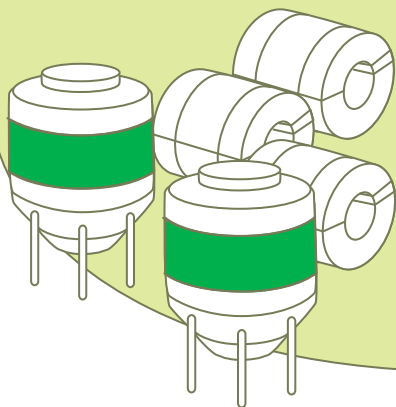




Corporate Social Responsibility Report 2014  
Sahaviriya Steel Industries Public Company Limited

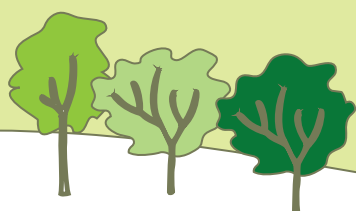


innovate • strength



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## Message from the Group CEO and President

Dear stakeholders,

Sahaviriya Steel Industries Public Company Limited or "SSI" strongly believes that Corporate Social Responsibility (CSR) plays an important role in leading the Company to sustainability. Therefore, SSI has continually developed and advanced its CSR process every year, from simply starting in the first stage by providing the society and community with assistance and support, to integrating the CSR awareness into the operating process of the steel industries, so called CSR-in-process, which covers economic, social, environmental and corporate governance aspects. In 2014, SSI has improved to the further stage, whereas we delivered value or positive impact from our operation by creating shared value from which both SSI and the society mutually gained benefit.

SSI's CSR Philosophy reflects its result in the three levels as follows:

### Product Level

A variety of Premium Value Products (PVP) have been developed to not only increase the Company's sales with higher margin, generating worthiness in efficient utilisation of raw materials, but also create value-adding for our customers and enhance their competitiveness. In 2014, SSI has delivered 561,975 tons of PVP, or accounting for 38% of the total sales. Furthermore, we have been continuously pushing other new products under research and development into the market, in order for new customers to gain access to our products.

In 2014, with our mission and strategy - Innovation and Integration, SSI has the total Steel Sales Volume of 3,318 thousand tons. The Company's business activities have contributed to Thailand the shared economic value totally worth of Baht 5,531 million. (More details of operating performance can be found in the Message from the Group CEO and President in the Annual Report 2014.)

In 2014, SSI Teesside Steelworks in the UK has exported Steel Slab worth USD 1.54 billion, or approximately 2.9 million tons. The volume is expected to reach 3.2 million tons in 2015.

### Value Chain Level

SSI has closely cooperated, in several matters, with its business partners, contractors and the community. The Supplier-Service Provider Development Project, carried out along with the quality, price and delivery planning process, has created market opportunities for suppliers. SSI has also benefited from faster delivery of products that meet the required quality. This has helped lower costs incurred on sourcing substitutes of unnecessarily higher quality. In order to promote environmentally-friendly products, in 2014, SSI has purchased products and services with attached green assurance labels announced by the Thailand Environment Institute according to the list of 10 product groups.

SSI's Safely Steel Delivery Project has not only decreased the traffic impact on the community, but also promoted safety in lives and assets for 48 times (theft tracking 48%, accident investigation 29% and dispute investigation 23%). We have also created jobs and generated income for 293 community businesses and enterprises by emphasising on purchases of local products and services from the community, totally worth of Baht 216 million.

Our employment policy, focusing on hiring local people living in the nearby area, not only enhances the community's economy, but also strengthens relationship among members in the family institution. As of 31 December 2014, SSI Group in Bangsaphan has 2,068 employees, 1,572 or 76% out of which are the residents of Prachuap Khiri Khan area. Additional 1,100 workers are hired by an outsourcing contract basis. At SSI Teesside Steelworks, 95.75% of 2,002 employees are the residents of the site-nearby area. Another 1,226 workers are hired by an outsourcing contract basis.

In 2014, statistics of all accidents including the Lost Time Injury Frequency Rate (LTIFR) of SSI Group moderately increases from 1.5 in 2013 to 2.0, even though SSI Bangsaphan Steelworks has run the Behavior-Based Safety Project as well as the Zero Accident Campaign, resulting in a decrease of all work-related accidents approximately 49%, down from that of the previous year. Also, SSI Bangsaphan Steelworks still continues to follow the plan to lower and control the risk for work safety.

SSI Teesside Steelworks has implemented the monitoring system and organised the training sessions on occupational health and safety in the workplace for both employees and contract-based workers, so that they can handle and solve the problems when accidents occur, as well as prevent any potential problems for ultimate safety.

Energy-preservation measures taken at SSI Bangsaphan Steelworks during 2011 - 2014 have been able to accumulatively reduce the heat consumption for 20,604,613 megajoules. In 2014, we can lower the yield loss down to a better-than-targeted rate at 1.66%.

SSI Teesside Steelworks has implemented the Efficient Energy Utilisation Project through various energy-saving activities, with the long-term goal of being energy self-reliant. We aim to utilise energy from the electricity generating plant fueled by exhaled gases in the production process. Moreover, SSI Teesside Steelworks has been approved for ISO 14001:2004 by the UK Environment Agency, which reflects that the Company's environmental management meets the international standard.

### Local Community Level

In the area of Bangsaphan District, Prachuap Khiri Khan Province, where SSI Bangsaphan Steelworks is located, we have cooperatively initiated, participated and supported in Bangsaphan community development activities of 29 projects



which cover education and youth, environmental management, career development and quality of life.

The Sahaviriya Group Personnel Development for Steel Industries Project, in collaboration with the Bangsaphan Industrial and Community Education College, have helped to elevate the level of knowledge on metallurgy for educational institutions and youngsters in the area, thus enhancing our access to labor. Until 2014, the total of 499 persons in 7 generations already graduated this training programs, and 116 of them have joined SSI and Sahaviriya Group. Sahaviriya Fund for Bangsaphan Educational Development Project, initiated in 2011, has finished its first generation in 2014. It was our great pleasure that the 2 funded schools have developed and performed satisfactorily. In 2013, Ban Don Sa-nga School had better rankings at the 17<sup>th</sup> and the 39<sup>th</sup>, among other schools in the same educational zone, jumping up from the 23<sup>rd</sup> and the 72<sup>nd</sup> in 2010, based on the scores of the Ordinary National Educational Test (O-NET) for Prathom 3 and Prathom 6, respectively. In addition, Ban Suan Luang School could successfully put 100% of its students from Montessori education system into the traditional literacy-focused primary schools and had an effective student follow-up system.

The Two Wheels Preserve Bangsaphan Project has brought a coalition of bike-for-health lovers in the area among several local groups to join the social activities that helps in promoting Bangsaphan a nice lovely town for living. In 2014, this project could reduce the carbon dioxide emission up to 3,321.20 kilograms of carbon dioxide equivalent. Furthermore, the micro-finances established by Sahaviriya Group, to financially support the community, have expanded their operating network to totally 18 areas, with the total fund of Baht 20,137,190 and 2,909 members having benefited from this project.

In 2014, the Culture Development on Volunteering - SSI Arsa Project under the name "SSI 25<sup>th</sup> Anniversary, 250 Virtues" has organised totally 22 activities in which 531 employees participated and 320 local villagers volunteered, equivalent to 4,428 and 2,560 working hours, respectively. This volunteer project has also been carried on to other companies throughout the whole Group.

In relation to the social capital development, the Company, in cooperation with allies in the steel industries, have successfully organised the "7<sup>th</sup> Thailand Iron Man Mini Marathon". We have donated all the revenues from this event, without expenses deduction, totally Baht 2.7 million, to support 24 charitable foundations for the underprivileged. The donations provided by 7 events have accumulated to Baht 16 million in total.

At SSI Teesside Steelworks in the UK, we coordinated with the local labor union for fundraising in term of food provisions and necessary commodities to support the underprivileged in the local area and activities for charities arranged by the local community.



**Win Viriyaprapaikit**  
Group CEO and President

Last year, there were two meetings held with local resident groups to provide updates on environmental management, to exchange ideas between SSI UK and the Teesside community continuously and to foster a network relation with the community.

In addition to the listed initiatives, the Company adopted the Anti-corruption policy and guidelines, and approved the amendment regarding Whistle Blowing which adds clarification of the protection measures for informants or whistleblowers. These were communicated to SSI staff throughout the Company. Alongside this, the Good Corporate Governance Committee was set up to put the policy into practice along with assessment.

#### Direction of Corporate Social Responsibility (CSR) in 2015

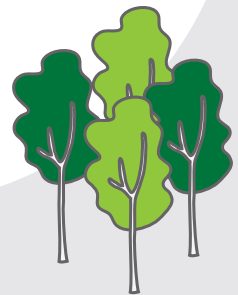
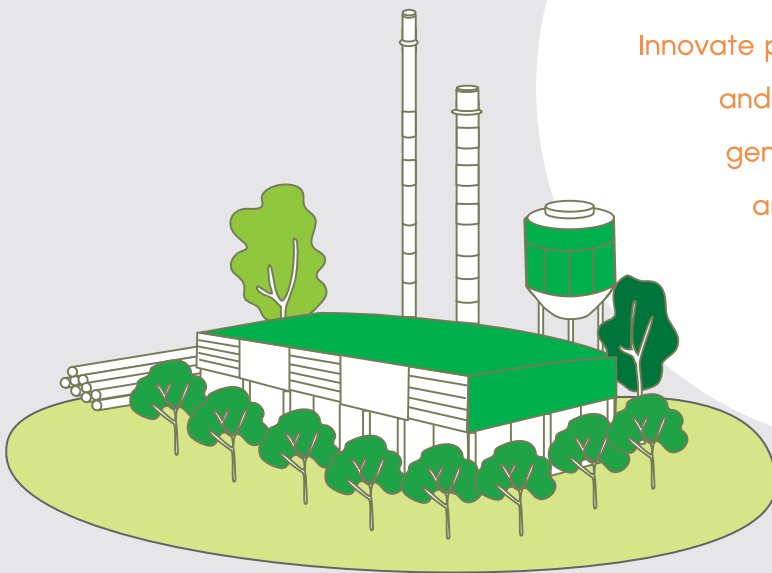
We continue to drive forward our CSR activities under the concept "innovate • strength", and intend to extend the guideline to related parties in the supply chain, by utilising the expertise in the steel industries with the highlight at high efficiency and effectiveness. Our employees are well aware of the duties and responsibilities for the society and community, and commit to improve the work plan in response to concerned clarification and social expectation from all groups of stakeholders.

Innovation is definitely a crucial key leading us to this opportunity. Therefore, every business unit and group function aim at building innovation responsive to the need and expectation of all stakeholders, corresponding to the advance for best practice and the new ways of work function with more efficiency, and sharing them throughout the whole Group.

We strongly believe that the CSR activities in forms of creating shared value within the clarified operation framework will respond to the social issues and expectation of all stakeholders, allowing SSI and its stakeholders to grow together.

## Vision & Mission

Innovate premium value steel products  
and services for customers;  
generate consistent profit  
and sustainable value  
for stakeholders

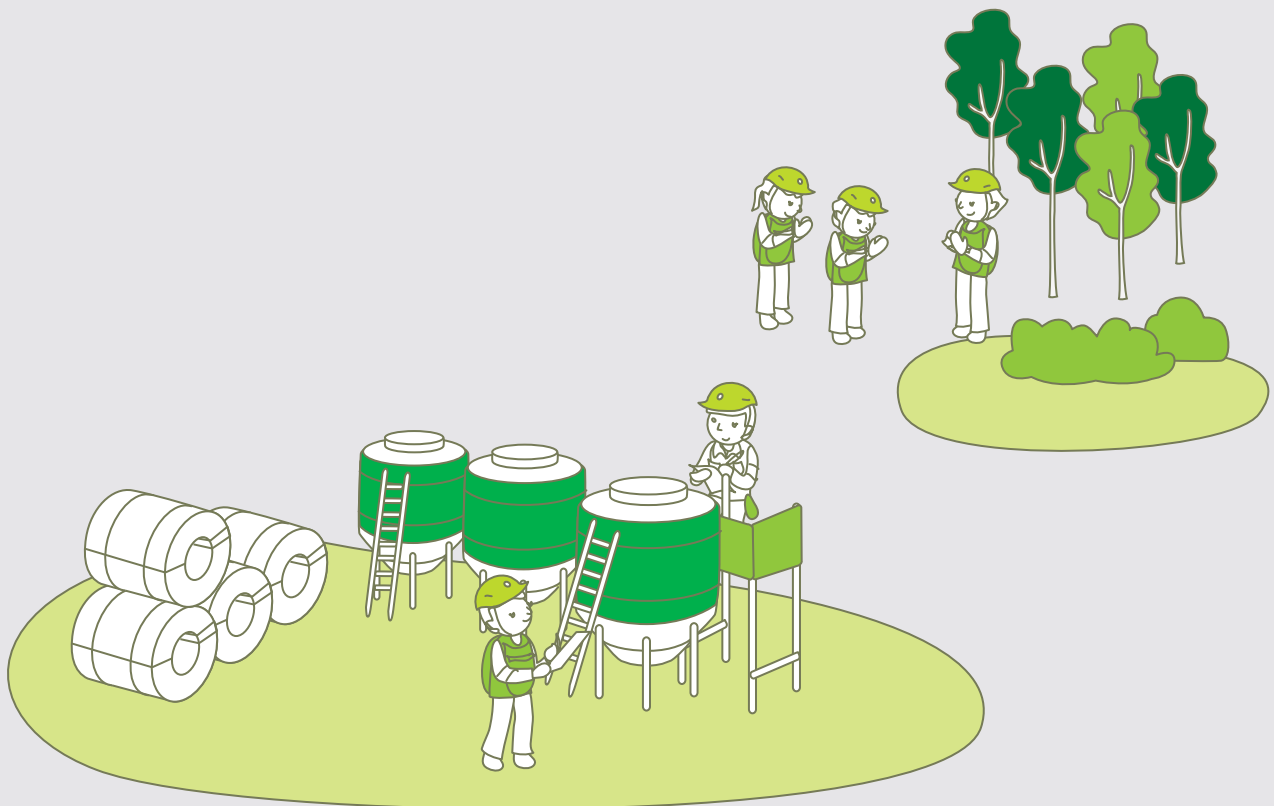


## Values

					
integrity	Fighting spirit	aim for excellence	can change	teamwork	service-mind
We do what we say	Never give up	The best is yet to be	Be the leader of change	One for all, all for one	Deliver more than expected

Sahaviriya Steel Industries Plc. or SSI is the ASEAN's largest fully-integrated flat steel producer with 4 million tons annual capacity of hot rolled steel sheet in coils (HRC). SSI endeavors to supply premium-grade steel sheets to cater for the region's growing demand in various sectors such as automobile, energy, transportation and construction sectors. In the upstream side, SSI has acquired SSI Teesside, a 3.6 million tons per annum fully-integrated iron-steel making plant located in Redcar in the northeast of UK, through a wholly-owned subsidiary Sahaviriya Steel Industry UK Limited ("SSI UK"). SSI Teesside supplies premium-grade steel slabs to feed the growing demands from SSI, as well as other rolling mills around the world. In the downstream side, SSI has investments in joint-venture downstream plants: Thai Cold Rolled Steel Sheet Plc. ("TCRSS") - Thailand's first and largest cold roll mill, and Thai Coated Steel Sheet Co., Ltd., ("TCS") - Southeast Asia's first and largest electro-galvanising line.

All SSI's plants in Thailand are located on a world-class coastal industrial site in Bangsaphan, Prachuap Khiri Khan Province, 400 km. south of Bangkok on the western peninsula of Thailand, a site efficiently integrated with a privately-owned deep-sea port (Prachuap Port Co., Ltd., or PPC), which allows import of raw materials and export of finished products on a large scale. SSI extends its engineering capabilities into its fully-owned subsidiary, West Coast Engineering Co., Ltd., or WCE, which specialises in engineering, maintenance, spare parts production, fabrication, erection and commissioning service. Our people's passion and energy is captured in the Company's vision statement - "innovate premium value steel products and services for customers; generate consistent profit and sustainable value for stakeholders." For more information, please visit <http://www.ssi-steel.com>.



100%

35.19%

## Upstream Business



Sahaviriya Steel Industries UK Limited

- Manufacturer of slab

## Hot Rolled Coil Business



Sahaviriya Steel Industries  
Public Company Limited

- Manufacturer of hot-rolled coils
- Manufacturer of hot-rolled coils picked and oiled

## Cold Rolled Coil Business



Thai Cold Rolled Steel Sheet  
Public Company Limited

- Manufacturer of cold-rolled steel sheet



Support core business



Core business



Increase revenues  
and enhance sustainable growth



3.7%

## Coated Steel Sheet Business



Thai Coated Steel Sheet Company Limited

- Manufacturer of electro-galvanised steel sheet



Increase revenues and enhance sustainable growth

51%

## Port Business



Prachuap Port Company Limited

- Provider of deep-sea port



Reduce costs and increase revenues

99.99%

## Engineering Business



West Coast Engineering Company Limited

- Provider of engineering and maintenance services



Reduce costs and increase revenues

## Corporate Social Responsibility Concepts and Policies

Sahaviriya Steel Industries Public Company Limited, or SSI, implemented Corporate Social Responsibility policies based on its business philosophy and business ethics that have been molded in the way of a pushing forward, driving as well as sustainable development and growth.

### Business Philosophies

#### 1. Devotion to Excellence

SSI is determined to do all we can to continuously improve ourselves and our operations. Through study, research, development, and upgrading, we aim for the highest we can attain. This effort to develop and break new records of excellence must be perpetual in all aspects of our operations.

#### 2. Adherence to Quality of Products and Services

SSI's products and services are all designed with the best interests and satisfaction of the customer in mind. We believe that our customers will always be willing to pay for the best, and that no improvement is of any use if it does not meet our customers' needs.

#### 3. Belief in the Value of Our Personnel

SSI realise that good employees are the main reason for an organisation's success. For this reason, we take care to hire only the best to work with us, and provide fair and attractive remuneration packages that include constant training and education. Quality of life for our employees is paramount; their occupational health and safety are assured.

#### 4. Commitment to Honesty and Ethics

SSI is fully resolved to conduct our business honestly and ethically. We believe that honesty and ethics in business bring good order to society and progress to the nation, and assure long-term prosperity in commercial dealings, for that reason we ethically conduct our business with all stakeholders, including shareholders, investors, customers, business partners, creditors, competitors, employees, the local community, and society in general.

#### 5. Dedication to Our Social and Environmental Responsibilities

SSI firmly believes that we are part of society. Any change in society is certain to affect our business. We are convinced that business and society must all be developed in concert to ensure a sustainably successful enterprise. Our responsibility, therefore, is to take part in continual maintaining, developing and conserving of a good natural and social environment.

### Business Ethics of the Company

In conducting the business, the Company adheres to the principles of accountability, transparency, integrity, and business competitiveness by acting in the best interest to all stakeholders in an equitable manner.

#### 1. Shareholders

The Company realises the shareholders are the owners of the Company and the Company has the duty to generate value-added to the shareholders in a long term. The Company has, therefore, stipulated a guideline for the directors, executive, and employees to perform the followings:

- 1) Perform duties to the fullest capacity with integrity, care, prudence and fair treatment for the best interest of all shareholders
- 2) Present the operating performance report, financial status report and other reports with accuracy and completeness and in a timely manner
- 3) Report a trend of the Company, both on the positive and negative sides, to all shareholders in an equitable manner based upon sufficient factual basis, quantitative information and rationale.
- 4) Ensure that there is no exploitation of undisclosed information or any wrongful action for improper advantage for oneself, or others, which may cause conflict of interest for the Company.

#### 2. Customers

The Company values the vital role and satisfaction of customers which contribute to success of the Company's businesses. Therefore, the Company has a strong intention to pursue the methods that are reliable to customers and can fulfill the needs of customers in a more efficient and effective manner. The guidelines are as follows:

- 1) Deliver quality products and services that meet or exceed the expectation of customers
- 2) Communicate with customers with courtesy and ensure that complete, accurate and up to date information of products and services is given to the customers. The Company will not misrepresent the products and services in terms of quality, quantity or any other conditions.
- 3) Strictly follow the conditions applied to the customers. In case the conditions cannot be satisfied, the Company will inform the customers without delay to figure out a possible solution together.
- 4) Establish a system and channel that allows customers to make complaints about quality, quantity and safety of products and service, and respond to the complaints in a timely manner.
- 5) Strictly protect confidential information of customers and will not use the information for other interests in an improper respect.
- 6) Provide instructions on the use of products and services in an efficient manner to maximise benefits.

### 3. Suppliers

The Company realises that ethical conduct with suppliers should be based on fair benefits to both parties. Thus, the Company commits to provide facts and accurate reports, implements according to agreements, negotiates and seeks solutions based on business relationship as well as avoids the situation which will result in a conflict of interest. The guidelines are as follows:

- 1) Never request, receive or pay any fraudulent benefits from and to suppliers
- 2) With an evidence indicating a fraudulent benefit has been claimed, received or paid, disclose such relevant information to the suppliers and together figure out the solution in a timely manner
- 3) Strictly perform in accordance with the conditions under the agreements and inform the suppliers in advance in case of inability to meet any condition.

### 4. Competitors

The Company realises the commitment to treat its competitors fairly. The guidelines are as follows:

- 1) Never seek any confidential information of the competitors by unfaithful or improper means
- 2) Never destroy the competitors' reputation by offensive accusations.

### 5. Employees

The Company realises that employees are valuable resources for the success of the Company; thus the employees are treated fairly in terms of compensation, opportunity and development, and potential based on humanity practices regardless of their race, religion, gender or physical condition. The guidelines are as follows:

- 1) Treat employees with respect to individual value and dignity
- 2) Provide fair compensation to employees
- 3) Provide a safe working environment to employees considering their lives and properties at all times
- 4) Appoint, rotate, promote and demote employees with sincerity and based on knowledge, merit and suitability
- 5) Value development of knowledge and ability of all employees
- 6) Avoid any unfair action which may affect the job security of the employees or any action which may threaten or cause pressure to mental health of employees

### 6. Supervisory Authorities

The Company values its duty to comply with law and business practices. The Company strictly conducts the business under laws, articles, regulations and standards imposed by supervisory authorities as well as cooperate with supervisory authorities in relevant matters.

### 7. Society and Community

The Company recognises accountabilities towards society and community as the core of business, with full realisation of the possible effect on natural resources and the environment. It has constantly provided support to a number of activities to improve society and community, safeguard and rejuvenate natural resources as well as to enhance the community capacities in an effort to bring about sustainable development.

The Company establishes a concept for CSR operation and communication guidance as follows:

**innovate • strength**

# Corporate Social Responsibility Management System

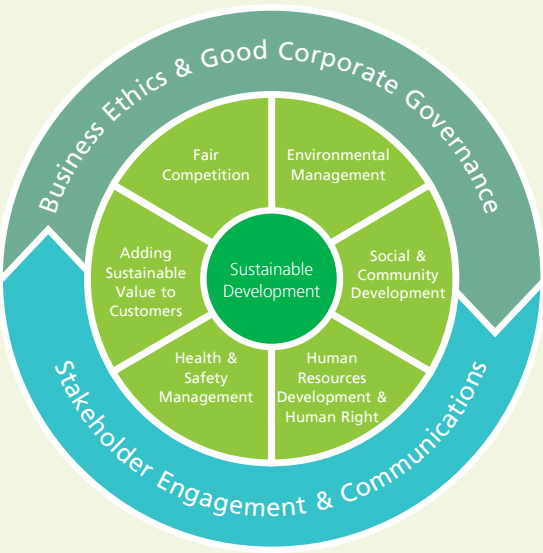
The Company has established the Corporate Social Responsibility Management Committee, which consists of executives from each division. Their duties and responsibilities are to implement and follow up on the CSR plan ensuring it to be in line with relevant policies. In addition they allocate the resources necessary for CSR operation and promote the work of the CSR Management Sub-Committee, which the Committee proposed to the President for appointment. The objective of the Sub-Committee and scope of their responsibility is to support the work of CSR Committee.

The Committee reports its CSR operating result to the Good Corporate Governance Committee (CG) quarterly. The duties and responsibilities of CG Committee are to provide an opinion to the management regarding CSR and to monitor them in establishing a clear action plan. Furthermore they follow up on the implementation of the management plan and then submit the results to the Board of Directors.

## CSR Management System Structure



## SSI CSR Framework







## Economic Overview

The International Monetary Fund (IMF) reported global economic growth of approximately 3.3% in 2014, maintained at the same level as 2013 but below expectation. The U.S. and the U.K. economy growth has gained momentum; unemployment rate continues to improve, while monetary policy remains extremely accommodative. On the other hand, the economic recovery in Euro Area and Japan has been accelerating slowly. Meanwhile, China is undergoing a carefully managed economic slowdown. In addition, the oil price has fallen since the end of June 2014 from higher oil supply of manufacturers outside the Organization of Petroleum Exporting Countries (OPEC) while OPEC decided not to reduce their production capacity, affecting crude oil exporters and metal prices in heavy industries. However, the drop in oil price will stimulate the global economy in the long run.

For the prospect of Thai economy, Office of the National Economic and Department Board (NESDB) projected Thai economy to increase approximately 1.0% in 2014, declining from 2.9% growth in 2013 mainly due to the delay of global economic recovery, especially in countries where Thailand's main trading partners reside such as the United States, Japan and the EU. There is also lower potential of households' consumption and industrial production which has reflected through decreased car sales volume. Moreover, investment in public and private sector had reduced and the recovery in the tourism sector was slower than expected.

## Business's Strategy

The global and domestic economy has experienced weak growth and slow recovery last year. The Company has closely monitored the situation and implemented strategic plans for appropriate business management as follows:

### Marketing Strategy

The Company cautiously managed the procurement of raw material; focusing on production for premium value products which is value added and lower price fluctuation. The Company closely monitored of domestic and overseas markets in order to analyse and consider the sale of product;

including simultaneously seek for new sources of imported raw materials with high quality but low cost. In addition the Company's focus on controlling a proper level of inventories to manage the production plan in cooperation with sales projection had lead to shorter delivery lead times. Furthermore, the Company closely monitored on the dumping situation of imported products and the government's price control policy in order to protect domestic steel industry.

### Production Strategy

The Company has improved the production process, reviewed the inventory management plan, and introduced new technologies to enhance the quality control efficiency and accuracy of the production process leading to a significant reduction of inferior goods. The Company also sourced an automatic system to be used in product quality management to accommodate the ability to meet the customer requirements. In addition, the Company has encouraged establishing a working team for the development of the production process aiming to figure out solutions for particular problems. The working team is also responsible for efficiency enhancement and cost reduction, as well as quality improvement.

Furthermore, the Company has prepared its personnel with necessary equipment and practices to be ready for emergency incidents according to the natural disaster handling plan and continuous training courses on an annually basis. Additionally, the Company possesses insurance covering property damages, loss from business interruption, damages on goods and products caused by natural disasters from flood, storm, tsunami, thunderbolt, earthquake and landslide to relieve cost of damages, as well as loss in case of fire in all circumstances.

### Financial Strategy

#### 1. Exchange Rate Management

The Company has managed the foreign exchange rate risk by using the matching method. The method is conducted by matching the income received from one trading partner to expenses, with the same currency, owed to another trading partner. The rest of the unmatched transactions are covered by forward contracts without any speculation.

## 2. Trade Credit Management




The Company has emphasised on the importance trade credit, conducted efficient control of credit collection, implemented suitable internal control, and applied a strict credit policy. The Company has also reviewed credit granted and credit approval authority to establish the consistent trade credit standards and to limit the level of risk from non generated income not to impact on the Company's performance.

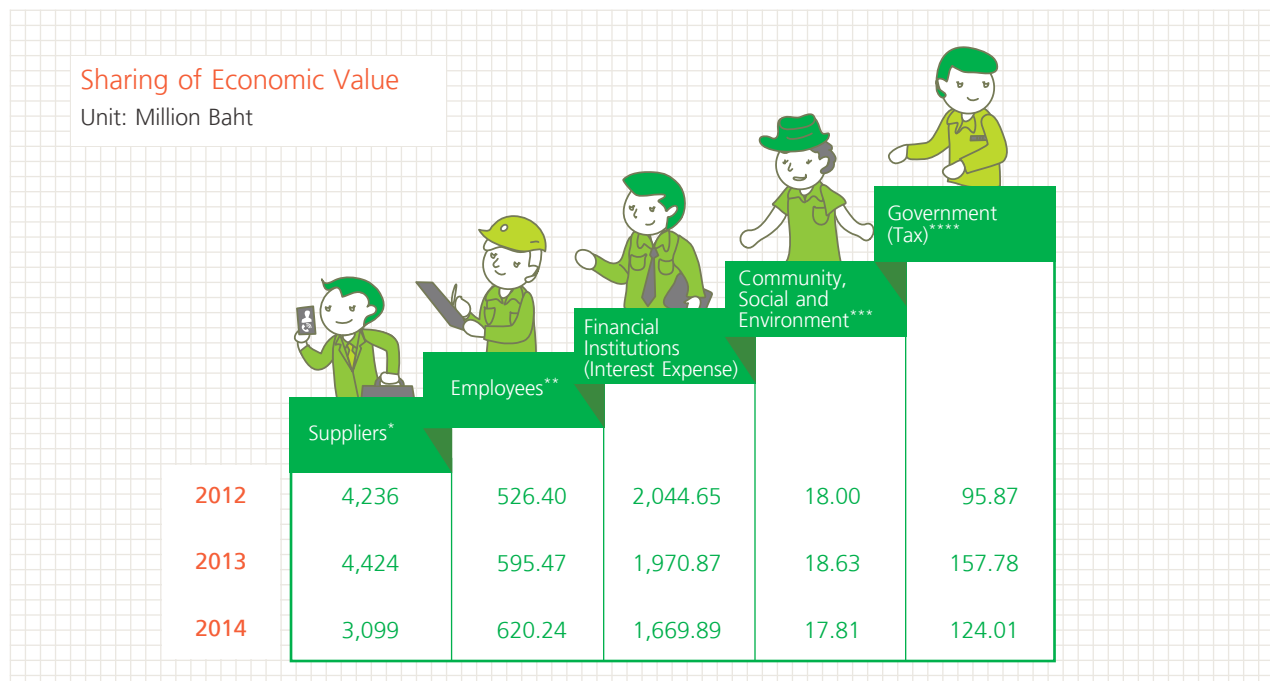
## 3. Liquidity Management

The Company has closely monitored the working capital level by consistently updating a projection of cash inflows and cash outflows to be aware of future liquidity requirements and have sufficient preparation time for liquidity solving. Currently, the Company is on process of sourcing for new investors or new loans to be reserved for the future need of cash.

## Economic Performance

Unit: Million Baht

Transactions	2013	2014	% change (YoY)
 Sales and Service Revenues	65,387	65,276	-0.2%
 Group Sales Volume (MT)	3,243	3,318	+2%
 EBITDA	(2,888)	808	+128%
<b>Net Profit (Loss)</b>	<b>(7,053)</b>	<b>(4,903)</b>	<b>+30%</b>



\* Consist of value of general trading transactions in goods

\*\* Consist of salary, wages, welfare, provident fund, social security and other expenses for HR development

\*\*\* Consist of expenses in community and environment development

\*\*\*\* Consist of corporate income tax, local development tax, house and building tax, signboard tax and withholding tax

## Safety, Occupational Health and Environmental Management

Sahaviriya Steel Industries Plc. ("SSI") has policies and business ethics in conducting business, placing importance on values of its staff and supporting good quality of life, good occupational health and safety management while adhering to responsibility in society and the environment. By considering these aspects, SSI is determined to set up a system for environment, occupational health and safety management. The Company appropriately operates its business to support the efficiently management system of safety, occupational health and environmental management and to allow the system to continuously develop and improve, in accordance with regulations.

### Safety and Occupational Health Management

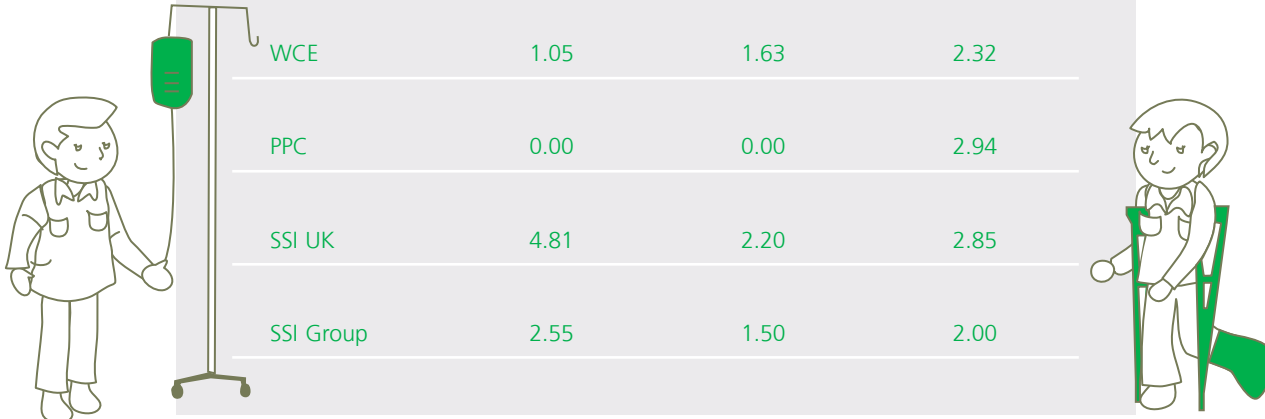
SSI recognises its social responsibility to take care of its staff and contractors working in the SSI Bangsaphan Steelworks area. The Company determines to provide safe working areas according to occupational health standard for its staff and contractors. The management of safety and occupational health is based on Thai Industrial Standard (TIS) 18001 and OHSAS 18001. Both standard systems have been examined, evaluated and renewed for certificates continuously.

### Safety and Occupational Health Performance

The Company has operated its occupational health and safety management, by arranging many projects, instilling the concept of safety, such as Behaviour Based Safety (BBS) Project and Zero Accident Campaign. The Occupational Health and Safety Committee closely monitors safety and provides guidelines to improve safety in all of the plant area. With support from the management, work accidents have decreased 49%, compared to last year and the Lost Time Injury Frequency Rate (LTIFR) was 1.10.

In addition, SSI has been working with the Environmental Management and Promotion Center of Sahaviriya Group to organise Sahaviriya Group's Safety and Environment Week to promote safety guidelines and report safety operation of its affiliates via exhibitions and public relations. As a result, the public realise the importance of safety and safety awareness is instilled.

#### Lost Time Injury Frequency Rate (LTIFR) of SSI Group



SSI Group of Companies	2012	2013	2014
SSI	0.36	0.97	1.10
TCRSS	0.51	0.00	0.00
WCE	1.05	1.63	2.32
PPC	0.00	0.00	2.94
SSI UK	4.81	2.20	2.85
SSI Group	2.55	1.50	2.00

LTIFR = (Number of Lost Time Injury x 1,000,000) / Total working hours



## Occupational Health and Safety Training

As occupational health and safety training is the key to reduce accidents and occupational decease, SSI has continuously provided occupational health and safety training courses for all level of its staff as it regards occupational health and safety training as important to reducing accident and injury in the workplace. SSI staff have learnt about workplace hazards, handling approach and the Company also provided experts to teach additional training. This has broadened their horizons and added knowledge which can be used by employees outside the work environment.

In 2014, 30 occupational health and safety training courses were organised, with 4 hours per person per year of staff training provided. In addition, the Company also provided risk assessments for each activity, risk reduction plan and risk control plan to maintain work safety and these activities will be continuously monitored to respond to changes.

## Emergency Preparedness and Fire Protection

SSI is aware of the need to reduce the risk from emergencies such as fire, chemical leaks, abnormal boiler and floods, etc. Thus, the Company appointed a subcommittee on fire protection and emergency responses as the main body responsible for overseeing and setting a preparation plan for emergency including staff and supporting equipment. The Company offers training simulation to reduce the impact of an emergency situation and continuously monitors emergency equipment to ensure availability when required. The emergency equipment is provided in the fire risk areas. New technologies are also considered to improve the fire protection procedures.

SSI has an insurance policy with comprehensive coverage of natural disasters including: hurricanes, floods, tsunamis, lightning, landslides, and earthquakes. The insurance covers damage to buildings as well as providing cover for business disruption resulting from the incident and covers damage due to the risk of fire in all cases.

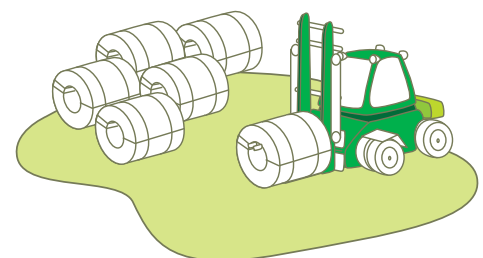
In 2014, the Company organised 3 fire protection training courses and 19 emergency response simulations and drills. At present, there is 60.38% of SSI staff trained in basic fire protection, in accordance with the law. Moreover, there were fire instances of protection equipment and fire alarm monitoring and both results found 100% readiness. Fire protection systems in 3 areas were also improved in 2014.

## Safety Management on Raw Materials and Products Transportation

SSI continues to monitor the implementation of a committee to control vehicles of the Sahaviriya Group through the Sahaviriya Community Leadership Council and Sahaviriya Group's 24 hours Complaint Center. This is used to follow up their operations, gather suggestions and complaints for improvement.

In 2014, there were several improvements, including adding surveillance cameras in 10 areas in Bangsaphan community to monitor and control vehicles, improving the monitor vehicle system of Sahaviriya Group's transportation vehicles, publicising among Sahaviriya Group's drivers before driving in the community and setting public relation signs about driving regulations in Bangsaphan community. Moreover, the working committee has promoted road safety through activities such as setting up warning posters, arranging projects to support safe transportation such as Safely Steel Deliver for Community Project, random truck monitoring in the community, setting up warning poster for drivers, arranging a forum to gain opinion from local people and to solve problems, with correct solutions and providing a reward for drivers who have an outstanding performance in safety. There were 4 SSI staff that performed in accordance with traffic regulations, demonstrated driving discipline and concern about the community. These initiatives aim at extending safeguarding of traffic rules-abiding of other vehicles in Bangsaphan district and encouraging Sahaviriya Group's drivers to do good deeds.

In 2014 the working committee supported the community with 48 activities (48% robbery investigation, 29% accident investigation and 23% quarrels and fights investigation) and received good co-operation from its staff and local people to control vehicles of Sahaviriya Group.



## Environmental Management

SSI realises that the steel industry is part of a developing process in Thailand. The Company has continued to focus on environmental management to allow sustainable development. By strictly adhering to government laws and environmental laws, SSI conducts many studies and prepares environmental impact assessments to prevent and reduce the environmental impact of steel production and monitor environmental quality. It also has been continuously certified in the ISO 14001 system since 1999.

The main task lies with the safety and environment office which works in co-operation with other production units and appoints staff in charge of the management of pollution, water, air and waste systems in order to meet the appropriate levels required by the law. Outside the plant, the Company operates in conjunction with Sahaviriya Group in the Bangsaphan district. The Environmental Management and Promotion Center of Sahaviriya Group are also in charge of community activities to promote environmental awareness and co-operation throughout the year.

As a result of appropriate control, SSI won EIA monitoring awards in 2014 and also established a mechanism to prevent and control environmental impacts from operations.

## Raw Materials and Products

SSI imports steel slabs as raw materials from several sources with quality controls in place regarding appropriate standards and customer demands. In 2014, the Company produced 1.46 million tons of hot-rolled steel sheets and 0.11 million tons of hot-rolled steel pickled and oiled sheets.

## Energy Management

SSI realises the importance of saving energy as it is a limited resource required in steel production. Therefore, the Company has set up efficient energy management systems to control energy usage in the organisation. By setting up the Energy Conservation Committee as a center to manage energy conservation, the Committee works closely with the cross functional team to connect everyone in the organisation together. Moreover, the Company has set up experts on energy and environmental field, who will support its potential in energy conservation and reducing environmental impact more efficiency.

Moreover, in order to generate sustainable and efficient energy conservation, SSI is planning to apply an international standard "ISO 50001" to its energy management system.

### The Energy Consumption Rate at SSI Bangsaphan Steelworks in 2014

Process	Energy usage	
	Target	Actual
Hot Rolled Coil Steel Sheets		
• Heat energy (kcal/kg slab)	345.0	339.2
• Electrical energy (kwh/ton)	107.0	110.7
Hot Rolled Steel Pickled and Oiled Sheets		
• Heat energy (kg LPG/ton coil)	3.0	2.8
• Electrical energy (kwh/ton)	21.0	21.1

At SSI Bangsaphan Steelworks, the electrical energy usage for HRC production is lower than forecast, with 3.66 kwh/ton and higher than forecast, with 0.12 kwh/ton for Hot Rolled Steel Pickled and Oiled Sheets. As production rate is lower than expected rate, the electrical energy usage did not hit its target.

As a result of the energy conservation plan, during 2012 - 2014 SSI Bangsaphan Steelworks had an energy saving as follow;

### Energy Saving from Improvements to the Conservation and Enhancement in 2014

Year	Heat Accumulation Reduction (MJ)
2012	3,343,305
2013	3,380,677
2014	20,604,613

As a result of its continuous energy management and employee engagement in energy conservation, in 2014 the Company has received Thailand Energy Awards 2014 for Outstanding Designated Factory in Energy Category and received "ASEAN Energy Awards 2014" in the Large Industry Category, which is the first ASEAN level award that SSI has ever received.

### Water Management

In order to manage the plant water usage which draws the raw water from the Bangsaphan canal, a huge surface water source, 13.5 kms from the plant, the water is pumped into a 2.4 million cubic meters water reservoir and used in the hot season when the water level of the irrigation is less than 2.2 m. The plant is also designed to recycle water in the HRC production. Our water management has minimised the problem of competing for water which is a common resource shared by the community and local agricultural sector. In the past year the Company has managed to strictly adhere to the set standard.

As for waste water management, SSI has set up a chemical water treatment system for the waste water which occurs in hot-rolled coils pickled and oiled, set up sedimentation tanks, sand filters and grease tanks in the HRC production line and also set up the biological treatment system for usage in the plant. The quality of water in all systems is constantly tested by officials and verified by outside authorities. The treated water is recycled, some of which to water plants, with zero discharge outside the plant.

During the past year, the Company controlled the water usage in its production processes at 1.24 million cubic meters. In 2014 The HRC production line has a water usage rate of 0.22 cubic meters per ton of production, a small decrease in comparison with the 2013 rate which was 0.64 cubic meters per ton of production. The pickled and oiled hot-rolled coils production line rate is 0.30 cubic meters per ton of production, compared to 0.28 cubic meters in 2013.

### Water Quality Control

Bangsaphan Steelwork has been designed to ensure zero discharge system. However, SSI has other quality control measures as follows:

1. Monthly check on recycled water quality at 4 stations performed by external authorised bodies. The outcome proved to be above the waste water standard according to the Ministry of Industry's 2<sup>nd</sup> notification issue of 1996.
2. Six-month checks on underground water quality at 9 stations performed by external authorised bodies. Although Thailand has not yet set the required standard, SSI maintains vigilance on possible changes and during the past few decades no significant changes have occurred.
3. Six-month checks on surface water in public water resources at 3 stations by external authorised bodies in order to ensure that the Company's activities do not affect the environment as detailed in the following chart:

## Environmental Performance Index of Water Quality

Index	Unit	Analysis Result						Standard
		Tha Kham Canal		Upper Mae Ramphueng Canal		Lower Mae Ramphueng Canal		
		Apr 2014	Sept 2014	Apr 2014	Sept 2014	Apr 2014	Sept 2014	
pH	-	7.71	7.30	7.50	7.29	7.53	6.89	5.0 - 9.0 <sup>1/</sup>
Suspended Solid	mg/l	30.6	13.3	32.0	21.0	33.0	42.0	-
Total Dissolved Solid	mg/l	11,600	680	11,500	616	11,800	6,770	-
Acidity	mg/l as CaCO <sub>3</sub>	< 1	3	< 1	6	3	4	-
Alkalinity	mg/l CaCO <sub>3</sub>	253	445	297	398	277	604	-
COD	mg/l as O <sub>2</sub>	78	84	78	43	72	151	-
Grease & Oil	mg/l	2	< 2	< 2	< 2	2	< 2	-
Total Coil form Bacteria	MPN/100 ml	< 1.8	240	< 1.8	240	< 1.8	43	No more than 20,000 <sup>1/</sup>
Iron	mg/l	0.37	0.90	0.79	0.95	0.71	< 0.03	-
Manganese	mg/l	0.311	0.128	0.519	0.152	0.388	0.030	No more than 1.0 <sup>1/</sup>

<sup>1/</sup>: Standard: Surface water quality standard (3<sup>rd</sup> Category) Notification of the National Environment Board, No. 8, B.E. 2537

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## Use of Chemicals

Water production systems for HRC production and hot-rolled coils pickled and oiled production require several types of chemicals. In the past year, SSI did not introduce new types of chemicals or increase the rate of chemical usage in production. Moreover, according to ISO 14001 and TIS/OHSAS 18001 evaluation, chemical usage management in the plant is in accordance with the set standard. Further suggestions for improvement have already been included in the implementation plan.

## Eco-Friendly Supply

In 2014, SSI has continuously obtained supply from the 10 eco-friendly product groups, certified by the National Environment Board. The project on supply and services, corresponding to the Save-Energy Policy of SSI Bangsaphan Steelworks has not increased in 2014 due to investment delays and the project will become operational in 2015. Moreover, in 2015, SSI aims to extend to obtaining supply from 12 eco-friendly product groups.



## Eco-Friendly Purchasing Table

Purchasing Year / Type of Product	2012	2013	2014
Products certified by Thailand Environment Institute and are used in SSI Bangsaphan Steelworks	9	10	10
Products in our Energy Saving Project	2	1	-

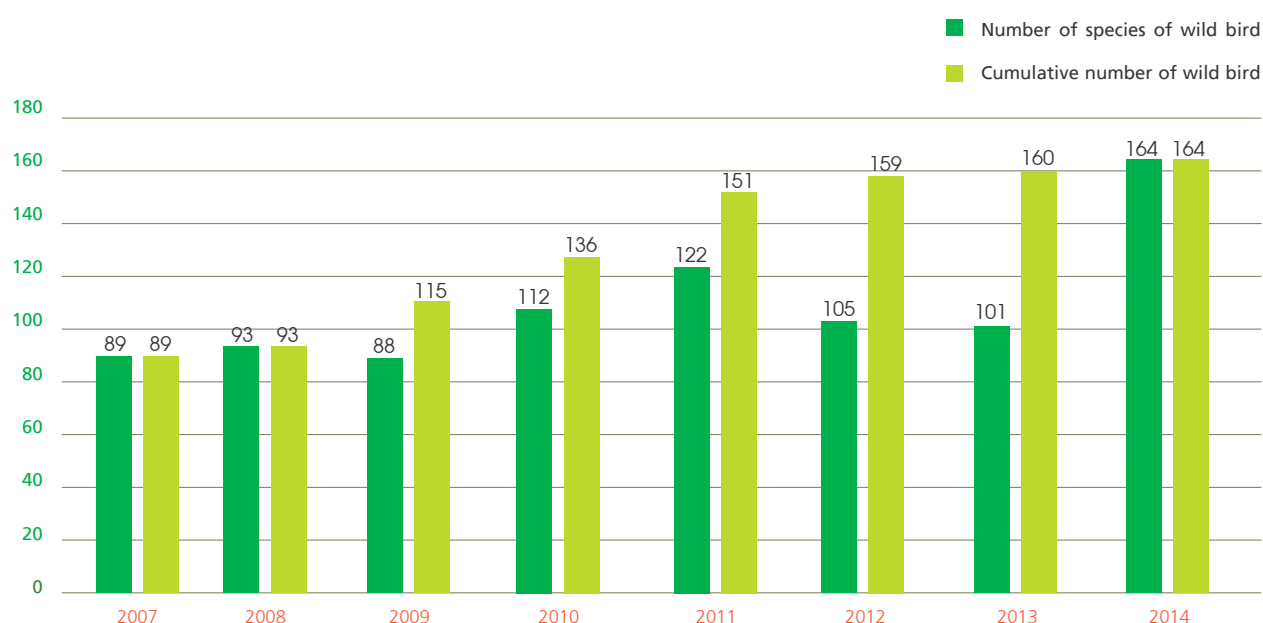
## Community Biodiversity

SSI in-co-operation with the Environmental Management and Promotion Centre of Sahaviriya Group has conducted projects on biodiversity which is the major indication of the abundance of the eco-system in areas around our plant in Bangsaphan as follows:

### Natural Resource Impact Monitoring Project

SSI and the Environmental Management and Promotion Center of Sahaviriya Group conducted a survey of bird species in natural areas near the plant for example, Mae Ramphueng wetland, Pa Klang Aow, Natural Park and Mae Ramphueng Natural Park. The project which was supervised by specialists from Kasetsart University showed the existence of more diverse types of birds, unfound in previous surveys and an increase in number of birds overall. In 1997, there were 89 types of birds this has increased to 164 by 2014. The data reflects the steel industry and the operation of Sahaviriya Group to be eco-friendly and together with pollution measures undertaken does not affect the natural habitats of the wildlife in the nearby areas. SSI has also sustained the natural resources and improved the bio-diversity situation for the local community.

### Species of wild birds found in Bangsaphan district



## Investigation of Species on the Biodiversity of Rocky-Shore Ecosystems Project

This is a project, carried out to survey the biodiversity of the area. The project is jointly organised by SSI, the Environmental Management and Promotion Center of Sahaviriya Group and Mahingsa Discovery Team of Ban Tha Kham School. Living creatures at Stone Beach around Aow Thian, next to Prachuap Port Co., Ltd.'s area are documented in order to understand their variety and use the data as an environmental indicator. The results suggest that Stone Beach's environment is changing, affecting the temperature of water pool habitats. However, the nearby port has a constant flow of cargo ships which may also affect the environmental conditions and living creatures. The outcome of surveying activities point towards the existence of 30 types of living animals and plants, for example, sea anemones, seashells, sea cucumbers, hermit crabs and sea sand goby, indicating the quality environment and abundant nature. This also shows that Prachuap Port Co., Ltd., a subsidiary of SSI, does not negatively affect the eco-system in Stone Beach. Nonetheless, the data gathered will form the basis for safeguarding environmental quality from future expanding activities of the port.



## Climate Change Management

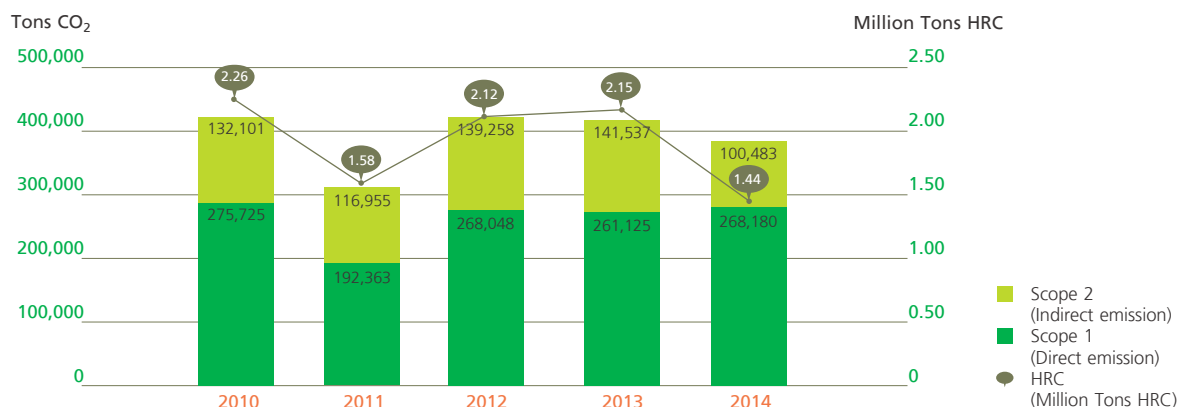
Another important trend is the effect of climate change. SSI is committed to managing its impact on climate change by constantly setting a good example in managing greenhouse gases emitted by the Company's activities. In order to decrease the greenhouse effects, all activities of SSI have aimed to decrease greenhouse gases emitted. We also join with the public and governmental sectors in reducing the increase of global warming. The following activities have been undertaken:

1. Increase the efficiency of energy usage to reduce the greenhouse gas emitted into the atmosphere.
2. Improve the greenhouse gas list to reach standardisation, collecting and documenting data, as well as having the list revised by external bodies.
3. Buy eco-friendly products and services. In 2014, SSI obtained such products from 10 groups who adhered to Thailand Environmental Institute (TEI) rules, and used energy-saving products and services at Bangsaphan. The target in 2015 is to increase the eco-friendly groups to 12, and the energy-saving groups to 2.
4. Support 3R activities which aim to reduce production waste, 98.22% which has been recycled.
5. Support the environmental activities of the local community.
6. Attend seminars on reducing greenhouse gas, organised by the government, to achieve low-carbon society.
7. Study about carbon dioxide retention and its usage afterwards.

One of its outstanding work is SSI has conducted a report on the plant's greenhouse gas release and the results reached ISO 14064-1 standard. This report focused on Operational Control, by collecting data on each type of energy and on activities that emit greenhouse gases. In 2014, the report showed the results of greenhouse gas release as follows:

1. The greenhouse gas release from HRC production is 0.184 tons carbon dioxide per HRC ton, decreasing 1.6% from the year 2013.

## CO<sub>2</sub> Emission from HRC Production



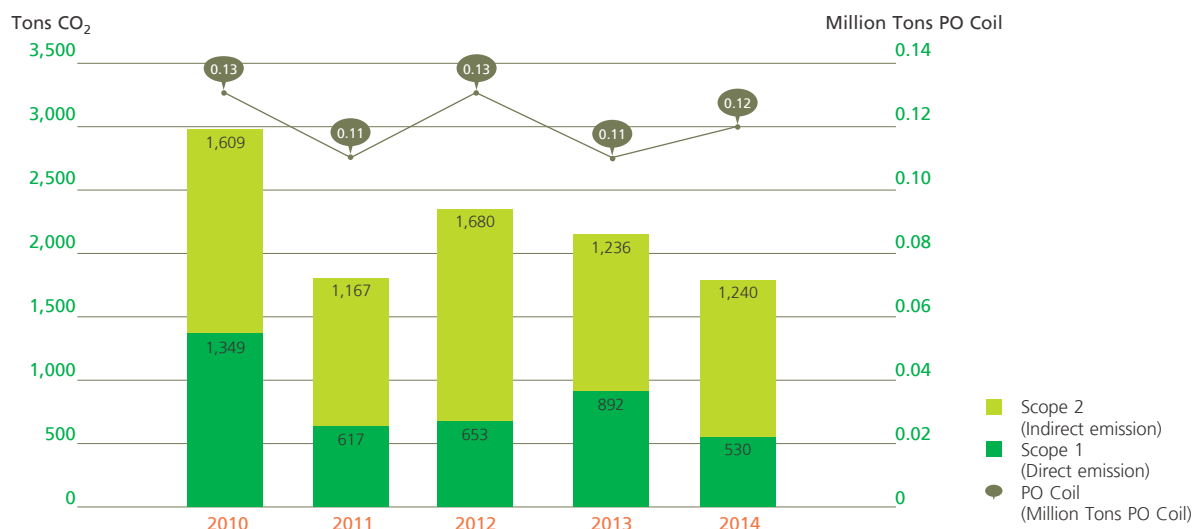
Note: According to ISO 14064-1: 2006 and IPCC

Scope 1: Green house gas emission from HRC production and internal transportation (not include SSI's vehicles)

Scope 2: Green house gas emission from external electrical usage (not include SSI Bangkok office)

2. The greenhouse gas release from pickled and oiled hot-rolled coil production is 0.017 tons carbon dioxide per PO Coil ton, decreasing 16.85% from the year 2013.

## CO<sub>2</sub> Emission from Hot-rolled Coils Pickled and Oiled



SSI's carbon dioxide release is used as an indicator for greenhouse gases (GHGs), in order to plan and implement a future project to reduce greenhouse gas. SSI also foresees the possibility to recycle greenhouse gas emissions. By focusing on post carbon intensity average, short-term and long-term plans can reflect the real results of the greenhouse gas management, and point to analyse and evaluate appropriate indicators for carbon intensity. This is needed for developing our country towards becoming a low-carbon society in the future.

## Air Quality Control

SSI Bangsaphan Steelworks was designed to maximise energy efficiency, with the computer-run combustion system controlling the sulphur level in the energy components at less than 2%. All these factors result in above-average air quality than the standard and rules set in the plant report on the environmental impact.

Within the pickled and oiled hot-rolled coils production, a system was established to detect acid gas in the production and recycle lines, resulting in above-average and set standards of air quality ventilated outwards.

Air quality in the atmosphere around the plant is monitored in various parameters throughout the year. In 2014, five stations, nearby Ban Tha Kham, Ban Tha Manoa, Ban Klang Aow, Ban Tubmon and Ban Bor Thonglang were monitored. The air qualities according to various parameters are as follows:

1. Hourly average of the density of sulfur dioxide in the atmosphere
2. Hourly average of the density of nitrogen in the atmosphere
3. Hourly average of total dust in the atmosphere
4. Hourly average of the density of hydrogen chloride in the atmosphere
5. Hourly average of the density of the amount of less than 10-micron dust.

All the air quality assessments indicated that performance was above-average and better than the set standard in every station. In addition the results show a similar outcome from the previous stations and parameters measured.



## Ambient air quality around 5 stations

Index	Average of minimal-maximal quantity of air found		Standard
	12 - 19 Feb 2014	16 - 23 Sept 2014	
Quantity of total suspended particulate (mg/m <sup>3</sup> )	0.063 - 0.119	0.028 - 0.041	No more than 0.330 <sup>1/</sup>
Quantity of sulfur dioxide gas (mg/m <sup>3</sup> )	0.013 - 0.017	0.012 - 0.016	No more than 0.300 <sup>1/</sup>
Quantity of nitrogen dioxide gas (mg/m <sup>3</sup> )	0.021 - 0.046	0.020 - 0.049	No more than 0.320 <sup>2/</sup>
Quantity of particulate matter less than 10 microns (mg/m <sup>3</sup> )	0.034 - 0.064	0.013 - 0.021	No more than 0.120 <sup>1/</sup>
Quantity of hydrogen chloride gas (mg/m <sup>3</sup> )	< 0.001	< 0.001	-

<sup>1/</sup>: Ambient Air Standards, Notification of the National Environment Board, No. 24, and B.E. 2547

<sup>2/</sup>: Nitrogen Oxide in the Ambient Air Standards, Notification of the National Environment Board, No. 33, and B.E. 2552

Remark: < 0.001 is the Detection Limit of HCl.

HCl does not have specific standard.

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## Air emission from the Furnace I and II

Index	Result				Standard
	18 Feb 2014	11 Jun 2014	19 Sept 2014	12 Dec 2014	
Quantity of particle intensity (mg/m <sup>3</sup> )	160	177	123	96	No more than 240 <sup>1/</sup>
Quantity of sulfur dioxide gas intensity (SO <sub>2</sub> ) (ppm)	469	456	631	532	No more than 800 <sup>1/</sup>
Quantity of the intensity of oxide of nitrogen gas (NO <sub>x</sub> ) (ppm)	87	100	105	92	No more than 200 <sup>1/</sup>
Quantity of carbon monoxide gas intensity (CO) (ppm)	10	11	1.6	14	No more than 690 <sup>2/</sup>

<sup>1/</sup>: Pollutant emission standards for existing steel factory (previous), Notification of the Ministry of Science, Technology and Environment B.E. 2544 (Calculated at 7% excess oxygen or 50% excess air)

<sup>2/</sup>: Standard of quantity of substances mixed in air emission from a plant Notification of the Ministry of Industry B.E. 2549 (For manufacturing process with fuel combustion)

Standard of air emission from industrial factory, Notification of the Ministry of Natural Resources and Environment B.E. 2549

Measured/analysed/controlled by	SPS Consulting Service Co., Ltd.
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## Air emission from the Furnace III

Result	Index		Standard
	1 Apr 2014	18 Sept 2014	
Quantity of particle intensity (mg/m <sup>3</sup> )	113	116	No more than 120 <sup>1/</sup>
Quantity of sulfur dioxide gas intensity (SO <sub>2</sub> ) (ppm)	579	320	No more than 800 <sup>1/</sup>
Quantity of the intensity of oxide of nitrogen gas (NO <sub>x</sub> ) (ppm)	105	103	No more than 180 <sup>1/</sup>
Quantity of carbon monoxide gas intensity (CO) (ppm)	0.54	1.3	No more than 690 <sup>2/</sup>

<sup>1/</sup>: Pollutant emission standards for steel factory (new), Notification of the Ministry of Science, Technology and Environment B.E. 2544 (Calculated at 7% excess oxygen or 50% excess air)

<sup>2/</sup>: Standard of quantity of substances mixed in air emission from a plant Notification of the Ministry of Industry B.E. 2549 (For manufacturing process with fuel combustion)

Standard of air emission from industrial factory, Notification of the Ministry of Natural Resources and Environment B.E. 2549

Measured/analysed/controlled by	SPS Consulting Service Co., Ltd.
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## Air emission from the Scrubber PPPL (from the pickling and oiling process)

Index	Result		Standard
	12 Feb 2014	20 Sept 2014	
Quantity of hydrogen chloride gas (HCl) (mg/m <sup>3</sup> )	1	1.3	No more than 200 <sup>1/</sup>

<sup>1/</sup>: Pollutant emission standards for industry, Notification of the Ministry of Industry B.E. 2549 (For manufacturing process without fuel combustion, calculated at actual oxygen concentration in emission when measured)

Standard of air emission from industrial factory, Notification of the Ministry of Natural Resources and Environment B.E. 2549

Measured/analysed/controlled by SPS Consulting Service Co., Ltd.  
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## Air emission quality from Boiler

Index	Result		Standard
	12 Feb 2014	20 Sept 2014	
Quantity of particle intensity (mg/m <sup>3</sup> )	28	8	No more than 120 <sup>1/</sup>
Quantity of sulfur dioxide gas intensity (SO <sub>2</sub> ) (ppm)	< 0.1	< 0.1	No more than 800 <sup>1/</sup>
Quantity of the intensity of oxide of nitrogen gas (NO <sub>x</sub> ) (ppm)	82	45	No more than 180 <sup>1/</sup>
Quantity of carbon monoxide gas intensity (CO) (ppm)	0.47	4.0	No more than 690 <sup>2/</sup>

<sup>1/</sup>: Pollutant emission standards for steel factory (new), Notification of the Ministry of Science, Technology and Environment B.E. 2544 (Calculated at 7% excess oxygen or 50% excess air)

<sup>2/</sup>: Standard of quantity of substances mixed in air emission from a plant Notification of the Ministry of Industry B.E. 2549 (For manufacturing process with fuel combustion)

Standard of air emission from industrial factory, Notification of the Ministry of Natural Resources and Environment B.E. 2549

Remark: < 0.1 is Detention Limit of SO<sub>2</sub>.

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## Air emission quality from Dust Collector

Index	Result		Standard
	15 Feb 2014	21 Sept 2014	
Quantity of particle intensity (mg/m <sup>3</sup> )	2	4	No more than 120 <sup>1/</sup> , 300 <sup>2/</sup>

<sup>1/</sup>: Pollutant emission standards for steel factory (new), Notification of the Ministry of Science, Technology and Environment B.E. 2544 (Calculated at 7% excess oxygen or 50% excess air)

<sup>2/</sup>: Standard of quantity of substances mixed in air emission from a plant Notification of the Ministry of Industry B.E. 2549 (For manufacturing process with fuel combustion)

Standard of air emission from industrial factory, Notification of the Ministry of Natural Resources and Environment B.E. 2549

Measured/analysed/controlled by SPS Consulting Service Co., Ltd.

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## Waste Management

SSI is committed to reducing the quantity of waste at source by applying the 3R's - Reduce, Reuse and Recycle.

- Reduce: Reducing waste at source, such as general waste, waste grease and waste oil. In addition efficient use of resources is encouraged.

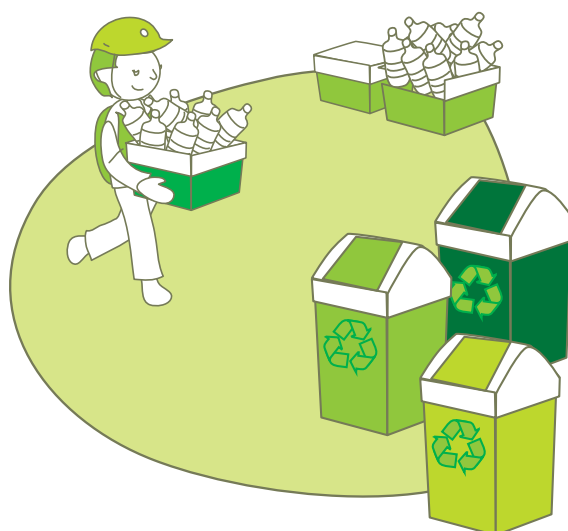
- Reuse/Recycle: Privatising and recycling waste and encouraging efficient use of resources, such as reducing oil contamination, and project lead of waste recycled as a way to dispose of waste from landfill by recycling and reusing as much as possible.

Moreover, SSI applies the 3R's to reducing waste at the original source. SSI also disposes of waste with minimal environmental impact as follows:

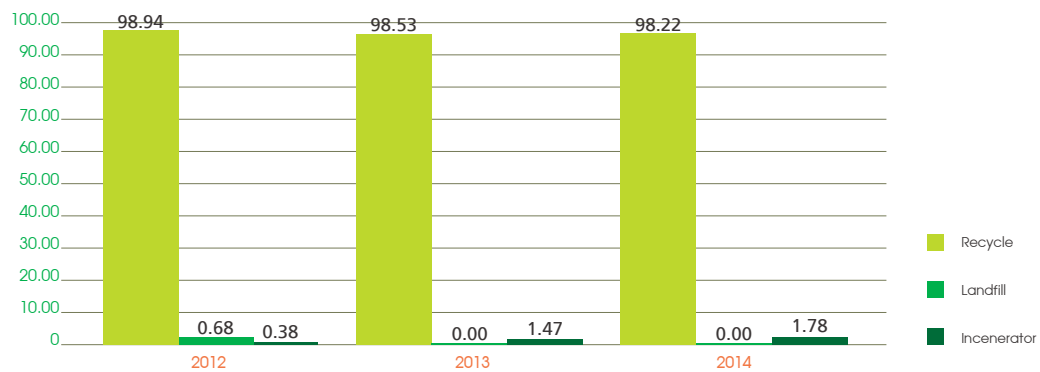
- Disposal: Disposal or pretreatment of waste. SSI uses the services of a waste processor with expertise and certification by the authorised government agency. In the past, SSI has not received any complaints from illegal dumping of waste.

- Operational control: SSI has industrial waste pollution control systems to perform correctly and in compliance laws.

- Zero Landfill: SSI is sending less than 5% of waste disposed to landfills. In the years 2012 - 2014, SSI continued to focus on waste recycling utilisation and aimed for 98 - 99% of waste to be recycled. In 2013 to present, there was zero waste to landfill.



## SSI's Disposal of Waste in 2012 - 2014



In 2014, the total waste amounted to 49,887 tons, costing Baht 8.5 million. The sale of 45,693 tons of waste amounts to Baht 371 million. The processes used to handle waste are 98.22% recycling and 1.78% burning and zero landfill.

## Co-operations with Partners

SSI was willing to join the governmental and institutional bodies to manage climate change as follows:

- Serving in an advisory role for the short-term 5-year action plan to conserve energy in the steel industry in Thailand, in co-operation with Iron and Steel Institute of Thailand
- Co-operation in the study of Best Available Techniques (BAT) and Benchmarking shared between SSI, the Iron and Steel Institute of Thailand (ISIT).

## Green Industry

SSI signed the memorandum of co-operation to develop a Green Industry with the Ministry of Industry as it recognises the importance of co-existence between the industrial community and the social and environmental factors. Under this umbrella, SSI has been certified in the Third Level Green Industry (Green System), due to our systematic environmental management and monitoring for continuous development, from 2011 to 2014.



## Surveying Local Viewpoints and Environmental Local Participation

A survey on attitudes of the community is conducted annually among the communities around the plant. The communities are important stakeholders for SSI because the operation of the plant affects them economically, socially and environmentally in both positive and negative ways. Thus, an attitude survey enabled the Company to understand their perception through community leaders and household leaders on various effects from the operation of the plant throughout the year. It also paves the way to joint decisions through participatory meetings, for example, community leader council meetings and village meeting SSI has used suggestions from these meetings as a basis to arrange programmes that directly respond to the need of the community and lead to sustainable local satisfaction.

Surveys made in 2014 show that most locals accepted and appreciated that the Company has played a part in improving income generation, better commerce and infrastructure. Such

activities included grant-giving, donations for educational purposes, aquatic animal conservation, career development, community-banking and mangrove forest conservation. The top priority was tree-planting, followed by Mae Ramphueng mangrove conservation, beach-cleaning, local environment safeguarding, support for sports, agricultural vocation, students' skill development, local product purchasing and youth camp.

There are 3 concerns, resulting from the survey in 2014: Road traffic 10.4%, Particulate matter 6.5% and Road accidents 5.2% while in 2013: Road traffic 11.2%, Rain quality 7.6% and Road accidents 6.0%. This has shown that road traffic has become a major issue. Therefore, SSI in co-operation with a working committee to control vehicles of Sahaviriya Group has focused on time management for goods traffic to avoid certain hours, setting up CCTV, patrol wagon, providing Sahaviriya fund for transportation trucks, arranging seminars for transportation contractors, and organising meetings with community leader council to discuss and consult about community participation and to relieve their concerns.



## Creating Customer Value and Fair Operating Practices

SSI recognises the importance of customer satisfaction and its effect on successful business, therefore specific focus is placed on ensuring best practice is achieved to effectively and efficiently respond to customer's needs. Furthermore, fair operating practices with business partners are always carried out in order to create appropriate benefits for both parties. The Company ensures that correct reports and facts are provided to customers and performs in line with contracts and the Company is committed to negotiating appropriate solutions based on business relationships, avoids business conflict situations and adheres to fair treatment.

### Innovated Value Products

In 2014, the Company has set up activities to strengthen relationships with customers, particularly in relation to resolving problems, handling customer complaints, and receiving feedback and suggestions. The data from the activities is used by the Products and Services development to meet the needs of the customers. Activities undertaken include customer visits, meetings with key customers on a monthly basis, annual customer satisfaction surveys, training and providing further knowledge of the Company's products. SSI also provides advice and assistance to clients to support them in resolving any problems associated with the Company's products.

The activities to analyse customer needs were carried out by the Innovated Value Products (IVPs) working team who then worked with the Production team to drive the development of products and services quality. Improvements made include, controlling product dimensions to reduce customers' loss, specially designing product properties according to customers' requirements and enhancing transportation efficiency to achieve on-time delivery for urgent orders. These will support customers to broaden their performance and expand marketing opportunity. Further important developments are as follows:

1. Developing prototypes of high tensile strength hot-rolled steel for structural application.
2. Developing prototypes of high strength hot-rolled steel for structural parts of the automotive application that needs strength more than 590 MPa.

3. Developing IVP, creating value added to customers (You+) for automotive industry customers.

In 2014, the Company delivered 213,760 tons of Innovated Value Products (IVPs) which represent 14.7% of the total sales.

### Create Shared Value with Business Partner

The Company strengthens relationships with suppliers through sharing experience and information. In 2013, 2 oversea suppliers were invited to attend the meeting to reconsider an agreement in Technical Protocol and Specification about raw material quality improvement, market fulfillment including solution for raw material quality improvement and other problems. In addition, meetings and seminars with vendors and service providers were conducted to clarify Company regulations, procurement purposes and procurement practices for Sahaviriya affiliated companies.

In 2014, the Company purchased products from general vendors of approximately Baht 3,100 million. Cost is classified as follows: Baht 2,312 million for energy product group, Baht 158 million for rollers, Baht 112 million for spare parts, Baht 135 million for factory supplies, Baht 324 million for services, Baht 59 million for others, and Baht 216 million for local purchases in the Bangsaphan community. For 2015, it is expected that procurement costs will be raised up to Baht 3,500 million from general vendors and Baht 220 million from the local community.

### Fair Trade Practices

The Company undertakes its business by treating competitors fairly and avoiding obtaining their confidential information in dishonest or inappropriate ways or performing any activity that will damage the competitors' reputation by a malicious accusation. Meetings are held between the management of SSI and their competitors meeting to strengthen relationships and share their experiences.

In 2014, the Company has set up activities to strengthen relationships with customers, particularly in relation to resolving problems. The data from the activities is used by the Products and Services development.

## Innovation, Research and Development

The Company recognises the need to focus on capability development in the steel industry. This is shown by the increase of research projects that the Company has been created for certification. From 2006 to 2014, the R&D expense related to 90 certified research projects was Baht 64.2 million. This reflects SSI's recognition of the importance of research and development to create sustainable knowledge.

### Certified Research and Development Projects by NSTDA (2006 - 2014)

Product Quality	48	Projects	R&D Expense	34,755,432	Baht
Process Improvement	42	Projects	R&D Expense	29,472,078	Baht
<b>Total</b>	<b>90</b>	<b>Projects</b>	<b>R&amp;D Expense</b>	<b>64,227,510</b>	<b>Baht</b>

The Company places emphasis on network development by the memorandum and collaboration with a renowned research institute and university from both public and private sector.

In 2014, the Company collaborated with Synchrotron Light Research Institute (Public) Organization on 2 main projects as follows:

No.	Topic	Project	Objective
1	Surface problems in low carbon steel strip analysis.	1. An investigation of salt and pepper scale on low carbon steel strip surface	1. To characterise and define the root causes of salt and pepper scale defect in low carbon steels strip which can be used for product quality development.
		2. An investigation of dark surface on low carbon steel strip surface	1. To characterise and define the root causes of dark surface problem which can be used for the product quality development.

Furthermore the Company has collaborated with other renowned institutes and universities as follows:

"Micromechanical based Design for Advanced High Strength Steels in Automotive Parts" was collaboration between the Company and King Mongkut's University of Technology Thonburi to develop a hot rolled steel strip for automotive industry.



## Dissemination of Innovation

For sustainable development disseminating research and innovation are considered to be important. The Company participated in domestic and international conferences to share knowledge. Furthermore, SSI was a fund supporter for the 8<sup>th</sup> Thailand Metallurgy Conference. In 2014, the Company submitted research to conference and seminar as follows:

### The 8<sup>th</sup> Thailand metallurgy conference (TMETC #8)

This conference, hosted by Chulalongkorn University, was held in Thailand on 15 - 16 December 2014. Three research studies by SSI were selected to present as follows:

1. A study of "Effect of Coiling Temperature and Skin Pass Process on Oxide Scales and Picklability of Hot Rolled Steel Strip" aimed to develop the surface quality of hot rolled steel strip.
2. A study of "Effect of Coiling Temperatures on Mechanical Properties and Forming Limit Curve of Hot Rolled Low Carbon Steel with Boron Addition" to develop steel for automotive application.

The Company has shown through past performance an emphasis on research and development to create high quality steel products to meet customer requirements.

## Anti-corruption

The Board of Directors places a strong emphasis on conducting business under the principles of good corporate governance and social responsibility which is intended for sustainable development. The Board deems that corruption is harmful and causes great damage to organisations and the nation. Hence, in 2013, the Company signed a Declaration of Intent of the Thai Institute of Directors' Private Sector Collective Action Coalition Against Corruption. In 2014, the Company carried out several anti-corruption initiatives as follows:

*The Company has established supervision and control practices to prevent and monitor fraud and corruption risks, which can be summarized as follows:*

### 1. Policies and Guidelines on Anti-corruption

The Board of Directors Meeting No. 3/2014 held on 28 February 2014 approved the policy and guidelines regarding

anti-corruption. The anti-corruption policy states that Directors, Executives, and all employees are prohibited from accepting or being involved in any type of corruption either directly or indirectly. The company shall act strictly in enforcing compliance with Thai anti-corruption laws and regulations, and those of each country in which the company conducts its business. The Board also determined that the company's subsidiaries and its jointly controlled companies shall adopt this anti-corruption policy including any guidelines issued by virtue of such a policy.

The anti-corruption guidelines provide guidance on offering or receiving gifts or entertainment or hospitality activities, granting contributions or donations to charities or common wealth, and political contributions. Guidance on reporting of suspected fraud or corruption is also provided. This policy and guidelines were developed in addition to the "SSI WAY" including the Company's commitment to ethics which is mentioned in business philosophy, integrity which is mentioned in business ethics, employee ethics and values, as well as the ethical conduct for employees on conflicts of interest which is mentioned in the Company's guidelines regarding conflicts of interest.

The Board of Directors Meeting No. 3/2014 also approved the amendment of the Board of Directors' guidelines regarding Whistle Blowing, which adds clarification of the protection measures for the informants or whistleblowers.

Moreover, The Board of Directors Meeting No. 10/2014 held on 18 September 2014, has approved the amendment of the good corporate governance policy which adds that "The Board of Directors emphasises on anti-corruption, and shall oversee and monitor the implementation of the Anti-corruption policy and guidelines".

### 2. Communication of Policies and Guidelines on Anti-corruption

The Company recognises the importance of communicating policies and guidelines on anti-corruption. A message from the Group Chief Executive Officer and President was sent to all employees in the company through the e-mail system. The policy and guidelines on anti-corruption are communicated through the e-mail system and internal newspaper. All employees have access to these policies and guidelines which are posted on the company Intranet and they are also available on the Company's website.

### 3. Training

The Company provides training to encourage executives and employees to be aware of anti-corruption. A seminar on the topic "Anti-corruption and Sustainable Development" for management and employees was held in September 2014. The Company also sent two representatives to observe a workshop held by a Certified Company of Thailand's Private Sector Collective Action Coalition Against Corruption. In November 2014, the Company launched iFacts Challenging Camp 2014 consisting of activities to provide employees with an understanding of the company's values and shape their behavior to follow the "SSI WAY".

The company also sent another staff member to attend a workshop on "Anti-Corruption: The Practical Guide (ACPG 15/2014)" on 27 - 28 November 2014 held by the Thai Institute of Directors Association to understand the steps in the certification process of Thailand's Private Sector Collective Action Coalition Against Corruption project, another member of staff attended last year.

### 4. Putting policies into practices

The Company appointed a working committee, to propel the anti-corruption policy into practice and to enable SSI to have what it takes to be a Certified Company of Thailand's Private Sector Collective Action Coalition Against Corruption, on 19 November 2014. This is to ensure that the Company's anti-corruption policy and guidelines are put into practices and the Company's fraud and corruption risk assessment process is in place in order to systematically measure fraud and corruption as well as to ensure that the Company are to be ready to enter the certification process of Thailand's Private Sector Collective Action Coalition Against Corruption project.

### 5. Fraud and corruption risk assessment

The Company assessed risk of fraud and corruption by the risk owner of each division who identified events that fraud and corruption risk may occur, assessed the likelihood and impact, reviewed and designed measures to combat fraud and corruption to reflect the risks identified. The working committee in No. 4 and the Risk Management Office jointly drove the fraud and corruption risk assessment, collected their results and proposed them to the Risk Management Working Committee for consideration before submission to the Risk Management Committee for acknowledgement.

*The Company has determined guidelines on monitoring and evaluating compliance with the anti-corruption policy as follows:*

#### 1. Whistle-Blowing System

The Company provided Whistle-Blowing channels for stakeholders to raise concerns about offense against the law, unethical practices, poor or unacceptable practices, offense against the position, irregularities, corruption, fraud or misconduct, violation of company's conflict of interest policy, abuse and disregard of company's policy, guidelines, orders or procedures, fraudulent financial reporting, deficiencies in internal control systems or any actions that may cause damage to the informants or the company, without fear of retribution by having the measures to protect the informants or whistleblowers. The Company also provided measures to review or investigate the whistleblower's concerns and the imposition of punishment for offenders. All the whistleblower's concerns that were raised to the Good Corporate Governance Committee were tracked and examined, resolved and responded to informers as soon as possible. These also were reported to the Audit Committee for acknowledgement and summary of the Good Corporate Governance Committee's activities were reported to the Board of Directors twice a year.

#### 2. Internal audit

The Internal Audit Office participated in the assessment to assure and advise on the good corporate governance, risk management and internal control. The Company's internal control was assessed by the Internal Audit Office together with the management on a quarterly basis especially the risk factors relating to misstatements arising from fraudulent financial reporting or misappropriation of assets assessment. The Internal Audit Office also developed an audit coverage plan and annual audit plan using risk based approach including fraud and corruption risk. Audit engagements were conducted follow the annual audit plan that has been approved by the Audit Committee and their audit results were reported to the Audit Committee too.

## Human Resources and Rights

The Company recognises the importance of human resources and that they are essential to the organisation's business success. We have determined the appropriate structure of employment, compensation, benefits and personnel development. The Company has continued the "Care Organisation project" to promote activities related to employees and their families, creating efficient collaboration and working relationships between employers and employees. The project supports employees to achieve an appropriate work life balance by considering their personal life and family. In addition it encourages employees to demonstrate good values and act as role models.

## Employee Structures

At 31<sup>st</sup> December 2014 SSI employed 1,059 people; 153 at the Bangkok office and 906 at the Bangsaphan Plant. The employee structure recognises 4 levels of employee as follows:

Executive	40	people
Managerial	142	people
Supervisory	420	people
Operational	457	people

### Number of Employees of SSI Group: as at 31 December 2014

SSI Group employee level	SSI	SSI UK	TCR	WCE	PPC	Total
Executive level	40	6	9	5	1	61
Managerial level	142	75	67	38	5	327
Supervisory level	420	964	170	202	27	1,783
Operational level	457	957	572	210	63	2,259
Total	1,059	2,002	818	455	96	4,430
Outsourcing	492	214	250	343	15	1,314

## Employment

The Company has a policy to encourage employees to consider promotion and rotation between roles. The policy looks to appoint internal employees into roles who have the appropriate knowledge and qualifications. If there are no suitable current employees for a required role, the Company will recruit external candidates. Recruitment policies are open to all genders, races, religions, ages of 18 years and over, providing the person is appropriately qualified and competent. The Company conducts interviews with fairness and effectiveness in recruitment and selection. In 2014 the Company had 141 job vacancies with 276 potential candidates and 110 people were successfully recruited into these roles; 69 newcomers and 41 transferring employees within organisation. As for the underprivileged, there are limited positions because of job characteristic. The Company has contributed to the Empowerment of Person with Disabilities Fund through improving the quality of life of people with disabilities.



## Employee Development

The Company has developed competency based guidelines to recognise talented staff and support the development of staff according to the SSI Way. In 2014 SSI has developed knowledge and skills of its employees with training courses as follows:

Guideline	Method	Outcome in 2014
<ul style="list-style-type: none"> <li>On the Job Training (OJT)</li> </ul>	<ul style="list-style-type: none"> <li>Set standards of necessary knowledge and skills for different tasks and assigned supervisors to coach and train staff. This has enabled them to perform in accordance with the knowledge and skill levels required. The supervisors will regularly monitor the outcomes and performance.</li> </ul>	<ul style="list-style-type: none"> <li>387 people</li> </ul>
<ul style="list-style-type: none"> <li>In-House Classroom Training</li> </ul>	<ul style="list-style-type: none"> <li>Core Competency Course</li> <li>Managerial Competency Course</li> <li>Functional Competency Course</li> <li>Anti-Drugs Course</li> <li>Occupational Health and Safety Course</li> <li>HIV/AIDs Prevention Course</li> </ul>	<ul style="list-style-type: none"> <li>165 courses</li> <li>1,059 participants</li> <li>Average training period 28.14 hours/person/year</li> </ul>
<ul style="list-style-type: none"> <li>Employee Development - talented and good staff through the SSI Way</li> </ul>	<ul style="list-style-type: none"> <li>Company value (iFacts) Knowledge and Awareness</li> </ul>	<ul style="list-style-type: none"> <li>3 activities</li> <li>654 participants</li> </ul>
<ul style="list-style-type: none"> <li>External Training (Domestic and Overseas Training)</li> </ul>	<ul style="list-style-type: none"> <li>Appoint staff to undertake training courses held by external organisations. The courses attended can be domestic or based overseas.</li> </ul>	<ul style="list-style-type: none"> <li>154 courses</li> <li>353 participants</li> <li>Average training period 3.45 hours/person/year</li> </ul>
<ul style="list-style-type: none"> <li>Acknowledge the Annual Division Goal Program</li> </ul>	<ul style="list-style-type: none"> <li>Managerial level and upwards acknowledge the policies, strategies and activities in each division.</li> </ul>	<ul style="list-style-type: none"> <li>February 2014, 120 participants (Managerial and above level)</li> </ul>
<ul style="list-style-type: none"> <li>Goal Program Presentation 2014</li> </ul>	<ul style="list-style-type: none"> <li>The Goal Program is presented by managers of each department.</li> </ul>	<ul style="list-style-type: none"> <li>July 2014, 124 participants</li> <li>December 2014, 145 participants</li> </ul>

## Welfare and Benefits

SSI places a focus on the welfare and benefits of employees and complies with the relevant legislation on employment such as leave days and holiday leave. Moreover, the Company provides the following welfare and benefits appropriate to the relevant working conditions:

- Two uniforms are provided on an annual basis
- 5-route transportations for staff in Bangsaphan to travel into the office
- Monetary support for staff who live outside of the Bangsaphan area
- Free rice and low price food for staff
- Upcountry allowance for staff who work at Bangsaphan plant
- Travelling allowance support for employees who work in other locations and overseas
- Shift allowance for shift workers
- Provident fund for employees on retirement
- Internal sport, Sport Day and Anti-Drugs sports
- Organises "Staff Health Week" campaign to support staff to learn to take care of their health
- Organises "Drug Free Workplace" project to bring collaboration from everyone involved in protecting and solving drug problems in organisations
- Organises lectures on HIV/AIDs
- Health and life insurance and travel insurance for overseas business trip.



## Employee Relations

The Company recognises the importance of building relationships between employees and management to create an effective work environment and to provide employees with a balance between work life and family life (Work Life Balance). The Company has therefore maintained the "Care Organisation" project which has included the following activities:

- Coaching: Improved coaching skills were developed to create good relationships between employees and supervisors. Training was provided to supervisors to develop their coaching skills and allow them to be more effective coaches to their employees. Coaching and evaluation plans were developed to allow the coaches and employees to review the improvement in the efficiency and effectiveness of their work. In 2014, there were 31 supervisors successfully attended the training/development course.
- Meet Management: The following activities have been put in place to establish a relationship between employees and management:
  - The annual policy statement: President informed managerial level staff about the strategic plan and company policies.
  - Goal Program Presentation: Managers and above reported their annual plans twice a year to support the company strategy and business plan. This allowed other managerial staff to share their plans and received comments and suggestions for improvement from the Management Committee.
  - Announce Division Annual Strategic Plan: Each management division presented to their staff the division strategy to create awareness and improve all employees understanding.
  - Executive meeting and participate in activities together: Management have visited the plants to participate in company activities such as sport, voluntary work, blood donations and merit in the New Year. These activities supported the Company's agenda to promote talented and good staff through the SSI Way.
- Increasing the well-being of employees and their families: Project activities have been set up for example, "1 family 1 storehouse of food". This project involves growing vegetables for employees. Other projects have been organised including Family Day, Mother's Day activities and volunteering activities for example lunch for children.
- HR Clinic: The Company arranged HR consulting staff to advise employees on any HR queries, for example company rules & regulations, salary, personal tax etc.

## Creative Internal Communication

In order to build good relationships and encourage understanding between the Organisation and all staff levels, SSI focuses on creative internal communication via many channels as follows:

Communication Channel	Objective	Outcome 2014
Message from Group CEO and President	To inform and make all staff aware of policies, operation directions and major performances of the Company directly from Group CEO and President.	1 time
Presentation of job performance and operation plans (Goal Program Presentation)	To allow all staff of managerial level and upwards to acknowledge and share their opinions on the direction and business operation. This is performed for the company in overview and for different departments to allow clear communication between teams.	3 times
Voice on the Line	To provide information to staff directly from the management team to help them understand the business vision or related operation.	5 days/week
Morning Talk (monthly/weekly)	To allow managers and staff to have a two way communication system to update on news related to the company and to solve any work issues.	1 day/week
Face to Face Workforce Visit	To visit staff at their operational locations to provide information and news about activities being held in the Company as well as asking them for their opinions and suggestions.	4 times
Employee Relations staff visit shift staff at their workplace	To visit night shift workers at their workplace and gain their opinion and provide them suggestion.	12 times
Welfare Committee	To communicate employees' requirements to the management team and strengthen the relationship between executives and staff.	4 times
Electronic Newsletters	To publicise updated information and activities of the Company. The newsletter includes completed and future projects to provide useful information related to daily life and health.	15 times
SSI Way Understanding Activities	To help employees learn and understand the "SSI Way" which are the values that the Company encourages staff to demonstrate - "good person", "talented person" and "qualified person" who will help develop both the organisation and the society.	5 times



Communication Channel	Objective	Outcome 2014
Internal TV	To distribute major information to all staff quickly	1,031 times
Communication via Social Media (Facebook, Page-SSI Employee Relation and Welfare)	Social media is used as a two way communication tool to inform staff about updated information regarding the organisation. The communication can be made via both the internet and smart phones.	505 messages
Steel man Steel Mind Project	To support the relationship between employees' families and the Company by choosing from employees who cooperate well with the Company's activities.	Whole Year Activity
Employee Engagement Survey	To survey engagement of employees toward the organisation in various aspects such as working process, welfare, wages and working environment in order to solve and improve issues.	1 time

## Employee Engagement Survey

SSI has continuously conducted the employee engagement survey since 2008. In 2014, the result of the relationship between the Company and its employees was in the indifference level with a score of 54%.

### Employee Engagement Survey Result Table

Year	Total Engagement Score (%)	Engagement Score Bangkok Office (%)	Engagement Score Bangsaphan Plant (%)
2012	58	37	61
2013	58	34	60
2014	54	39	56

Note: Hewitt Associates were applied to conduct the employee engagement survey.

The results of the survey were less than last year. The score in work engagement was slightly lower. Therefore, to increase the engagement level, managers will assign jobs which are more suitable for employees' skill and this, in turn, will generate satisfaction among members of staff.

## Social and Community Development

SSI has continuously focused on social and community development in accordance with sustainable development to strengthen relationships with its stakeholders. SSI has done this by adhering to three principles: creativity, stakeholder engagement and operation efficiency. In 2014, the Company operated 29 social and community development projects (this includes 22 Arsa projects), which benefited 11,400 stakeholders. These projects are divided into two parts: 1) Social development to strengthen the underprivileged and 2) Community development in 4 aspects: Education quality development, Environment quality development, Job and income development, and Good quality of life development which includes religion and culture support.

### Social Capital Development

#### Thailand Iron Man Mini Marathon 2014

The Company, in cooperation with steel industry partners, namely Thai Cold Rolled Steel Sheet Plc. (TCRSS), Siam United Steel (1995) Co., Ltd. (SUS), NS Blue Scope (Thailand) Limited (NS Blue Scope), and Nippon Steel & Sumikin Galvanizing (Thailand) Co., Ltd. (NSGT) jointly arranged a mini marathon for vulnerable people. The 7<sup>th</sup> Thailand Iron Man Mini Marathon 2014 managed to raise Baht 2.7 million for 24 charities. The event was held on the 8<sup>th</sup> November 2014 at Lumpini Park, with more than 1,400 participants. Over the previous 7 years, over Baht 16 million has been raised for charities providing benefits to vulnerable people, strengthening and sustaining their life in the society.



#### The 8<sup>th</sup> Academic Conference on Metallurgy

SSI continuously supported the 8<sup>th</sup> Academic Conference on Metallurgy or TMTC-8 which was held by the Department of Metallurgy, Faculty of Engineering of Chulalongkorn University and many leading universities in Thailand, during 15 - 16 December 2014 at Swissotel Le Concorde, Ratchadaphisek, Bangkok. The conference was arranged under the topic "Metallurgy Towards Green Innovation." It is a platform for academics to present their researches and exchange metallurgy knowledge between students, professors, government officers, private sectors and the public. The Company also presented the Excellent Metallurgist Award to Associate Professor Siriluck Niwitjanyong and Associate Professor Dr. Thoranin Chairuengsri and the Young Metallurgist Award to Assistant Professor Dr. Vitoon Utaiangsuk.

#### Cycling to Plant Trees in Honour of His Majesty the King

This is a cycling activity for local people to ride bicycles together and plant trees to expand green spaces and encourage local people to realise the importance of tree planting and energy reduction. This project has been organised 3 times already. The first time was to ride bicycles 30 km distance long from Bangsaphan district to plant trees at Thongchai Tammachak Temple in Thongchai subdistrict. The second time was to ride bicycles 12 km distance long from Bangsaphan district to plant trees at Thong Kee Tai, Pongprasas subdistrict, one of the five target plots that SSI has supported the Royal Forest Department. The third time was to ride bicycles 16 km distance long from Bangsaphan district to Khaowong cave in Moo 8, Kamnerd Noppakhun subdistrict to plant 700 trees in 2 rai.

### Community Development

In 2014, SSI has carried out 26 projects which reflect our commitment towards good citizenship and earning trust from Bangsaphan locals and stakeholders from strengthening the relationships with the community. The community development of SSI focuses on engagement from everyone, including SSI staff, locals and related organisations in the aspects as follows: education quality development, environment quality development, job and income development, good quality of life development, religion and cultural support and "SSI Arsa," a public mind project development among SSI Staff.

## Jointly Developing the Quality of the Community Education

### Sahaviriya Funds for Bangsaphan Educational Developments

Sahaviriya Funds for Bangsaphan Educational Developments Project emphasised 3 dimensions (school, teacher and student) and has continued for 3 years, with co-operation with the Office of the Basic Education Commission (OBEC) and from the Office of Prachuap Khiri Khan Primary Educational Service Area Zone 1. Sahaviriya Funds for Bangsaphan Educational Developments Project was started in 2011 and in 2014 it has expanded target schools to 35 schools in 7 subdistricts in Bangsaphan district to join "Sahaviriya Funds for Bangsaphan Educational Developments Project 3<sup>rd</sup> generation" and moves forward to sustainable excellence. This project is a 3-year continuous project with 3 generation of schools and 4 schools who received the scholarships in 2014. During 2014 there were activities during May to November 2014 as follows:

- 1<sup>st</sup> generation school: In 2014, the 2 medium sized schools, who passed the assessment in 2011 - Suan Luang School in Kamnerd Noppakhun subdistrict and Ban Don Sa-Nga School in Phonprasas subdistrict, were assessed if their 3-year educational plans passed the 2<sup>nd</sup> assessment (before receiving their 3<sup>rd</sup> installment fund)
- 2<sup>nd</sup> generation school: In 2014, a large sized school Bangsaphan Kindergarten School in Kamnerd Noppakhun subdistrict, who passed the assessment in 2013, had their 1<sup>st</sup> assessment (before receiving the 2<sup>nd</sup> installment fund)
- 3<sup>rd</sup> generation school: In 2014, the Sahaviriya Funds for Bangsaphan Educational Developments Committee has chosen a large size school - Bangsaphan School in Mae Ramphueng to receive the fund while there were 19 schools, submitting their 3-year educational plans.

### Scholarships for Students in the Community

SSI and Sahaviriya Group have continuously provided scholarships for primary schools - bachelor's degree students in Bangsaphan district. In 2014, 21 schools received 199 scholarships, Baht 496,000 worth:

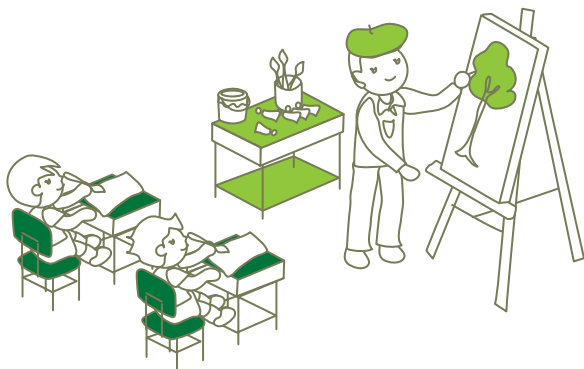
- 191 scholarships for primary school - high school students
- 4 continuous scholarships for bachelor's degree students
- SVG's Scholarship for Excellent Education Development (SVG SEED) Program started in 2012 and was developed, according to sustainability idea "supporting local teachers, developing local community." The local youths, who join the program and want to study to become a teacher, will be given 2 scholarships so that they will come back and develop their community.

Moreover, in 2014, Sahaviriya Group has encouraged staff to support educational opportunity for the youths in Bangsaphan district, by providing additional funding, in addition to SVG SEED, "Tun Nee Phue Nong" (ทุนนี้เพื่อน้อง) The project was well-received, with 36 scholarships, worth Baht 40,500 for the youths in Bangsaphan.

### Local Curriculum Development Project

SSI has joined with the school committee and local people in setting up the Local Curriculum Development Committee to apply local resources such as tools to teach students and create an effective learning environment. To generate co-operation among SSI staff, the lesson about "Steel in daily life" and "Steel industry and community development," were taught 6 hours by SSI Volunteer Teachers.

In 2014 Wat Napakkuang School and Ban Chamuang School were 2 schools who took part in the project after Ban Thakam School joined the project in 2012 and Ban Don Samran School in 2013.



### The Annual Drawing Contest Project

"The 11<sup>th</sup> Creative Arts, Wide Imagination Project," a drawing contest, provides an opportunity for students in Bangsaphan district to compete for scholarships. There were 242 students from kindergarten to junior high school levels, joining the contest. Some of the drawings will be selected and sent to compete in an international drawing contest.

### Sufficiency Economy School for Sustainability Project

SSI recognises the importance of His Majesty the King's idea of Sufficiency Economy, therefore, the Company has arranged *Sufficiency Economy School for Sustainability Project 2014*.

Last year the Company set up this project in Wat Napakkuang School, Kamnerd Noppakhun, Bangsaphan district, Prachuap Khiri Khan, by focusing on sustainability and creating shared value between SSI, schools, temple and community. Activities are as follows:

1. Arranged a poll for public opinion in a community meeting to gain support
2. Arranged a tour to study Sufficiency Economy Learning Centers in local areas to spark ideas off
3. Concluded lessons from the study tour to evaluate oneself
4. Arranged a study tour for community academics, so that they can apply knowledge, gained from the tour
5. Arranged skill training such as mushroom farming, biological fertiliser, non-toxic vegetable and bean sprout planting
6. Reported outcome, gained from Wat Napakkuang in 2014, in Napakkuang village meeting to acceptance, co-operation and unity among local people.

### Young Agriculturist Project

This project was launched in 2012. SSI has set up Hydroponics Vegetable system for Ban Tha Kham School in Mae Ramphueng subdistrict, Bangsaphan district, Prachuap Khiri Khan and 143 students gained benefit from this. In 2013, the project was expanded to Ban Morasuab School, Moo 3, Chaikasem subdistrict. During this project, students learned to practice business skills by planting vegetables and selling them in the school's cooperative. There were 346 students who received benefits from the project and enjoyed lunch from the vegetables while the rest were sold to the community to generate additional income for students.

In 2014, SSI expanded the Young Agriculturist Project to Ban Huaysai Khao School and Ban Suan Luang School. Students learned business skills, including production process, management and marketing skills. Moreover, the food grown from the project was used for school lunch and sold to parents and the community to create additional income for students.





### Youth Council Project

This project focused on life skill development management for the youths. The youths were prepared in various aspects such as potential development and instilling public awareness to support the community.

In 2014, there was outstanding progress made as a result of the project as follows:

- Youth Council Committee and consultant team were set up by community leader.
- There were 144 youth members.
- There were 4 potential development activities and 2 community development activities.
- The Youth Council competed in the Mother of the Nation Fund and received 2<sup>nd</sup> runner up prize in the province.
- The Youth Council competed in the Sufficiency Economy in Village Contest and won the contest.
- The Youth Council was certified by the Ministry of Social Development and Human Security which is the only Organisation, working on youths.

### The 10<sup>th</sup> To Be Engineer Project

SSI joined with schools in the Bangsaphan district to arrange a study camp for 327 Mattayom 3 students to learn about steel industry, under "the 10<sup>th</sup> To Be Engineer Project." The project consisted of providing knowledge of steel production, safety, environment management, community activities and steel in daily life in addition to a plant tour. There are also many recreational activities and guidelines provided for a future career, so that students will have information before making their decision for further study.

### Job Development to Strengthen Household Economy

SSI has operated in the steel industry in Bangsaphan for more than 20 years. This is an agricultural-based area where pineapple, rubber tree and coconuts are grown. To date this has proven that agriculture and industrial societies can co-exist and grow together with mutual care in a harmonious society where the inhabitants have steady jobs and sufficient income. Whilst adhering to Thai traditional living culture, the Company has supported agricultural development; this will help generate more income for local agriculturalists and housewife groups as follows:

### Supporting Sahaviriya Ruam Pattana Project

Sahaviriya Ruam Pattana Project was launched by Sahaviriya Group, by establishing community banks in 4 subdistricts around our plant. At present, there are 4 generations (18 banks), with Baht 20,137,190 total fund and 2,909 members. The first generation was set up in 2010, consisting of Tha Kam, Chamuang, Suanchat and Marong and now there are 677 members, with Baht 5,685,660 total fund: Baht 4,885,660 or 86% is community fund and Baht 800,000 is additional fund from Sahaviriya Group or 14%. The second generation included 6 community bank members, namely Thamanao, Ban Klangna, Pordang, Talad, Lukmuang and Chaimongkol Community Bank. At present, there are 1,077 members, with Baht 9,489,080 total fund: Baht 8,389,080 or 88% is community fund and Baht 800,000 or 12% is supported fund by Sahaviriya Group. The 3<sup>rd</sup> generation consists of 4 community banks, namely Ban Thangsai, Banfai, Ban Don Tong and Ban Tong Lankwai Community Banks, with 638 members and Baht 3,818,070 total fund: Baht 3,018,070 or 79% is community fund and Baht 1,100,000 or 21% is supported by Sahaviriya Group. Moreover, in 2013 - 2014 this project has established 4 more community banks: Ban Nong Taja, Ban Nong Rawang, Ban Thongnoon,



and Ban Donsung Community Bank. At present, there are 517 members, with Baht 1,144,380: Baht 944,380 or 83% is community fund and Baht 200,000 or 13% is provided by Sahaviriya Group.

### Increase Locals Hiring from the Community

In compliance with the policy of promoting the local workforce and discouraging people from Bangsaphan and surrounding areas to move away in search of income, SSI altered the policy in 2014 to increase the ratio of employment of local inhabitants. They report number of employees in the previous month and advertised job vacancies of SSI and Sahaviriya Group in current and next month, as part of the monthly meeting of community leaders. In 2014, SSI admitted 329 employees, or 122%, to work at the Bangsaphan Plant while the target was 270 employees.

As of 31 December 2014, the total number of SSI Group staff was 2,068. SSI Group has a policy to focus on hiring local people, there are 1,572 employees at SSI Bangsaphan Plant (76% are from Prachuap Khiri Khan) and 1,100 contracted employees. The total number of SSI Teesside Steelworks Staff is 2,002; out of this number 95.75% are resident in the local area and 1,226 are contracted employees.

### Purchase of Products and Services from the Community

In 2014, SSI Group of Companies spent Baht 216 million on local products and services and in 2015, the number is expected to rise to Baht 220 million.

SSI has supported jobs in Bangsaphan by buying local products from various groups. SSI also organised a mobile local products project, selling local One Tambon One Product ("OTOP") goods. These products are produced by housewife groups from various areas and sold in SSI Bangsaphan Plant. This will make local products well-known and generate additional income for Bangsaphan locals. In 2014, the value of purchased local products amounted to Baht 698,131.



### Safeguarding and Upgrading the Environmental Quality

SSI is aware of its responsibility to the environment and natural resources. The Company controls the industrial processes to ensure that pollution is minimised to maintain the quality of life and health of staff and local people. SSI, together with related offices, co-operate to continuously improve the quality of the environment.

### SSI Beach Clean-Up

SSI executives, staff, students, and Bangsaphan people annually joined together on the World Environment Day, 5 June, to support the United Nations Environment Programme (UNEP). The topic this year is "Raise your voice, Not the sea level", by collecting garbage on Mae Ramphueng beach, Mae Ramphueng subdistrict, Bangsaphan district. In 2014 there were 500 participants and the distance covered was 3 kilometres.





## Bangsaphan Car Free Day

SSI allied with the Bangsaphan district and the local administration to join a bicycle ride, "Bangsaphan Car Free Day 2014" for the 4<sup>th</sup> consecutive year, on Sunday 21 September 2014. The activities included stopping using motorised vehicles for 30 minutes and cycling around the Bangsaphan market. The opening ceremony was held in Bangsaphan district multipurpose playground, Prachuap Khiri Khan. There were 541 cyclists, which was an increase of 87.8% from 2013. This activity helped reduce approximately 822.32 tons of carbon dioxide emissions.



## SSI Waste Bank Project

SSI arranged the SSI Waste Bank Project at Ban Tha Kam School in Mae Ramphueng subdistrict, with an aim to support learning, understanding and instilling public mind among young people and to allow them to be part of environmental management. This has created a platform for the youths to express their imagination and expanded environmental projects that SSI has cooperated with the youths.

There were 67 participants from 11 schools, namely Ban Morasub School, Ban Wang Numkaew School, Bangsaphan School, Wat Don Yang School, Wat Thongchai Tammachak School, Ban Suanluang School, Ban Nong Yahphlong School, Ban Thakam School, Sot Suksa Tepparat School, Don Sa-nga School and Women Secretaries 1 School (out of these, 4 schools have joined the SSI Waste Bank Project, except Sot Suksa Tepparat School, who has constantly been a member of Youth Conservation Camp for 11 consecutive years).



### Youth Conservation Camp

SSI, in co-operation with the Prachuap Khiri Khan Primary Educational Service Area 1, organised Youth Conservation Camp for representative youths from educational institutes in Bangsaphan district. There were 120 junior conservationists, high school students (Matthayom 5) from 24 schools, joining the camp. The project aims at instilling green awareness among local youths, by arranging various activities. This project has been held for 10 consecutive years, with 1,049 junior conservationists, in total.

### Love the King, Preserve Bangsaphan 2014

SSI together with Mae Ramphueng Subdistrict Administration Organization organised an activity, under "Love the King, Preserve Bangsaphan Project 2014," to honour His Majesty the King on His Majesty's 87 birthdays. There were 1,461 people, including SSI staff and local people, joining the 3-km walking activity from Moo 5 multipurpose pavilion in Mae Ramphueng subdistrict to Mae Ramphueng Subdistrict Administration Organization Office and releasing 9 million marine lives such as turtle, shrimp and fish to honour His Majesty the King. This was done to return fertility to the Bangsaphan coast, increase food source and generate income for local fisherman. The event was held at Mae Ramphueng Subdistrict Administration Organization Office, Bangsaphan district, Prachuap Khiri Khan.



### Super Smart & Intelligent Kids (SSI Kids)

SSI, in co-operation with the Natural Resource and Environmental Office, invited 120 primary school students (Prathom 5) to learn basic water and environment quality monitoring. This was taught in theory and practice from specialists from Natural Resource and Environmental Prachuap Khiri Khan, by setting up 5 learning bases. Moreover, the youths were encouraged to establish a group to test water quality in their community.





## Culture and Religion Activities

### Activities on Elders Day

SSI, in co-operation with the Bangsaphan Hospital and Health Network of Bangsaphan, organised 2014 Elder's Day activities by disseminating knowledge on elderly healthcare and sprinkling water on elderly people to show gratitude and respect. There were 137 local elders who participated.

### National Children's Day 2014 in Bangsaphan

SSI joined with local government organisations to arrange activities for the youths on Children's Day, 11 January 2014. The event is a collaboration between local government organisations in Bangsaphan, Prachuap Khiri Khan, comprising recreation activities, performance, free food, souvenir and awards for the youths. Moreover, Prachuap Port Co., Ltd. (PPC) opened its deep sea port and allowed young people to explore the site and PPC Shore Crane which is used for transferring raw material and products. More than 2,000 youths and their families joined the event.



### Supported the Building of Floating Temple for Khok Chang Phueak Temple

SSI supported hot-rolled steel sheet, worth Baht 100,000, for building structure of the only floating temple (Uthokkhep Sima) in the world and the first one in Prachuap Khiri Khan, for Khok Chang Phueak Temple, Bangsaphan Noi, Prachuap Khiri Khan. The floating temple is 1.2 meters width, 3.05 meters long and 4 mm thickness, using 55 hot-rolled steel sheets. This will help reduce steel costs and support religious activities for the community.

### Made Merit and Provided Monetary Support for Napakkuang Temple

SSI and its subsidiaries, community leaders and locals in Bangsaphan, 300 people in total, together made merit and provided monetary support for the building of pavilions for Napakkuang Temple in Kamnerd Noppakhun subdistrict and Mae Ramphueng subdistrict, so that, local people can use them for religious activities. The total monetary support was Baht 279,564.25.



## SSI Arsa Project

“SSI Arsa Project” is a volunteering project, launched by SSI staff and executives. They worked together, to arrange activities to help the society and community in Bangsaphan. This project has generated pride among the staff.

## Instilling Corporate Volunteering Culture

In 2014, SSI Arsa Volunteers have arranged 1 major volunteering activity and 21 minor activities under the project “SSI 25<sup>th</sup> Anniversary, 250 Virtues.”

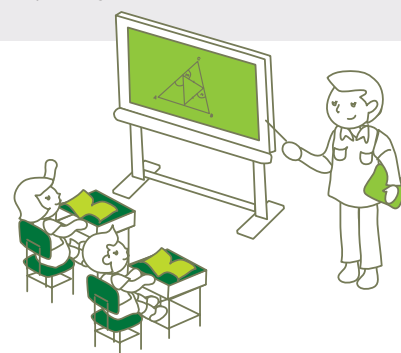
### SSI Arsa Major Volunteering Activity

The 19<sup>th</sup> SSI Arsa Project: Painted school building and built a public rest-house for Matthayom Noppakhun School in Moo 1, Kamnerd Noppakhun subdistrict

### SSI 25<sup>th</sup> Anniversary, 250 Virtues: 21 good deed

- The 101<sup>st</sup> good deed: Repaired a crematorium at Tha Manao Temple in Moo 2, Mae Ramphueng subdistrict
- The 102<sup>nd</sup> good deed: Repaired a crematorium door and boat at Nong Mongkol Temple in Moo 7, Thongchai subdistrict
- The 103<sup>rd</sup> good deed: Repaired a crematorium at Huay Sai Khao Temple in Moo 1, Kamnerd Noppakhun subdistrict
- The 104<sup>th</sup> good deed: Repaired a crematorium at Don Aree Temple in Moo 6, Saithong subdistrict
- The 105<sup>th</sup> good deed: Repaired a crematorium at Samkum Temple in Moo 10, Chai Kasem subdistrict
- The 106<sup>th</sup> good deed: Repaired a crematorium at Don Takien Temple in Moo 9, Bangsaphan Noi subdistrict
- The 107<sup>th</sup> good deed: Repaired a crematorium at Chonglom Temple, in Moo 9, Changrag subdistrict
- The 108<sup>th</sup> good deed: Repaired children play area for Ban Don Samnuk School in Moo 1, Ron Thong subdistrict
- The 109<sup>th</sup> good deed: Repaired a crematorium boat at Rak Khiriwan Temple in Moo 1, Chai Kasem subdistrict
- The 110<sup>th</sup> good deed: Repaired a crematorium and a crematorium boat at Thong Kratin Temple in Moo 1, Ron Thong subdistrict
- The 111<sup>th</sup> good deed: Built a public rest-house for students and parents at Wat Don Samran School in Moo 1, Mae Ramphueng subdistrict
- The 112<sup>th</sup> good deed: Repaired computers for Wat Napakkuang School in Moo 2, Kamnerd Noppakhun subdistrict
- The 113<sup>th</sup> good deed: Set up computers for Wat Napakkuang School in Moo 2, Kamnerd Noppakhun subdistrict
- The 114<sup>th</sup> good deed: SSI Arsa Volunteers taught science and math for primary school students (Prathom 3 and 6) at Bangsaphan Kindergarten School in Moo 1, Kamnerd Noppakhun subdistrict
- The 115<sup>th</sup> good deed: Replaced roof tiles of crematorium pavilion for Paron Temple in Moo 6, Ron Thong subdistrict
- The 116<sup>th</sup> good deed: Paint multipurpose public rest-house for Pak Prak Temple in Moo 2, Pak Prak subdistrict, Bangsaphan Noi district
- The 117<sup>th</sup> good deed: Built a 14 x 14 meter sport field and replaced the water tank for Wang Yao Temple in Moo 4, Ron Thong subdistrict
- The 118<sup>th</sup> good deed: Repaired the community water tank for Nong Chan Temple in Moo 2, Chai Kasem subdistrict
- The 119<sup>th</sup> good deed: Repaired crematorium boat for Trikoo Temple in Moo 3, Ron Thong subdistrict
- The 120<sup>th</sup> good deed: Painted a multipurpose public rest-house for Pak Prak Temple in Moo 2, Pak Prak subdistrict, Bangsaphan Noi district
- The 121<sup>st</sup> good deed: Replaced rain gutters for Bangsaphan School in Moo 8, Mae Ramphueng subdistrict

The total number of SSI Arsa Volunteers involved were 531, or 4,248 working hours, and volunteers from the community were 320 or 2,560 working hours.



### Expanding Arsa Network to Stakeholders

#### Tam Kan Pan Nong Project

SSI supported the project “the 13<sup>th</sup> Tam Kan Pan Nong,” by providing sport equipments, educational funds, repairing school buildings and arranging recreational activities for students. The event was held at Ban Nong Ta Guy School, a school in a remote area, in Lao Kwan district, Kanchanaburi province. SSI was working in partnership with the media from the Energy for the Society Club.



#### Youth Volunteering Project for Society

SSI set up a network of volunteers for local youths named “Arsa Bangsaphan Youth Group.” The group was given initial investment to raise funds for vulnerable people. In 2014 the activity “Young Guide” was developed to support Bangsaphan tourism in line with instilling public mind among the youths and strengthening the underprivileged. This activity is a collaboration between SSI and Prachuap Khiri Khan Provincial Administrative Organization, Phra Mahathat Chedi Phakdi Prakat Foundation, and Thongchai Wittaya School. There were 61 youths who have trained both in theory and practice and they will have shift work every weekend to raise fund to help the underprivileged.



## Social and Community Development of SSI UK

In 2014, Sahaviriya Steel Industries UK Limited (SSI UK), a subsidiary of SSI, has arranged CSR activities as follows:

- SSI UK and their Trade Union representatives worked together to collect food items to support disadvantaged people in the local area.
- SSI UK Communications Team helped a local charity organisation by providing advice and guidance on its marketing activities.
- Two regular meetings were held with local resident groups to update them on the SSI UK's environment initiatives, exchanging ideas and foster good relationships. This event is planned to be held 2 times a year.



## 1. Economics

GRI	Required Data	Unit	2012	2013	2014	Remark
Economics						
G4-EC1	Economic performance					
	Sales and service revenues	Million Baht	60,604.00	65,387.00	65,276.00	
	HRC Sales Volume (ktons)	Million Baht	2,478.00	3,243.00	3,318.00	
	EBITDA	Million Baht	10,597.00	(2,888.00)	808.00	
	Net profit (loss)	Million Baht	15,918.00	(7,053.00)	(4,903.00)	
	Economic value distributed					
	Suppliers*	Million Baht	4,236.00	4,424.00	3,099.00	
	Employees**	Million Baht	526.40	595.47	620.24	
	Financial Institutions (Interest Expense)	Million Baht	2,044.65	1,970.87	1,669.89	
	Community, Social and Environment***	Million Baht	18.00	18.63	17.81	
	Government (Tax)****	Million Baht	95.87	157.78	124.01	
Customer satisfaction						
G4-PR5	Target	%	75	75	75	
	Customer satisfaction					
	• Domestic market group A1	%	79	72	76	
	• Domestic market group A2	%	82	70	74	
	• Domestic market group B2	%	87	80	77	

\* Consist of value of general trading transactions in goods

\*\* Consist of salary, wages, welfare, provident fund, social security and other expenses for HR development

\*\*\* Consist of expenses in community and environment development

\*\*\*\* Consist of corporate income tax, local development tax, house and building tax, signboard tax and withholding tax

## 2. Environment

GRI	Required Data	Unit	2012	2013	2014	Remark
Energy						
G4-EN3	Total energy consumption	Megajoule (MJ)	4,265,870,043.74	4,192,104,255.51	2,749,635,901.86	
	Direct energy consumption	Megajoule (MJ)	3,464,879,958.14	3,375,299,827.11	2,167,655,070.66	
	• Benzene consumption	Liter	86,104,924.00	83,933,127.00	53,902,830.00	
	• Diesel consumption	Liter	1,111,673.00	1,023,596.00	657,318.00	
	Indirect energy consumption	Megajoule (MJ)	80,099.01	81,680.44	58,198.08	
	• Electricity consumption	Megawatt Hour (MWh)	22,249.72	22,689.01	16,166.13	
G4-EN6	Total amount of saved energy	Megajoule (MJ)	3,343,305.00	3,380,677.00	20,604,613.00	
CO <sub>2</sub> Emission						
G4-EN15	CO <sub>2</sub> Emission	Tons CO <sub>2</sub>	409,640.00	404,790.00	270,767.00	



GRI	Required Data	Unit	2012	2013	2014	Remark
Water						
G4-EN8	Water consumption from production process	million cubic meters	1.89	1.42	1.37	
Wastes						
G4-EN23	Percentage of materials used that are recycled input materials	%	98.94	98.53	98.22	
	Percentage of waste by waste incineration	%	0.38	1.47	1.78	
	Percentage of waste by landfill	%	0.68	0	0	
Transport						
G4-EN30	Number of company's vehicles or leased vehicles for product transportation					
	• Short distance truck	Unit	56	56	56	
	• Long distance truck	Unit	700	700	700	
	Number of transportation					
	• Short distance truck	Trips	1,463	1,432	1,189	
	• Long distance truck	Trips	3,433	3,326	2,010	

### 3. Workforce

GRI	Required Data	Unit	2012	2013	2014	Remark
Hiring						
G4-LA1	Number of employees					
	• Number of permanent employees	Person(s)	1,004	1,036	1,059	
	• Number of contracted employees	Person(s)	-	591	492	
	By gender					
	• Male	Person(s)	825	850	865	
	• Female	Person(s)	179	186	194	
	By age					
	• Over 50 years old	Person(s)	39	47	61	
	• 30 - 50 years old	Person(s)	708	732	765	
	• Below 30 years old	Person(s)	257	257	233	
	By employee structure					
	• Executive	Person(s)	22	39	40	
	• Managerial	Person(s)	118	127	142	
	• Supervisory	Person(s)	424	419	420	
	• Operational	Person(s)	440	451	457	
	Employee turnover					
	Total turnover	Person(s)	85	73	63	
	Total turnover rate	% of total employee turnover	8.46	7.04	5.94	

GRI	Required Data	Unit	2012	2013	2014	Remark
Hiring						
	By gender					
	• Male	Person(s)	60	48	43	
	• Female	Person(s)	25	25	20	
	By age					
	• Over 50 years old	Person(s)	2	-	-	
	• 30 - 50 years old	Person(s)	48	50	45	
	• Below 30 years old	Person(s)	35	23	18	
	Newly hired employees					
	Total number of new employee	Person(s)	117	128	110	In 2014, 69 people from external parties and 41 people from SSI were recruited.
	Total new employee rate	% of total employee	11.65	12.35	10.38	
	By gender					
	• Male	Person(s)	78	75	60	
	• Female	Person(s)	39	53	50	
	By age					
	• Over 50 years old	Person(s)	2	1	-	
	• 30 - 50 years old	Person(s)	42	44	54	
	• Below 30 years old	Person(s)	73	83	56	
Maternity and parental leave						
G4-LA3	Number of employee who take maternity leave	Person(s)	10	11	9	
	Number of employees returing to work after leave	Person(s)	10	10	9	
Training and education						
G4-LA9	Average training hour					
	By branch					
	• Bangkok office	Hours/Person/Year	17.80	22.56	24.32	
	• SSI Bangsaphan Plant	Hours/Person/Year	25.60	28.25	29.19	
	By employee structure					
	• Managerial - Executive level	Hours/Person/Year	-	-	34.83	No record during 2012 - 2013
	• Operational - Supervisory level	Hours/Person/Year	-	-	26.74	
Anti-corruption						
G4-SO4	Number of employees who have completed ethics training	Person(s)	151	404	296	
Code of conduct						
	Violation of Business Ethics	Cases	-	-	-	No violation

GRI	Required Data	Unit	2012	2013	2014	Remark
Talent attraction and retention						
	Percentage of employees who passed formal performance reviews	%	100.00	100.00	100.00	Applied Hewitt Associates in surveying employee engagement
	Employee satisfaction Goal	%	65.00	65.00	65.00	
	Percentage of employees who take engagement survey					
	• Bangkok Office	%	11.00	9.00	9.40	
	• SSI Bangsaphan Plant	%	89.00	91.00	90.60	
	Score					
	• Total score of employee engagement with the Company	%	58.00	58.00	54.00	
	• Score of employee engagement with Bangkok Office	%	37.00	34.00	39.00	
	• Score of employee engagement with SSI Bangsaphan Plant	%	61.00	60.00	56.00	

#### 4. Occupational Health and Safety Performance Table

GRI	Required Data	Unit	2012	2013	2014	Remark
Occupational health and safety						
G4 - LA6	Injury Frequency Rate (IFR)					
	• Employees and contractors	case/a million working hour	4.36	2.97	2.92	
	Lost Time Injury Frequency Rate (LTIFR)					
	• Employees and contractors	case/a million working hour	0.34	0.99	1.1	

LTIFR: (Number of Lost Time Injury x 1,000,000) / Total working hours

IFR: (Number of Injury x 1,000,000) / Total working hours



### Annual General Meeting Checklist (AGM Checklist) in the highest score group 2014

The Securities and Exchange Commission (SEC), the Thai Investors Association (TIA) and the Thai Listed Companies Association

### National Outstanding Award for Safety, Occupational Health and Environment 2014 (3 consecutive years)

Ministry of Labour



### National Outstanding Industrial Establishment Award in Labour Welfare/Relations Category for 10 consecutive years (2004 – 2014) None Labour Union Category (3 consecutive years)

Department of Labour Protection and Welfare, Ministry of Labour



### ASEAN Energy Awards 2014 under the Large Industry Category This is the first award in ASEAN standard for SSI ASEAN Center for Energy (ACE)



### Excellent CSR Honorable plate

Ministry of Social Development and Human Security



### CSRI Recognition 2014

Corporate Social Responsibility Institute (CSRI), Stock Exchange of Thailand



### Thailand Energy Awards 2014, in the category of Outstanding Designated Factory in Energy Conservation

Office of Natural Resources and Environmental Policy and Planning, Ministry of Energy



### Prime Minister Industry Award 2014 for Outstanding Productivity

Ministry of Industry

### Outstanding Level in Corporate Governance Report of Thai Listed Companies 2014

Thai Institute of Directors (IOD), the Stock Exchange of Thailand (SET) and Securities and Exchange Commission (SEC)



### Excellent Organization by Environment Impact Assessment Standard 2014 (EIA Monitoring Award 2014)

Office of Natural Resources and Environmental Policy and Planning, Minister of Natural Resources and Environment

## Scope of the Report

The Corporate Social Responsibility Report 2014 of Sahaviriya Steel Industries Public Company Limited (SSI) is the sixth issue that the Company has published to inform shareholders, stakeholders, investors and the public. This issue has added information about stakeholder engagement and their expectation which will be applied to set up a clear CSR framework with economic, social and environmental consideration.

This issue has covered all business strategy, policies, guideline, and business performance in economic, social and environmental aspect, mainly about SSI and some parts connected to its subsidiaries, during 1 January 2014 to 31 December 2014, to ensure that the CSR guidelines are delivered consistently throughout the Group.

Moreover, the Company determines to expand the report to cover more areas, as the Company has a subsidiary abroad.

This report has been generated in accordance with Global Reporting Initiative (GRI) G4 which is an international initiative. The report is disseminated in written reports and online at [www.ssi-steel.com](http://www.ssi-steel.com) to allow everyone easy access to the information.

### For more information, please contact:

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Bangkok 10500  
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0-2236-8892



SSI has channels for appealing against illegal action, including actions which will damage whistle-blowers and the Company. Moreover, the Company has policies to protect the whistle-blowers and the appeal will be monitored and the facts assessed. These issues will be fixed, while the whistle-blowers and the Audit Committee will be informed about its progress. In addition, the results of the Good Corporate Governance Committee's tasks will be reported to the Board of Directors for acknowledgement twice a year.

There are communication channels that the Company has applied to communicate with the main 7 groups of stakeholders to create understanding and allow them to be part of the operation. Their opinion will be assessed to appropriately respond to all stakeholders and continuously enhance for sustainable development.

### Stakeholders Engagement and Expectation

Group of Stakeholder	Expectations	Engagement Method	No. of Time Engaged
Shareholders and Investors	<ul style="list-style-type: none"> <li>Good corporate governance</li> <li>Risk management</li> <li>Good performance and return</li> <li>Investment plans for the future</li> <li>Anti-corruption policy</li> </ul>	Annual general meeting Annual report Investor relations activities Website Road show and financial institutions relationship Plant visit	Annual Annual As needed Continuous As needed As needed
Customers	<ul style="list-style-type: none"> <li>Product quality</li> <li>Technical supports</li> <li>On time delivery</li> <li>Service quality</li> <li>Appropriate access to product</li> <li>Product information</li> <li>Products that promote the society and environment</li> </ul>	Customer visit Customer meeting Development of good relationship via corporate tools; website, products manual, and activities System of complaint Plant visit	As needed As needed Continuous Continuous Continuous
Business Partners and Suppliers	<ul style="list-style-type: none"> <li>Quality promotion</li> <li>Technical support</li> <li>Co-management of occupational health, safety and environment</li> </ul>	Annual seminar Meeting Recruitment and selection process Advisory system	Continuous Continuous Continuous Continuous
Competitors	<ul style="list-style-type: none"> <li>Fair competition</li> <li>Avoiding dishonest or inappropriate access confidential information of competitors</li> <li>Not discrediting competitors</li> </ul>	Conference Association membership Association and sharing of experiences	Continuous Continuous Continuous
Employees	<ul style="list-style-type: none"> <li>Environment, health and safety management in workplace</li> <li>Human resource development</li> <li>Fair evaluation and appropriate remuneration</li> <li>Communications</li> <li>Equal employment opportunity and anti-discrimination in the workplace</li> <li>Welfare</li> </ul>	Meeting Internal program development Employee relations activities Workplace visit Internal radio broadcasting Intranet E-mail System of complaint	Continuous Continuous Continuous Continuous Continuous Continuous Continuous



Group of Stakeholder	Expectations	Engagement Method	No. of Time Engaged
Government	<ul style="list-style-type: none"> <li>• Job creation</li> <li>• Fair competition</li> <li>• Safety at work</li> <li>• Additional investment</li> <li>• National economic promotion</li> </ul>	Meeting and sharing information Membership and participation in activities	Continuous As needed
Communities	<ul style="list-style-type: none"> <li>• Community development</li> <li>• Safety, occupational health and environmental management</li> <li>• Additional investment</li> <li>• Knowledge transferring</li> <li>• Community activity support</li> <li>• Product transportation</li> </ul>	Community visit Monthly meeting Opinion leader meeting Activity support Sponsorships Communication activities Opinion survey System of complaint	Continuous Continuous Continuous Continuous Continuous Continuous As needed Continuous

## Sustainability Evaluation

SSI has conducted this report, by considering important issues which cover risk assessment, current and future business opportunities, in accordance with Global Reporting Initiative (GRI) and information from its stakeholders. This report was assessed according to GRI (G4) and was grouped in "Core" level, by revealing Material Aspect, which is shown in GRI G4 Content Index. Details of the assessment are as follows:

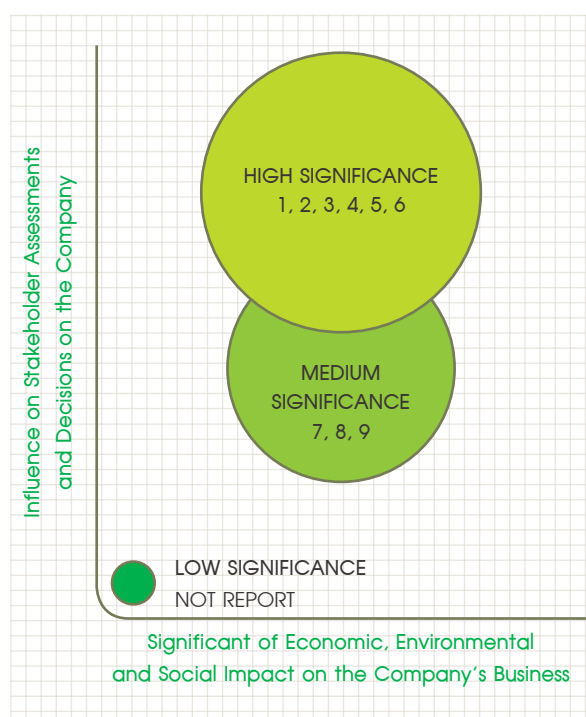
**1. Identification:** Identified significant sustainability related issues, by taking into account GRI indicators, industry standards, and market trends. The Company chose the issues influence business strategies, business risks and sustainability strategies of the Company, stakeholder expectations and creating shared values.

**2. Materiality Assessment:** Collected, assessed and introduced issues significant to business operations and in line with stakeholder's interest regarding level of high and medium significance. Other issues are presented on the SSI website or through other communication channels i.e. Annual Report, 56-1 Report, website, etc.

**3. Issue Verification:** Interviewed external stakeholders and incorporated their perspectives and viewpoints during the content development. Corporate Social Responsibility Management Committee verifies assessment of significant issues to the organisation, selection of report content for publishing, as well as report formatting in order to ensure that the report covers significant issues relating to SSI and stakeholders' expectations.

## Results of Significant Issue Assessment 2014 Table

1. Creating customer value
2. Good corporate governance and fair operating practices
3. Anti-corruption
4. Environmental management
5. Occupational health and safety
6. Water management
7. Human resource development and human right
8. Innovation for sustainable future
9. Local community development



## General Standard Disclosures

- Fully Reported
- Partilly Reported
- Not Reported

GRI Aspect	Indicator	Level of Reporting	Page	Note
Strategy and Analysis	G4-1	●	2, 3	
	G4-2	●	2, 3, 12, 13 and annual report page 6, 7, 28, 29	
Organisational Profile	G4-3	●	5, 52	
	G4-4	●	5	
	G4-5	●	52	
	G4-6	●	5 - 7 and annual report page 8 - 10	
	G4-7	●	5, and annual report page 8 - 10	
	G4-8	●	5, 12 - 13, and annual report page 6 - 7	
	G4-9	●	5, 52	
	G4-10	●	32, 48 - 49	
	G4-11	●	Not applicable	
	G4-12	●	8, 9, and annual report page 17 - 20	
	G4-13	●	Annual report page 6, 7, 12, 13	
	G4-14	●	12 - 13, 14 - 27, and annual report page 29	
	G4-15	●	2 - 3, 13, 47	
	G4-16	●	Thailand's Private Sector Collective Action Coalition against Corruption (CAC), page 31	
Identified Material Aspects and Boundaries	G4-17	●	Annual report page 21	
	G4-18	●	52 - 54, "Report Preparation"	
	G4-19	●	54, "Results of Significant Issue Assessment 2014"	
	G4-20	●	The Aspect is material within the organization, refer to "About this report" and "Assessment of SSI's Key Sustainability Issues" on page 52 - 54	
	G4-21	●	refer to page 52 - 54 "About this report" and page 27 "Result of Stakeholder Survey"	
	G4-22	●	There are not any restatements of information provided in previous report.	
	G4-23	●	There is no significant change from previous reporting period in scope and boundary. Please refer to "About this report", page 52 - 54.	
Stakeholder Engagement	G4-24	●	8, 9, and 53 - 54, "Stakeholder Engagement"	
	G4-25	●	53 - 54, "Stakeholder Engagement"	
	G4-26	●	8, 9, and 53 - 54, "Stakeholder Communication Process"	
	G4-27	●	27 and 53 - 54, "Stakeholder Communication Process"	
Report Profile	G4-28	●	52	
	G4-29	●	52	
	G4-30	●	52	
	G4-31	●	52	
	G4-32	●	55 - 59	
	G4-33	●	Our financial data are audited by Independent Auditor (Refer to annual report, page 137)	
Governance	G4-34	●	8 - 9, and annual report page 85 - 90, 96	
	G4-35	●	10, and annual report page 96	
	G4-36	●	10, and annual report page 96	
	G4-37	●	Annual report page 39 - 51, 96	
	G4-38	●	Annual report page 97 - 99	

GRI Aspect	Indicator	Level of Reporting	Page	Note
Governance	G4-39	●	Annual report page 39	
	G4-40	●	Annual report page 97 - 99	
	G4-41	●	Annual report page 88 - 89	
	G4-42	●	10, and annual report page 5, 68, 69, 76 - 77, 96	
	G4-43	●	33, 49 and annual report page 93	
	G4-44	●	10, and annual report page 92	
	G4-45	●	Annual report page 29 - 33, 68 - 69	
	G4-46	●	Annual report page 29 - 33, 68 - 69	
	G4-47	●	10 and annual report page 68 - 69	
	G4-48	●	54	
	G4-49	●	10, and annual report page 68 - 69	
	G4-50	●	In 2014, there was zero case.	
	G4-51	●	Annual report page 60 - 62	
	G4-52	●	Annual report page 60	
	G4-53	●	Annual report page 92	
	G4-54	○	Not applicable	
	G4-55	●	Not applicable: Proprietary information	
Ethics and Integrity	G4-56	●	8, 9	
	G4-57	●	30 - 31, 83	
	G4-58	●	30 - 31, 83	

### Specific Standard Disclosures Overview

GRI Aspect	Location of Disclosure	Indicator	Level of Reporting	Page
General		Disclosures on Management Approach	●	12 - 13, and annual report page 6 - 7

### Economic

GRI Aspect	Location of Disclosure	Indicator	Level of Reporting	Page
Economic Performance	SSI	G4-EC1	●	2, 3, 12, 13, 47 and annual report 131 - 136
	Partner	G4-EC2	●	20 - 26
	Customer	G4-EC3	○	Not applicable
	Community	G4-EC4	○	
Market Presence	SSI	G4-EC5	○	
		G4-EC6	○	
Indirect Economic Impacts	SSI Community	G4-EC7	○	
		G4-EC8	●	2 - 3, 13, 47
Procurement Practices		G4-EC9	●	2 - 3, 13, 41

## Environmental

GRI Aspect	Location of Disclosure	Indicator	Level of Reporting	Page
Materials	SSI	G4-EN1	●	16
		G4-EN2	●	25, 26, 48
Energy	SSI	G4-EN3	●	16, 17, 47
		G4-EN4	○	Not applicable
		G4-EN5	●	21
		G4-EN6	●	16, 17
		G4-EN7	●	16, 17
		G4-EN8	●	17, 48
Water	SSI	G4-EN9	●	17, 48
		G4-EN10	●	17
		G4-EN11	○	
Biodiversity	SSI Community	G4-EN12	○	
		G4-EN13	●	19, 20
		G4-EN14	●	19, 20
		G4-EN15	●	20 - 21, 47
Emission	SSI	G4-EN16	●	20 - 21, 47
		G4-EN17	○	
		G4-EN18	●	22 - 24
		G4-EN19	●	20 - 26
		G4-EN20	○	
		G4-EN21	●	20 - 25
		G4-EN22	●	17 - 18
		G4-EN23	●	25 - 26, 48
Influents and waste	SSI	G4-EN24	○	
		G4-EN25	○	
		G4-EN26	○	
		G4-EN27	●	15
		G4-EN28	○	
Product and Services	SSI	G4-EN29	○	Annual report page 83
Transport	SSI	G4-EN30	●	15, 48
Overall	SSI	G4-EN31	○	
Supplier Environmental Assessment	SSI	G4-EN32	●	2 - 3, 18 - 19
		G4-EN33	●	15
Environmental Grievance Mechanisms	SSI	G4-EN34	●	27, 54

GRI Aspect	Location of Disclosure	Indicator	Level of Reporting	Page
Employment	SSI	G4-LA1	●	32, 48, 49
		G4-LA2	●	13, 34, 47
		G4-LA3	●	49
Labor/Management Relations	SSI	G4-LA4	○	
Occupational Health and Safety	SSI	G4-LA5	●	14, 15
		G4-LA6	●	2 - 3, 14, 50
		G4-LA7	○	
		G4-LA8	○	
Training and Education	SSI	G4-LA9	●	33, 49
		G4-LA10	●	49
		G4-LA11	●	50
Diversity and Equal Opportunity		G4-LA12	●	32
Equal remuneration for women and men	SSI	G4-LA13	○	
Labor Practices and Decent Work				
Supplier Assessment for labor practices	SSI Supplier	G4-LA14	●	SSI found no illegal actions from performing supplier assessments, auditing and evaluation
		G4-LA15	○	
Labor practices grievance Mechanisms	SSI	G4-LA16	●	SSI has received no significant complaints, affecting the business.
Human Rights				
Investment	SSI	G4-HR1	○	
		G4-HR2	●	33, 49
Non-discrimination	SSI	G4-HR3	○	
Freedom of association and collective	SSI	G4-HR4	●	8, 9
Child Labor	SSI	G4-HR5	●	32, 49, No case of child labor in our operations.
Forced or compulsory labor	SSI	G4-HR6	●	32, 49, No case of forced labor in our operations.
Security practices	SSI	G4-HR7	○	
Indigenous rights	SSI	G4-HR8	○	
Assessment	SSI	G4-HR9	○	
Supplier human rights assessment	SSI Supplier	G4-HR10	●	SSI found no illegal actions from performing supplier assessments, auditing and evaluation
		G4-HR11	○	
Human rights grievance mechanisms	SSI	G4-HR12	○	

## Society

GRI Aspect	Location of Disclosure	Indicator	Level of Reporting	Page
Local Communities	SSI	G4-DMA	●	37
		G4-SO1	●	3, 13, 37
		G4-SO2	○	
Anti-corruption	SSI	G4-SO3	○	
		G4-SO4	●	30 - 31, 49
		G4-SO5	○	
Public policy	SSI	G4-SO6	○	
Anti-competitive behavior	SSI	G4-SO7	○	
		G4-SO8	○	
Supplier assessment for impacts on society	SSI	G4-SO9	○	
		G4-SO10	○	
Grievance Mechanisms for Impacts on Society	SSI	G4-SO11	○	

## Product Responsibility

GRI Aspect	Location of Disclosure	Indicator	Level of Reporting	Page
Customer Health and Safety	SSI	G4-PR1	○	
		G4-PR2	○	
Products and service labeling	SSI	G4-PR3	○	
		G4-PR4	○	
		G4-PR5	●	47
Marketing Communications	SSI	G4-PR6	○	
		G4-PR7	○	
Customer privacy	SSI, Partner, Customer	G4-PR8	●	SSI strictly protects confidential information of customers (as promagated in the Business Ethics of the Company). In 2014, there was no substantiated complaint regarding breaches of customer privacy and losses of customer data, page 8 - 9, 28
Compliance	SSI, Partner, Customer	G4-PR9	●	In 2014, there was no fines for non-compliance with laws and regulations concerning the provision and use of products and services. Annual report page 83











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