including employees, their families and other citizens, as well as establishing a recovery plan. These precautionary activities enabled SCG to resume normal operations in a short period of time.
 - 3.3 Assessing Manageability of risks.
4. Define strategies for managing risks by taking into account risk tolerance and cost benefit analysis. SCG's main strategies are:
 - Retain: SCG can accept certain risks that do not lead to major impacts and are acceptable.

- Exploit: willing to risk more in order to obtain higher gains.
 - Transfer and Hedging: an important tool in transferring/sharing currency risks and risks from fluctuations in cost of major raw materials and fuels to/with third parties.
 - Reduce: utilizing fuels from wastes instead of from coal, and producing environmentally friendly products are some of the measures that SCG implements in order to manage risks to acceptable levels.
 - Avoid: SGG ceased the manufacturing of cathode ray tubes after it has assessed and determined that the continuation of the business could lead to more losses from constant changes in technologies that would require a large capital investment to keep up with.
5. The Risk Owner must monitor and report the results of risk management to the Business Unit Management Committee and to SGG Management Committee every quarter.
 6. Continuous and timely improvements of risk management capabilities. The SGG Management Committee monitors changes both in the internal and external environments and if new or existing risk elements could occur and lead to severe impacts, responsible persons will be informed in order to appropriately review the risk management approach or process, as well as continuously improve risk management capabilities to be more efficient.

Business Continuity Management

Besides risk management, SCG also applies the Business Continuity Management (BCM) concept for preventing and mitigating impacts from events that could cause business disruptions. This is to ensure that operations are able to continue even in the face of such situations as a natural disaster, political violence and interruptions in the supply chain. SCG has identified the structure, roles and responsibilities for business continuity management, assessed risks that might lead to business interruption both at the SCG and Business Unit level and implemented the Risk Treatment Plan, the Crisis Management Plan to urgently solve any problems and the Business Continuity Plan to quickly resume operations.

Oversight of Risk Management

The Audit Committee has been established as a mechanism to ensure that SCG has been equipped with the effective and appropriate risk management system and internal controls enabling the organization to achieve its defined objectives and goals. The Audit Committee has a duty to independently oversee, monitor, and review efficiency of risk management administered by the management committees and report the performance to the Board of Directors quarterly or when there occur important circumstances which could potentially affect the SCG's business operations.



Advanced production technology has been adopted to reduce risks that may occur prior to the delivery of high quality products to customers.

Sustainability Issues

SCG vision is to be well recognized as an innovative workplace of choice, a role model in corporate governance and sustainable development, and a regional market leader that will help strengthen growth and sustainability of ASEAN by 2015. Sustainable development in the context of SCG is to operate the business with the focus on achieving the balance between profitability and environmental & social stewardship; all this under the framework of corporate governance and the intention to better the quality of life of communities where it conducts business. SCG believes that stakeholders are a significant factor in enabling us to achieve our vision.

In the past year, SCG conducted surveys of communities living around our facilities, organized forums for hearing suggestions, as well as invited experts from various sectors including government, NGOs, academia and the media to have a dialogue with top management and review issues of sustainable development along with risk management and results of performance according to the Dow Jones Sustainability Indexes (DJSI), in order to create a ‘Materiality Matrix’ that summarizes the significant sustainable development issues to be incorporated into the action plan of the Sustainable Development Committee, as shown below.

Stakeholders' Aspect	High Significance	<ul style="list-style-type: none"> • Climate Change • Air Quality Management • Community Participation • Product and Service Responsibility • Information Disclosure and Reporting 	<ul style="list-style-type: none"> • Health and Safety • Energy Management • Waste Management • Water Management • Environmentally-friendly Products and Services
	Significance	<ul style="list-style-type: none"> • Biodiversity and Ecosystem • Employee Engagement 	<ul style="list-style-type: none"> • Resource Use • Corporate Governance • Risk Management
		Significance	High Significance
		SCG Aspect	

Plan and Progress

From materiality issues, SCG Sustainable Development Committee has developed a Medium Term Sustainability Plan along with the Medium Term Business Plan in order to create balance between economic, social and environmental aspects by reviewing sensitivity analysis and following up progress of the objectives and action plans yearly. Aspects will be categorized based on 2 approaches, namely, Internal extending to External, and Present overseeing to Future. This will enable SGC to set direction, strategies, targets and plans for each business to further develop and implement.

In the past, SCG has focused firstly on Operational Excellence within the organization such as energy conservation, management of greenhouse gas emissions, managing industrial wastes, safety and environmental performance assessments, and then transferring results throughout the supply chain from upstream to downstream,

such as Green Procurement, environmentally-friendly products and services under the SCG eco value label, as well as Contractor Safety Certification System.

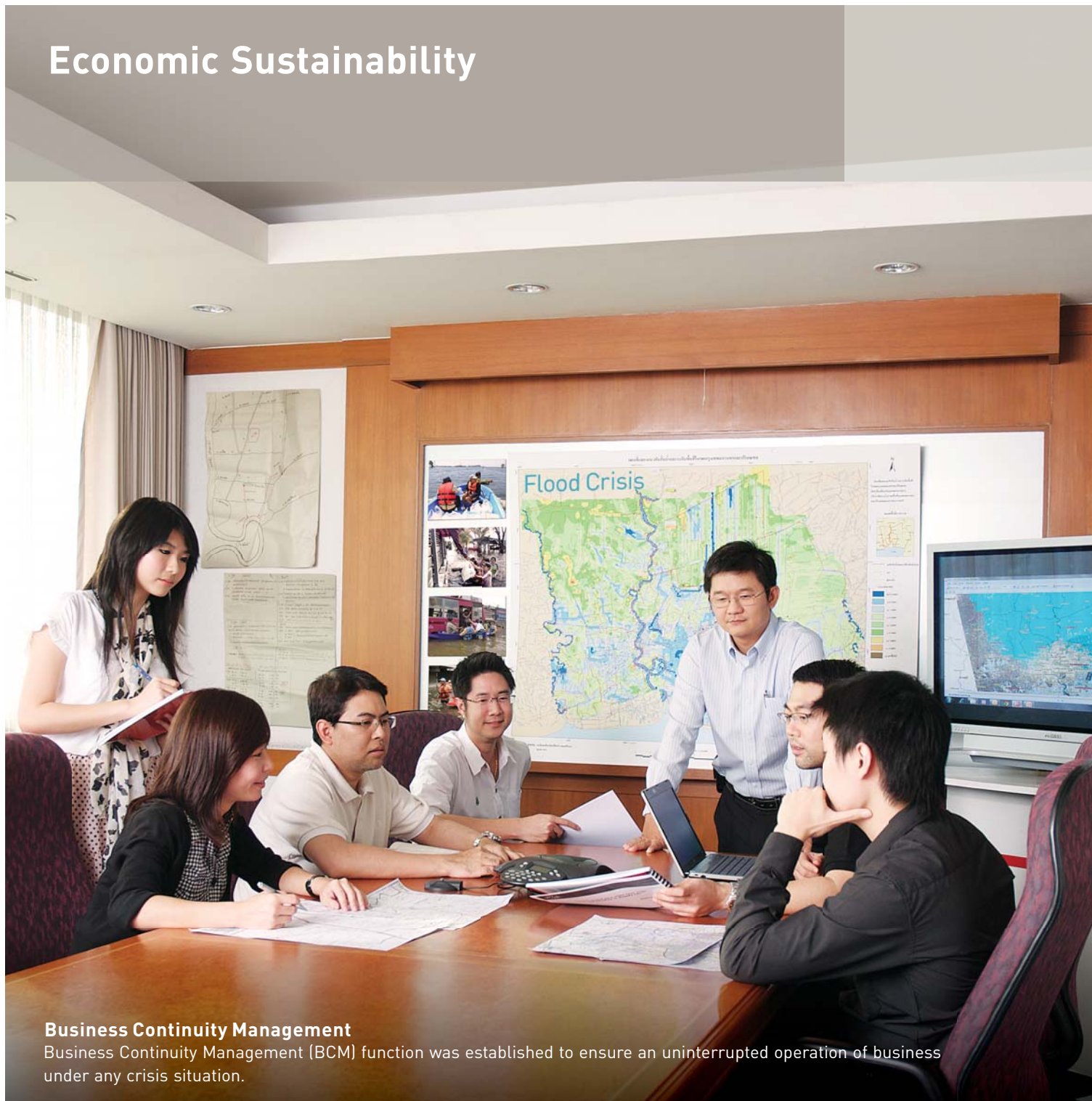
From now on, SCG is committed to expanding the implementation of the sustainable development approach to our business operations in other countries. This is to create value to customers, employees and stakeholders whilst accelerating sustainable growth to meet SCG vision and the formation of ASEAN Economic Community (AEC) in 2015. SCG will also seek to extend the results of sustainability performance to the outside by encouraging other organizations to adopt the approach, motivating other organizations to implement their sustainability reports, and strengthening communities to be self-reliant, all in the hope of raising living standards by not depleting our limited natural resources.

Plan and Progress

Program	Page	Action Plan	Actual Performance	Next Steps
Economic Dimension				
High Value Added Products and Services (HVA)	37	Increase sales of HVA to 50 percent of revenue from sales volume by 2015	HVA sales volume accounted for 32 percent of revenue from sales	<ul style="list-style-type: none"> Promote R&D of HVA Communicate the increasing benefits to customers and stakeholders
Corporate Governance	-	Improve corporate governance guidelines to be more up-to-date and be consistent with guidelines of other leading organizations and to be a more global standard	<ul style="list-style-type: none"> Monitored & assessed performance based on corporate governance policy Created SCG's Policies and Practices Toward Stakeholders 	<ul style="list-style-type: none"> Develop the system to allow the incorporation of suggestions from stakeholders Communicate ideas and actions in order to be a model of corporate governance
Environmental Dimension				
Climate Change	71	Reduce greenhouse gas emissions per unit of production	Decreased by 1-3 percent for SCG Paper and SCG Cement only	<ul style="list-style-type: none"> Review protocol for accounting and reporting of greenhouse gas emissions for the second time for all businesses Analyze the report to determine ways to reduce emissions at source Encourage business partners to report and set goals of greenhouse gas emissions reduction.
Energy Management	69	Reduce energy consumption per unit of production	Decreased by 1-5 percent for SCG Paper and SCG Cement only	<ul style="list-style-type: none"> Increase efficiency of manufacturing processes, reduce loss and increase reuse of energy Promote R&D for using biomass fuels, using new technologies such as Gasification, Pyrolysis and Torrefaction
Water Management	70	Reduce water consumption per unit of production	Decreased by 4-6 percent for SCG Paper and SCG Cement only	Promote R&D and undertake continuous improvements to reduce consumption in all processes and utilize water efficiently
	57	Construct check dams to restore the environment	Built 34,004 check dams	Summarize lessons learnt and expand efforts to integrate water conservation in the total life cycle of products
Waste Management	33	Zero Waste to Landfill by 2012	Waste to landfill <ul style="list-style-type: none"> 1 percent Hazardous waste 36 percent Non-hazardous waste 	R&D on reuse/recycle of wastes as raw materials or high value added products

Program	Page	Action Plan	Actual Performance	Next Steps
Biodiversity	34	Preserve biodiversity, rehabilitate the environment and reduce environmental impacts from activities and operations	<ul style="list-style-type: none"> Rehabilitation of all cement quarries and expanded the scope of study Sustainable forest management of 43,200 rais in accordance with the Forest Stewardship Council (FSC) standard 	Restore and develop mining areas to become nature education trails benefiting students and youth in the communities
Environmentally Friendly Business	36	Green Procurement	484 models of products registered under the Green Procurement List, equalling 2,669 million Baht in purchasing volume	Increase and expand green procurement to cover all groups in the the supply chain
	36	Greening Supply Chain	An additional 23 business partners that conformed to the criteria	Help develop capabilities of business partners to enable them to be registered in the Green Procurement List
	37	Environmentally friendly products and services under the SCG eco value to be 1 in 3 of revenue from sales by 2015	47 products certified with SCG eco value, equal to 13 percent of revenue from sales	<ul style="list-style-type: none"> R&D of environmentally friendly products and services Raise stakeholders' understanding and use of SCG eco value products
Social Dimension				
Health & Safety	50	Reduce workplace and road accidents	<ul style="list-style-type: none"> Accidents resulting in Incident rate (Lost time cases) was 0.12 cases/200,000 man-hours Serious accidents resulting in total Fatalities were 9 cases which was a decrease of 30 percent, compared to 2010 	<ul style="list-style-type: none"> Continuously promote safety and safe driving habits Expand safe driving program to SCG subsidiaries in other countries
Human Capital Development	47	Enhance capabilities and provide knowledge and skills required for personal growth	Allocated a budget of 700 million Baht and average 12 training days per employee for all levels of employees in areas of Functional and Business Knowledge	Identify Operational Excellence knowledge and create adequate specialists to maintain business competitiveness and expand knowhow
Stakeholder Engagement	44	Develop standards and a system for stakeholder involvement and create plans for responding to diverse stakeholder expectations	Conducted activities both at business unit and SCG level according to SCG's Policies and Practices Toward Stakeholders	Assess, evaluate and develop appropriate activities based on results from the stakeholder engagement process

Economic Sustainability



Business Continuity Management

Business Continuity Management (BCM) function was established to ensure an uninterrupted operation of business under any crisis situation.

Economic Risk and Risk Management

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Economic Management Approach

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Sustainable Business Operations Maintaining Smooth Operations during the Crisis

“Regardless of any crisis, SCG is resolved to continue its undisrupted business operations to deliver products and services to customers as promised.” This is the mission statement **Mr. Apichai Intakaew, Director of Corporate IT and BCM Office, SCG**, and his team aim to achieve regardless of any daunting obstacles that may come the Company’s way to demonstrate their professionalism.

Business Continuity Management (BCM) was a new function established on September 1, 2010 to ensure smooth operations in the case of unexpected circumstances such as riots, earthquakes, fires, or floods. Information gathered from various sources will be systematically analyzed and assessed in order to draw up a preparedness plan which will be materialized to minimize the repercussions.

“This year’s worst floods in decades put SCG to the test. We set up a war room to analyze the direction, severity, and volume of run-off water into Bangkok, taking into consideration employees’ safety and the floods’ impacts on the Company’s business and assets. Preventive measures were taken to keep the impacts to a minimum.

The efforts were divided into two parts. The first one, which involved **handling the disaster and assisting employees**, encompassed keeping employees abreast of

the flooding situation, evacuating employees and their families who were affected by the flood to safe places, and rebuilding their lives after the flood water receded.

The second part was **the setting up of Mobile Offices** which had previously been planned with the IT system already installed. When SCG announced the temporary closing down of its Headquarters Office, employees could work outside the office from many locations such as SCG’s plants and offices in provincial areas, hotels, or homes. As a consequence, SCG was able to produce and distribute products and services to accommodate the needs of customers without disruption, enabling SCG to gain greater confidence from all concerned parties including joint venture partners, shareholders, investors, trading partners, and consumers.”

Although Thailand’s worst flood crisis was over, the work of the BCM Office still continues. The Plan-Do-Check-Act (P-D-C-A) management method will be employed to improve the work processes, reducing ‘flaws’ and consolidating ‘strengths’ to ready itself for any future crisis.

Moreover, the Office plans to share its BCM knowledge with SCG’s business partners, dealers, and business allies through training, educating, and practicing so they can plan and prepare for any crisis. This will help strengthen Thailand’s business sector, empowering them to grow strongly and sustainably.



“ This year’s worst floods in decades put SCG to the test. We set up a war room to analyze the direction, severity, and volume of run-off water into Bangkok, taking into consideration employees’ safety and the floods’ impacts on the Company’s business and assets. Preventive measures were taken to keep the impacts to a minimum. ”

Apichai Intakaew

Director of Corporate IT and BCM Office, SCG

Economic Risk and Risk Management



Since most of SCG's businesses are in the manufacturing sector, and production costs are an important factor to keep the businesses competitive. Therefore, the most significant economic risk is the inevitable fluctuations in the cost of raw materials and fuels. Another significant risk is the fluctuations in exchange rates for foreign transactions since SCG also imports raw materials, machinery and equipment from other countries. Risks and control measures that SCG implements are outlined below.

Fluctuations in Prices of Raw Material and Energy

Cost of raw materials and energy are key factors for SCG as it operates a large scale industry. Raw materials and energy are also important factors affecting the competitive advantage and the sustainability of the business. The main raw materials and energy are naphtha, which is a raw material used by the petrochemical industry; pulp and waste paper that are used as raw

material by the paper industry; coal which is the primary fuel used in the manufacture of paper and cement; and oil and gas that are used in production and transport. At present, the costs of the aforementioned raw materials and fuels are quite volatile based on the stability of the current world economy and it is on a rising trend and may even enter a state of shortage in the future.

SCG has assigned senior management of each business group to be jointly responsible for monitoring and evaluating the trends both inside and outside the country and to outline short and long term strategies. The SCG Commodity Price Risk Management Committee has also been established for determining the risks and impacts associated with the price of raw materials and energy by using such financial instruments as hedging to set prices and costs in advance to help manage the impacts of price volatility.

For risk factors associated with quantity, SCG has a policy that requires the management of each business to predict the reserves of raw materials that are required for production and to find sources of these raw materials from both domestic and foreign markets to meet the long-term demand. This includes entering into long-term contracts or joint ventures as well as conducting research and development of alternative fuel sources.

Fluctuations in Exchange Rates

The risk of volatile exchange rates in the global economy has an effect on the performance of the SCG in many ways such as in the expansion of investment abroad and in the import and export of raw materials and products. SCG's policy for managing such risks is through the operations of SCG Financial Committee which is responsible for establishing policy, guidelines and for monitoring of financial activity to be able to adjust strategies to fit changing circumstances. SCG has managed the exchange rate fluctuation risk by using financial instruments such as derivatives in futures market (Forward) in the appropriate proportions to manage the risk to be at an acceptable level. The nature of some of SCG's business is based on the Natural Hedge and therefore the nature of exchange rate risk is inherently being managed. In addition, the Exchange Rate Scenario Analysis and Sensitivity Analysis are employed to analyze the impact of exchange rate fluctuations on SCG's business and to help create effective risk management strategies measures.

The Risk of Foreign Investment

SCG is continually expanding its investments into countries in the region. The focus is on the investment in strategic countries. However, these investments carry their own risks including currency fluctuations, the availability of utilities, the shortage of skilled labor, the acceptance by the communities, the religious and cultural differences, and the purchasing power of the people in particular countries. Therefore, SCG continuously monitors the situation in the different countries in which it has invested and if determined that there is a potential for growing the business, SCG will continue to expand its presence in such countries. For example, SCG has increased its investment in Indonesia in its petrochemicals, cement, building materials and distribution businesses. As for community and social relations, SCG has established partnerships with community and religious leaders and government agencies to promote understanding and engage the participation of communities around its facilities.

The planned establishment of the ASEAN Economic Community (AEC) in 2015 is another challenge for which SCG needs to be prepared. This planned move by the ASEAN countries is another opportunity for SCG to expand its presence to a wider market with lower production costs and the opportunity to work with regional business partners. On the other hand, this trade liberalization can also result in increased competition to SCG from increased market access. SCG therefore recognizes both the opportunities and risks of the AEC and hence has adjusted its strategy for human resources and operational excellence, investing in research and development of products and technologies, an increasing business partnerships, all the while taking into account corporate governance and sustainable development.

Economic Management Approach

SCG places importance on the management of the economy which is one of the three components of sustainable development, the other two being social and environmental. The strategy for economic management is consistent with SCG's vision of delivering high value added products and services (HVA) and its aim to expand into the region (Go Regional). The growth of SCG based on the above strategy is widely supported by its Sustainable Development Policy with regard to taking into account the view of all stakeholders and incorporating environmental considerations and fairness on the basis of corporate governance. SCG has therefore always been entrusted by all customers, employees, shareholders, partners, suppliers, and other stakeholders.

SCG has been conducting business with fairness and with respect to all stakeholders for almost 100 years. SCG believes that with the continual development of a dynamic strategy adaptively to changing circumstances and one which focuses on investments in research and development to improve the quality of products and services continuously, as well as the expansion of the business into the region, we will expand the definition of the word 'Home' to not only mean doing business locally but more to mean building a solid foundation of business and long relationships with our neighbors in order to expand the marketing and branding of SCG. This will allow us to strengthen our economic growth and create strategic support for other aspects of our business as well.



Environmental Sustainability



SCG eco value

EL Green, a compostable plastics compound that is 100% compostable by naturally occurring microorganisms under specific environmental conditions of appropriate moisture and temperature.

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Compostable Plastic One of Our Eco-friendly Innovations

Innovations can contribute to a better world as a result of the development of eco-friendly products that fully utilize natural resources whilst reducing energy consumption and pollution. Compostable plastic is an answer to eco-friendly innovations for our world.

"Most plastics are used in the manufacturing of packaging. With a short service life, they cause pollution when disposed of by burning. Therefore, the SCG Chemicals' research team has developed materials that can be used for producing packaging like traditional plastics but which are 100% compostable. The materials are designed to undergo a significant change in their chemical composition under specific environmental conditions with appropriate moisture and temperature. The degradation results from the action of naturally occurring microorganisms." said **Dr. Pichet Rojanapithayakorn, a researcher at SCG Chemicals' Technology Center.**

"Every division from the research team that developed the chemical formula, to the production team responsible for the design of the production process and quality control and other support staff such as marketing team and sales

representatives work collaboratively to educate consumers and manufacturers, encouraging them to use this innovative product. Certified by the SCG eco value label to be environmentally-friendly, the new compostable plastics promote resource-efficiency and help reduce greenhouse gas emissions that adversely impact the environment."

The going green trend and pressing concern for the world's grave environmental issues have contributed to an increasing demand for biodegradable plastic products. In answers, scientists and researchers have developed a wide variety of innovative biodegradable items to address the wide-ranging needs of eco-conscious consumers. More recently, SCG Chemicals has produced seedling grow bags, using the compostable plastics (EL Green). The bags were donated to Bangkok Metropolitan Administration for use in public and environmental activities. The efforts also extend to the development of catering packaging products and medicals related equipments, which are safe and environmentally friendly.

The compostable plastics are thus eco-friendly innovations that help make our world a better place to live.



“ EL Green is an eco-friendly innovation developed by the team of SCG Chemicals' encompassing product design, production process, and quality control to ensure it can be used in the manufacturing of packaging like traditional plastics but 100 percent compostable. The goal is to meet the going green trend and customers' growing demand for degradable plastic products. ”

Dr. Pichet Rojanapithayakorn
Researcher of SCG Chemicals' Technology Center

Environmental Risk and Risk Management

Natural disasters such as earthquakes, tsunamis, droughts, extreme winters, floods, storms, have become more severe than ever. Constant and unpredictable changes in climate are now an increasing global threat to humanity. In addition, an exploding population growth that is already reaching 7 billion and the subsequent demand for a better standard of living, coupled with economic growth in each region of the globe, is leading to an increase in use of already limited natural resources. It is subsequently affecting and depleting our environment even further.

SCG recognizes the changes that are occurring in the environment, lifestyles and economies and is therefore continually analyzing and assessing environmental risks in order to define strategies for managing such risks. This is a precautionary approach adopted to mitigate potential impacts while improving efficiency and eventually leading to sustainability at SCG. Significant environmental risks include:

Environmental Pollution and Greenhouse Gases

Environmental pollution and greenhouse gases are both risks and challenges that need to be appropriately addressed. Climate change, particularly in relation to goals and control measures for greenhouse gas emissions as well as fees and other environmental taxes levied by the government, are becoming more common. SCG has therefore evaluated risks and impacts as outlined below.

- Risk from insufficiently managing the environment. Even though we monitor and treat pollution to be in compliance with regulations, and stakeholder expectations such as those of local communities living nearby our facilities, we realize that any failure to meet such expectations from our stakeholders could be considered unacceptable. It is therefore crucial to arrange dialogues in order to acknowledge and incorporate stakeholders' opinions as part of SCG's action plans and in developing clear business objectives and targets that align with the needs of our stakeholders.

- Risk from losing the opportunity to compete. There are additional costs associated with environmental management during the initial stage. Failure to improve efficiency, reduce pollution at source and effectively manage resource utilization, might lead to even greater costs and decrease the competitiveness of the business. Therefore, we have to review the different measures that are required to improve production efficiency and communicate to stakeholders and customers, creating a market for environmentally friendly products and services to propel towards a Green Business. In addition, encouraging other organizations to participate and take responsibility for

reducing pollution and greenhouse gases will also help raise new business standards that will lead to sustainable operations.

- Risk from loss of revenues from marketing of products containing carbon. Economic, environmental and social factors that contribute to the steadily increasing cost of raw materials and fuels, significant climate change, and stakeholders who have developed understanding and intend to select products or services with low carbon content, could cause a business that does not adapt to the current circumstances to face opposition and lose business opportunities. Therefore, business must reconsider cost of natural resource used in producing products and services that meet customers' expectations, define clear plans, strategies and policy for improving manufacturing processes throughout the life cycle, while researching and developing new technologies for producing low carbon products and services.

Water Resources

Water is an essential resource for SCG's business operations. Risks associated with water use must therefore take into account the whole product life cycle starting from sources of water that might be insufficient to meet demands from industrial and agricultural sectors during the dry season, abundance of water during the flood season similar to that which caused the great flood crisis this past year, volume and quality of water used in production processes, as well as that of treated water that is discharged to a water body which must not cause any impacts to the environment and be in compliance with specified laws. SCG has prepared preventive and mitigating measures as outlined below.

- Risk from water shortage leading to disruptions to production and an increase in cost of water supply.



By implementing 3R principle, water is reused/recycled in production process.

SCG has explored the water bodies where SCG facilities located, analyzed the volume of water used in different activities both for industrial and agricultural sectors and household use in order to create appropriate production plans and ensured that it will not impact local communities. Moreover, in Map Ta Phut which is an industrial estate where there is a high level of water use, SCG has joined with the Eastern Industrial Water Committee, a joint committee founded by the government and private sectors whose duty is to analyze the volume of water used and potential impacts upon the national GDP in order to address the problem of water shortages, managing water resources during dry season and providing reservoirs in case of water shortages.

- Risk from abundance of water leading to flood crisis, affecting property, public facilities, transportation of products and services, employees and business partners, and eventually leading to loss of trade opportunities. The SCG Business Continuity Management (BCM) Committee recognizes the importance of having in place preparedness and response plans for such situations that include preventive measures that can be taken, ways to mitigate impacts, a recovery plan, and researching new innovations for handling another such severe crisis. At the same time, we have also expanded the outcomes of our actions to social assistance during such times.

- Risk from volume and quality of water that enters the production processes, affecting production plan and quality of products and services. SCG implements the 3R principle to improve production processes by reducing water consumption, reuse/ recycle and replenish. In addition, we control water quality by testing water prior to it entering the production process. Water that is input into the process comes from both internal and external sources and has been treated for reuse; this is also one way to reduce water consumption.

- Risk from volume and quality of treated water discharged to water bodies which must not impact the environment and comply with specified laws. SCG considers compliance to legal standards as a minimum requirement of conducting business. It is the local communities who are truly the social license holders whom SCG must strictly comply with. SCG arranges several community engagement activities, inviting representatives from communities to monitor water quality around facilities and provide to them evidence that treated water discharged from our facilities are safe enough to be habitats for fish and used for agricultural purposes.

Laws and Regulations

Risk from governing laws and requirements,

particularly from new laws that emphasize the importance of health aspects in relation to impacts from the industrial sector such as Health Impact Assessment (HIA). Failure to comply with such laws could lead to suspension of operations and opposition from local communities. SCG has taken a progressive step by conducting HIA studies and reporting results as an extension of the environmental impact assessment process for large scale projects such as investments in petrochemical projects and has prepared measures to address Volatile Organic Compounds (VOCs). In addition, in collaboration with the governmental sector, we have conducted an analysis of problem solving approaches and measures and outlined clear guidelines for continuously monitoring and prevention.

Environmental Management Approach

SCG has always given the long importance to environmental management as we give to economic and social management in accordance with our core value of 'concern for social responsibility'. Based on the environmental risks that have been mentioned, the SCG Management Committee has defined strategies and measures for addressing such as

- Operational Excellence by using the Total Quality Management (TQM) process for analyzing potential impacts by assessing the life cycle of products, defining environmental indicators in order to effectively utilize resources, and research and development of innovative technologies, all which are further used in setting environmental goals such as reduction of GHG emissions and industrial wastes, utilizing alternative energies, etc.

- Extension of positive outcomes throughout the supply chain to help raise suppliers' standards by promoting and communicating know how on business operations and improvement of production processes to its upstream business partners under the Green Procurement and Greening Supply Chain programs, while developing downstream partners to become more sustainable consumers by innovation of environmentally friendly and SCG eco value products and services.

- Promoting goodwill and supporting other organizations both within the same industry or those located nearby to become environmental stewards. SCG launched the 'Community Partnership Initiative' within the Map Ta Phut industrial estate in order to form collaborations among industries. Our aim is to expand such initiatives and practices to other locations where SCG operates.

Green Process

Climate Change and Energy

SCG recognizes the importance of the climate change problems and even though the ASEAN countries where we conduct operations are not governed by the Kyoto Protocol for reducing greenhouse gas emissions, we have nevertheless created an inventory and reported greenhouse gas emissions under control approach of the World Business Council for Sustainable Development for all our businesses since 2006.

The risk assessment of the impacts of climate change on the environment, society and business found that there were indeed adverse effects to operations, property and morale, as witnessed this past year. The seriousness and reality of climate change led the major flood crisis for a whole country that affected SCG, business partners and stakeholders, all of whom suffered from this event.

SCG has therefore set a target to reduce both direct and indirect greenhouse gas emissions by 10 percent by 2020 from base year 2007 levels which was when SCG completed its greenhouse gas accounting and reporting verification by external party. To achieve these objectives, an assessment and analysis of the causes of greenhouse gas emissions was conducted and it was found that the major source of emissions was from direct operations of SCG such as fuel combustion, reactions in manufacturing processes, etc. The other source was from indirect operations such as purchase of energy for use as electricity and steam and the last source was from the support activities of business partners.

Reducing greenhouse gas emissions by SCG, a leading manufacturer of industrial products, must therefore involve management of energy sources that generate the most greenhouse gases. SCG has done this by applying principles of quality management to help identify areas of improvement as follows.

1. Increasing Energy Efficiency

- **Energy loss minimization** in production processes such as by drying paper in a closed system, thus reducing heat loss into the environment.
- **Waste energy recovery** such as by installing the Waste Heat Power Generation (WHG) that uses waste heat from cement production to generate electricity.
- **Precision control of manufacturing systems** to prevent the loss of excess energy such as by using the

Advance Process Control (APC) in the manufacture of plastic substrates to decrease the deviation and reduce the error offset of the system.

- **New technology utilization** to increase production capacity while reducing energy consumption per unit which will also result in lesser maintenance required. For instance, the installation of a pre-grinding machine to reduce the size of cement clinker before transferring into the cement grinder.

2. Use of Alternative Fuels

- **Use of the production process wastes** as alternative fuels. For instance, the use of waste gas from petrochemical process and black liquor from pulping process as fuel substitution.
- **Use of wastes from other industries** that cannot reuse within themselves as alternative fuels in cement production.
- **Use of biomass fuel**, SCG's target is to maintain its leadership position in the use of biomass fuels both for combustion and in the steam boiler. In addition, SCG has applied technology for conversion of biomass to be used in such diverse processes as Gasification, Pyrolysis and Torrefaction.

3. Increasing Transportation Efficiency

- **Multimodal management** which involves considering several modes of transportation such as land, waterway, or rail, and selecting the mode that will consume the least amount of fuel.
- **Deadhead reduction** by ensuring that vehicles carry a load both to and from their destination, thereby keeping the number of transport vehicles that travel with an empty load to a minimum.
- **Consolidate management** which arranges the shipments to one location and uses one large truck to transport to the distribution center before transferring to smaller vehicles for final delivery.

- **Changing types of fuel used in trucks** to natural gas which is a cleaner fuel that emits lesser greenhouse gas per unit of energy compared with diesel fuel.

4. Creating Awareness

- **Promote employee participation and awareness of energy conservation** through the Energy awareness Working Committee which is comprised of representatives

from each business who share experiences and campaign to save energy such as by encouraging the switching off of electricity and computers when not in use, the use of bicycles instead of cars to get around in the facility.

Some key energy projects that were undertaken in 2011 are described below.

SCG Chemicals

- **Project to install a heat exchanger** to reuse heat from the Quench Water to raise the temperature of the condensate by Rayong Olefins Co., Ltd. This has led to a reduction of heat from the steam at the De-aerator by 130,000 gigajoules per year and reduced carbon dioxide emissions by 8,300 tons per year.

- **Project to improve the moisture system** by Map Ta Phut Olefins Co., Ltd. by removing the multiple tanks for getting rid of moisture located at the output of the compressor to the simultaneous use of an overlap system. This has helped reduce power consumption by 22,000 gigajoules per year and reduced carbon dioxide emissions by 1,200 tons per year.

SCG Paper

- **Project to reduce heat loss** from the manufacturing process by installing a wall cover on the machinery that can be either opened or closed and by installing exhaust fans to help control humidity. This has led to a reduction in energy loss of 80,000 gigajoules per year and reduced carbon dioxide emissions by 4,000 tons per year.

SCG Cement

- **Project to improve the quality of industrial wastes** so that it can be used as fuel in the cement kiln by SCI Eco Services Co., Ltd. This involved reducing the size and quality of the fuel mixture to be more consistent which enabled the cement plant to use more of this processed fuel and as a result, the use of industrial wastes as alternative fuels increased by 80,000 tons last year and substituted 60,000 tons of coal. It also reduced carbon dioxide emissions by 100,000 tons.

- **Expansion of the use of biomass fuels** to Kampot Cement Co., Ltd. in Cambodia. Biomass fuels were used to substitute 4,500 tons of coal which led to a 4,000 tons in carbon dioxide emissions reduction.

SCG Building Materials

- **Project to replace burners** to optimize volume of air entering into furnaces. This helped to reduce excess combustion air, increase energy efficiency and reduce the use of natural gas by 3,900 gigajoules per year.

- **Project to reduce the volume of the room** for casting sanitary ware by Siam Sanitary Ware Industry (Nongkhae) Co., Ltd. by reducing the height of the ceiling. This reduced the amount of heat required for the system and also reduced fuel consumption. It also decreased the time required to incubate, thereby reducing the volume of natural gas used as fuel by 880 gigajoules per year.

SCG has extended the approach for reducing greenhouse gas emissions to business partners throughout the supply chain. This includes the process of data collection, accounting and reporting of greenhouse gas emissions resulting from the activities of the business partners. Pilot projects have also been introduced to support business partners who are ready to reduce emissions of greenhouse gases. Examples are

- Project for improving transport vehicles of SCG Logistics Management Co., Ltd. that helped to improve more than 340 vehicles of business partners to use natural gas which is cleaner and reduces carbon dioxide emissions.

- Project for using Refused Derived Fuel (RDF) of the SCG Trading Co., Ltd. (Philippines) by segregating waste from the municipality of Manila and subsequently using as fuel in furnaces of the local cement plant, thereby substituting 32,000 tons of coal usage per year.

Another key strategy that SCG has implemented to further its aim of reducing greenhouse gas emissions is to participate with Thailand Greenhouse Gas Management Organization (Public Organization) to evaluate the life cycle of its products and be certified with the Carbon Reduction Label. There are 32 products including cement, floor tiles, wall tiles, and petrochemical products that have been certified. In addition, the disclosure of greenhouse gas emissions of goods and services has led to the Carbon Footprint Label certification for 8 products such as cement, corrugated packaging, floor tiles and wall tiles.

Sustainable Resource Use

SCG believes that natural resources should not be considered as only raw materials for generating profits but they are also an asset of each living organism on this planet, a principal investment that is depleted. Resources must therefore be creatively used to maximize their benefit. SCG has therefore carried out a study on life cycle assessment of our product, used the information to analyze risks and impacts, and developed resource management plans in order to achieve the most efficient and valuable use of resources.

SCG Chemicals

Raw Materials	Tons
Naptha	2,702,000
P-Xylene	966,000
Acetic Acid	64,000
Chloride	77,000
Salt	43,000
Recycled materials*	6,000

* 0.2 percent of total raw materials consumption

SCG Chemicals selects raw materials that have high quality and standards to increase the efficiency of the manufacturing process and reduce environmental impacts. The research and development undertaken to increase efficiency of resource use and the use of renewable raw materials has led to such improvements as the development of biodegradable plastics, thereby leading to waste reduction, and the use of waste heat from the Quenchwater system to increase the temperature of condensate, thereby reducing steam and energy consumption.

SCG Paper

Raw Materials	Tons
Wood	1,546,000
Wood Chip	323,000
Paper pulp	170,000
Recycled materials*	1,211,000

* 37 percent of total raw materials consumption

SCG Paper has been sustainably managing forests such that they are certified, improving the efficiency of plantations, and controlling the raw materials of pulp and paper products to be more environmentally and community friendly. One of its initiatives is the use of EcoFiber pulp that is an environmentally friendly material obtained from segregating of wastes from outside sources and producing a good quality pulp that can replace the use of pulp from trees.

SCG Cement

Raw Materials	Tons
Limeston	25,034,000
Clay	3,095,000
Sand	277,000
Gravel	183,000
Gypsum	698,000
Recycled materials*	381,000

* 1.3 percent of total raw materials consumption

The main raw material of the business is limestone. SCG Cement has therefore created a program for sustainably managing the mining areas by introducing the Semi-opened Cut Mining method in conjunction with other projects to help improve biodiversity, to preserve and protect the ecological system and to rehabilitate the quarries. SCG Cement also uses wastes from other industries as raw material such as fly ash, slag, washed clay, and synthetic gypsum.

SCG Building Materials

Raw Materials	Tons
Sand	1,042,000
Cement	799,000
Aggregate	413,000
Clay	425,000
Feldspar	220,000
Others	1,389,000
Recycled materials*	14,000

* 0.3 percent of total raw materials consumption

SCG Building Materials has developed a manufacturing process that enables the reuse and recycle of wastes. This has helped to promote increased usage of wastes in production, especially wastes from internal processes. It also encourages the sharing of waste products within the organization to be used as raw materials. Since most of the products of SCG Building Materials are directly used by consumers, the company has also been campaigning to create awareness regarding reuse and recycling and encouraging the use of more environmentally friendly through SCG eco value label.

Water Management

The management of resources is a significant factor for operating a business on the basis of sustainable development. An especially important resource is water and in the 98 years that we have been in business, SCG has always taken into account water management along with assessing the risk of social, environmental and business practices that can occur since upstream to downstream to avoid situations of conflict with the surrounding communities. Some of these issues include managing water shortage in the community as a result of use in the manufacturing process, management of water overflow both in terms of quality and quantity, and management of an ineffective wastewater treatment system.

SCG has been operating its business continuously and has never caused any water shortages, overflow or polluted water owing to our business continuity model that takes into account the unexpected by incorporating suggestions and concerns from relevant stakeholders in order to prepare plans for appropriately responding to various situations.

Factors that SCG takes into consideration include the source of water used for production processes because the use of water by the industrial sector generally causes changes in patterns of water use by the community, and production planning to evaluate the total amount of water required in each area. The total water to be used from the water source must not exceed 5 percent.

Wastewater from production processes is treated before being discharged to the outside. The quality of wastewater is better than that required by legal standards and has been tested to ensure that it is safe for use.

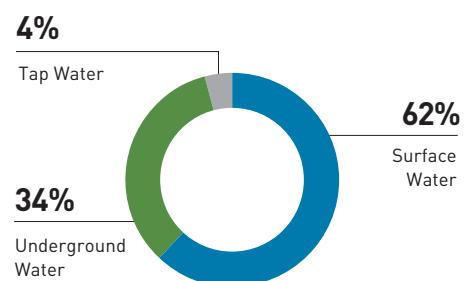
Based on the water risk management mentioned above, SCG is confident that water use in its businesses does not have an effect on the water resources as the average volume of water used and discharged annually is less than 5 percent of the total amount of water and drainage of those water resources.

SCG has a water management system that has been adapted from the 3R concept of Reduce, Reuse/ Recycle and Replenish. These incorporate improving of machine efficiency, identifying and repairing of leak points, production planning to ensure the most efficient use of water, and restoration of water resources by building check dams with the help of the communities nearby. Check dams help alleviate the shortage of water during the dry

season, restore moisture and promote reforestation under the 'SCG Conserving Water for Tomorrow' Project. To date, more than 30,000 check dams have been built nationwide.

SCG Chemicals is a major user of water, using as much as 34 percent in SCG's manufacturing process. The company has prepared an action plan to reduce water consumption and discharge since 2003 by increasing the installations of the Reverse Osmosis (RO) systems every year. In 2011, Thai MMA Co., Ltd. was able to take treated wastewater and pass it through the RO system before reusing it in the production process. This resulted in a saving of 255,000 cubic meters of water annually. Map Ta Phut Olefins Co., Ltd. increased the number of RO systems to help improve the quality of water from the production process for reuse, resulting in 95,000 cubic meters that was able to be beneficial again.

Water sources used in the production process



The quality of treated wastewater is better than required by legal standards.

Air Quality Management

Along with our commitment to deliver quality products and services to consumers, SCG also recognizes the importance of controlling air pollution right from the source and has set the air quality from emissions point to be better than the minimum standard that is required by the government.

SCG also invests in research, including the installation of innovative technologies for the monitoring of air quality both in and around the plants. The results of air quality monitoring are posted at the front of the company to demonstrate transparency. SCG also implements a continuous emission monitoring system (CEMs) to ensure the emission quality at all times.

In 2011, the quality of air emissions was better than standard requirements and our targets.

Oxides of Nitrogen

In order to reduce the emission of oxides of nitrogen, resulting from combustion at very high temperatures or from complete combustion with exceeded oxygen, SCG had a plan to control and maintain a constant temperature throughout the combustion chamber. It is also equipped with high efficiency burners, Ultra low NOx burners, to help reduce emissions of nitrogen oxide from the previous type of burners used.

Oxides of Sulfur

Oxides of sulfur are a result of the combustion of fuel containing compounds of sulfur (e.g., fossil fuel). SCG's policy for controlling oxides of sulfur emissions at sources is to purchase and use a high quality fuel with low sulfur content in the production process. We also use innovative technologies. For example, SCG Paper has installed machinery to mix biomass and coal; this helps to increase the ratio of biomass used in the manufacturing process.

Dust and Particulate

SCG undertakes analysis to determine the causes of dust and particulate and has set out guidelines for the management of dust and particulate arising from production activities as follows.

- Dust from production process is managed by the installation of appropriate dust removal and control system such as an electrostatic precipitator, bag filter and cyclone. To help minimize waste, the collected dust is recycled as a raw material.

- Dust from stockpiles is particularly from the coal storage piles of SCG Trading Co., Ltd. and SCG Logistics Management Co., Ltd. In order to prevent an impact on the surrounding communities from such dust, SCG requires

regular watering around the storage areas, use of canvas and wind mesh together with conducting a study of wind speed, wind direction, and characteristic of communities' housing. Trees are also planted to act as a buffer zone.

- Dust from transportation is usually caused by dirt on the wheels of trucks. A high pressure hose spray is therefore installed for automatic wheel washing.

From the aforementioned activities, in 2011 SCG has reduced 8 percent of dust and particulate emissions.



High pressure hose spray to wash out dust and particulate from trucks before leaving premises.

Volatile Organic Compounds

SCG Chemicals is committed to reducing the environmental impacts from volatile organic compounds (VOCs) and strengthening community confidence. Steps have therefore been undertaken to continually prevent and control VOCs emissions starting from facility design and the selection of environmentally friendly technologies, improving the manufacturing processes to effectively use raw materials, controlling VOCs leaks from various equipment, as well as increasing investment in the system to enable the return of VOCs in ship loading or even in the responsible areas. SCG Chemicals has also formed partnerships with other companies in the Map Ta Phut Industrial Estate to set up a 'Community Partnership Center' aiming at reducing VOCs by providing training on VOCs management best practices to other companies to help keep VOCs emissions into the environment to a minimum.

Ozone Depleting Substances

SCG has prepared a list of the equipment and machinery that contain ozone depleting substances (ODS). Most of the ODS is from refrigerant and fire extinguishers. There has been a gradual shift towards Non-ozone depleting substances using equipment coupled with customized equipment to ensure higher efficiency.

Industrial Waste Management

Recognizing the importance of managing all waste streams, SCG has had clear guidelines and a goal of Zero Waste to Landfill by 2012 since 2006. We have been working on achieving this goal for the last 6 years by investing in such areas as research on innovation, technology and human resources, as well as coordinating among all stakeholders through the SCG Waste Management Committee.

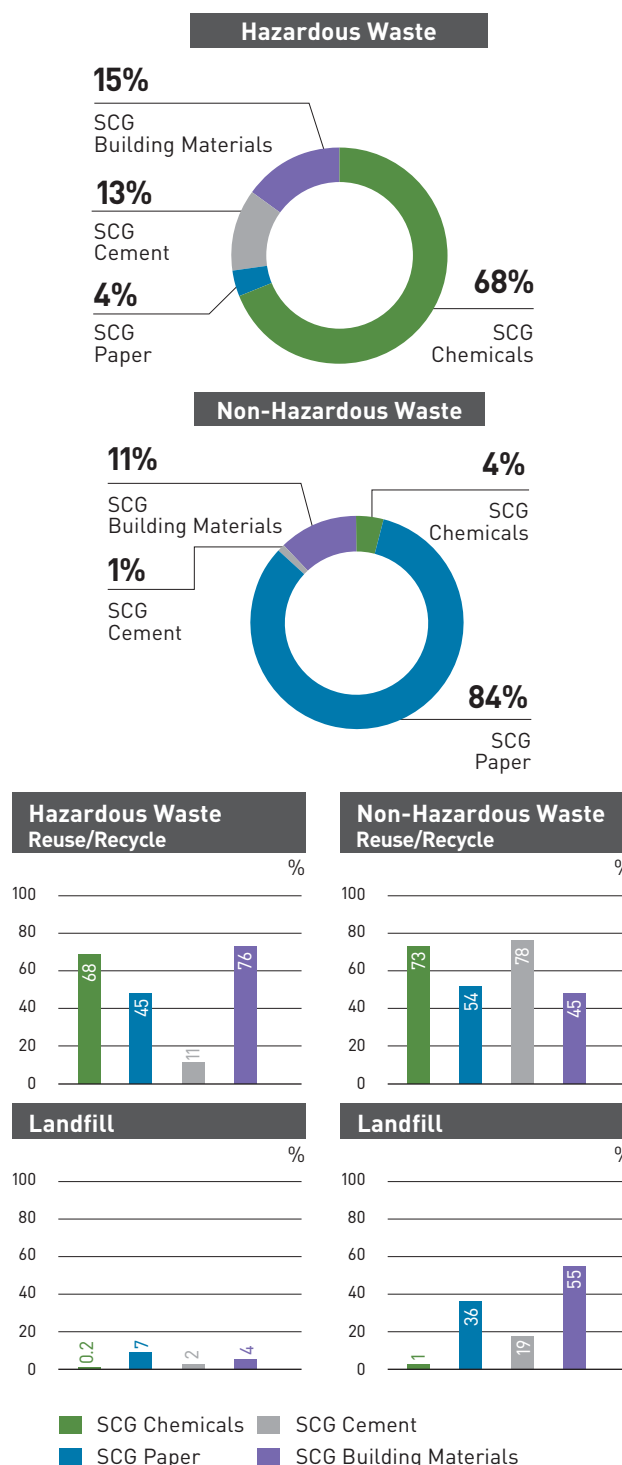
SCG focuses on waste management starting from the sourcing of effective raw materials and those that can be reused in order to minimize the amount of waste that will ultimately need to be disposed. For example, some waste scraps can be used as an alternative fuel or raw materials in other manufacturing processes. There is also a system for the segregation and storage that is in line with international standards to prevent contamination to the environment and that works simultaneously with natural resource conservation.

Hazardous Waste: Most hazardous wastes are generated from the manufacturing processes of SCG Chemicals and account for 68 percent of total waste. For instance, Siam Mitsui PTA Co.,Ltd. mixes PTA residue, a byproduct of their manufacturing process, with a solution in the mixing tank and sends it back to be recycled in the production process. This way, they were able to reduce their waste volume by 4,500 tons in 2011. In addition, sludge waste from the treatment system is mostly used as an alternative fuel in the cement kiln of SCG Cement, which is considered an effective method of waste management, and complies with legal and technical principles. For heavy metal waste, every company in SCG ships their waste abroad for extracting the metals for reuse strictly under the terms of the Basel Convention.

Non-hazardous Waste: Most non-hazardous waste is coal ash and lime mud that is generated by SCG Paper. In 2011, they completed the installation of lime kilns and began to recycle the residue from incineration in the production process. There is also an attempt to utilize ash in different ways to eliminate waste to landfill including using it as an ingredient in ready-mix concrete, and using it as a component of floor blocks.

CPAC Roof Tile Co., Ltd., a subsidiary of SCG Building Materials, has installed a grinder for grinding waste tiles so that they can be recycled as raw materials in the processes. As a result, the tiles do not need to be landfilled any longer. Also, Thai Ceramic Co., Ltd. grinds the sanitary ware scrap generated from its business unit and recycles it as an alternative material in the ceramic tile production.

In 2011, SCG was able to reduce the volume of hazardous and non-hazardous wastes to landfill to 1 and 36 percent respectively.



Biodiversity and Ecosystem



The Siam Cement (Lampang) Co.,Ltd. an example of doing business in line with conservation of biodiversity.

Based on the belief that with good management practices, industry and nature can coexist, SCG has established clear policy and guidelines to be implemented by every business unit to ensure that any impacts to ecology and biodiversity from such operations as mining and pulp production are reduced. Some significant activities undertaken in 2011 are described below.

SCG Cement focuses on the conservation of biodiversity in conjunction with implementing a master plan and action framework for the restoration of limestone quarries in all areas. The primary objective for restoring these areas is to help return them closest to their original ecological condition. In the past years, activities have been carried out in collaboration with experts from academic institutions and related government agencies such as Royal Development Study Centre, Forest Restoration Research Unit of Chiang Mai University, Faculty of Forestry of Kasetsart University, World Wildlife Fund, and Department of Primary Industries and Mines.

In 2011, all limestone quarries of SCG Cement expanded the scope of study and rehabilitation of the mine based on the specified framework as follows;

- Inclusion of the Khao Wong quarry into the study scope and collecting in-depth information on the plant and tree species in order to prepare plans and assist in the selection of native plant species to be used in the next restoration process.
- Conducting practical training on forest restoration using the framework species method to develop skills of

the rehabilitation team of SCG Cement. This principle is to rehabilitate framework species by selection of native plant species with potential for planting in rehabilitated mine areas, thereby increasing their growth potential and survivability as well as attracting wildlife to the area to help restore the ecological integrity.



Technical training on forest rehabilitation in order to develop skills of the rehabilitation team of SCG Cement.

- In addition, SCG Cement publishes mine rehabilitation technical manuals and other publications in order to disseminate information to interested parties to apply as a pilot model for rehabilitation based on the fundamentals of the biodiversity conservation.



SCG Cement's quarry rehabilitation publications.



Cement Lampang staff was giving knowledge to students along the nature education trail.

- The Siam Cement (Lampang) Co.,Ltd. including Mae Tan lignite quarry, collaborated with the Forest Restoration Research Unit at Chiang Mai University in preparing a long term rehabilitation plan for restoring the landscape. The main objective of the plan is the rehabilitation of the quarries at the end of operations in order to restore the areas to their original ecosystem as much as possible and to create nature education trails for the youth and others in the vicinity who are interested.

SCG Paper's focus on innovation along with protection of ecosystems and restoration of biodiversity has led to its implementation of the guidelines for sustainable forest management of the international Forest Stewardship Council (FSC). SCG Paper has been certified both the

FSC-FM (Forest Management Certification) and FSC-CoC (Chain-of-Custody Certification) and is the first of paper business to receive these certifications in Thailand. The FSC standard aims at creating balance among economic, social and environmental aspects.

FSC-FM is a forest management standard that requires a conservation area of at least 10 percent of the forest that is seeking certification in order to protect the integrity of the ecosystem and restore the biodiversity. The Siam Forestry Co., Ltd. has been able to successfully manage its activities to meet the FSC requirements. The FSC-CoC is a supply chain management standard that certifies wood products, yielded from FSC certified forests. The standard requires that all steps from the sourcing of raw materials, receipt and storage of the raw materials, quantity control, as well as the sale and delivery must be clearly defined to ensure that there is no mixing at any time with materials that have not been sourced from certified forestry channels. The Siam Cellulose Co., Ltd. and the Phoenix Pulp & Paper Co., Ltd. have been FSC-CoC certified for their Pro Series paper and the Siam Kraft Industry Co., Ltd. has received FSC Recycled certification for its TTF packaging paper that is produced from 100 percent FSC recycled pulp.

Presently, SCG Paper has achieved 43,200 rais of FSC-FM forests, 21 percent or 8,943 rais of which have been restored back to the community. Its activities are also helping to sustainably increase in the income to the villagers and communities in the vicinities.



FSC auditor was assessing wood process management (FSC-CoC).

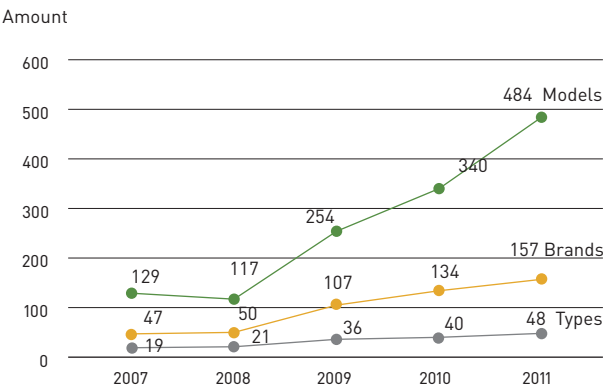
Green Procurement

Current global trends require that businesses adapt to keep pace with changing in environmental conditions and competition, all the while maintaining a balance between economical, environmental and social aspects in order to reduce risks and create sustainable opportunities. SCG recognizes that in moving towards being a sustainable leader, the entire supply chain will have to be co-developed. Green procurement starting from the sourcing of raw materials, supply materials, spare parts, and office and general items, and improving the environmental management of its partners under the ‘Greening Supply Chain’ program has therefore been implemented by SCG since 2004.

The green procurement list includes those products that are certified from Green Label or those that meet the requirement criteria set out by the SCG Green Procurement Committee that take into consideration legal standards, efficient resource and energy usage, environmentally friendly manufacturing processes, waste management, and involving environmentally friendly product development. SCG has enhanced the environmental performance of business partners through its ‘Greening Supply Chain’ program that provides knowledge, guidance and motivation to help partners improve their environmental management systems, resulting in cost reduction of business partners more than 90 million baht.

In 2011, SCG had 23 business partners participating in the program. 48 products, 157 brands and 484 models were registered in the green procurement list. This resulted in a total spending in 2011 of Baht 2,669 million on environmentally friendly products.

Number of items registered under SCG Green Procurement List 2007-2011



2011 SCG Green Procurement

Categories	Types	Brands	Models
Office and General Items	29	98	358
Raw Materials	9	22	63
Supply Materials	7	31	55
Spare Parts	3	6	8
Total	48	157	484
Percent Increase	20	17	42



“ Participation in Greening Supply Chain program with SCG helped to develop and improve the manufacturing process. For instance, recycling treated wastewater, setting up customer services center to reduce logistic cost and developing service quality helped reduce both company’s and customer’s costs as well as increase company’s market opportunity. This expedited the company growth, increased staff’s happiness from environmental conservation and enhanced the company’s profitability. ”

Mr.Pongsawat Ratanawichean
Managing Director of Envir-tech Ink & Chemicals Co.,Ltd.

Green Products and Services

Considering its vision of improving the quality of lives and well-being of people through its exceptional products and services and excellent innovation, SCG has been continually developing High Value Added Products and Services (HVA). For instance, coming up with ideas to improve products or enhance product features as well as becoming a solution provider by selling products with services to our customers. Our target is for the sale of HVAs to reach 50 percent of revenue from sales by 2015.

SCG also aims to increase the production of HVA products and services by its businesses in the ASEAN countries to help prepare for the formalization of the AEC in 2015.

In addition, SCG has been developing environmentally friendly products and services under the SCG eco value label. SCG eco value products are environmentally friendly and outperform other products in the same category by having a longer shelf life; consuming lesser energy during both manufacturing and use and consequently help reduce greenhouse gas emissions that are a cause of global warming; and reducing natural resource consumption or using renewable resources which in turn helps to reduce the amount of waste. SCG's target is for the revenue from sales of SCG eco value products to be 1 in 3 of all revenue from sales by 2015.

High Value Added Products and Services

SCG has set a goal for 50 percent of the revenue from sales to be from HVA products and services. In 2011, it invested Baht 1,111 million on research and development.

It also recruited additional personnel to join its research and development team and presently has 60 staff with a Ph.D. who are employed in the R&D department.

Not only are HVA products and services fundamentally different from other products, SCG also provides added services to cover its basic or new products as well as new business models with a focus on adding value for the consumer. In 2011, the revenue from revenue from sales of HVA products and services amounted to 32 percent of the revenue from sales.

SCG eco value

SCG places importance on the research and development of products and aims to develop innovative products that both are environmentally friendly and meet the demands of the consumer. This is an important strategy to continually increase the capability of the business.

Environmental labeling is one tool that SCG uses to communicate a product's environmental friendliness to the stakeholders. Currently, SCG's products, such as the SCG brand insulation, COTTO wall tiles and SCG and Tiger brand cement, have been certified with environmental labels from both national and international agencies, namely Green Label, Carbon Label, Carbon Footprint Label and Environmental Choice Label of Australia.

SCG is also the first organization in Thailand to have a self-declared environmental labeling of its products and services under the 'SCG eco value' label since 2009. The employed criteria are in accordance with the ISO 14021 standard, Environmental Labels and Declaration-Self-Declared Environmental Claims, in parallel with the needs of stakeholders and analysis of the product life cycle



“ As packaging quality and food safety are our priority, Betagro together with SCG has developed packaging using LLDPE which is more durable and resistant to a low temperature. The packaging is 20 percent thinner and lighter using less resources in production and transportation but still tough and non-fragile during transportation. A total loss reduction from packaging damage is, on the other hand, also accounted for waste reduction. ”

Thanomvong Taepaisitphongse
Executive Vice President of Group Human Resources,
Legal & Purchasing, Betagro Group.

including product design, reduction in raw material, energy and water consumption during production and use, the use of renewable materials and energy, recyclability, waste reduction, and emission of greenhouse gases. A Technical Team has been appointed for considering the labeling of SCG eco value products to ensure their reliability and increase consumer's confidence.



In 2011, SCG eco value label had so far been given to 47 of SCG products and services, contributing 13 percent of revenue from sales.

Examples of products and services that received the SCG eco value label in 2011 include;

- **SCG Chemicals**

EL Green plastic pellet is the Compostable Plastics Compound that is 100 percent biodegradable under the suitable moisture and temperature for natural microorganisms and causes no harm to the ecosystem.

- **SCG Paper**

Green Carton is produced by corrugated cardboard that reduces paper use not less than 25 grams per square meter but still maintains the same integrity.

- **SCG Cement**

The Elephant Marine Cement emits lesser greenhouse gases during production by at least 350 kilograms per ton and is more resistant to chlorine in seawater, doubling the product lifespan of normal cement in such strength.

- **SCG Building Materials**

An integrated ceramic roof tile and solar cell that can produce solar energy of 15 watts per panel.

- **SCG Distribution**

Transportation management system that reduces the number of empty cargo fleet, resulting in the reduction of greenhouse gas emissions not less than 10 percent.

Green Logistics

SCG Logistics Management Co., Ltd, under the umbrella of SCG Distribution, is a provider of transportation for products and raw materials for SCG companies and other customers. The company has a policy to provide an effective management of transportation as well as to look after the environmental conditions.

The company's operations involve both land and marine transportation with a variety of vehicles such as trucks, trains and cargo ships. 'Green Logistics' transportation management is employed to select the appropriate means of transport that would achieve the maximum efficiency based on the following management approaches.

1. Multimodal Management is the management of transport by using a multiple modes of transportation with the aim of reducing fuel consumption. For example, using trains and trucks, instead of using truck alone, may require several transfers but in overall, the total fuel consumption is reduced and the total greenhouse gas emissions is reduced by up to 7,300 tons or 67 percent.

2. Deadhead Reduction Management is the management of both Headhaul and Backhaul for trucks with an aim to reduce the number of empty fleet and increase fuel efficiency. This system also leads to the reduction of greenhouse gas emissions by 41,570 tons or 25 percent compared with trucks that run on empty fleet for backhaul.

Besides the management of transportation outlined above, there is also a Consolidate Management system to consolidate multiple delivery trips and, in parallel, collect customer's products to a central distribution center before deliver to the destination. This concept is based on Hub and Spoke Concept and Cross Docking Concept, resulting in the reduction in the number of vehicles used and the more-efficient utilization of transport trucks. As a result, fuel consumption and pollution are reduced, and the company's competitiveness is enhanced.

Green Building



The corporate headquarters in Bang Sue consists of several small and large buildings that have historical significance, including a cement kiln's old chimney and old factory settings that have been converted into office buildings. All of these buildings have been around for not less than 25 years.

SCG has adapted the idea of living harmoniously with the environment to improve the buildings at the headquarters area to demonstrate that even old buildings can be made into energy saving and environmentally friendly buildings and that their inhabitants can also have a better quality of life.

SCG has been continuously working to improve its corporate headquarters buildings such that it is now an exemplary building and was the first building in Thailand to be certified with a 'Gold Label' (Outstanding) award in 2009 by the Ministry of Energy. It also received the Thailand Energy Award under retrofitted building category by Ministry of Energy, and was the first runner-up for retrofitted Building category at the ASEAN Best Practice for Energy Efficient Building Award in the past year.

SCG has also expanded our global presence in this field by further improve a number of existing buildings in headquarters area to meet the standard of the Leadership in Energy and Environmental Design for Existing Building: Operations & Maintenance or LEED EB: OM platinum level certification standard of the United States. Some of the actions that SCG has undertaken include;

1. Sustainable Site: Reducing the environmental impact from the use of the building.

- Campaign to reduce the use of private cars by encouraging carpooling and the use of public transportation such as the subway system that has a station right in front of

the headquarters in order to help reduce vehicular pollution.

- Ban the use of hazardous chemicals by specifying the types of chemicals and pesticides/insecticides that can be used inside and outside the building, and educate and raise awareness about these chemicals to the responsible division.

- Reduce heat transferring into the building, reduce energy consumption in the cooling systems, use high performance glazing systems, and increase green space within the area to 25 percent, designate rainwater retaining area for plant watering, use porous block to reduce stormwater runoff and potential flooding, reduce the heat island effect by using the innovative Cool Plus ceramic tiles and paving blocks that absorb less heat, and prevent solar radiation from penetrating into the building.

2. Water Efficiency: Using sanitaryware complied with LEED requirements ensures the occupant's comfort and results in 35% reduction of water usage. Wastewater is also treated and used for plant-watering within the headquarters area.

3. Energy Efficiency: Managing energy use in the buildings with an Energy Star Rating of 97 percent by improving the cooling systems, using efficient lighting equipment, installing Cerafino Solar Tiles on the parking roof which converts solar energy into electricity and cooperating with SCG staff to turn off the light and switch off the computer when not in use.

4. Resource Efficiency: adopting Sustainable Purchasing policy for any purchase or use products and services and assisting business partners throughout the supply chain to manage their operations and activities to be more environmentally friendly. Waste streams are also managed by types right from the source to facilitate recycle much as possible.

5. Enhance Quality of Life and Happiness: Managing parameters such as chemical usage, smoking, temperature, humidity and carbon dioxide levels in the buildings to reduce impacts on inhabitants. Office area is designed based on ergonomic principles, thereby reducing risk of any workplace injuries.

SCG has established a Green Building Committee responsible for preparing Green Building brochures, facilitating open houses for visitors, and sharing know-how and information from SCG's experiences and know-how to the visitors with an aim to expand the success and awareness for general public.

Social Sustainability



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Assisting Fellow Employees and Reaching out to Help Society

"In 2011, Thailand's worst floods in many decades caused severe damage across the country. For employees' safety, SCG announced the temporary closure of its Headquarters Office from October 20, 2011. The Assistance Coordination Center for SCG Employees was established on the same day to assist employees and families affected by flood.

As soon as the staff sent out messages via social media to enlist volunteers, almost 100 employees came in to sign up. Over the course of two months of the Center's operations, more than 1,500 employees signed up for volunteer, demonstrating the collaboration and commitment of their volunteer spirits to fight through the crisis together. This has turned a new page in the history of SCG," said **Mr. Amnuay Apichainant, Head of HR Customer Support, Corporate Human Resources Division, who acted as Head of The Center of Flood Relief Coordination Center**, recounting the generosity of SCG employees.

These employees are like small ants who combine their strength to fight the crisis, using their potential and capabilities to help those affected in their areas of expertise.

"Employees with good human relations skills would run the Call Center which was opened 24 hours to receive distress calls. Those who were more physically fit joined the Rescue Team to help evacuate the flood victims to safe places. In addition there was a team dedicated to providing sandbags for flood prevention as well as a parking space team, accommodation team, transportation team, food supply team, paramedic team, and communication team.

The Assistance Coordination Center provided assistance to 857 flood-hit employees and families as well as providing them with relief supply bags, accommodation, and safe parking space. It is worth noting that some volunteer employees were flood victims themselves. But after they had been helped, they were willing to assist other sufferers not only their fellow employees but also those within communities."

SCG's assistance for flood victims encompassed four areas. These were **Distributing Flood Prevention Materials** such as sandbags and **Providing Immediate Relief** such as relief supply bags, paper toilets, floating toilets, free transportation, and opening **Restoration Projects after the Flood Crisis** provided advice on self-home repair, distributed various media communications such as a DVD on Repairing the Home to Bring Back Happiness, rebuilt over 300 child centers and schools, and offered up to 60% discounts on construction materials. The last area was **Preparing for Future Floods** by developing innovations to accommodate flooding such as floating houses.

The factors contributing to this success are SCG employees who are both talented and moral individuals. They worked as a team to help their fellow employees as well as the community and society. This not only helped take some burden off the government and involved agencies but also clearly reflected the characteristics of the SCG People in accordance with SCG's 4 Core Values: Adherence to Fairness, Dedication to Excellence, Belief in the Value of Individual, and Concern for Social Responsibility.



“ By providing support to employees, stakeholders and other flood victims in the time of needs with help from SCG employees who have volunteer spirits, it was considered leveraging the government burden during crisis. It was also a mentally commitment and support to all victims that we'll fight through the crisis together. This reflects the vision of SCG in developing business in line with society along the path of sustainable development ”

Amnuay Apichainant

Head of The Assistance Coordination Center
for SCG Employees

Social Risks and Risk Management

SCG is aware of the transformations that are taking place in our society and the impacts that these might have on each stakeholder group. We have therefore used the results from consumer satisfaction and expectations surveys to create action plans and new strategies for minimizing any potential impacts and for creating new business opportunities for SCG's progress and sustainability. A summary of key risk areas are outlined below.

Risks to Employees and Relevant Personnel

The changes in today's society has affected the way of life, cultural diversity and attitudes of our youth. This has prompted SCG to continuously improve the form and content of personnel development at all levels. This is done by increasing their skills to enhance their capabilities, developing more efficient work processes to help them be more prepared for their jobs, and providing adequate care and welfare for employees to help strengthen their commitment to the organization and respond to changing expectations. Another risk that needs to be addressed is the control and reduction of accident rates. It is found that most accidents still mostly occur on business partners who are nevertheless under the direct supervision of SCG staff. We are therefore committed to continue to raise awareness about the safety of all employees, business partners and communities who reside nearby our facilities and transportation routes.

SCG also foresees the labor issue as being a long-term problem for the country because of steadily rising labor costs, including the adjustment that is required to the cost of living that has consistently increased. Also, the number of skilled Thai workers has decreased significantly over the last several years. Because of the aforementioned points, SCG has placed significant focus on workforce development.

Social Changes

Changes to the population structure, inequality in education and income, natural disasters and other related problems have led to changes in social patterns and lifestyles of the people. This is a key factor that is used in SCG's planning process. Another risk is related to community acceptance that could cause business interruptions. Today's communities are more aware and want to be able to participate more in various activities

that may have an impact on their lives whether in terms of environmental, health or social impacts from business operations. SCG has therefore tried to educate the communities and foster the correct understanding, as well as to support these communities to be more stable and self sufficient. In addition, consumer behavior that has changed, and that is which more likely to choose products that are environmentally friendly, has motivated SCG to focus on the research and development of high value added products and services and promote products and services that are friendly to the environment under the SCG eco value label.

Impact on Stakeholders

Due to the diverse nature and location of each business, SCG has identified all the relevant stakeholder groups in each area in order to understand their needs and expectations. SCG has used this information and the different expectations in the design, planning and implementation process in order to respond to these expectations. We have also established a Stakeholder Engagement Policy and guidelines. All operations will adhere to principles of sustainable development and involve the participation of employees, business and community partners under the framework of corporate governance.

Safety of Products and Services

The responsibility for products and services is a legal requirement and an ethical commitment. If consumers are harmed by the use of products and services, they are eligible to claim for damages. What is also important is the loss of image/reputation and trust that could occur as a result. This makes the safety of products and services at all stages starting from the design, manufacturing, transportation, use and appropriate disposal, an issue of utmost importance to SCG.

Social Management Approach

Based on its ideological commitment to social responsibility, SCG has always given significant importance to the community, society and stakeholders. The Sustainable Development Committee has therefore established strategies and targets for preventing and reducing any potential social risks.

- **Employee Engagement.** Focusing on staff development starting from recruitment. We aim to provide knowledge and skills to employees based on the Competency Based Management approach, as well as create awareness of sustainable development. We have also created a Succession Plan to rotate the workforce and maintain a good balance and have a plan for ensuring that employees remain with the organization. SCG also has a Whistleblower Policy to address employee complaints and respond with fairness.

In terms of health and safety, we have tried to create a sustainable safety culture by encouraging our executives to exhibit leadership and set good examples for employees and contractors. We also continue to promote the concept of “Think Safe Work Safe” and “Uncompromising Safety Standard” in the workplace as stated in our vision by

1. Developing the capabilities of our management executives to ensure an effective safety culture.

2. Creating awareness and developing the capabilities of our business partners regarding safe driving habits, with focus on accident prevention. This has been implemented by SCG Cement, SCG Logistics and SCG Trading.

- **Community Engagement.** Focusing on encouraging employees to continuously contribute to community and social development both in the country and abroad. In addition, we regularly encourage community participation in activities and provide assistance during emergencies and disasters to help alleviate the suffering of communities when governmental assistance is not accessible.
- **Consumer Groups.** Manufacturing safe and environmentally friendly products and services and developing Consumer & Product Liability process for control and quality assurance of the safety of products and services. There is also a systematic process for addressing consumer complaints through online social media.
- **Stakeholder Engagement.** Using multiple channels to listen to any comments or suggestions from stakeholders and then prioritize those issues and establish policy for responding. This includes the process for communicating the results of implementation to ensure transparency and efficiency.



Promote defensive safety culture to all employees with safety observation program.

Stakeholder Engagement

SCG recognizes that stakeholders play a critical role in determining the direction of the business and has therefore categorized the various types of stakeholders in order to create action plans to better meet their expectations. A 'Stakeholder Engagement Policy' that is used by staff as a guideline was entered into force in 2010. In 2011, additional stakeholder groups were added and a policy for 'Stakeholder Engagement' was initiated for a more systematic approach towards interacting with stakeholder groups to manage SCG sustainable growth based on transparency and fairness in business operations.

SCG had surveyed community engagement around factories. In 2011, result showed that community satisfied with SCG's sustainable development was 13 percent higher than previous year.

Moreover, SCG by Sustainable Development Committee had organized the 2nd opinion panel which saw the exchange of opinions among several experts to identify expectation of community from industrial sector and many suggestions. The results are very close to last year as follow;

- Social services, transfer knowledge to external community
- Nature and energy conservation, mitigate environmental impacts and climate change.
- Improve for effectiveness of processes, open and transparent to information.

Response to Various Stakeholder Group

Stakeholder	Needs	Identification Approach	Programs/ Activities
Customers	<ul style="list-style-type: none"> • Satisfaction in products and services • Reasonable price • Premium quality products and services • Environmentally friendly in manufacturing processes and products 	<ul style="list-style-type: none"> • Customer satisfaction surveys • Customer complaint channels 	<p>Focus on maximum benefit and satisfaction to consumers of products and services, both in terms of quality and pricing, and aim to create goodwill by</p> <ul style="list-style-type: none"> • Creating high value added products and services to meet customer needs • Creating environmentally friendly products and services under the SCG eco value label • Auditing and controlling manufacturing processes in accordance with TIS/ISO 9001 and relevant industrial standards
Employees	<ul style="list-style-type: none"> • Welfare and remuneration • Job security and career path • Programs for skill enhancement at work and beyond • Care for occupational health, safety and environment, including quality of life in the workplace 	<ul style="list-style-type: none"> • 'Employees meet Management' program • Listening to employee suggestions or complaints • Attitude Surveys • SCG Whistleblower Policy 	<p>Treat employees with fairness based on human rights principles, consider employees' needs to foster goodwill towards the company, continuously promote knowledge and provide skills to employees, and provide a safe, stable and progressive work environment by</p> <ul style="list-style-type: none"> • Providing reasonable welfare and wages comparable to other industry leaders and based on overall company performance • Continually managing and developing appropriate human resources for different career profile • Having management systems in accordance with TIS/OHSAS 18001 and TIS/ISO 14001

Stakeholder	Needs	Identification Approach	Programs/ Activities
Suppliers	<ul style="list-style-type: none"> Reasonable price and prompt payment Sustainable and transparent business operations Technical support for environmentally friendly procurement 	<ul style="list-style-type: none"> Visits to suppliers Responding to supplier suggestions and complaints 	<p>Maintain fairness in business by strictly adhering to contractual agreements, business ethics and promises made to suppliers by</p> <ul style="list-style-type: none"> Considering reasonable prices and defining clear purchasing procedures Supporting and assisting in their environmentally friendly procurement initiatives Not doing business with suppliers who violate human rights or intellectual property
Contractors	<ul style="list-style-type: none"> Compensation Occupational health, safety and environmental well-being Programs for skill enhancement at work and beyond 	<ul style="list-style-type: none"> Contractors meet SCG Management Mechanisms for suggestions 	<p>Encourage contractors to give the same consideration to occupational health and safety and environmental concern, help develop contractors' skills to ensure efficiency by</p> <ul style="list-style-type: none"> Providing wages and remuneration equivalent to or exceeding regulatory requirements Contractor Certification Program (SCS) Developing capabilities in the distribution business Developing technical skills
Communities	<ul style="list-style-type: none"> Creating income and bring progress into communities Protecting the environment and control pollution around communities Supporting community activities Enhancing education and schools in local communities 	<ul style="list-style-type: none"> Community needs and satisfaction surveys Face-to-face meetings between community leaders and SCG's management Open house events Addressing of complaints and suggestions 	<p>Conduct business with fairness and promote quality of life and create benefit in communities where SCG operates, including requiring employees and relevant personnel to behave as responsible members of the community by</p> <ul style="list-style-type: none"> Carrying out community relation activities in education, religion, public service, environment, employment promotion and public health Continuous pollution control and monitoring Open house Providing scholarships and occupational development skills
Shareholders	<ul style="list-style-type: none"> Revenue and business growth Manage business based on fairness under corporate governance 	<ul style="list-style-type: none"> Annual shareholder meeting Direct communication channel to the Executive Board 	<p>Conduct business by adhering to corporate governance and core values to maximize benefits and add value to shareholders</p>
Investors	<ul style="list-style-type: none"> Meet investment goals 	<ul style="list-style-type: none"> Cooperate fully with investors Arrange a joint meeting with partners 	<p>Carry out investment activities with fairness and provide advice and guidance as necessary to ensure that the investment is fruitful by</p> <ul style="list-style-type: none"> Exchanging information and ideas with investment partners Ensuring that investment activities are in compliance with legal and sustainable development requirements

Stakeholder	Needs	Identification Approach	Programs/ Activities
Creditors	<ul style="list-style-type: none"> Prompt payment Strengthen business and create profits 	<ul style="list-style-type: none"> Joint meetings 	<p>Treat all creditors with equality, fairness and transparency by adhering to contract terms and agreements by</p> <ul style="list-style-type: none"> Maintaining good relations with creditors Conducting open house activities for creditors
Government Agencies	<ul style="list-style-type: none"> Comply with relevant regulations and requirements Being a role model for other companies on environmental and safety management, and corporate governance 	<ul style="list-style-type: none"> Meetings with government agencies Government visits/ inspections Opinions and suggestions Opinion panels 	<p>Establish guidelines for interacting with government agencies in SCG's manual, cooperate with government agencies both in technical and support capacity by</p> <ul style="list-style-type: none"> Strictly adhering to all relevant regulations Enhancing knowledge of local government administration Regularly attending and contributing to initiatives of governmental agencies Provide budget and products for government agencies' activities
Media	<ul style="list-style-type: none"> Directly and transparently disclose business information Provide immediate and up-to-date information Meetings with high-level management 	<ul style="list-style-type: none"> Continually disclose accurate and transparent information Making it convenient for members of the media to contact Create opportunities for media to meet with management 	<p>Place importance on providing information to media as a way to communicate accurately and immediately to the publicly by</p> <ul style="list-style-type: none"> Regular press releases Facilitating media visits to observe factories and operations Facilitating media interviews with management Conducting media appreciation events
NGOs, Academics, Opinion Leaders	<ul style="list-style-type: none"> Transparently disclosing business information Conducting business in a manner that has minimal impact on the environment and communities Conservation of natural resources and environment 	<ul style="list-style-type: none"> Suggestions and complaint channels Opinion panels Provide news and information via various media 	<p>Disclose complete and accurate information and consider all opinions in order to implement sustainable policies for community and social development by</p> <ul style="list-style-type: none"> Effectively utilizing natural resources and preserving environmental quality Issuing annual reports and sustainability reports according to GRI guidelines
Competitors	<ul style="list-style-type: none"> Transparent, honest and fair business practice Anti-dumping Compete under legal and ethical standards 	<ul style="list-style-type: none"> Gather Information from Industrial Council, Chamber of Commerce, public forums 	<p>Fair and just treatment of competitors, good faith, and conduct trade under the framework of law and ethics</p>

Employee Engagement



SCG employees are our most valuable resources and we are committed to safeguarding them and promoting their growth and development simultaneously with the organization. In addition to the basic benefits provided to employees such as leave days and financial support such as pensions, child support, emergency loans, money for uniforms, medical care and dental work, and travel allowances and expenses, SCG has also set up a Quality of Work Life working group to study and propose ways to improve employees' welfare consistent with their diverse lifestyles, ages, and culture, covering employees' family, by promoting a better living, improving the working environment, encouraging proactive health care and adjusting their compensation on a regular basis. All this is to take good care of our employees so that employees can remain fully dedicated to the organization. SCG is also continually recruiting knowledgeable and skillful persons to work for the organization.

There are a number of activities that SCG organizes in collaboration with leading academic institutions both at home and abroad to publicize information regarding the organization to students and to attract and recruit them in the future. Some of the activities include Campus Road Show, Information Sessions, Summer Internships (MBA / Technical) and the SCG Excellent Internship.

New employees are recruited through a selection process that includes competency based interviews and Career Camp to ensure that qualified good and excellent individuals who meet the expectations of the business are hired.

To improve performance and increase knowledge and consequently promote employee progress, SCG has set a policy for job rotations by giving employees the opportunity to work in other businesses or in other ASEAN countries where SCG invests. This gives them the opportunity to learn the different customs and cultures and the different

concepts or methods that differ from country to country.

SCG has a Whistleblower Policy that allows employees to appeal if they encounter an unlawful or unethical situation which may cause adverse effects or damages to the employee or the company. This system allows employees to make a complaint without disclosing their names, hence maintaining confidentiality. The investigation process also ensures fairness to all parties. In summary, it is a channel to allow employees to oversee the interests of the organization.

SCG also organizes activities to promote goodwill between employees, their families and the organization, for example, Family Day, recreation activities, family plant visit, and encouragement in the families to participate in social, community and environmental projects such as rural area development camps, constructing check dams, planting of mangrove forest, and cleaning up important public places after floods.

In addition, SCG helps employees prepare for retirement by educating them on saving after retirement, giving them knowledge in such areas as retirement planning, finance, healthcare and mental health, living after retirement, and their rights under the Social Security Act to ensure that they are able to live happily and sufficiently after they are retired.

During the great flood crisis, SCG took good care of employees and their families. We helped in flood prevention, evacuating employees and their families from flooded homes and areas, providing temporary shelters, moving operations to safer areas, and providing necessary equipment and facilities. Employees' morale was also kept high by management and supervisors. Many volunteers helped their friends clean up and repair houses that were flooded and helped each other get through the difficult time.

Human Capital Development

It is essential to prepare employees for striving of excellence at a global scale so that all employees of all profession, levels and races have the appropriate knowledge, skills, and capabilities to respond to a growing business. In 2011, SCG allocated a budget of more than 700 million Baht and training of an average 12 days per person per year to focus on the development of both functional and business knowledge for employees. This was in the format of either classroom training, on the job training, self learning, expert sharing, group learning, CoP (Community of Practice) or e-learning in conjunction with knowledge management system to share and enhance the knowledge.

The Management Committee and Best Practices Development committee define policies and guidelines for staff development to enhance the competitiveness of the business. All employees are ultimately responsible for continually developing their knowledge base to help them effectively carry out their respective jobs.

New employees are required to attend an orientation, the SCG Ready Together Program, which focuses on SCG Business Philosophy, key policy directions, business overview and sustainable development. Supervisors must be trained on business operations, team leading and business planning to operation. Managers are trained regarding business strategy, management of change, and linking strategies to plans.

Business Human Resources and eight Professional Development Committees are responsible for employee development at each professional level and using skill

mapping technique to determine operational excellence and increase the number of specialists in each field to increase competitiveness of the business and encourage sharing of knowledge.

SCG Human Capital Institute (HCI) is a collaboration with leading institutions such as The National Institute of Development Administration (NIDA), Harvard University, The Wharton School of the University of Pennsylvania, and Columbia and Duke Universities. The HCI is responsible for designing the syllabus for Leadership Skill and Business Knowledge courses to prepare employees for taking on higher assigned positions. Faculties from leading institutions, as well as senior executives of the company are invited to be instructors and to provide consultation in course design. The lecture is based on the action learning approach and the sharing of experiences and the success of the course is measured during actual implementation or in behavioral changes. SCG also provides scholarships to employees who want to further their education in MBA/Ex MBA/ Technical at some of the world's leading universities.

Career Management

The Managing Development Committee is responsible for evaluating the performance of every employee twice a year and overseeing the development of professional staff. It is also responsible for Individual Development Planning (IDP) and career management and succession plan management in cooperation with supervisors every year in order to help propel employees towards their future job expectations. Employees can also apply for internal positions through the Career Click program to move to other jobs they are interested in or which they find to be more challenging.

SCG Development Courses

Level	Leadership Skill	Business Knowledge	Functional
New Employee	SCG Ready Together Program		• Business/Function Orientation
	• LDP1*: Lead Self	• ABC: Abridge Business Concept	• TQM/TPM/Safety
Supervisor	• LDP2*: Lead Team	• BCD: Business Concept Development • MBA Scholarship	• TRM/OJT • Technical Scholarship
Manager	• LDP3*: Facilitate	• MDP: Management Development Program • Ex MBA Scholarship	• TRM/Project Short Courses
Senior Executive	• EDP: Executive Development Program	• AMP: Advanced Management Program	• Overseas Seminar

* LDP: Leadership Development Program

Health and Safety



Review safety procedures prior to start work.

With the aim of creating a sustainable safety culture for employees and business partners while reducing the number of work accidents and road accidents, SCG has implemented several programs on health and safety for all employees and relevant parties as follows.

1. Development of Felt Leadership

From an initiative by SCG Chemicals that aims to develop the leadership qualities of senior management in safety aspects, experts from external agencies were invited to provide consultation. In addition, Personal Safety Action Plans (PSAP) and Safety Observations are also prepared and conducted. In 2011, the implementation of these programs was extended to other SCG businesses to help create a sustainable safety culture and to encourage all senior management to learn and understand the true meaning of the word 'Safety Leadership' and implement it within their business.

2. Safety Performance Assessment Program (SPAP)

Monitoring the effectiveness of the safety program of each organization is another performance indicator that SCG has implemented since 2006. This has been implemented by establishing an SCG Safety Framework that each organization must adhere to improve the occupational health and safety to meet international standards which is continuously assessed. In 2011, SCG carried out a review and improved the contents of the safety program to make it up-to-date and reflect changes in legal and other requirements. The SPAP target of each SCG company is to pass at level 3 or qualifying with the safety standard, and to-date, there are 97 percent of companies that have met this criteria.

3. SCG Contractor Safety Certification System (SCS)

SCG has developed the SCS program since 2006 with the objective to enhance the capabilities of contractors in managing their own safety. SCG provides guidance and technical support and conducts an assessment of their safety management system. In 2011, there were 499 contractors or 73 percent who had been certified. The target is for all contractors involved in the production process to be certified by 2012.

4. Safety Transportation

SCG Cement has adopted Driving Safety requirements of the Cement Sustainability Initiative (CSI) for use with its ready mixed concrete transport partners. This includes providing defensive driving training to 1,840 drivers, monitoring of transportation conditions and driver behavior to help reduce accidents and create awareness.

SCG Logistics Management Co., Ltd. has founded the SCG Skill Development School to help train drivers and provide them with the knowledge and awareness of safe driving. It is also a service that helps to enhance the capabilities of its business partners. The training curriculum is divided into three categories.



Set safety standard in all areas in a factory.

1. General Driver: Training in Safety Driving Course, use of fire extinguishing equipment, first aid and basic vehicle inspection. All drivers are required to pass this training.
2. Professional Driver: Advanced drivers training for professional drivers.
3. Specific Driver: Training on specific skills such as driving a forklift, loading and storage of goods.

In 2011, over 11,000 drivers or 72 percent of the driving force were trained. In addition, SCG created a Safety Monitoring Center Room and equipped transport trucks with GPS systems to conduct 24 hour tracking and monitoring of vehicles. GPS installation in all transport trucks will be completed in 2012.

5. Industrial Hygiene Management System

SCG Chemicals, in conjunction with the Faculty of Public Health, Mahidol University, has developed an Industrial Hygiene Management System to help create a standard for monitoring conditions in the workplace and monitoring of worker exposure to chemicals. It also proposes a standard for conducting physical examinations based on associated health risks and outlines a plan to control and minimize impacts on health. This is

communicated to all workers. The pilot project began at Rayong Olefins Co., Ltd. in the Map Ta Phut Industrial Estate, Rayong Province, and will expand to cover other businesses under SCG Chemicals in the future.

6. Reducing Road Accidents

The major cause of death of employees and business partners outside of work being mainly motorcycle accidents, SCG is continuously trying to promote safe driving and has now also extended this to its international companies. For instance, SCG Trading Co., Ltd. organizes motorcycle riding safety training for local employees in Cambodia and Vietnam, where motorcycles are the major form of transportation. So far, 40 percent have been trained and the target is to train all by 2012.

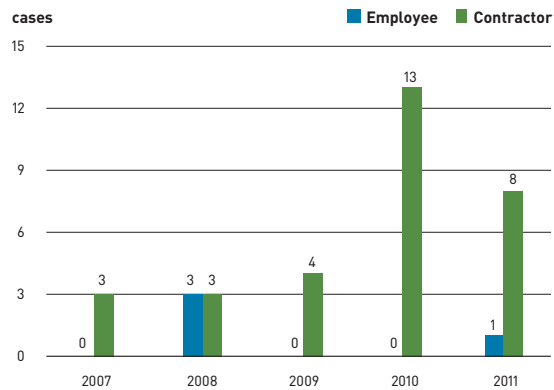
Accident Statistics

As a result of ongoing safety programs, the lost time accident rate of employees and contractors remained close to that in 2010. There were 9 cases of severe accidents leading to death of employees and contractors, a decrease of 30 percent when compared to 2010. The majority of these cases were from vehicle accidents. Therefore, SCG has established and enforced additional preventive safety measures to address and reduce the number of future accidents and fatalities.

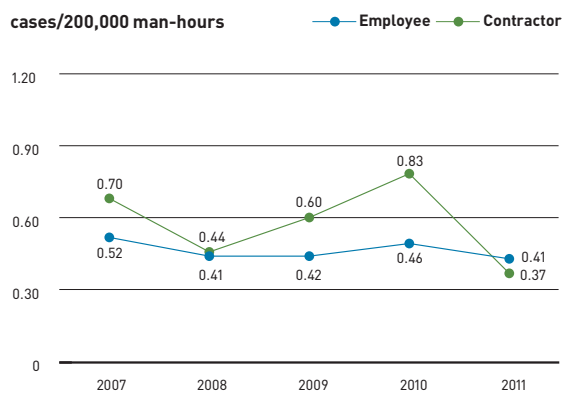


Organize motorcycle riding safety training in Vietnam.

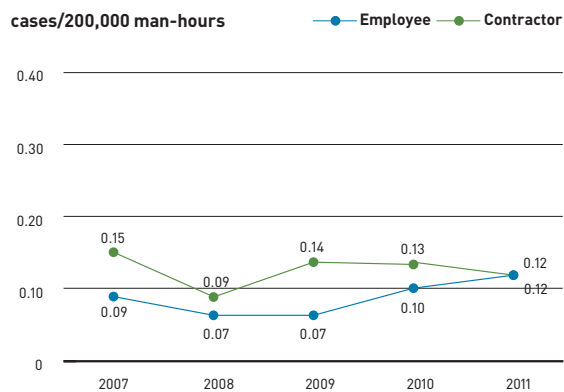
Number of Fatality cases



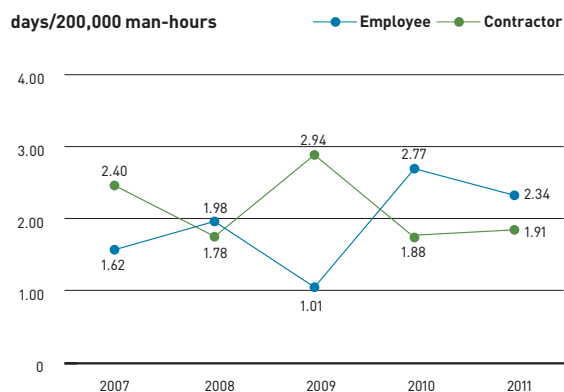
Total Incident Rate



Incident Rate (Lost Time Cases)



Severity Rate



Products and Services Responsibility

SCG has developed a quality assurance system that is in conformance to Product Liability Law. All activities are monitored according to PL Health Check Program to ensure that the system effectively covers all product categories of SCG. The main procedures are outlined below.

1. Classify all products into groups based on their potential harm to consumers.
2. Carry out an in-depth review and analysis of the product groups to systematically determine the unsafe characteristics both from the perspective of the consumer and the manufacturer. The Product Hazard Analysis (PHA) technique is used to analyze the severity level of the hazards inherent in the total process such as production, transportation, storage, use and disposal of finished product. The hazard types cover physical, chemical and biological hazards and are used to prevent defects in the product design, production processes, and attached warning labels in order to be more effective.
3. Assess the completeness and efficacy of the analysis and implement corrective and preventive action in each product group.

SCG has performed the preceding steps for all product categories that have been determined as having the potential to have a significant impact on consumers. A PL Simulation Drill is also undertaken to practice on how to respond and handle complaints in order to be prepared for such situations.

In addition, general guidelines have also been prepared for handling complaints regarding quality of products and services through social online media in order to promptly and effectively address the needs of customers and consumers. The continuous development of the quality assurance system helped to ensure that in the past year, there were no complaints of violations of health and safety requirements from customer use or from information, labeling or advertisement of the products and services. There were also no penalties levied from failure to comply with any laws relating to the use of such products and services.

Social and Community Development

SCG has pledged to the creation of sustainable growth in the regions and communities where it operates. The Group encourages its employees and all sectors in society to take part in socially-beneficial activities to contribute to a better quality of life and a sustainable society. In addition, SCG has established SCG Foundation in tune with SCG’s business philosophies of ‘**Concern for Social Responsibility**’ and ‘**Belief in the Value of the Individual**’ as the Group realizes that for the country and society to grow sustainably, the quality of people must be given top priority - they must be both talented and ethical.

In 1967, SCG established a fund and was subsequently proclaimed a public charitable organization in 1992. It is one of Thailand’s early corporate foundations set up by a private company with a strong determination to conduct business with responsibility and social contribution. The focus is on human resource development especially children who will be the country’s major driving force in the future. SCG Foundation’s philanthropic efforts can be categorized into five areas:

- 1. Early child development through books
- 2. Educational promotion and support
- 3. Youth’s special talents promotion
- 4. Creating social awareness
- 5. Sustainable community development and emergency relief

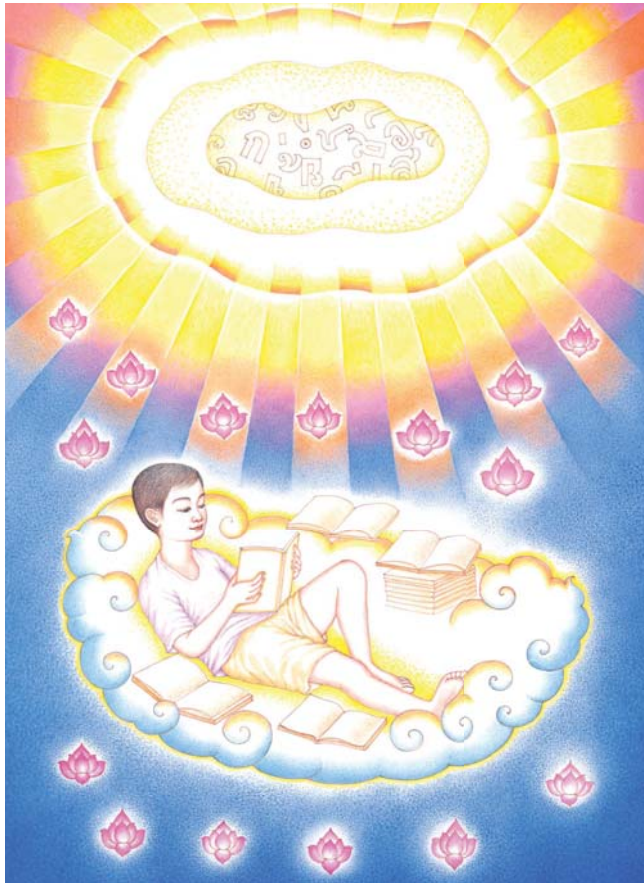
In 2011, SCG has supported and encouraged employees to take part in various social activities. SCG’s social responsibility encompasses five areas: **corporate governance, youth potential development, the environment, public welfare, and strong and sustainable community development**. The efforts span all age ranges from early children (under age 6), primary school students, high school students, university students, individuals with special talents, community and society.

Early Child Development (under age 6)

Early Child (under age 6) is the window of opportunity for promoting child development and a period when a child’s brain can best develop given the proper ongoing



SCG Foundation, together with SCG Paper, held Tales in the Paper Garden Festival for the first time to promote reading culture to parents and other parties concerned with children.



National Children's Book Day poster is designed to boost children's imagination through reading.

stimulants. SCG has carried out various programs dedicated to promoting early child development through books among parents and concerned parties.

- **The 8th Tales in the Garden Festival** SCG Foundation has organized Tales in the Garden to promote storytelling, reading, and the use of picture books among parents to foster a culture of early child development through books in Thai society at the main city parks of Lumpini and Vachira Benjatas (Railway Park) in Bangkok since 2004.

In 2011, the Tales in the Garden Festival was held in Chiang Mai for the second consecutive year. The Foundation also joined forces with SCG Paper to hold the 'Tales in the Paper Garden Festival' for the first time in Thailand at the Queen Sirikit National Convention Center. The Festival was dedicated to promoting the use of picture books to boost children's creativity and imagination.

- **Providing Training and a 'Books Are Happiness' Set to SCG Employees Who Had a Newborn Baby in 2011** SCG Foundation provided training and a 'Books Are Happiness' set to employees with newborns. The set consists of a congratulation card on the newborn baby, selected picture books suitable for reading to young

children, a handbook on child development through books and other media for use in developing children intellectually, physically, and emotionally. The set together with a bookshelf was also given to the Registration Office Learning Center of the Bang Sue District Office.

- **The Poster for National Children's Book Day and International Children's Book Day Program**

SCG Foundation prepared a poster for use as a promotional medium to make all concerned parties realize the importance of reading and encourage more reading activities dedicated to promoting reading. For 2011, the poster was designed by Teerawat Kanama, under the concept 'Imagination from Reading'.

Youth Potential Development at the Primary School and High School Levels

Children and youths are the future of the country. Providing them with educational opportunities is building a good future for the nation whilst developing the potential of young people physically, intellectually, and emotionally.

- **SCG Foundation Scholarships** for more than 25 years, SCG Foundation has provided non-binding scholarships to needy students from primary school up to university level who display good conduct and strong determination in pursuance of their studies. At present, there are some 4,500 students under the care of SCG Foundation each year. The program allows SCG employees to submit the names of children in their hometown whose parents do not have stable income or are in financial





SCG Art Camp is held to enhance youths' creativity and inspire them to be the future artists.



Children learned the process of mushroom cultivation and concept of sufficient economy at The Environmental Youth Camp.

need to SCG Foundation. If the student is granted the scholarship, the employee submitting the name will serve as his/her mentor, providing advice as well as consultation and encouragement to the student. At present, there are 200 mentors supervising 400 students. In addition, SCG Foundation carries out various activities to enhance the students' potential in many areas such as the Academic Counseling Camp and the Basic Agricultural Machinery Skill Development program.

- **Programs to Support Families of Community Service Workers in Southern Border Provinces** SCG Foundation set up programs to support and encourage service workers who are civilians or community leaders such as volunteers to assist doctors in hospitals, volunteers on the environment, NGO officers especially those working in the southern border provinces plagued with violent incidents. They are as follows:

- **Scholarships to complete studies in a bachelor's degree to children and dependents of community service workers** The scholarships were presented at a family camp to foster strong family ties and make children and youths value and be proud of their parents' social contributions.

- **Professional fund and training for service workers** A revolving fund was established to provide service workers access to funds which can be used for making a living. With financial security for their families, the service workers can fully commit themselves to social work.

- **The 7th SCG Art Camp** SCG Foundation has organized an art camp for art teachers and high school students who want to pursue their studies in art at a university level but either have no access to tutoring schools or cannot afford the expenses.

In 2011, the program was attended by 150 participants. So far, there has been a total of over 600 students and art teachers joining the program. A follow-up survey found that 80% of the participating students were admitted to the art faculty or art college of their choice.

- **SCG Sci-Camp** The camp is designed to instill a good attitude toward the study of science and technology into junior high school students. It is hoped that this will lead to the future creation of innovations for a better environment and improved quality of life.

In 2011, SCG Sci-Camp was held for the 22nd year under the theme of resource-efficiency and developing research work into innovations for a better quality of life. This year's camp was attended by 100 participants. Up to now, there has been a total of 2,200 students participating in this program.

- **The 4th Environmental Youth Camp** SCG Paper has organized an environmental conservation camp to promote learning about the environment and life skills in a sufficient and sustainable manner for Grade 5 to Grade 9 students.

In 2011, the camp, which was attended by 500 participants, focused on educating the participants about paper recycling as a means to environmental conservation, conserving local natural resources, and using raw materials in the community to produce products to increase household income.

- **SCG Chemicals Youth League** To promote good health in juveniles and to encourage their time spending in improving football skills constantly, SCG Chemicals has organized the 2nd SCG Chemicals Youth League. The winning team receives the HRH Princess Maha Chakri Sirindhorn's trophy. 10 schools from 8 districts in Rayong Province were participated in this league.

- **SCG Badminton Academy** SCG established SCG Badminton Academy in 2007 to promote and develop the skills and capabilities of young players to international standards on an extensive scale for the first time in Thailand. Currently, 26 players participate in this program, comprising 17 male players and 9 female players aged between 13-19.

Their major achievements in 2011 included

1. Winners in the Men's Singles Under 19 at Junior Challenge Open Badminton Championships 2011 in Indonesia
2. Winners in the Men's Singles and Girls' Doubles Under 17 Group in the Badminton Asia Youth in Japan
3. Winners in the Girls' Doubles Under 19 and Under 17 in Singapore Youth International 2011
4. Runner-up of Women's Singles in Vietnam International Challenge in Vietnam
5. Winners in the Men's Singles, Men's Doubles, and Mixed Doubles Under 18 in the SCG Junior Badminton Championship

Further, SCG has provided constant support to badminton for over 30 years, organizing badminton tournaments at all levels: junior tournament (SCG Junior Badminton Championships), national tournament (SCG All Thailand Badminton Championships), and international tournament (SCG Thailand Open Badminton Championships).



SCG has continually supported badminton competition for over 30 years to encourage potential to reach international levels.

Youth Potential Development at University Level

SCG provides opportunities for university students to develop their potential in their fields of study, encompassing the areas of education, science, technology, innovation, sports, and art.

- **SCG Talent Scholarship** Since 1994, SCG has granted scholarships to university students with an excellent accumulative grade point average over the course of four years. Each year, 125 non-binding scholarships worth over 3 million Baht are offered. Apart from this, a camp designed to inculcate morality and ethics into the scholarship recipients and raise their social awareness, enabling them to be smart and ethical individuals.

- **The 10th SCG Excellent Internship Program** Continued since 2002, this summer internship program provides third year university students with experience and a broad range of professional skills in their field. Also instilled is a good sense of corporate governance and social responsibility to prepare them for their future careers.

For 2011, there were over 200 university students joining in the program, adding to the total number of 1,700 interns.

- **The 2nd Home Solution Career Choice** SCG Building Materials has organized this project to enhance professional potential as part of a bilateral project included in the curriculum for High Vocational Certificate majoring in construction science and construction techniques (full service home solution). The focus is on the study of theory and internships at Saraburi Technical College and other training centers.



SCG Sci-Camp integrated knowledge in science technology and the environment together.



SCG held SCG Thailand Robot@Home Championship for the first time in Thailand to encourage innovative ideas of robots for housework.

In 2011, there were 20 participants, who received 2-year renewable scholarships plus other payments for accommodation, travel, and per diem during the internship period. Upon graduation, they will be awarded a High Vocational Certificate accredited by the Ministry of Education and have chance to work for SCG Building Materials as technical service officers at Home Solution service centers.

- **SCG Thailand Rescue Robot Championship** SCG has organized the Thailand Rescue Robot Championship since 2004 to provide a venue for university students to develop their potential in designing and developing rescue robots. The winning team receives the HRH Princess Maha Chakri Sirindhorn's trophy and enters the World RoboCup Rescue.

For 2011, iRAP_Judy team from King Mongkut's University of Technology North Bangkok, representing Thailand in the competition held at Istanbul, Turkey, won World RoboCup Rescue for the 6th consecutive year, bringing much fame and pride to the nation, and enhancing the rescue technology.



SCG Thailand Rescue Robot Championship has been awarded championship prize for six consecutive years from World RoboCup Rescue which helps inspire innovative ideas among the new generation of Thai youths.

Moreover, SCG organized Thailand Robot@Home Championship 2011 for the first time in Thailand. The goal was to promote the development of service and assistive robots for personal applications and providing assistance for the sick and the handicapped. The winning team will represent Thailand in World RoboCup: Robot@Home.

- **Elephant Power Concrete Competition** SCG Cement has organized the competition to promote knowledge, understanding, and skills in concrete production technology.

In 2011, 46 teams entered the competition. The winning team for the High Compressive Strength category was Rajamangala University of Technology Isan in Nakhornratchasima and the winning team for the Target Strength Concrete category was Rajamangala University of Technology: Uthenthawai Campus.

In addition, SCG Cement contributed 1,000 tons of cement to educational institutions under Office of Vocational Education Commission for use in their studies and other activities for two years (2011-2012).

- **Chang Young Engineer Camp** Nawaplastic Industries (Saraburi) Co., Ltd. has organized a camp for engineering students to instill a sense of ethics under the concept of 'Good Engineers Possess Quality and Social Responsibility'. The focus is on working as a team, using high quality products that meet standards, and taking responsibility for their jobs.

In 2011, the company organized an activity beneficial to society by improving the toilet facilities and landscape at Wat Nai Rai School in Rayong.

- **SCG Lounge** SCG Distribution set up SCG Lounge at the Faculty of Architecture, Chulalongkorn University around the concept of 'Inspiration, Experience, Innovation'. SCG Lounge, which provides information about innovations in building materials, is aimed at inspiring students to create design works using innovative building materials.

- **Young Thai Artist Award** SCG Foundation has organized Young Thai Artist Award, which is Thailand's largest young artist competition, to recognize young Thai artists for their artistic excellence in six categories: Two-dimensional Art, Three-dimensional Art, Photography, Film, Literature, and Music Composition.

In 2011, to showcase the talents of artists in the film category, SCG Foundation showed over 30 short films at SCG Foundation Room, Bangkok Art and Cultural Centre.

- **Young Writer Camp 2011** In conjunction with Matichon Newspaper, SCG has organized Young Writer Camp to promote the skills development of Thai youths in thinking, reading, and professional writing. Famous writers are invited to provide knowledge and advice on writing as well as giving comments to young writers, enabling them to develop their writing skills and become the next generation of professional writers.

Sustainable Community Development

SCG attaches significance to community development to achieve sustainable growth. To that effect, SCG encourages communities to learn, manage, and solve problems together, enabling them to be strong and self-reliant. The efforts will be extended to other communities, resulting in a network of friends in all sectors including the government, business sector, and civil society sector.

- **SCG Conserving Water for Tomorrow Project** SCG has substantially and continuously adopted His Majesty the King's initiative about water management to solve the problems associated with the shortage, excess, and pollution of water in an attempt to restore balance to the

ecological system, mitigate global warming, and return a good quality of life and sustainable happiness to society. To achieve the goal, SCG has joined hands with the communities and a network of friends to build check dams since 2003. It is targeted that by 2013 when SCG celebrates its 100th anniversary of operations, a total of 50,000 check dams will have been constructed.

Between 2003-2011, over 40,000 people took part in constructing more than 30,000 check dams, resulting in four strong communities including Ban Samkha, Ban Donfai, and Ban Pamaew in Amphoe Mae Tha, Lampang and Ban Sasobhok in Amphoe Jae Hom, Lampang. Added to these were two learning centers dedicated to communicating the sustainable conservation concept: Mae Jang Basin Learning Center at Ban Samkha, Amphoe Mae Tha, Lampang, and Ban Sasobhok Learning Center at Amphoe Jae Hom, Lampang. This has given rise to a network of 35 water conserving villages in Lampang, Chiang Mai, Prae, Nan, Rayong, Saraburi, Kanchanaburi, Ratchaburi, Nakhonsithammarat, and Khon Kaen.

The efforts have given rise to community enterprises. For instance Ban Samkha community in Lampang set up a community power plant to generate electricity for use locally and the excess is sold to nearby communities.

In addition, the project was extended to Khoa Yai Da community in Rayong, SCG Chemicals in cooperation with surrounding communities commit to complete 5,000 check dams within 2013.

- **Innovative Technological for the Restoration of Saline Land Project** SCG in conjunction with the National Center for Genetic Engineering and Biotechnology and



Young Thai Artist Award is the beginning of the successful of creating works of arts.



SCG, together with communities, partners, and volunteers, constructed check dams to restore balance to the ecological system.

other government and private agencies has worked to rehabilitate the saline areas and study salt-tolerant rice to enable farmers to grow rice and other crops in the areas. A farmer training center for rehabilitation of saline land was set up at Amphoe Ban Dung, Udon Thani to serve as a prototype training center where farmers can exchange knowledge and learn about solutions to saline soils. Further, a host of farmer groups for self-development in the form of community enterprise that rely on one another were established. Examples include Ban Na Dee plant fertilizer group, Ban Bor Pat liquid fertilizer group, Ban Pone Soong rice mill group in Udon Thani, Ban Nong Kwang rice mill group in Sakon Nakhon, Ban Phai biofertilizer group in Khon Kaen, and Ban Toey salt-tolerant rice seeds and rice processing group in Nakhonratchasima.

In 2011, SCG provided support to the communities to set up rice mills, and prepare packaging for rice grown in saline land, which is fragrant, soft, and sticky unlike other rice strains. The objective was to add value to agricultural products through brand building. The project will be expanded to other provinces. It is hoped that the efforts will help farmers to grow plants efficiently, earning more income and solving poverty problem in the long term. The result is the increase of rice from 200-300 kilogram per Rai to 400-1,000 kilogram per Rai.

• **Community Partnership Association** The Community Partnership Initiative, later became Community

Partnership Association, is the first cooperation of a number of leading companies at Map Ta Phut, Rayong consisting of SCG, PTT Public Company Limited, BLCP Power Co.,Ltd, Dow Chemical Thailand, a joint venture between SCG and Dow Chemical, and Glow Group. The goal is to develop clean industry that is environmentally-friendly and coexists with the community sustainably.

For 2010-2012, the Association has set its sights on jointly establishing environmental standards building around the concept 'Friend helps Friend, Big Brother helps Small Brother'. As part of the initiative, plants with better know-how and experience will share their experience with smaller plants to keep these plants up to the standards. This runs concurrent with the developments in health, education, or other areas as needed by the community.

The projects carried out in 2011 include the prototype industrial hygiene management development, tutoring for university entrance examination, scholarships for nurses, a mobile medical unit for the community.

• **Cement Partnership Initiative** SCG Cement, Thai Cement Manufacturers Association, and Siam City Cement jointly set up Cement Partnership Initiative. It is the first cooperation among cement manufacturers in Saraburi to drive good practices in developing the cement industry into an eco-friendly industry whilst taking care of the community, and supporting the development of the quality of life earnestly and sincerely to enable the



Cement Partnership Initiative is the first project of the cement industry to jointly push an environmentally-friendly industry.

industry and the community to coexist symbiotically and sustainably.

The project carried out in 2011 is the Green Truck Project designed to provide training on safety driving skills to truck drivers.

Other Socially-beneficial Projects

SCG has carried out many other socially-beneficial projects to enhance the potential of people and communities and encourage them to jointly develop society and the environment, enabling them to coexist sustainably.

- **Thailand Sustainable Development Symposium 2011** SCG organized the international symposium for the second consecutive year with the goal of sharing approaches to business operations in accordance with the concept of sustainable development. This would lead to a balance among economic, social, and environmental commitments under the principle of corporate governance.



World executives and specialists in the field of sustainable development shared their best practices at Thailand Sustainable Development Symposium 2011.

This year's symposium was graced by Her Excellency Prime Minister Yingluck Shinawatra, Dr. Surin Pitsuwan, Secretary General of ASEAN, Mr. Björn Stigson, President of the World Business Council for Sustainable Development (WBCSD), Mr. Stuart L. Dean, President of GE ASEAN, and Mr. Davide Vassallo, Global Practice Leader of DuPont Sustainable Operations as the guest speakers. Also in attendance were over 600 attendees including high-ranking government officers, executives from leading listed companies, academicians, the civil society sector, the media, and those involved in sustainable development. This will lead to a network of cooperation from every sector, which can contribute to sustainable development in Thailand.

The symposium was built around the concept of Carbon Neutral Symposium with the goal of minimizing carbon dioxide (CO₂) emissions, having negative impact on the environment and climate. This was achieved by a strict control on resource consumption through various efforts. Examples include the use of LED presentation screens, and the provision of drinking water in smaller bottles which would be subsequently recycled. Moreover, the attendees were asked to travel to the venue via mass transportation and dress without a suit and tie whereas the room temperatures were properly adjusted. The calculation of the carbon footprint of the symposium was 9,204 kilograms in CO₂ emissions less than other events. To offset the CO₂ emissions caused by the event, SCG donated 100,000 Baht to the energy fund of the 'Energy Ashram' to match the reduced amount of CO₂ emissions.

- **Production of Children's Table & Chair Sets Using Recycled Postcards from the Panda-naming Contest Project** SCG in cooperation with Thailand Post Co., Ltd recycled over 30 million postcards sent to the Panda-naming Contest for used in producing children's table & chair sets. They were given to 34 schools affected by floods or in need of school supplies.

- **The Skilled Army Engineer Project** SCG Foundation organized the 1st Wall and Ceiling Installation Course for the army engineers and enlisted soldiers under Army Engineering Department. The objectives were to enhance their potential and skills in construction such as building toilet facilities, bricklaying, masonry, installation of wall and ceiling boards and roof tiles.

- **Building Defensive Bunkers along the Border** The Concrete Product and Aggregate Co.,Ltd (CPAC) donated CPAC pre-stress hollow core slabs to the 23rd Infantry Battalion, 2nd Task Force, Royal Thai Army, Suranaree Command for use in building military bunkers in border areas in Surin and Buriram.



Communities and SCG employees constructed a school building as part of the SCG Employee Volunteer Club, held for over 30 years.



More than 4,000 volunteers in several SCG corporate philanthropy programs in 2011 aiming to benefit communities across the country.

Providing Emergency Assistance to Society

SCG has a systematic approach providing assistance to those affected by disasters or the disenfranchised. The efforts are achieved through human resources at the core of restoration and development backed by SCG's solid network of friends, budget, high quality products, and volunteer employees.

- **SCG-Channel 7 Project** The project has been carried out since 2002 in conjunction with Bangkok Broadcasting & Television Company Limited Channel 7 to provide immediate relief supplies to those affected by disasters. In 2011, flood relief bags were given to flood sufferers in Surat Thani, Nakhon Si Thammarat, Prachin, Nan, Nakornsawan, Sing Buri, Ayutthaya and Lopburi.

- **Supporting Charitable and Philanthropic Organizations** SCG provided 150 million Baht to 123 foundations and charitable organizations to help the disenfranchised in society to have a better life and become more self-reliant. Support was also given to organizations dedicated to creating activities beneficial to developing people.

- **The SCG Employee Volunteer Club** Each year, a group of SCG employees voluntarily spend their vacations to carry out activities beneficial to society. On the occasion of the Club's 30th anniversary of operations, the body of knowledge about school building was made into a user-friendly 3D video to showcase the concepts, techniques, and methods for other organizations to follow. This enormously benefits schools in remote areas with a lack of or decrepit school buildings.

- **Sharing Opportunities, Drawing the Future Program** SCG invites employees to form groups of at least three members and submit benevolent project proposals to SCG Foundation. If the proposal is approved, the Foundation will provide support to enable the implementation of the project. In the past five years, over 12,849 employees have spent their time doing voluntary work in 837 projects in various areas across the country. The efforts have fostered strong relationships and ties between SCG employees and the communities.

In 2011, a total of 4,128 SCG employees dedicated their time, efforts, and money to carry out voluntary work to benefit communities and society.

Number of projects under Sharing Opportunities, Drawing the Future Program

Year	No. of proposed projects	No. of approved projects	No. of employee participant	Budget (million Baht)
2007	282	143	1,825	12.46
2008	371	156	2,023	13.14
2009	373	138	2,318	11.67
2010	293	142	2,555	12.09
2011	326	258	4,128	26.56
Total	1,645	837	12,849	75.92



SCG Cement joined its efforts to restore Monastery in Myanmar.



SCG Sharing The Dream scholarships has been granted to over 2,100 students in ASEAN, encouraging their brighter future.

Socially-Beneficial Projects in ASEAN

SCG is committed to contributing to the growth of every community in which it operates. As a consequence, the Group has carried out a host of projects dedicated to enhancing the potential of people in ASEAN nations.

- **SCG Sharing the Dream** The project provides scholarships for needy high school students with good academic achievements, good conduct, and motivation to pursue higher education. A Leadership & Sharing camp is also organized to allow the scholarship recipients to get to know each other through various activities. In Vietnam, the project was introduced in 2007 and more than 1,700 students have received the scholarships. Since 2010, scholarships have also been granted to students passing the university entrance examination. Most recently in 2011, an Outstanding Teacher Award was given to teachers

dedicated to teaching excellence. In the Philippines, the scholarships have been given since 2008 with a total of 400 recipients.

- **The Children's Day in Vietnam** SCG has initiated a project to renovate Disabled Children's Training School in Ba Ria-Vung Tau province, Vietnam since 2009. In 2011, the company held Children's Day activities along with providing scholarships and Internet connection for the school's computer room.

- **Nurturing Buddhism in Myanmar** SCG Cement contributed cement and money donation for the restoration of Thane-daung-taik-thit Monastery.

- **Assisting Flood-sufferers in Laos** SCG Trading (Laos) Co., Ltd donated money to help those affected by flood in Lao People's Democratic Republic.



“ I first received a scholarship from SCG Sharing the Dream project in 2007 while studying in Grade 10. Apart from the scholarship, I have received love, care, and useful advice from my mentors from SCG who have encouraged me to pursue higher education. Later in 2009, I received another scholarship from SCG to pursue my bachelor degree while my sister was also granted a scholarship for high school students, enabling both of us to continue our studies. I am going to graduate soon with an excellent academic performance. I am determined to take part in social activities to provide opportunities for others like I have been given. ”

Ms. Le Thi Hieu
SCG Sharing the Dream student in Vietnam

Flood Relief

Thailand's worst floods in decades dealt a severe blow to every sector in the country. Many businesses were forced to cease operations due to a lack of an emergency plan to cope with the unexpected situation.

Having been well-prepared and equipped to cope with any unexpected circumstance, SCG managed to run operations smoothly and provide assistance to the flood victims. The management approaches are as follows:

Business Continuity Management

1. Business Continuity Management (BCM) Office SCG established the BCM Office in 2010 to plan and prepare for emergencies and unexpected circumstances. In doing so, BCM kept close track of news and information about the inundation from various sources. The information was used to analyze and assess the situation to draw up an emergency plan, allowing the business to continue to operate normally.

2. Mobile Offices SCG temporarily relocated its offices to the safe locations of SCG's plants and subsidiaries in different regions. Examples include the eastern office in Chon Buri, companies under SCG Chemicals in Rayong, and companies under SCG Cement in Saraburi. The efforts enabled SCG to continue to serve clients smoothly.

Establishment of the Center of Flood Relief Coordination for SCG Employees

SCG established the Center for Flood Relief Coordination for SCG Employees on October 20, 2011, comprising volunteer employees dedicated to assisting their fellow employees, families, and the communities. The volunteers were systematically grouped into the following teams:

1. The Call Center Team operated around the clock to receive distress calls and provide advice to those affected.

2. The Sandbag Provision Team provided sandbags and crushed dust to SCG employees and other agencies for use to stop flooding from entering the buildings.

3. The Rescue Team assisted SCG employees and their families living in the flood-hit areas as well as the communities on the way.

4. The Parking Space Provision Team procured parking space for cars at flood-safe locations such as SCG Paper's plant in Ratchburi and SCG Chemicals' plant in Rayong.

5. The Accommodation Team provided the accommodation rooms for flood-affected employees and their families.

6. The Volunteer Team engaged volunteer employees to help flood victims such as packing relief supply bags.

7. The Transportation Team procured trucks, cars, and boats for use in assisting flood victims.

8. The Procurement Team procured necessary items such as life vests, paper toilets, water purifiers, and relief supply bags.



SCG employees, together with volunteers from TPBS channel, private and public organizations, of more than 3,000 people joined their efforts on the Big Cleaning Day at the Mahachulalongkornrajavidyalaya University, Ayutthaya province.

9. The Paramedic Team provided medicine and first aid to accident victims.

10. The Communication Team communicated information about the flooding to employees through various channels, for example, social media, SMS and e-mail.

Over 1,510 volunteer employees joined the Center for Flood Relief Coordination and 2,119 joined the Rescue Team. The collaborative efforts helped out flood-affected employees, families, and the communities, taking some burden off the government and other agencies.

- The Rescue Team assisted 857 employees and families and 6,653 flood victims.
- 2,163 calls from flood-affected employees and the general public for assistance were received.
- 1,277 temporary rooms were provided for the employees and their families, accommodating 2,723 persons.
- Temporary parking space in safe locations was provided for 500 cars.
- 100,000 sandbags were given to the employees for flood prevention.



Relief supply bags were distributed to flood victims even in remote areas.

Approaches to Assisting Flood Victims

SCG allocated a special budget of 200 million Baht to provide immediate relief and assistance to flood victims. The four solid and tangible approaches are as follows:

1. Distributing flood prevention materials

- One million bags for containing sand were donated to the government's Flood Relief Operation Center.
- One million bags of crushed dust were given to the Bangkok Metropolitan Administration. The crushed dust from the cement crusher plant was used as a sand substitute which was in short supply.

2. Providing immediate relief

- **Donating over 32 million Baht to various agencies** including the Prime Minister's Office's Disaster Victims' Assistance Fund, Mae Fah Luang Foundation's Sustainable Flood Victim Restoration Project, Princess Pa Foundation, Listed Company Fund to Assist Flood Victims, Thai PBS for Flood Victims, and the Thai Red Cross Society.

- **Distributing necessary items to government agencies, NGOs, foundations, communities, and the general public.**

- Donated 100,000 sets of paper toilets and white lime for disinfection and removing odor.
- Donated 100 floating toilets to the Department of Disaster Prevention and Mitigation. After the flooding, they could be collected, cleaned, and reused in other circumstances of flooding.



The trucks were converted into free transport service for flood victims.

- Packed and distributed more than 42,000 relief supply bags.
- Donated 10 motorized boats and 10 rowing boats to the heavily-flooded communities which were inaccessible by car for use in transport.
- Donated 1,000 water purifiers and 15 water storage tanks for the production of clean drinking water for the communities and evacuation centers.
- Donated 1,000 life vests, 1,000 sets of sleeping bags, pillows, and mosquito nets, 3,500 blankets, and 2,000 clothing items.
- Donated 600 boxes of milk powder for young children.
- Donated 5,000 sets of powder and liquid EM and EM balls for treating polluted water.
- **Providing free transport service** encompassing eight flooded roads in Bangkok.



Rescue team of more than 2,000 people dedicated their efforts to helping the flood victims.

- **SCG Logistics opened a recruitment coordination center with over 1,000 job openings** for chauffeurs, loader workers, warehouse men, and Q.C. workers for SCG's logistics providers throughout the country.

- **SCG together with the government agencies and the communities used water jets to push flood water** to Mahachai Canal, Sanam Chai Canal and other canals in Thonburi and Bangkok with pumping stations to discharge flood water to Kaem Ling (large water retention reservoirs) and The Gulf of Thailand.

- **Saving pomelo orchards in Sam Phran district, Nakhon Pathom** SCG coordinated with academicians and donated 25,000 sandbags, 1,000 big sandbags, and large size tarpaulins for the construction of a 4-km-long big bag barrier to protect more than 5,000 rais of pomelo orchards in Nakhon Pathom.

3. Restoration projects after the flood crisis

- **The Big Cleaning Day Project** SCG, in cooperation with Thai PBS TV station, government and private agencies, and 3,000 volunteers, helped clean Mahachulalongkornrajavidyalaya University, a Buddhist university, and educated people on proper waste separation and elimination.

- **Repairing Homes to Bring Back Happiness with SCG** SCG's housing experts organized training to provide knowledge and advice on self home repair after the deluge and gave out media such as handbooks and videos for use in repairing flood-damaged homes.

- **Offering discounts** Up to 60% discount on building materials were offered to flood victims.

- **SCG volunteer employees** helped restore 300 child centers and schools.

- **Publishing a book on SCG Model: Lessons Learned from the Flood Crisis** SCG in conjunction with Krungthep

Turakij Publishing published the book which features lesson learned from SCG's business management during the flood crisis and assisting flood victims to provide a model for other organizations to follow.

4. Preparing for future floods

- Developed innovations to accommodate flooding such as floating shelters.

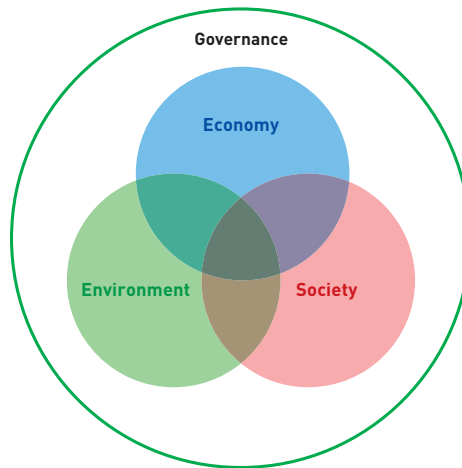
- Joined forces with the Department of Disaster Prevention and Mitigation to educate people so they are well-prepared to prevent and handle flooding.

SCG's ability to carry out smooth operations and serve clients smoothly along with the provision of immediate assistance to flood victims created confidence in SCG and minimized repercussions on all concerned parties including joint venture partners, shareholders, trading partners, and consumers. This was because SCG managed to produce and distribute products as well as provide service to customers without disruption and help take the burden off the government and involved agencies.



Relief supply bags, prepared by SCG volunteer employees at provincial offices, were dispatched to SCG Headquarters Office to help flood victims.

Balancing the Triple Bottom Line



Compliance with regulations and laws is a minimum requirement for all SCG operations.

SCG has proven that the strategy of incorporating principles of sustainable development into business practices within the framework of corporate governance has allowed SCG to proudly weather several past crises. Our vision is to be a business leader in the ASEAN region by 2015, coupled with bringing about sustainable progress to the communities where we operate, creating value for our stakeholders through quality and a global standard, improving quality of life and safety, and introducing innovative and environmentally friendly products and services.

Sustainable development is not a new concept for SCG. This can be seen from our business philosophy that have been a part of us for so long and, in conjunction with SCG Code of Conduct, have become parts of our corporate culture and translate into all our activities in terms of fairness and excellence, in recognizing the value and potential of our people and our responsibility to society.

Maintaining a sustainable business even during economic fluctuations demonstrates that we are not only pursuing just profits but in fact, we do business with integrity, transparency and honesty and to ensure our partners that doing business with us is beneficial to them and they do not have to worry about unfair practices, inequality, corruption or bribery. When one purchases goods or services from SCG, they can be sure that they are receiving quality products at reasonable prices, reducing the risk to business, and moreover helps maintain a balance and strengthens the trust between us and our business partners.

Sustainable development also helps addresses the steadily changing environmental conditions such as natural

disasters and climate change, drought, and the recent flood crisis that caused significant damage to business, either by directly affecting property, machinery and causing injury or losses to staff; or indirectly by causing shortages and higher prices, affecting production planning and creating panic and loss of employee morale.

Sound environmental management helps reduce greenhouse gas emissions by using innovative technologies and renewable energy, save trees by using EcoFiber, and reduce water use and restore the fertility of the forests through sound water management based on principles of self sufficiency. Having a BCM system helped prepare and enabled SCG to operate our business without interruptions even when the country was affected by the major flood crisis in the previous year.

SCG has always had the cooperation and support from all stakeholder groups as we have sought their participation when undertaking any project so as to help the business to appropriately meet their needs and to ensure a sustainable coexistence with the communities and societies where SCG has a presence. That is immunity for SCG even though the social conditions have changed over time, both in terms of population structure and different lifestyles from the past.

From the sustainable development guidelines that have been actually implemented and accepted by stakeholders, thereby reaffirm the confidence in the management and products and services of SCG. A happy society with a good quality of life and a better environment is an indicator of the success of an organization that does more than the pursuit of economic interests alone. SCG truly believes that business cannot succeed in a society that fails.

WBCSD-CSI Operating Results of SCG Cement

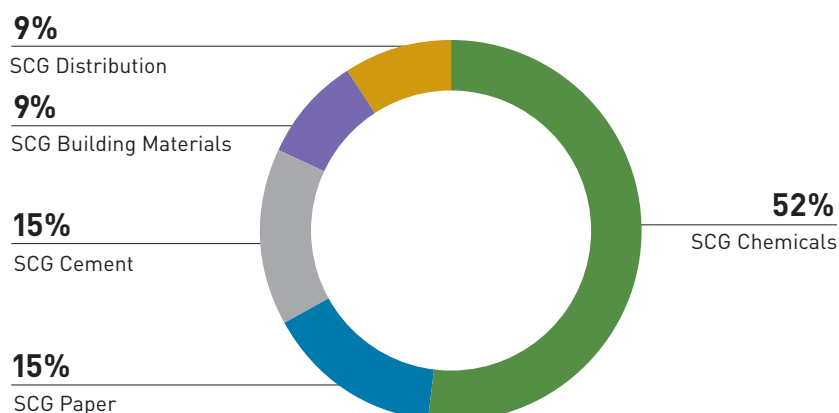
		2008	2009	2010	2011
Climate Protection*					
1. Number of facilities adopting WBCSD CO ₂ Protocol	Number of Facility %	6 100	6 100	6 100	6 100
2. Absolute Gross CO ₂	Million Tons of CO ₂	13.62	13.66	14.86	14.50
3. Absolute Net CO ₂	Million Tons of CO ₂	13.52	13.58	14.73	14.45
4. Specific Gross CO ₂	Kg CO ₂ /Ton Cementitious	713	721	697	685
5. Specific Net CO ₂	Kg CO ₂ /Ton Cementitious	708	717	691	682
Use of Fuels and Raw Materials					
1. Heat Consumption	MJ/ Ton Clinker	3,235	3,299	3,314	3,283
2. Alternative fossil fuels	% by Heat	1.8	2.1	2.7	1.2
3. Biomass	% by Heat	13.3	12.9	8.8	11.3
4. Alternative Raw Materials	% by Weight	0.57	0.85	0.62	0.50
5. Clinker/Cementitious Ratio	%	81.5	82.2	79.9	79.5
Employee Health and Safety					
Fatality					
1. Employee	Case				
Domestic Cement Plant		0	0	0	0
Overseas Cement Plant		0	0	0	0
Other Industries in SCG Cement**		2	0	0	0
Total		2	0	0	0
2. Contractor	Case				
Domestic Cement Plant		0	0	2	0
Overseas Cement Plant		1	0	0	0
Other Industries in SCG Cement**		1	0	1	2
Total		2	0	3	2
3. Third Party	Case				
Domestic Cement Plant		0	0	0	0
Overseas Cement Plant		0	0	0	0
Other Industries in SCG Cement**		5	3	3	3
Total		5	3	3	3
Lost-time Injury Accident					
1. Employee	Case				
Domestic Cement Plant		4	4	4	0
Overseas Cement Plant		0	0	0	0
Other Industries in SCG Cement**		10	3	2	1
Total		14	7	6	1
2. LTIFR (Employee)***	Case/1,000,000 Man-hour				
Domestic Cement Plant		NA	NA	0.76	0
Overseas Cement Plant		NA	NA	0.00	0
Other Industries in SCG Cement**		NA	NA	0.37	0.30
Total		1.35	0.69	0.56	0.08

		2008	2009	2010	2011
3. Contractor Case					
Domestic Cement Plant		10	18	6	5
Overseas Cement Plant		5	1	1	0
Other Industries in SCG Cement**		11	28	13	8
Total		26	47	20	13
4. LTIFR (Contractor)***					
Case/1,000,000 Man-hour					
Domestic Cement Plant		NA	NA	0.26	0.20
Overseas Cement Plant		NA	NA	0.41	0
Other Industries in SCG Cement**		NA	NA	0.77	0.50
Total		0.63	1.11	0.47	0.32
Emission Reduction					
1. Dust emissions	Ton	1,391	1,467	1,160	1,022
(% of Clinker produced by kilns covered by an monitoring system)	%	(94.7)	(99.5)	(100)	(100)
2. Dust Emission Rate	g/Ton clinker	83	88	65	58
3. SO ₂	Ton	2,190	1,506	1,232	1,367
(% of Clinker produced by kilns covered by an monitoring system)	%	(96.3)	(99.5)	(100)	(100)
5. SO ₂ emissions rate	g/Ton clinker	130	90	69	77
6. NO _x	Ton	15,451	17,166	14,602	14,887
(% of Clinker produced by kilns covered by an monitoring system)	%	(98.7)	(99.5)	(100)	(100)
7. NO _x emissions rate	g/Ton clinker	920	1,027	817	844
Local Impacts					
1. Quarry sites with rehabilitation plans	Number of Site	4	4	4	4
	%	(100)	(100)	(100)	(100)
2. Sites with community engagement plans	%	100	100	100	100
3. Sites where biodiversity issues are addressed****	Number of Site (accumulated number)	3	4	4	4
	TS/KK/LP KW (added)			-	-

Remark * The collection and reporting of GHGs data is in accordance with WBCSD, The Cement CO₂ Protocol based on company's own control
** Ready-mix concrete, mortar, refractory and other cement-related products
*** The analysis of lost time injury of employee and contractor separated by industry begins in 2010
**** Names of quarry sites; TS = Thong Song, KK = Kaeng Khoi, LP = Lampang, KW = Khao Wong

Sustainability Performance Data 2007-2011

Revenue from Sales breakdown 2011

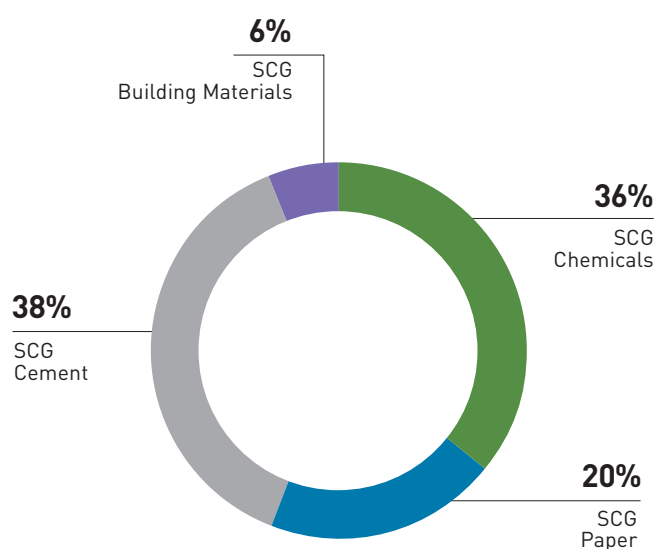


Performance Data	2007	2008	2009	2010	2011	GRI
Economic Performance*						
Revenue from sales (Billion Baht)	267.7	293.2	238.7	301.3	368.6	EC1
Profit for the year (Billion Baht)	30.4	16.8	24.3	37.4	27.3	EC1
EBITDA (Billion Baht)	50.0	38.8	47.1	45.9	46.3	EC1
Benefits to employees comprising salaryies, wages, welfares and regular contributions (Million Baht)	15,833	17,010	18,903	21,270**	23,997**	EC1
Dividend to shareholders (Million Baht)	18,000	9,000	10,200	15,000	15,000	EC1
Finance costs paid to lender (Million Baht)	5,273	6,089	5,649	4,670	6,048	EC1
Taxes to government and local government authorities such as income tax, local maintenance tax, property tax and other specific taxes (Million Baht)	4,356	4,583	5,047	13,045	8,190	EC1
Privilege tax and others from investment promotion, and research and development (Million Baht)	NA	573	904	1,187	1,734	EC4
Investments and expenditures regarding community development, social infrastructure and environment (Million Baht)	477	450	331	480	712***	EC1
Environmental expenditures (Million Baht)	NA	832	854	1,146	1,741	EN30

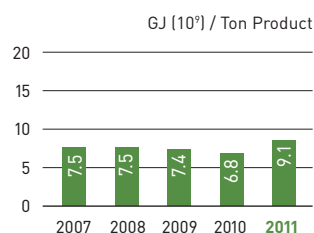
Remark * Includes all significant consolidated subsidiaries according to Annual Report 2011
 ** Excluding expenditures and investment on employee developments
 *** Includes flood relief spending of 200 Million Baht
 NA = Not Available

Performance Data	2007	2008	2009	2010	2011	GRI
Environmental Performance						
Production (Thousand Tons)	29,467	28,761	29,036	32,168	34,784	
Raw materials (Thousand Tons)	NA	35,165	37,337	38,413	41,078	EN1
SCG Chemicals	NA	2,410	2,530	2,379	3,858	
SCG Paper	NA	1,420	2,003	3,222	3,250	
SCG Cement	NA	28,475	29,514	29,532	29,668	
SCG Building Materials	NA	2,860	3,290	3,280	4,302	
Recycled materials (Thousand Tons)	NA	1,753	2,011	1,623	1,612	EN2
SCG Chemicals	NA	0	0	11	6	
SCG Paper	NA	1,440	1,438	1,156	1,211	
SCG Cement	NA	304	560	445	381	
SCG Building Materials	NA	9	13	11	14	
Total Energy Consumption (Petajoules)	136.84	135.50	135.49	140.68	167.68	EN3
Thermal Consumption (Petajoules)	123.09	122.98	123.77	128.30	153.65	EN3
Alternative Energy Consumption (Petajoules)						EN4
Biomass	10.78	8.93	8.84	7.31	9.10	
Industrial Waste	10.38	11.74	10.90	10.71	8.78	
Electrical Consumption (Million kilowatt hours)	3,819	3,478	3,254	3,441	3,895	EN3

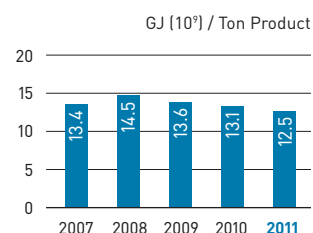
Energy Consumption



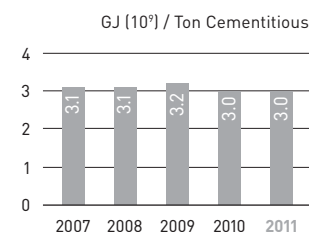
SCG Chemicals*



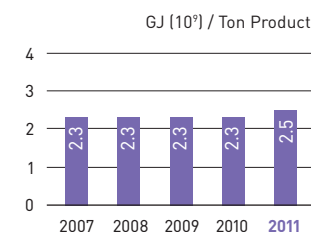
SCG Paper



SCG Cement

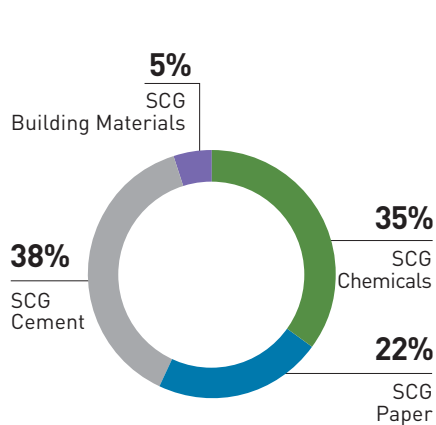


SCG Building Materials

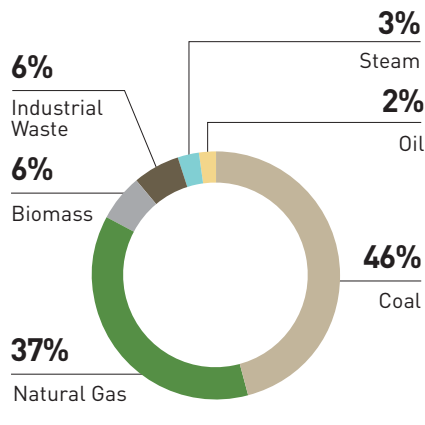


* SCG Chemicals reported data of Map Ta Phut Olefins Co., Ltd. in 2011

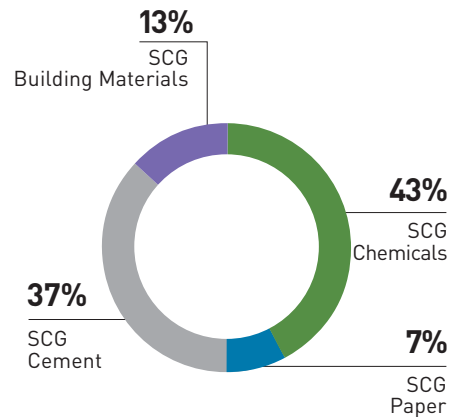
Thermal



Thermal Source



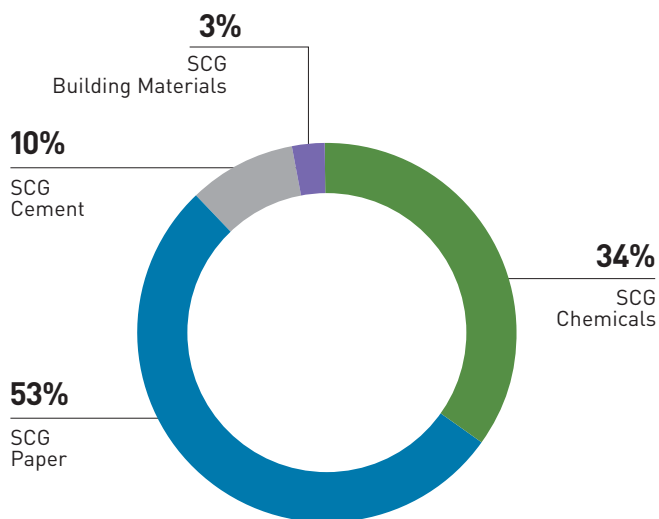
Electricity



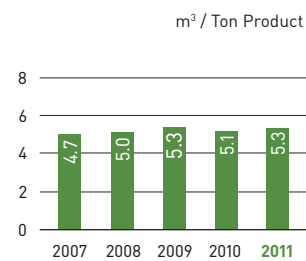
Performance Data

	2007	2008	2009	2010	2011	GRI
Water Consumption (Million Cubic Meters)	79.02	78.20	91.89	95.50	104.55	EN8
Proportion of Recycle Water (%)	11.72	10.54	10.78	9.99	9.90	EN10

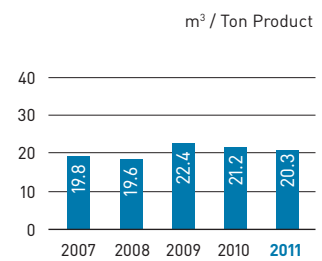
Water Consumption



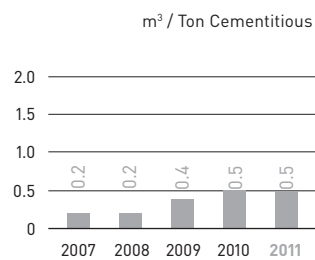
SCG Chemicals



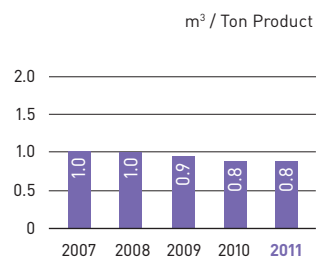
SCG Paper



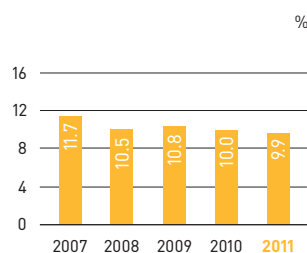
SCG Cement



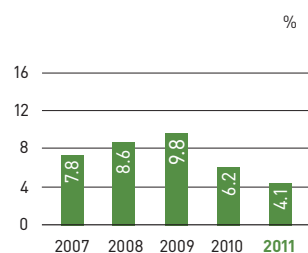
SCG Building Materials



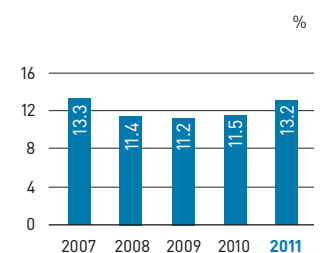
Proportion SCG Recycle Water



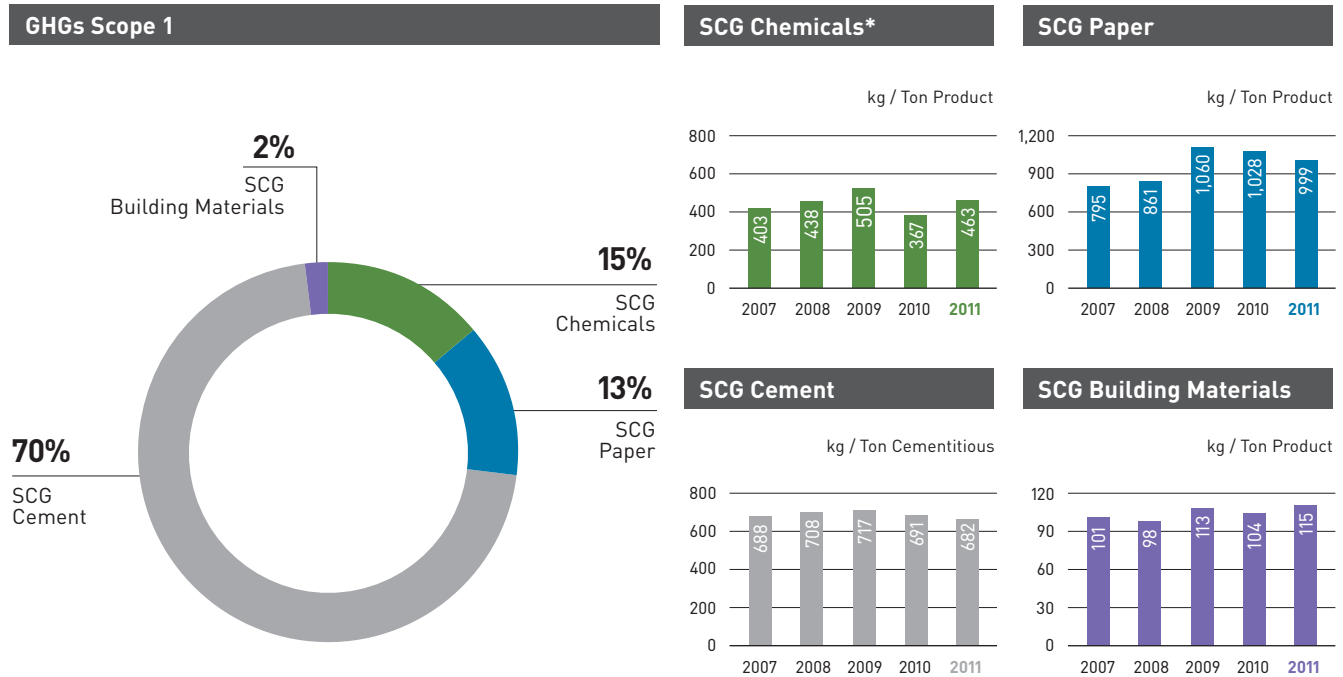
SCG Chemicals



SCG Paper

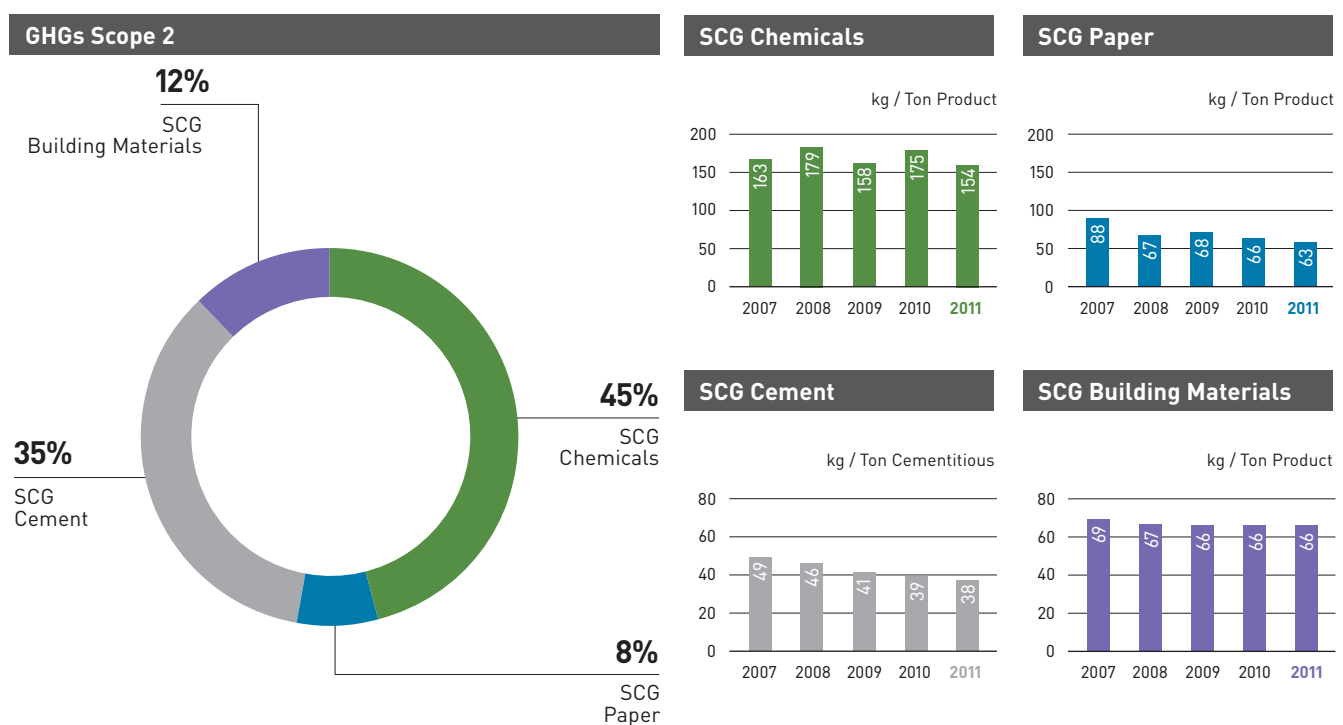


Performance Data	2007	2008	2009	2010	2011	GRI
GHGs Scope 1 (Million Tons)	17.54	17.87	18.92	19.66	20.73	EN16



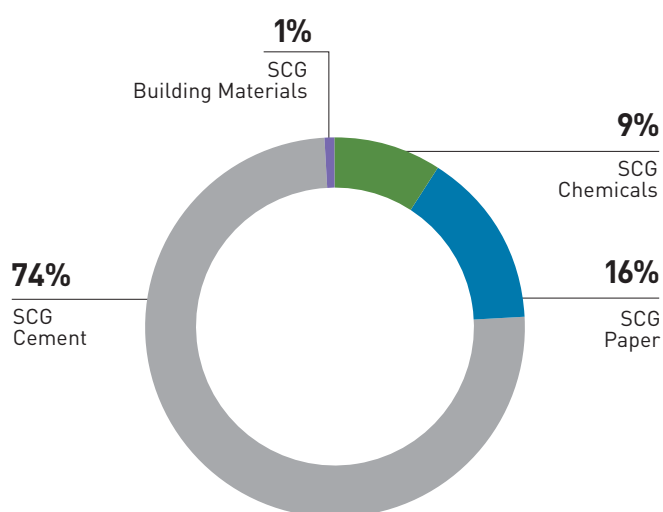
* SCG Chemicals reported data of Map Ta Phut Olefins Co., Ltd. in 2011

Performance Data	2007	2008	2009	2010	2011	GRI
GHGs Scope 2 (Million Tons)	2.21	2.23	1.86	2.09	2.27	EN16

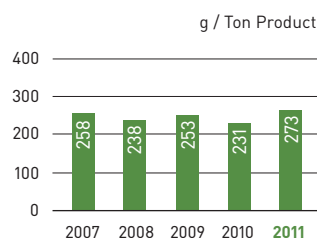


Performance Data	2007	2008	2009	2010	2011	GRI
Oxides of Nitrogen (Thousand Tons)	23.87	20.09	21.27	18.92	20.02	EN20

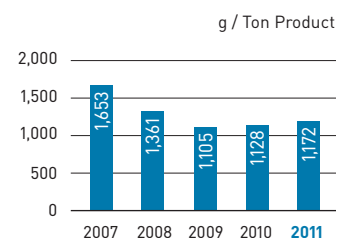
NO_x



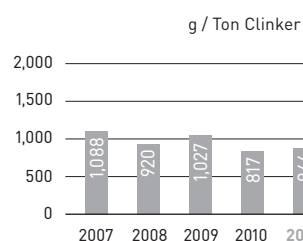
SCG Chemicals*



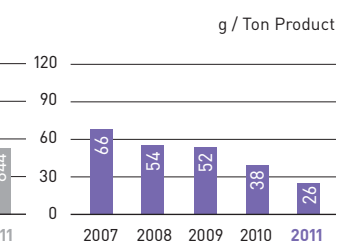
SCG Paper



SCG Cement



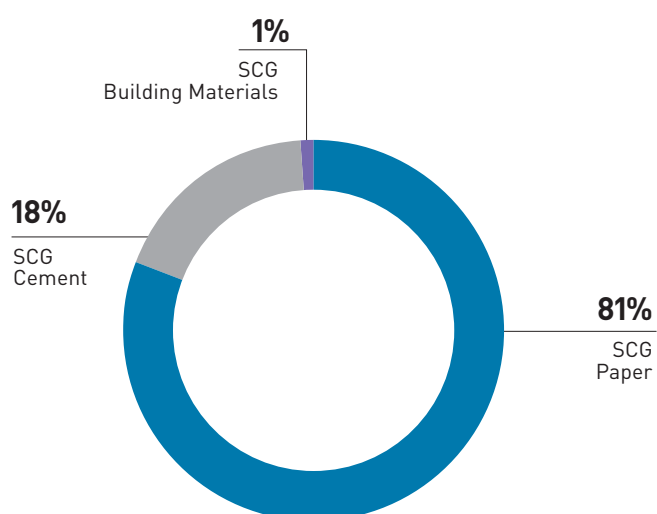
SCG Building Materials



* SCG Chemicals reported data of Map Ta Phut Olefins Co., Ltd. in 2011

Performance Data	2007	2008	2009	2010	2011	GRI
Oxides of Sulfur (Thousand Tons)	9.38	6.50	6.91	6.06	7.52	EN20

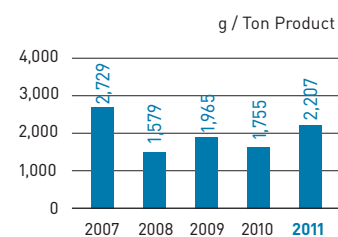
SO_x



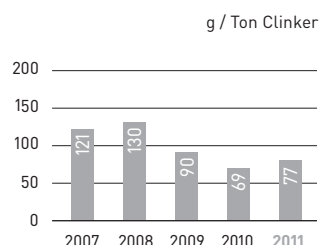
SCG Chemicals

SCG Chemicals produces a non-significant amount of SO_x

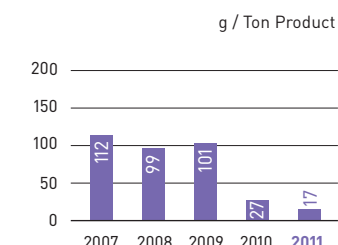
SCG Paper



SCG Cement

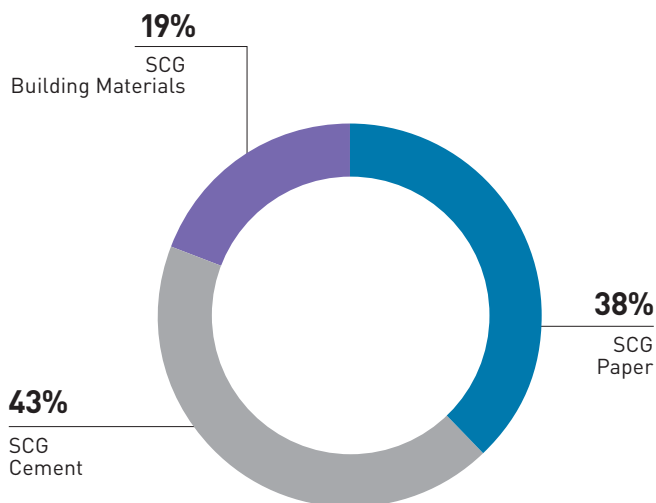


SCG Building Materials



Performance Data	2007	2008	2009	2010	2011	GRI
Particulate Matter (Thousand Tons)	4.19	3.43	3.35	2.57	2.36	EN20

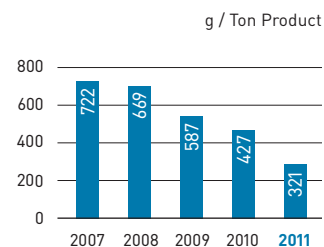
Particulate Matter



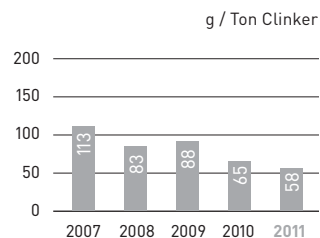
SCG Chemicals

SCG Chemicals produces a non-significant amount of particulate matter

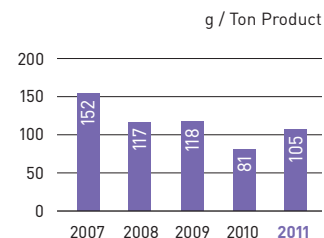
SCG Paper



SCG Cement

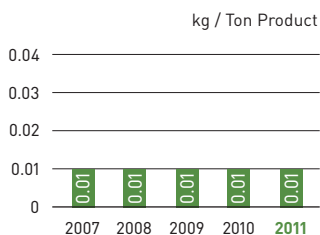


SCG Building Materials

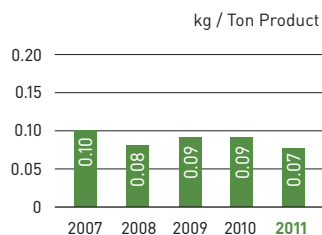


Performance Data	2007	2008	2009	2010	2011	GRI
BOD (Thousand Tons)	0.74	0.56	0.48	0.51	0.46	EN21
COD (Thousand Tons)	8.79	7.76	7.78	7.50	7.34	EN21
TSS (Thousand Tons)	1.31	1.39	1.00	0.90	0.87	EN21

SCG Chemicals BOD



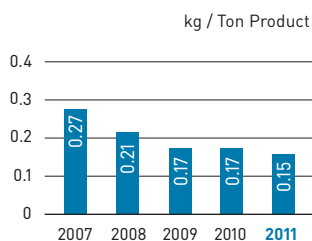
SCG Chemicals COD



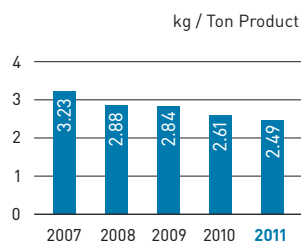
SCG Chemicals TSS

SCG Chemicals have a very negligible amount of total suspended solid

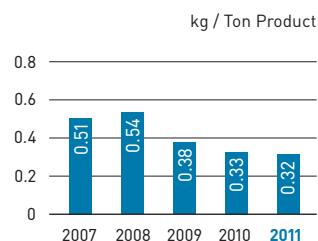
SCG Paper BOD



SCG Paper COD

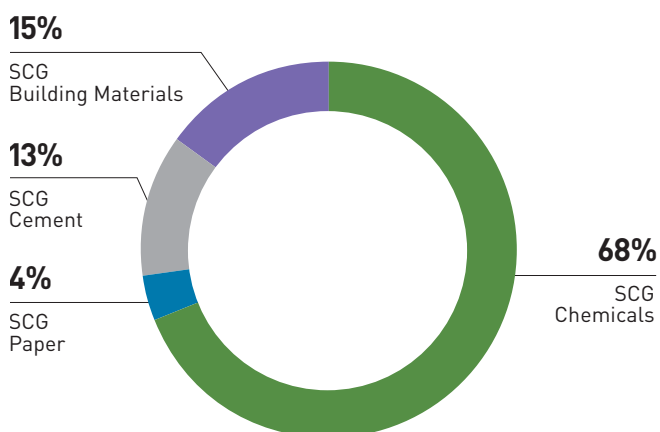


SCG Paper TSS

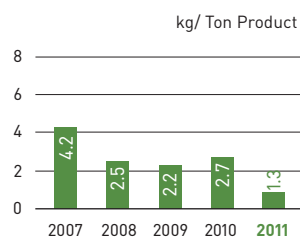


Performance Data	2007	2008	2009	2010	2011	GRI
Hazardous Waste (Thousand Tons)	23.41	14.32	13.44	17.02	12.21	EN22

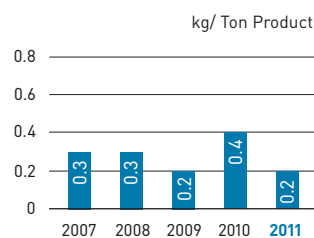
Hazardous Waste



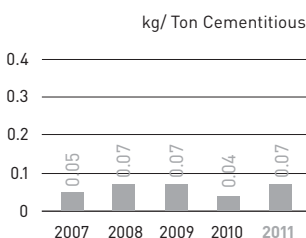
SCG Chemicals



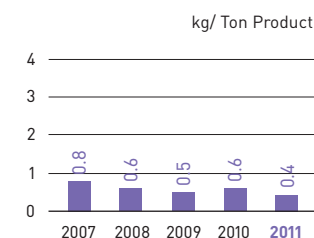
SCG Paper*



SCG Cement

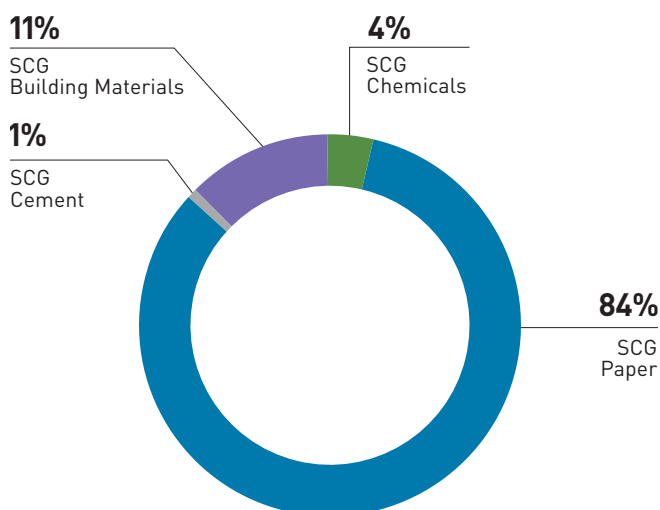


SCG Building Materials

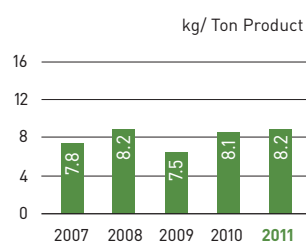


Performance Data	2007	2008	2009	2010	2011	GRI
Non-Hazardous Waste (Thousand Tons)	758.27	749.38	653.60	1,176.12	1,305.30	EN22

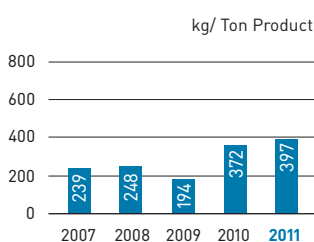
Non-Hazardous Waste



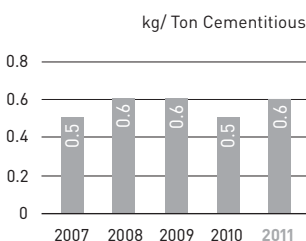
SCG Chemicals



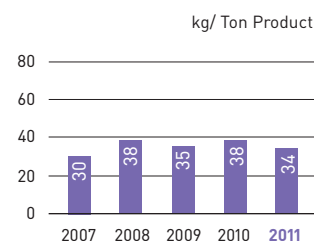
SCG Paper*



SCG Cement



SCG Building Materials



* SCG Paper has revised data from "as dry basis" to "as received basis" since 2010

Performance Data	2007	2008	2009	2010	2011	GRI
Number of Chemical Spillage Cases *						EN23
Level 1 : High Severity	1	2	4	1	0	
Level 2 : Moderate Severity	2	0	2	3	1	
Level 3 : Low Severity	2	1	4	8	2	

Level 1 : High severity means that the volume of chemical spills is more than 2,500 kg (plastic powder or granule is more than 5,000 kg) that leak from primary containment or any spills to environment or causes injury.

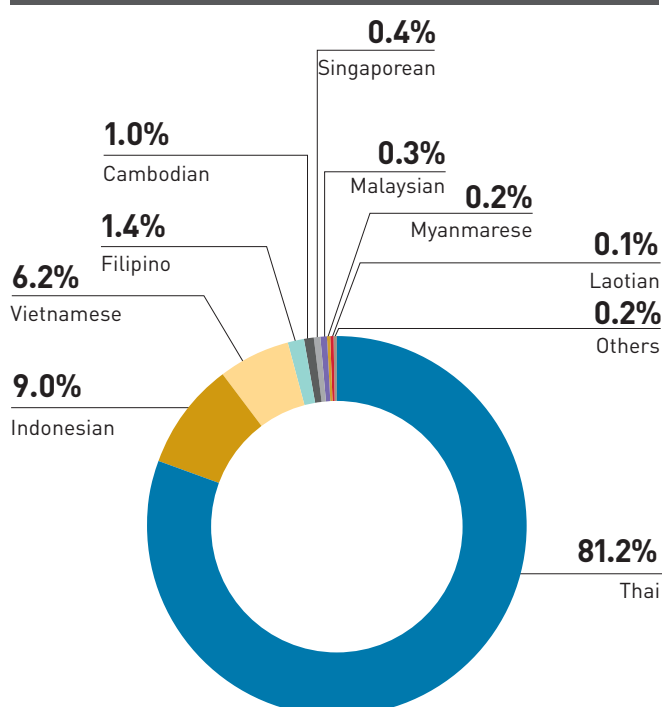
Level 2 : Moderate severity means that the volume of chemical spills is between 500-2500 kg (plastic powder or granule is between 2,500 - 5,000 kg) that can be contained (not reaching to environment), and no injury occurred.

Level 3 : Low severity means that the volume of chemical spills is between 50-500 kg (plastic powder or granule is between 500-2,500 kg) that can be contained (not reaching to environment), and no injury occurred.

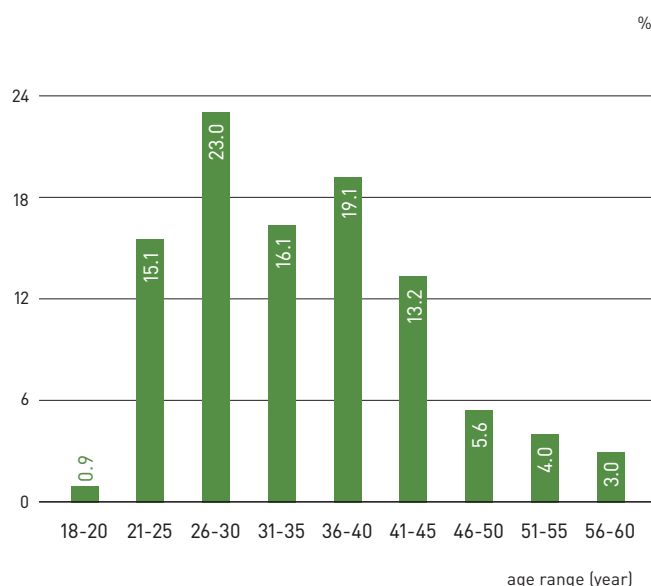
* Excludes flammable gas and utility chemicals, e.g. raw water, filtrated water, distilled water, Nitrogen gas, instrument air, service air, or Carbon dioxide.

Performance Data	2007	2008	2009	2010	2011	GRI
Social Performance						
Employee Information						
Number of employees** (persons)	25,130	27,305	28,515	30,820	34,725	LA1
Proportion of employees by level						LA1
Management	4.3	4.4	4.7	4.0	3.7	
Supervisor and Technical Staff	29.3	30.6	31.5	31.8	31.0	
Operator	66.4	65.0	63.8	64.1	65.3	
Proportion of employees by gender						LA13
Male	81.5	81.0	80.7	79.0	78.0	
Female	18.5	19.0	19.3	21.0	22.0	

Proportion of employees by nationality**

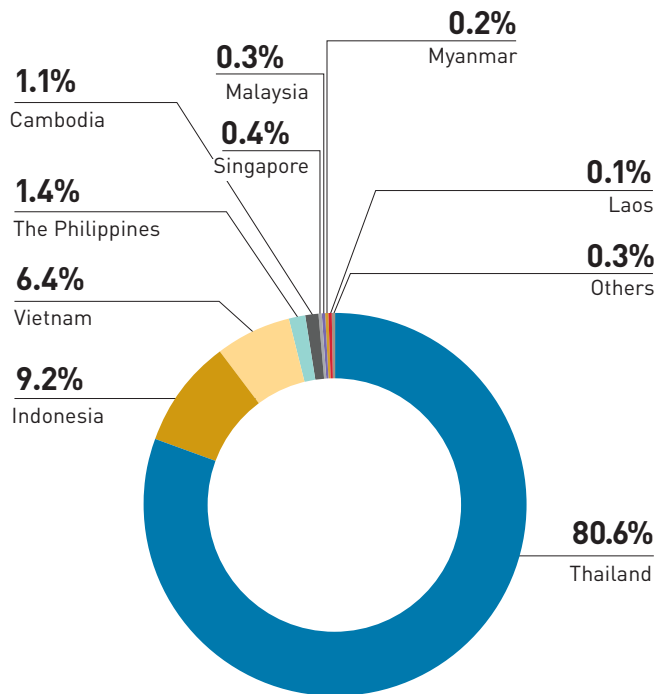


Proportion of employees by age

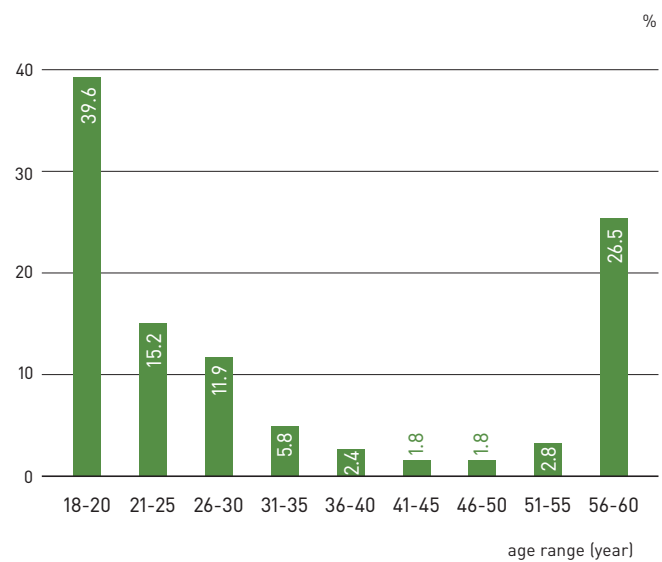


Remark : ** Included all significant consolidated subsidiaries according to Annual Report 2011

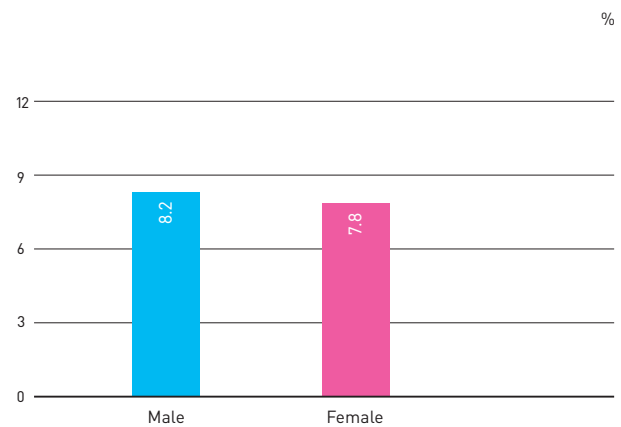
Proportion of employees by country*



Proportion of employees turnover by ages



Proportion of employees turnover of male and female**



Performance Data	2007	2008	2009	2010	2011	GRI
Proportion of local senior management (%)*	NA	46.0	23.9	25.7	22.8	EC7
Proportion of Basic Salary of Male to Female (on the average of each employee level)						LA14
Management	1.00:0.95	1.00:0.97	1.00:1.01	1.00:0.96	1.00:0.86	
Supervisor and Technical Staff	1.00:0.94	1.00:0.92	1.00:0.94	1.00:0.91	1.00:0.92	
Operator	1.00:1.00	1.00:0.98	1.00:0.97	1.00:0.92	1.00:0.93	

Remark * Includes all significant consolidated subsidiaries according to Annual Report 2011
 ** Turnover means those who were resigned, dismissed, fired, retired, or passed away.
 NA = Not Available

Performance Data	2007	2008	2009	2010	2011	GRI
Health and Safety Information						LA7
Total Incident Rate (cases/200,000 man-hours)						
Employee	0.52	0.41	0.42	0.46	0.41	
Contractor	0.70	0.44	0.60	0.83	0.37	
Incident Rate (Lost Time Cases) (cases/200,000 man-hours)						LA7
Employee	0.09	0.07	0.07	0.10	0.12	
Contractor	0.15	0.09	0.14	0.13	0.12	
Severity Rate (days/200,000 man-hours)						LA7
Employee	1.62	1.98	1.01	2.77	2.34	
Contractor	2.40	1.78	2.94	1.88	1.91	
Proportion of Absence by Type (%)						LA7
Sickness	14.1	14.9	14.7	14.3	14.9	
Work-related injuries	0.5	0.6	0.3	0.4	0.3	
Others	85.4	84.5	85.0	85.3	84.8	
Number of Fatalities (Cases)						LA7
Employee	0	3	0	0	1	
Contractor	3	3	4	13	8	
Number of Fatalities from motor vehicle accidents (Cases)						LA7
Employee	0	2	0	0	1	
Contractor	1	2	3	7	3	

About this Report

This 2011 SCG Sustainability Report is the 11th issue published on an annual basis to present our significant performance in economic, environmental and social aspects for the past 5 years.

Information presented in this report was referred to the Global Reporting Initiatives Guideline (GRI) - G3 Standard in which its boundary covered only SCG owned-management companies located in Thailand as listed in the table of 'Subsidiaries included in the Sustainability Report 2011'. For overseas subsidiaries, their performance data are expected to be included in SCG performance within 2012. Performance data apart from this report will be addressed and referred to 2011 SCG Annual Report.

Methodologies for data collection and calculation in this report were conformed to international standards and recommendations, i.e. USEPA, NIOSH, OSHA, WBCSD-CSI, and other relevant standards. All responsible persons from

every business were participated in the development of sustainable development information system (SDIS) on a regular basis for the most accuracy, transparency, and corporate-wide completeness of information.

In 2011, the approach used to define materiality content in this report was not significantly changed from previous year. Sustainability issues were reviewed by internal stakeholder workshop, external stakeholder interview and discussion panel to ensure that the disclosed information is accurate and directly respond to stakeholder needs. The materiality issues were then reviewed and prioritized by SCG Sustainable Development Committee and Sustainable Organization Development at business level. This report was reviewed by external party to enhance the reliability of the contents presented in this report. The details of the review can be found on page 87-89.

GRI Application Level Criteria

Report Application Level		C	C+	B	B+	A	A+
Standard Disclosures	<div>G3 Profile Disclosure</div> <div>OUTPUT</div>	Report On: 1.2 2.1-2.10 3.1-3.8, 3.10-3.12 4.1-4.4, 4.14-4.15	Report Externally Assured	Report on all criteria listed for level C plus: 1.2 3.9, 3.13 4.5-4.13, 4.16-4.17	Report Externally Assured	Same as requirement for Level B	Report Externally Assured
	<div>G3 Management Approach Disclosure</div> <div>OUTPUT</div>	Not Required		Management Approach Disclosures for each Indicator Category		Management Approach Disclosures for each indicator Category	
	<div>G3 Performance Indicator 6 Sector Supplement Performance Indicators</div> <div>OUTPUT</div>	Report on a minimum of 10 Performance Indicators, including at least one from each of Economic, Social and Environmental.		Report on a minimum of 20 Performance Indicators, at least one from each of Economic, Environmental, Human Rights, Labor Society, Product Responsibility		Report on each G3 and Sector Supplement* Indicator with due regard to the Materiality Principle by either: a) reporting on the Indicator or b) explaining the reason for its omission.	
		*Sector supplement in final version					

The electronic file of this report and the previous can be downloaded from SCG website.

For more information and comment, please contact: SCG Sustainable Development Committee, 1 Siam Cement Road, Bangsue, Bangkok 10800
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Subsidiaries included in the Sustainability Report 2011 *

Business / Company	Air				Water				Energy		Waste	Safety	Human Resources	
	Dust	SO _x	NO _x	GHG	Water Consumption	BOD	COD	TSS	Thermal	Electricity				
SCG														
1	The Siam Cement Public Company Limited													•
SCG Chemicals														
1	SCG Chemicals Co., Ltd.												•	•
2	Thai Polyethylene Co., Ltd.	NR	NR	NR	•	•	•	•	NR	•	•	•	•	•
3	Thai Polypropylene Co., Ltd.	NR	NR	NR	•	•	•	•	NR	•	•	•	•	•
4	SCG Plastics Co., Ltd.												•	•
5	SCG Performance Chemicals Co., Ltd.												•	•
6	SCG Polyolefins Co., Ltd.												•	•
7	Rayong Engineering & Plant Service Co., Ltd.												•	•
8	Protech Outsourcing Co., Ltd.													•
9	RIL 1996 Co., Ltd.													•
10	Vina SCG Chemicals Co., Ltd.													•
11	Rayong Pipeline Co., Ltd.													•
12	Map Ta Phut Tank Terminal Co., Ltd.												•	•
13	Map Ta Phut Olefins Co., Ltd.	NR	NR	•	•	•	•	•	NR	•	•	•	•	•
14	Rayong Olefins Co., Ltd.	NR	NR	•	•	•	•	•	NR	•	•	•	•	•
15	Flowlab & Service Co., Ltd.													•
16	Thai Plastic and Chemicals Public Company Limited	NR	NR	•	•	•	•	•	NR	•	•	•	•	•
17	The TPC Paste Resin Co., Ltd.													•
18	The Nawaplastic Industries (Saraburi) Co., Ltd.													•
19	Nawa Plastic Industries Co., Ltd.													•
20	Nawa Intertech Co., Ltd.													•
21	Total Plant Service Co., Ltd.													•
22	Siam Stabilizers and Chemicals Co., Ltd.													•
Associates, Jointly-controlled entity and Other Companies														
23	Siam Mitsui PTA Co., Ltd.	NR	NR	•	•	•	•	•	•	•	•	•	•	•
24	Grand Siam Composites Co., Ltd.	NR	NR	NR	•	•	•	•	•	•	•	•	•	•
25	Thai MMA Co., Ltd.	NR	NR	•	•	•	•	•	•	•	•	•	•	•
26	Thai MFC Co., Ltd.	NR	NR	NR	•	•	•	•	•	•	•	•	•	•
27	Thai PET Resin Co., Ltd.	NR	NR	•	•	•	•	•	•	•	•	•	•	•
SCG Paper														
1	SCG Paper Public Company Limited													•
2	SCG Paper Public Company Limited	•	•	•	•	•	•	•	•	•	•	•	•	•
3	Thai Paper Co., Ltd.	•	•	•	•	•	•	•	•	•	•	•	•	•
4	Thai Union Paper Public Company Limited	•	•	•	•	•	•	•	•	•	•	•	•	•
5	Siam Kraft Industry Co., Ltd.	•	•	•	•	•	•	•	•	•	•	•	•	•
6	Thai Kraft Paper Industry Co., Ltd.	•	•	•	•	•	•	•	•	•	•	•	•	•
7	Thai Union Paper Industry Co., Ltd.	•	•	•	•	•	•	•	•	•	•	•	•	•
8	Siam Cellulose Co., Ltd.	•	•	•	•	•	•	•	•	•	•	•	•	•
9	InfoZafe Co., Ltd.												•	•
10	The Siam Pulp & Paper Holding Co., Ltd.													•
11	The Siam Forestry Co., Ltd.	NR	NR	NR	•	NR	NR	NR	NR	NR	NR	NR	•	•
12	Phoenix Pulp & Paper Public Company Limited	•	•	•	•	•	•	•	•	•	•	•	•	•

Remark * Includes all significant consolidated subsidiaries according to Annual Report 2011

○ = Office / Investment / Sale / Service where the collection of environmental performance data is not necessary

NR = Non Relevance

Business / Company	Air				Water				Energy		Waste	Safety	Human Resources
	Dust	SO _x	NO _x	GHG	Water Consumption	BOD	COD	TSS	Thermal	Electricity			
13 Phoenix Utilities Company Limited													•
14 Thai Cane Paper Public Company Limited													•
15 Thai Cane Paper Public Company Limited (Kanchanaburi Plant)	•	•	•	•	•	•	•	•	•	•	•	•	•
16 Thai Cane Paper Public Company Limited (Prachinburi Plant)	•	•	•	•	•	•	•	•	•	•	•	•	•
17 Thai Containers Group Co., Ltd.												•	•
18 Thai Containers Group Co., Ltd. (Pathumthani Plant)	•	•	•	•	•	•	•	•	•	•	•	•	•
19 Thai Containers Group Co., Ltd. (Samutprakarn Plant)	•	•	•	•	•	•	•	•	•	•	•	•	•
20 Thai Containers Group Co., Ltd. (Ratchaburi Plant)	•	•	•	•	•	•	•	•	•	•	•	•	•
21 Thai Containers Songkhla (1994) Co., Ltd.	•	•	•	•	•	•	•	•	•	•	•	•	•
22 Thai Containers Khonkaen Co., Ltd.	•	•	•	•	•	•	•	•	•	•	•	•	•
23 Thai Containers Rayong Co., Ltd.	•	•	•	•	•	•	•	•	•	•	•	•	•
24 Thai Containers Saraburi Co., Ltd.	•	•	•	•	•	•	•	•	•	•	•	•	•
25 Thai Containers (TCC) Co., Ltd. (Chonburi Plant)	•	•	•	•	•	•	•	•	•	•	•	•	•
26 Thai Containers (TCC) Co., Ltd. (Pathumthani Plant)	•	•	•	•	•	•	•	•	•	•	•	•	•
27 Thai Containers (TCC) Co., Ltd. (Prachinburi Plant)	•	•	•	•	•	•	•	•	•	•	•	•	•
28 Thai British Security Printing Public Company Limited													•
29 Thai British Depost Co., Ltd.													•
SCG Cement													
1 SCG Cement Co., Ltd.												•	•
2 The Concrete Products and Aggregate Co., Ltd.												•	•
3 The Siam Cement (Kaeng Khoi) Co., Ltd.	•	•	•	•	•	NR	NR	NR	•	•	•	•	•
4 The Siam Cement (Ta Luang) Co., Ltd.	•	•	•	•	•	NR	NR	NR	•	•	•	•	•
5 The Siam Cement (Thung Song) Co., Ltd.	•	•	•	•	•	NR	NR	NR	•	•	•	•	•
6 The Siam Cement (Lampang) Co., Ltd.	•	•	•	•	•	NR	NR	NR	•	•	•	•	•
7 Siam Mortar Co., Ltd.												•	•
8 The Siam White Cement Co., Ltd.	•	•	•	•	•	NR	NR	NR	•	•	•	•	•
9 The Siam Refractory Industry Co., Ltd.												•	•
10 Cemen Thai Energy Conservation Co., Ltd.													•
11 Eco Plant Services Co., Ltd.												•	•
12 Siam Research and Innovation Co., Ltd.												•	•
13 SCI Eco Services Co., Ltd.												•	•
SCG Building Materials													
1 SCG Building Materials Co., Ltd.													•
2 The Siam Fibre-Cement Co., Ltd. (Saraburi/Ta Luang/Thung Song)	•	NR	•	•	•	NR	NR	NR	•	•	•	•	•
3 The Fibre-Cement Products (Lampang) Co., Ltd.	•	NR	•	•	•	NR	NR	NR	•	•	•	•	•
4 Tip Fibre-Cement Co., Ltd.												•	•
5 SCG Landscape Co., Ltd.	NR	NR	NR	•	•	NR	NR	NR	•	•	•	•	•
6 Siam Fiberglass Co., Ltd.	•	•	•	•	•	NR	NR	NR	•	•	•	•	•

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● = Office / Investment / Sale / Service where the collection of environmental performance data is not necessary

NR = Non Relevance

Business / Company	Air				Water				Energy		Waste	Safety	Human Resources
	Dust	SO _x	NO _x	GHG	Water Consumption	BOD	COD	TSS	Thermal	Electricity			
7 Cementhai Gypsum Co., Ltd.													•
8 Cementhai Ceramics Co., Ltd.													•
9 Thai Ceramic Co., Ltd.	•	•	•	•	•	NR	NR	NR	•	•	•	•	•
10 The Siam Ceramic Group Industries Co., Ltd.	•	•	•	•	•	NR	NR	NR	•	•	•	•	•
11 Cementhai Home Services Co., Ltd.												•	•
12 Thai Ceramic Power Co., Ltd.													•
13 Sosooco And Group [2008] Co.,Ltd.													•
14 Saraburirat Co., Ltd.	NR	NR	NR	•	•	NR	NR	NR	•	•	•	•	•
15 The CPAC Roof Tile Co., Ltd. (Nakhon Pathom/Saraburi/Lamphun/Khon kaen/ Thung Song/Chonburi)	NR	NR	NR	•	•	NR	NR	NR	•	•	•	•	•
16 Thai Ceramic Roof Tile Co., Ltd.	•	•	•	•	•	NR	NR	NR	•	•	•	•	•
17 Thai Ceramic Holding Co., Ltd.													•
18 Quality Construction Products Public Co., Ltd.	•	•	•	•	•	NR	NR	NR	•	•	•	•	•
19 Q-Con Eastern Co., Ltd.	•	•	•	•	•	NR	NR	NR	•	•	•	•	•
20 Thai-German Ceramic Industry PLC	•	•	•	•	•	NR	NR	NR	•	•	•	•	•
21 Sosooco Ceramic Co., Ltd.	•	•	•	•	•	NR	NR	NR	•	•	•	•	•
22 SCG-Sekisui Sales Co.,Ltd.												•	•
Associates and Other Companies													
1 Sekisui-SCG Industry Co.,Ltd.	NR	NR	NR	•	•	NR	NR	NR	•	•	•	•	•
2 The Siam Sanitary Fittings Co., Ltd.	•	•	•	•	•	NR	NR	NR	•	•	•	•	•
3 TOTO Manufacturing (Thailand) Co.,Ltd													•
4 The Siam Moulding Plaster Co., Ltd.	•	•	•	•	•	NR	NR	NR	•	•	•	•	•
5 Siam Sanitary Ware Co., Ltd.												•	•
6 Siam Sanitary Ware Industry Co., Ltd.	•	•	•	•	•	NR	NR	NR	•	•	•	•	•
7 Siam Sanitary Ware Industry (Nongkae) Co., Ltd.	•	•	•	•	•	NR	NR	NR	•	•	•	•	•
SCG Distribution													
1 SCG Distribution Co., Ltd.												•	•
2 SCG Trading Co., Ltd.												•	•
3 SCG Network Management Co., Ltd.												•	•
4 SCG Logistics Management Co., Ltd.												•	•
5 SCG Trading Services Co., Ltd.													•
6 SCG Sourcing Co., Ltd.												•	•
7 SCG Experience Co., Ltd.												•	•
SCG Investment and Others													
1 Cementhai Holding Co., Ltd.													•
2 Cementhai Property [2001] Public Company Limited													•
3 Property Value Plus Co., Ltd.													•
4 SCG Accounting Services Co., Ltd.													•
5 SCG Legal Counsel Limited													•
6 Bangsue Management Co., Ltd.													•

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NR = Non Relevance

GRI Content Index

G3 Indicator	Description	AR Page Number	SR	2011 Disclosure
Strategy and Analysis				
1.1	CEO Statement on relevance of sustainability to the organisation & strategy	4–5	4–5	Full
1.2	Description of key impacts, risks, and opportunities	51–55	17, 22–23, 26–27, 42–43	Full
Organisational Profile				
2.1	Name of the organisation	1	1	Full
2.2	Primary brands, products, and/or services	–	2–3	Full
2.3	Operational structure of the organisation	6	11	Full
2.4	Location of organisation's headquarters	1	78	Full
2.5	Countries where the organisation operates	–	1	Full
2.6	Nature of ownership and legal form	1, 5–6	–	Full
2.7	Markets served	10–19	1–3	Full
2.8	Scale of the reporting organisation	8–9, 50	68, 75, 79–81	Full
2.9	Significant changes during the reporting period in size, structure, ownership	10–19	–	Full
2.10	Awards received in the reporting period	–	92–96	Full
Report Parameters				
3.1	Reporting period (e.g. fiscal/calendar year) for information provided	1	78	Full
3.2	Date of most recent previous report (if any)	–	78	Full
3.3	Reporting cycle (annual, biennial, etc.)	–	78	Full
3.4	Contact point for questions regarding the report or its contents	1	78	Full
3.5	Process for defining report content	–	17	Full
3.6	Boundary of the report	34–49	78–81	Full
3.7	Any specific limitations on the scope or boundary of the report	–	78	Full
3.8	Basis for reporting on joint ventures, subsidiaries, etc.	–	78	Full
3.9	Data measurement techniques and the bases of calculations	–	78	Full
3.10	Explanation of effect of re–statements of information provided previously	–	None	Full
3.11	Significant changes in scope, boundary, or measurement methods	–	69, 71–72	Full
3.12	Table identifying the location of the Standard Disclosures in the report	–	82–85	Full
3.13	Policy and current practice on seeking external assurance for the report	–	78	Full
Governance, Commitments, and Engagement				
4.1	Governance structure of the organisation	6	11, 14	Full
4.2	Indicate if Chair of the board is also an executive officer	28	–	Full
4.3	The board members that are independent and/or non–executive members	57	–	Full
4.4	Ways for shareholders and employees to provide recommendations or direction	21–22, 24	44–45	Full
4.5	Link between compensation of board and management with performance	29–31	–	Full
4.6	Processes in place for the board to ensure conflicts of interest are avoided	23	–	Full
4.7	Process for determining the qualifications and expertise of the board	31	–	Full
4.8	Internally developed statements of mission or values, codes of conduct, & principles	–	6–7	Full
4.9	Procedures of the board for overseeing identification and management of performance	27–28	–	Full
4.10	Processes for evaluating the boards own performance related to sustainability	30–31	–	Full
4.11	Explanation of whether and how the precautionary approach or principle is addressed	51–55	14–16, 22–23, 26–27, 42–43	Full
4.12	Externally developed economic, environmental, and social charters, principles	–	34, 65, 90–91	Full
4.13	Memberships in associations	–	inside cover, 66, 90–91	Full
4.14	List of stakeholder groups engaged by the organisation	24	44–46	Full

AR = Annual Report

SR = Sustainability Report

G3 Indicator	Description	AR	SR	2011 Disclosure
		Page Number		
4.15	Basis for identification and selection of stakeholders with whom to engage	23–25	44	Full
4.16	Approaches to stakeholder engagements	23–25	44–46	Full
4.17	Key topics and concerns that have been raised through stakeholder engagement	23–25	44–46	Full
Economic				
	Disclosure on Management Approach	52–54	10–13, 22–23	Full
EC1	Direct economic value generated and distributed	2–3, 9	68	Full
EC2	Financial implications and other risks and opportunities for the organisation's activities due to climate change	55	26, 28–29	Full
EC3	Coverage of the organisation's defined benefit plan obligations	–	47, 68	Full
EC4	Significant financial assistance received from government	–	None	Full
EC5	Additional: Range of ratios of standard entry level wage compared to local minimum wage	Note: entry level wage of SCG is higher than local minimum wage in all areas.		Full
EC6	Policy, practices, and proportion of spending on locally-based suppliers	24	45	Full
EC7	Local hiring and proportion of senior management hired from the local community	–	76	Partial
EC8	Development and impact of infrastructure provided primarily for public benefit	–	59–61	Partial
EC9	Additional: Understanding and describing significant indirect economic impacts	52–54	22–23	Full
Environmental				
	Disclosure on Management Approach	45, 55	4–5, 9–13, 26–27	Full
EN1	Materials used by weight or volume	–	30, 69	Full
EN2	Percentage of materials used that are recycled input materials	–	30	Full
EN3	Direct energy consumption by primary energy source	–	28–29, 69–70	Full
EN4	Indirect energy consumption by primary source	–	69–70	Full
EN5	Additional: Energy saved due to conservation and efficiency improvements	11, 17	28–29, 66, 69–70	Full
EN6	Additional: Energy-efficient or renewable energy products and services	–	28–29, 38	Full
EN7	Additional: Indirect energy consumption reduction initiatives and results	–	28–29	Full
EN8	Total water withdrawal by source	–	31	Full
EN9	Additional: Water sources significantly affected by withdrawal of water	–	31	Full
EN10	Additional: Percentage and total volume of water recycled and reused	–	31, 70	Full
EN11	Location and size of land by protected areas and areas of high biodiversity value	–	34–35, 67	Full
EN12	Description of significant impacts of activities, products and services on biodiversity	–	34–35	Full
EN13	Additional: Habitats protected or restored	–	34–35	Full
EN14	Additional: Managing impacts on biodiversity	–	19, 34–35	Full
EN15	Additional: IUCN Red List species and other list species with habitats affected by operations	–	None	Full
EN16	Total direct and indirect greenhouse gas emissions by weight	–	18, 28, 66, 71	Full
EN17	Other relevant indirect greenhouse gas emissions by weight	–	18, 38	Full
EN18	Additional: Initiatives to reduce greenhouse gas emissions and reductions achieved	–	38	Full
EN19	Emissions of ozone-depleting substances by weight	–	32	Full
EN20	NOx, SOx, and other significant air emissions by type and weight	–	32, 67, 72–73	Full
EN21	Total water discharge by quality and destination	–	73	Partial
EN22	Total weight of waste by type and disposal method	–	18, 33, 74	Full
EN23	Total number and volume of significant spills	–	75	Full
EN24	Additional: Weight of waste deemed hazardous	–	33	Partial
EN25	Additional: Details of water and habitats significantly affected by discharges of water and runoff	–	31	Partial
EN26	Initiatives and extent of environmental impacts of products and services mitigation	–	25, 37–38	Partial

AR = Annual Report

SR = Sustainability Report

G3 Indicator	Description	AR Page Number	SR	2011 Disclosure
EN27	Percentage of products sold and their packaging materials reclaimed by category	–	Not Available	–
EN28	Significant fines and non-monetary sanctions for non-compliance with environmental law	Note: no significant fines		–
EN29	Additional: Significant environmental impacts of transporting products etc. and workforce	–	38	Partial
EN30	Additional: Total environmental protection expenditures and investments by type	–	68	Full
Social : Labour Practices and Decent Work				
	Disclosure on Management Approach	55	42–43	Full
LA1	Total workforce by employment type, employment contract, and region	–	75	Full
LA2	Total number and rate of employee turnover by age group, gender, and region	–	76	Full
LA3	Additional: Benefits for full-time employees not provided to temporary or part-time	Note: benefits provided to temporary and part-time employees are as specified by Thai law		Full
LA4	Percentage of employees covered by collective bargaining agreements		Non Relevance	
LA5	Minimum notice period(s) regarding significant operational changes	Note: comply with to Thai law		Full
LA6	Additional: % workforce in formal management-worker health and safety committees	Note: comply with to Thai law		Full
LA7	Rates of injury, occupational diseases, lost days and absenteeism, & number of work-related fatalities by region	–	51, 66–67, 77	Full
LA8	Education, training, counselling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases	–	48	Partial
LA9	Additional: Health and safety topics covered in formal agreements with trade unions	–	Non Relevance	Partial
LA10	Average hours of training per year per employee by employee category	–	48	Partial
LA11	Additional: Programmes for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	–	47–48	Partial
LA12	Additional: % employees with regular performance & career development reviews	–	48	Partial
LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity	–	75	Full
LA14	Ratio of basic salary of men to women by employee category	–	76	Full
Social : Human Rights				
	Disclosure on Management Approach	–	inside cover, 42–45, 48, Code of Conduct	Full
HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening	Note: all agreements are in compliance with Code of Conduct		Partial
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken	–	48	Partial
HR3	Additional: Hours and % of employee training on policies and procedures in human rights	–	48	Full
HR4	Total number of incidents of discrimination and actions taken	Note: no incidents		Full
HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights	–	inside cover, 44, Code of Conduct	Full
HR6	Operations with significant risk for incidents of child labour, and measures taken to eliminate	–	44, Code of Conduct	Partial
HR7	Operations with significant risk of forced or compulsory labour, and measures to eliminate	–	44, Code of Conduct	Partial
HR8	Additional: Percentage of security personnel trained in the organisation's policies or procedures concerning aspects of human rights that are relevant to operations	Note: all are trained according to contract agreement		Full
HR9	Additional: Incidents of violations involving rights of indigenous people & actions taken	Note: no incidents		Full

AR = Annual Report

SR = Sustainability Report

G3 Indicator	Description	AR	SR	2011 Disclosure
Page Number				
Social : Society				
	Disclosure on Management Approach	54–55	42–43	Full
SO1	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering,operating, and exiting	–	44–46	Full
SO2	Percentage and total number of business units analysed for risks related to corruption	30	inside cover, 22, 26, 42	Full
SO3	Percentage of employees trained in organisation’s anti–corruption policies and procedures	Note: all employees are trained according to training road map.		
SO4	Actions taken in response to incidents of corruption	89, 90	–	Partial
SO5	Public policy positions and participation in public policy development and lobbying	75	5	Full
SO6	Additional: Total value of financial and in–kind contributions to political parties, politicians, and related institutions by country	–	Non Relevance	Full
SO7	Additional: Total number of legal actions for anti–competitive behaviour, anti–trust, and monopoly practices and their outcomes	–	Non Relevance	Full
SO8	Monetary value of significant fines and total number of non–monetary sanctions for non–compliance with laws and regulations	Note: no significant fines		
Social : Product Responsibility				
	Disclosure on Management Approach	–	42–43	Full
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories	–	5, 30, 38	Full
PR2	Additional: Incidents of non–compliance with regulations and voluntary codes on health and safety impacts of products and services during their life cycle, by type of outcomes	–	51	Full
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements	–	51	Full
PR4	Additional: Total number of incidents of non–compliance with regulations and voluntary codes concerning product and service information and labelling, by type of outcomes	–	51	Full
PR5	Additional: Practices related to customer satisfaction, including results of surveys measuring customer satisfaction	–	44, 51	Full
PR6	Programmes for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship	–	51	Full
PR7	Additional: Total number of incidents of non–compliance with regulations and voluntary codes on marketing communications, including advertising, promotion, and sponsorship by type of outcomes	–	51	Full
PR8	Additional: Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	–	51	Full
PR9	Additional: Monetary value of significant fines for non–compliance with laws and regulations concerning the provision and use of products and services	–	51	Full

AR = Annual Report

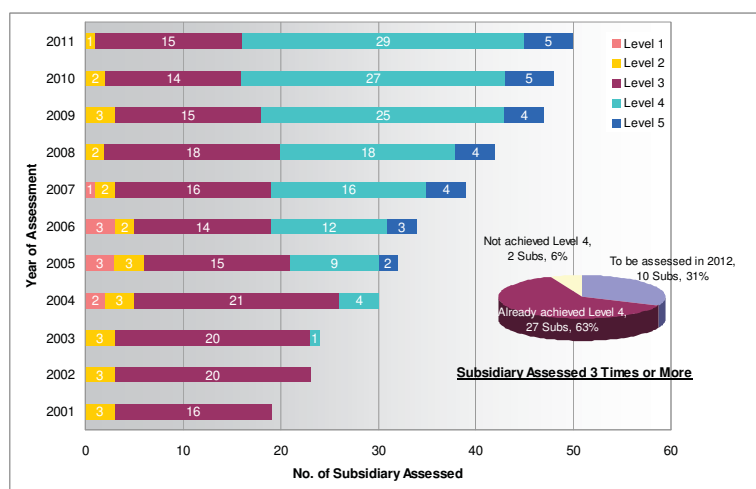
SR = Sustainability Report

Assurance Statement

Siam Cement Group (SCG) Assessing Environmental Performance

SCG has implemented the Environmental Performance Assessment Program (EPAP) since 2001 with a continuous increase in the number of subsidiaries participating in this program. Up to 2011, 50 subsidiaries in total participated in the program with 125 assessments being conducted. During 2011, ERM evaluated the environmental performance and conformity for 13 subsidiaries across SCG's Business Units against key regulatory requirements, industry good practices, environmental-related sustainability issues, and selected environmental data.

The EPAP assessment results of individual subsidiaries are demonstrated in terms of maturity levels comprising Level 1: Denial; Level 2: Reactive; Level 3: Assurance; Level 4: Business Integration; and Level 5: Leadership. The results of previous assessments indicate a continuous improvement in the environmental performance with an increased number of subsidiaries obtaining higher level especially Level 4. Over 60% of the subsidiaries that have been assessed more than 3 times, have achieved at least Level 4 as per the target set out by SCG. The assessment results up to 2011 are summarized in the chart below.



Based on the assessment conducted in 2011, SCG will focus on the following aspects in order to move towards sustainable business operations.

Improvement of Environmental and Social Program for Sustainability of Business Operation by:

- Going beyond regulatory compliance by clearly setting meaningful key performance indicators (KPI) and key action indicators (KAI).
- Acting as the Role Model and Partnership Model to leverage industry standards and promote good practices.
- Openly and transparently engaging stakeholders to gain acceptance, trust and support from nearby communities.

Integrated Risk Management for Better Planning Process by:

- Having an integrated view of safety, environmental and community critical risks of new projects as part of Total Productivity Management (TPM) - Initial Phase Management and POI (Principle of Investment).
- Identifying safety and environmental competency and culture requirements for new projects.
- Having preparedness and response plan, technologies and equipment for possible unplanned events.

Improved Operational Risk (including Compliance Assurance) and Emergency Management by:

- Focusing on safety, health, environmental and community critical aspects of operations, including equipment, procedures, operating criteria, skills, regulatory requirements and verification.
- Being prepared for and able to respond to worst case scenarios for off-site hazardous material, waste management and transport.
- Integration of critical compliance requirements into tasks/current management practices.

Raising Environmental and Safety Awareness and Performance to Business Partners by:

- Conducting specific environmental and safety training and awareness building activities for Business Partners.
- Incorporating "Environmental and Safety KPI" into Business Planning Process with our Business Partners.
- Implementing operational excellence management standards (including partnership) appropriate to Business Partners' risks.

Based on the commitment, knowledge and talent of SCG with support from SCG's Senior Management to drive continuous improvement in SD performance, ERM believes that SCG will sustainably conduct its business and be the Role Model of the Industry.



Environmental Resources Management Thailand Business Unit, 22 February 2012

ERM is a global provider of environmental, social and corporate responsibility consulting and assurance services. We have worked with over half of the world's 500 largest companies, in addition to numerous governments, international organizations and NGOs.

Independent Assurance Report

To SCG Sustainable Development Committee of The Siam Cement Public Company Limited (SCG)

I have performed procedures to provide limited assurance on the following aspects of the SCG Sustainability Report 2011.

Subject matter

Data and information disclosed within the Sustainability Report of SCG and its consolidated Thailand subsidiaries for Chemicals, Paper, Cement and Building Materials described in pages 79-81 for the year ended 31 December 2011 on the following aspects and all with a limited level of assurance:

- The management and reporting processes with respect to the Sustainability Report and to the preparation of environmental and social dimension performance indicators, as well as the control environment in relation to the data aggregation of these key figures;
- The environmental dimension performance indicators in the tables on pages 69-71 and page 74 and social dimension performance indicators disclosed on page 77 of the SCG Sustainability Report 2011;
- The application of the WBCSD Cement Sustainability Initiative (CSI) Cement CO₂ Protocol, the WBCSD guidelines CSI Safety in the Cement Industry: Guidelines for measuring and reporting, as well as SCG internal CO₂ emissions and OH&S data reporting guidelines to the CO₂ emissions and OH&S reporting;
- The CO₂ emissions and OH&S data in the WBCSD CSI Operating results table in the Cement Sustainability Initiative, CSI section on pages 66-67 of the Sustainability Report 2011; and
- SCG's declaration on the Global Reporting Initiative (GRI) Application Level 'A' of the GRI G3 Sustainability Reporting Guidelines on page 78 of the Sustainability Report 2011.

Reporting criteria

- The WBCSD/WRI Green House Gas Protocol: A Corporate Accounting and Reporting Standard, Revised edition 2010;
- The WBCSD Cement Sustainability Initiative (CSI) Cement CO₂ Protocol: CO₂ Accounting and Reporting Standard for the Cement Industry June 2005;
- The WBCSD guidelines CSI Safety in Cement Industry: Guidelines for measuring and reporting, updated October 2008 (Version 3.0);
- The 'Sustainability Reporting Guidelines G3' published in October 2006 by the GRI; and
- The SCG internal sustainability reporting guidelines by which environmental and social dimension performance indicators are gathered, collated and aggregated internally.

Responsibility and Methodology

The accuracy and completeness of sustainability indicators are subject to inherent limitations given their nature and methods for determining, calculating and estimating such data. The assurance report should therefore be read in connection with SCG's internal guidelines, definitions and procedures on the reporting of its sustainability performance.

SCG Sustainable Development Committee is responsible for both the subject matter and the application of the evaluation criteria. My responsibility is to provide a conclusion on the subject matter based on evidence-gathering procedures in accordance with the International Standard on Assurance Engagements (ISAE) 3000 "Assurance Engagements other than Audits or Reviews of Historical Financial Information". This Standard requires that I comply with independence and, ethical requirements, plan and perform the assurance engagement to obtain limited assurance on whether any matter comes to my attention that causes me to believe that the subject matter does not comply in all material respects with the criteria.

In a limited assurance engagement the evidence-gathering procedures are more limited than for a reasonable assurance engagement, and therefore less assurance is obtained than in a reasonable assurance engagement. The procedures selected depend on the practitioner's judgement, including the assessment of the risks of material non-compliance of the subject matter with the criteria.

Main Assurance Procedures

The assurance procedures included the following work:

- **Evaluation of the application of sustainability reporting guidelines**

Reviewing and assessing the application of the following guidelines:

- the WBCSD/WRI Green House Gas Protocol;
- the WBCSD CSI Cement CO₂ Protocol;
- the WBCSD CSI Safety measuring and reporting guidelines;
- GRI 'Sustainability Reporting Guidelines G3'; and
- SCG's internal sustainability reporting guidelines

- **Site visits**

Visiting selected sites of the business units:

- SCG Chemicals (Thai Polyethylene Co., Ltd.);
- SCG Paper (Phoenix Pulp and Paper Public Company Limited);
- SCG Cement (The Siam Cement (Ta Luang) Co., Ltd. – Khao Wong Plant);
- SCG Building Materials (The Siam Fibre-Cement Co., Ltd. – Saraburi Plant).

All sites are located in Thailand. The selection was based on quantitative and qualitative criteria: interviewing personnel responsible for internal reporting and data collection at the sites visited, at the business unit and at the corporate level to determine an understanding and application of the guidelines.

- **Assessment of the performance indicators**

- **Chemicals, Paper, Cement and Building Materials Business Units (according to GHG Protocol and GRI G3 Sustainability Reporting Guidelines):**

Performing tests on a sample basis of evidence supporting selected environmental and social dimension performance indicators (greenhouse gases (*scope 1 & 2*), energy and alternative fuels consumption (*only for Paper and Cement business units*), industrial waste generation, hazardous and non-hazardous waste management, water consumption, recycled water (*only for Chemicals business unit*), total incident rate, incident rate (*lost time cases*), number of fatality cases).

- **Cement Business Unit (according to WBCSD CSI guidelines):**

Performing tests on a sample basis of evidence supporting selected environmental and social dimension performance indicators. This involved testing CO₂ emissions scope 1 and 2 related to *energy consumption, fuel net calorific values, clinker production, calcinations/emission factor, clinker produced/bought/sold, OH&S data (number of fatalities for directly employed, number of fatalities for indirectly employed, number of fatalities for third parties, lost time injury (LTI), lost time frequency rate (LTIFR) and lost time severity rate (LTISR) for directly employed, number of lost time injuries (LTI) for indirectly employed*);

- **Review of the documentation and analysis of relevant policies and basic principles**

Reviewing the relevant documentation on a sample basis, including SCG sustainable development policies, management and reporting structures and documentation;

- **Assessment of the processes and data consolidation**

Reviewing the appropriateness of the management and reporting processes for sustainability reporting; and assessing the consolidation process of data at the corporate level.

- **Assessment of GRI Application Level**

Assessing the GRI Application Level of the GRI G3 Sustainability Reporting Guidelines applied to the SCG Sustainability Report 2011.

I believe that the information I have obtained is sufficient and appropriate to provide a basis for my conclusions.

Conclusions

Based on my work described and the criteria detailed in this report, in all material respects, nothing has come to my attention that causes me to believe that the selected subject matter for the year ended 31 December 2011 has not been prepared in accordance with the Reporting criteria.

Recommendations

From my work, I have provided the following recommendations to the management, which have been agreed:

- The internal sustainability reporting guidelines and related policies and procedures of SCG Group have been developed, reviewed and regularly updated on an ongoing basis. I advise an enhancement of communication of the guidelines and the related documents to the responsible personnel at the business unit level and the plant level on a regular basis to ensure mutual understanding of the updates so that the procedures are actually implemented and complied with at all levels of the SCG Group.
- Enhancement of SCG data quality governance by performing a spot check for accuracy of the reporting, taking a risk based approach on a regular basis at plant, BU and Corporate levels and integrate the involvement of the Internal Audit function, as independent parties when necessary, in the review process to ensure accurate and complete reporting. Analytical review procedures are also recommended during the checking process of the data reported.



Svasvadi Anumanrajdhon

Partner

24 February 2012

PricewaterhouseCoopers ABAS Limited

SCG Road to Sustainability





- The Environmental Conservation and Safety Committee
- Environmental Conservation Policy

1995

- SCG Environmental Indicator Standards

1996

- SCG Code of Conduct (1st Revision)
- ISO 14001 Certificate for Environmental Management System

1997



- The Governance and Nomination Committee
- Guidelines for Environmental Conservation and Safety
- Sustainability Report



- The Donations Committee
- SCG Corporate Governance Handbook
- Safety Performance Assessment Program (SPAP)
- Sustainability Report

2002



- SCG Corporate Governance Handbook (1st Revision)
- SCG Sustainable Development Committee
- Guidelines for Sustainability Development
- Intellectual Property Policy
- Conserving Water for Tomorrow Handbook
- Greening Supply Chain Program
- Sustainability Report

2003



- Silver Class in the Sector of Building Materials & Fixtures from SAM/DJSI
- SCG Code of Conduct (4th Revision)
- SCG and Business Operation following the Principles of Sufficiency Economy
- SCG Vision
- SCG Contractor Safety Certification System (SCS)
- SCG Safety Framework
- SCG Distribution's Recycle Handbook
- Sustainability Report

2006



- Gold Class in the Sector of Building Materials & Fixtures from SAM/DJSI
- Stakeholder Engagement Policy
- CSR by Heart: Anyone Can Do It Handbook
- SCG SD Highlight
- Sustainability Report

2007



- Sector Leader and Gold Class in the Sector of Building Materials & Fixtures from SAM/DJSI
- Green Happiness on the Salinity Land Handbook
- Repairing Homes to Bring Back Happiness Handbook
- Home Repairing After Flood Handbook & DVD
- SCG Model: Lessons Learned from the Flood Crisis Handbook
- ISO 50001 Certificate for Energy Management System
- The 3rd Community Satisfaction Survey
- Sustainability Report

2010

2011

Pride of SCG



The Best Pavillion Award
and The Popular Vote at BOI Fair 2011



Ishikawa-Kano Award
Mr. Kan Trakulhoon, President & CEO, SCG



SET Award of Honor in
Best Corporate Social Responsibility

The Siam Cement Public Company Limited

- HRH Princess Maha Chakri Sirindhorn's Trophy for Thailand Corporate Excellence Awards 2010 from Thailand Management Association (TMA) and Sasin Graduate Institute of Business Administration of Chulalongkorn University
 - Human Resource Management for the 10th consecutive year
 - Innovation Excellence for the 6th consecutive year
 - Corporate Social Responsibility Excellence
 - Product and Service Excellence
 - A Decade of Excellence: Hall of Fame
- Sector Leader in DJSI Building Materials & Fixtures by SAM and ranked Gold Class, the highest group, for the 4th consecutive year
- SET Award of Honor in Best Corporate Social Responsibility for the 4th consecutive year from the Stock Exchange of Thailand and Finance and Banking Magazine (2007-2010)
- Investor Relations Awards from the Stock Exchange of Thailand and Finance and Banking Magazine
- The Best Company from Southeast Asia's Institutional Investor Corporate Poll of Alpha Southeast Asia magazine
 - Most Organized Investor Relations
 - Strongest Adherence to Corporate Governance
 - Most Consistent Dividend Policy
- Asia's Best Companies 2011 from FinanceAsia
 - Best Managed Company Award
 - Best Corporate Governance Award
 - Best Corporate Social Responsibility Award
 - Most Committed to a Strong Dividend Policy
 - Best CFO Award
- Ishikawa-Kano Award from Asian Network for Quality (ANQ) for Mr. Kan Trakulhoon, President & CEO, SCG
- The Best Pavillion Award and The Popular Vote at BOI Fair 2011 from Thailand Board of Investment (BOI)
- Superbrands 2010 award from the survey based on consumers, executives and specialists in marketing, advertising, public relations and Thailand Superbrands Council.

SCG Chemicals

SCG Chemicals Co., Ltd.

- Prime Minister Road Safety Award 2011 from Don't Drive Drunk Foundation.

Thai Polyethylene Co., Ltd.

- Outstanding Award for Safety, Occupational Health and Working Environment for the 5th consecutive year from The Ministry of Labour

Rayong Olefins Co., Ltd.

- EIA Monitoring Award for the 5th consecutive year and Gold class for the 2nd consecutive year from The Ministry of Natural Resources and Environment

- Outstanding Award for Safety, Occupational Health and Working Environment for the 8th consecutive year from Ministry of Labour

Siam Mitsui PTA Co., Ltd.

- Outstanding Award for Safety, Occupational Health and Working Environment for the 11th consecutive year from The Ministry of Labour
- Carbon Reduction Label for PTA from Thailand Environmental Institute (TEI)

Thai Polypropylene Co., Ltd.

- Carbon Reduction Label for Polypropylene product from Thailand Environmental Institute (TEI)

Thai MMA Co., Ltd.

- Carbon Reduction Label for MMA product from Thailand Environmental Institute (TEI)

Map Ta Phut Olefins Co., Ltd.

- Certification of Role Model company in applying ISO 26000: Social Responsibility Standard from The Ministry of Industry

SCG Polyolefins Co., Ltd.

- Special Award for TPM Achievement from Japan Institute of Plant Maintenance (JIPM)

Thai Plastic and Chemicals Public Company Limited

- Award for Excellence in Consistent TPM Achievement from Japan Institute of Plant Maintenance (JIPM)

SCG Paper

14 companies in SCG Paper

- Corporate Social Responsibility Award (CSR-DIW) from Department of Industrial Works

Thai Paper Co., Ltd.

- Special Award for TPM Achievement from Japan Institute of Plant Maintenance (JIPM)

Siam Kraft Industry Co., Ltd.

- Award for Excellence in Consistent TPM Achievement from Japan Institute of Plant Maintenance (JIPM)

Siam Cellulose Co., Ltd., Thai Cane Paper Public Company Limited, and Thai Union Paper Public Company Limited.

- Award for TPM Excellence, Category A from Japan Institute of Plant Maintenance (JIPM)

Thai Union Paper Public Co., Ltd.

- Golden Award (Task Achieving QCC Prize) and Silver Award (Service QCC Prize) in Thailand Quality Prize 2011 from Technology Promotion Association (Thailand-Japan)

Phoenix Pulp and Paper Public Company Limited

- Outstanding Award for Safety, Occupational Health and Working Environment for the 6th consecutive year from The Ministry of Labour





Outstanding Award for Safety, Occupational Health and Working Environment

Thai Cane Paper Public Company Limited-Kanjanaburi Plant

- Outstanding Establishment for Achievement on Labor Relations and Welfare (for no labour union) for the 5th consecutive year from The Ministry of Labour
- The Silver Medal Award for completing one year without a lost-time accident (zero accident) from The Ministry of Labour

Thai Containers (TCC) Co., Ltd-Pathum Thani Plant

- Outstanding Establishment for Achievement on Labor Relations and Welfare (for no labour union) from The Ministry of Labour
- Outstanding Award for Safety, Occupational Health, and Working Environment for the 6th consecutive year from The Ministry of Labour

Thai Containers Saraburi Co., Ltd.

- Outstanding Award for Safety, Occupational Health, and Working Environment for the 3rd consecutive year from The Ministry of Labour

Thai Containers Group Co., Ltd-Ratchaburi Plant

- The Silver Medal Award for completing one year without a lost-time accident (zero accident) from The Ministry of Labour

Thai Containers Group Co., Ltd-Navanakorn Plant

- Outstanding Award for Safety, Occupational Health and Working Environment for the 3rd consecutive year from The Ministry of Labour

Thai British Security Printing Public Company Limited

- The first printing publisher in Thailand with certification of Information Security Management System – ISO/IEC 27001:2005 for Information security management systems from British Standard Institute (BSI)



The Silver Medal Award for completing one year without a lost-time accident (Zero accident)

SCG Cement

The Siam Cement (Ta Luang) Co., Ltd.

- Award for Excellence in Consistent TPM Achievement from Japan Institute of Plant Maintenance (JIPM)
- Outstanding Limestone Mine and Crushing Plant with logistics management from The Ministry of Natural Resources and Environment
- Corporate Social Responsibility for Manufacturing Excellence In Mining from The Ministry of Natural Resources and Environment
- The Gold Medal Award for Industrial Waste Management from Department of Industrial Works, The Ministry of Industry
- Outstanding Establishment for Achievement on Labor Relations and Welfare Environment for the 5th consecutive year (for no labour union) from The Ministry of Labour

The Siam Cement (Kaeng Khoi) Co., Ltd.

- Green Mining Award 2011 from The Ministry of Industry
- The Gold Medal Award for Industrial Waste Management (101) from Department of Industrial Works, The Ministry of Industry
- Corporate Social Responsibility Continuous Award (CSR-DIW) from Department of Industrial Works
- Corporate Social Responsibility Networking Award (CSR-DIW) from Department of Industrial Works



Award for Excellence in Consistent TPM Achievement

- Outstanding Establishment for Achievement on Labor Relations and Welfare Environment for the 5th consecutive year (for no labour union) from The Ministry of Labour
- Outstanding Award for Safety, Occupational Health and Working Environment for the 3rd consecutive year from The Ministry of Labour

The Siam Cement (Thung Song) Co., Ltd.

- Outstanding Establishment for Achievement on Labor Relations and Welfare Environment for the 5th consecutive year (for no labour union) from The Ministry of Labour

The Siam Cement (Lampang) Co., Ltd.

- Outstanding Award for Energy management from The Ministry of Industry
- Green Mining Award 2010 from The Ministry of Industry
- Corporate Carbon Footprint Award from Thailand Greenhouse Gas Management Organization (Public Organization) and National Metal and Materials Technology Center
- Taxpayer Recognition Award from Revenue Department, Ministry of Finance
- Outstanding Establishment for Achievement on Labor Relations and Welfare Environment for the 5th consecutive year (for no labour union) from The Ministry of Labour

SCI eco services Co., Ltd.

- The Gold Medal Award for Industrial Waste Management (106) from Department of Industrial Works, The Ministry of Industry

The Concrete Products and Aggregate Co., Ltd.

- Outstanding Award for Safety, Occupational Health and Working Environment for Nakhon Panum Plant from The Ministry of Labour

SCG Building Materials

SCG Building Materials Co., Ltd.

- IP Champion 2011 award for trademark from Intellectual Property Rights Coordination Center, The Ministry of Commerce

Thai Ceramic Co., Ltd.

- Good Design Award (G-Mark) 2011 for COTTO Ceramic Tile (GRAND CALCUTTA SERIES) from Japan Industrial Design Promotion Organization (JIDPO)
- Outstanding Award for Safety, Occupational Health and Working Environment for the 5th consecutive year from The Ministry of Labour

Siam Sanitary Fittings Co., Ltd.

- Good Design Award (G-Mark) 2011 for Sanitary and Fitting (AQUA TWI) and Water Saving Sanitary and Fitting (CT 1052) from Japan Industrial Design Promotion Organization (JIDPO)
- Outstanding Award for Safety, Occupational Health, and Working Environment from The Ministry of Labour

Thai-German Ceramic Industry Public Company Limited

- Carbon Footprint Label for Cutting edge of floor tiles 16"X24" from Thailand Greenhouse Gas Management Organization (Public Organization)



Outstanding Award for Safety, Occupational Health and Working Environment



CSR-DIW: Corporate Social Responsibility



Good Design Award (G-Mark) 2011



- The 2nd Winner (Silver Award) for Kaizen Suggestion System and The 2nd Winner (Silver Award) for Automation Kaizen in Thailand Kaizen Award 2011 from Technology Promotion Association (Thailand-Japan)

The CPAC Roof Tile Co., Ltd.

- Corporate Social Responsibility Networking Award (CSR-DIW) from Department of Industrial Works
- SCG CPAC Monier Roofing School was certified The First of Test Center for National Skill Standard (Roofing Installation Skill)
- Outstanding workplace award for Workplace Learning from The Ministry of Labour
- Outstanding Establishment for Achievement on Labor Relations and Welfare Environment for Nakonprathom plant from The Ministry of Labour
- Outstanding Award for Safety, Occupational Health and Working Environment from The Ministry of Labour

The Siam Ceramic Group Industries Co., Ltd.

- Carbon Footprint Label for Cutting edge of floor tiles 8"X10" from Thailand Greenhouse Gas Management Organization (Public Organization)
- Outstanding Award for Safety, Occupational Health and Working Environment from The Ministry of Labour

SCG Landscape Co.,Ltd.

- White Factory Award (Drug Free Factory) for Khon Kaen plant from The Ministry of Labour

Siam Fiberglass Co.,Ltd.

- Honorable Mention of STI Thailand Award 2011 for Thermal Insulation and Acoustic Insulation from The Ministry of Science and Technology

Mariwasa-Siam Ceramics, Inc.

- Quality Management Award of the Philippines

PT. Surya Siam Keramik

- Certification of Indonesian National Standard (SNI)

PT. Siam-Indo Gypsum Industry

- Best Buy Product Award (Woodplank category) from Bintang Home magazine

SCG Distribution

SCG Trading Co., Ltd.

- ISO 9001:2008 Certification for Coal Business in the Philippines and Vietnam

SCG Logistics Management Co., Ltd.

- Export Logistics Model Award 2011 (ELMA 2011) from Thailand International Logistics Fair 2011
- Outstanding Award for Excellence Corporate NGV Brand Station and Excellence 5S Award for NGV Station





SCG ensures this report is environmentally friendly. All paper is 100% made from EcoFiber using Green Process by SCG Paper. Soy ink is used in the printing process without laminating or any special printing technique.



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