CHINA STEEL

2015 CORPORATE SUSTAINABILITY REPORT

MEMBER OF
Dow Jones Sustainability Indices
In Collaboration with RobecoSAM

ROBECOSAM Sustainability Award Silver Class 2016

CDP
DRIVING SUSTAINABLE ECONOMIES

天 下 企 業 公 民
Excellence in Corporate Social Responsibility

1

Overview

1.1 Message from Top Management

Chairman

The performance in sustainability of China Steel Corporation in 2015 can be summarized as follows:

Economy

In 2015, overproduction was still severe for global steel market which cause fierce price competition and shrank the profit of steel industry. Most of the major steel companies were losing money while China Steel Corporation (CSC) is still making money. Key measures for CSC to keep profitable were cost control, raising the ratio of green steel products and reinforce sales channel, etc. The green steel ratio reached the highest ever of 56.31% while we achieved decent performances in areas such as new products development, process technology renew and quality control system verification.

Energy and Environment

To effetely recycle and reutilize desulfurization slag, CSC invested China Steel Resources Corporation (CSRC) to handle desulfurization slag from CSC Group and recover iron and magnetic material to return back to CSC Group. At the same time, through mineral material processing plant, CSRC makes the residuals more useful in various applications. The company began operation on Jun 1st, 2015. None the less, to respond the request of United Nation for controlling temperature rise below 2℃, CSC executes greenhouse inventory every year. Nevertheless, in Sep. 2015 CSC committed to adopt a science-based emissions reduction target, which is prompted by CDP, to endeavor achieving carbon reduction target for the world.

Caring for Employees

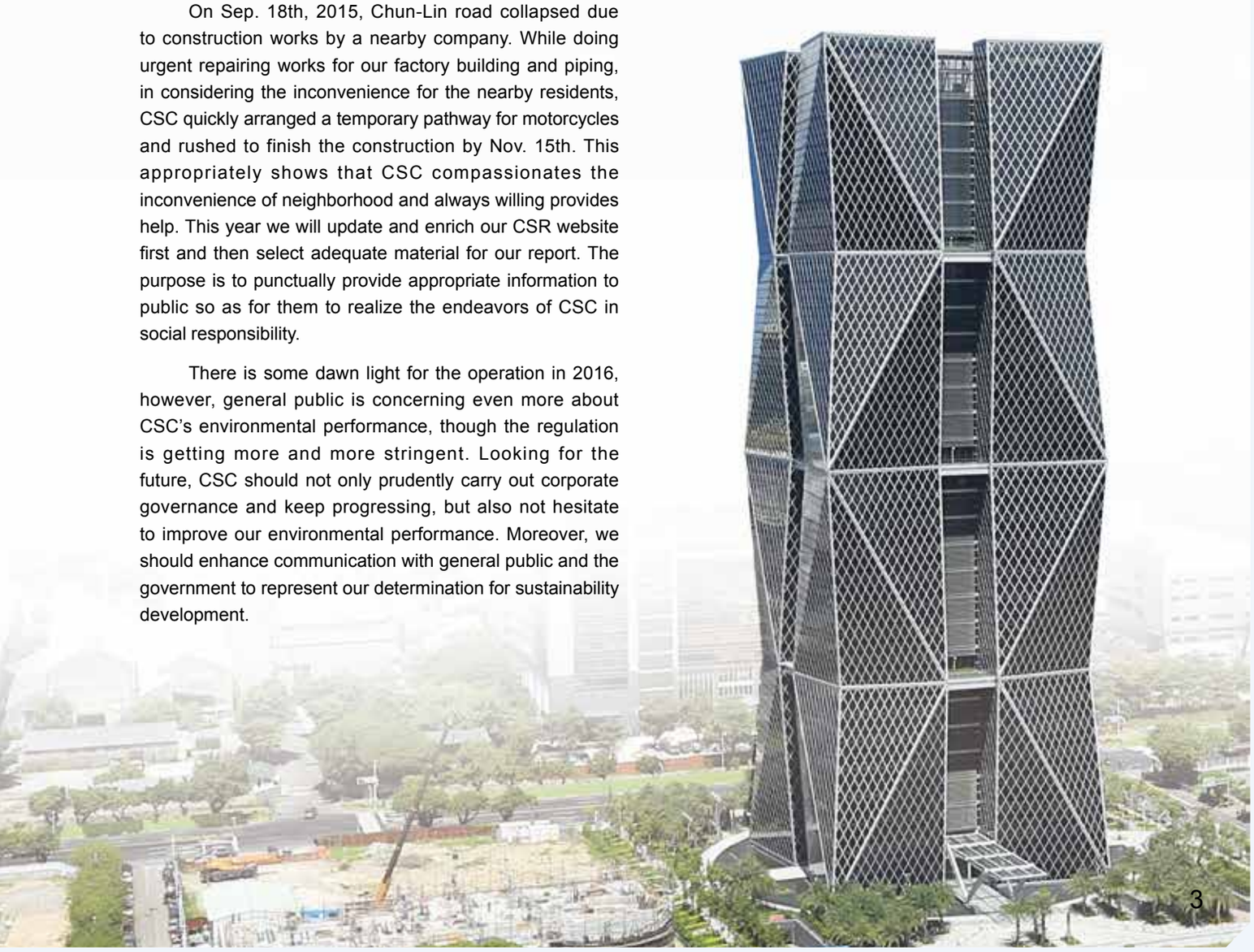
CSC always considers safety the first priority and should never be compromised. Through with all employees attaining safety actions like safety training enhancement, management and supervision, behavior care, and health protection, the performance of occupation safety of CSC was improved drastically in 2015 with no major incident. About the welfare of the CSC Group employees, we have started to build employees' residence just by CSC Group building. There are 211 cozy apartments to be sold to CSC Group employees. To promote the communication between Taiwan's young people and the world, CSC Group not just provided fund but also sent 4 employees to join the One Journey, One Mission project of W.Island. The missions were completed and the participants had shared their precious experience.

President Chao-Tung Wong

Public Interest

On Sep. 18th, 2015, Chun-Lin road collapsed due to construction works by a nearby company. While doing urgent repairing works for our factory building and piping, in considering the inconvenience for the nearby residents, CSC quickly arranged a temporary pathway for motorcycles and rushed to finish the construction by Nov. 15th. This appropriately shows that CSC compassionates the inconvenience of neighborhood and always willing provides help. This year we will update and enrich our CSR website first and then select adequate material for our report. The purpose is to punctually provide appropriate information to public so as for them to realize the endeavors of CSC in social responsibility.

There is some dawn light for the operation in 2016, however, general public is concerning even more about CSC's environmental performance, though the regulation is getting more and more stringent. Looking for the future, CSC should not only prudently carry out corporate governance and keep progressing, but also not hesitate to improve our environmental performance. Moreover, we should enhance communication with general public and the government to represent our determination for sustainability development.

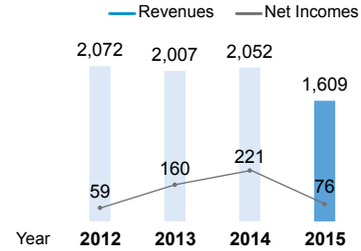


1.2 Sustainability Performance Highlights

Economy Environment Society

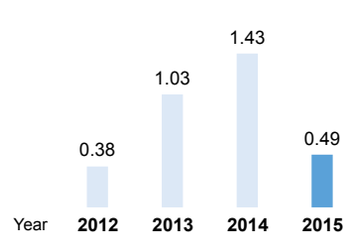
Revenues and Net Incomes

(100 million NTD)



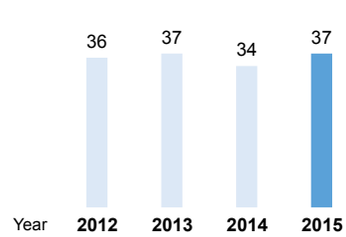
EPS

(NTD)



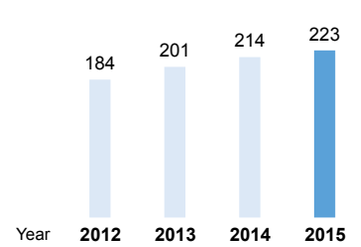
Liabilities to Assets Ratio

(%)



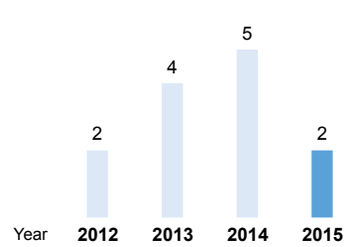
Long-Term Capital to Fixed Assets Ratio

(%)



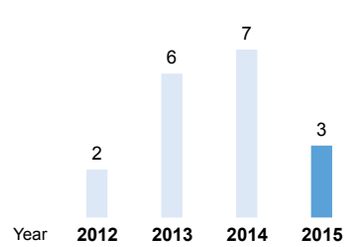
Return of Assets

(%)



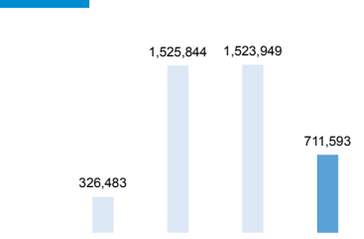
Return on Equity

(%)



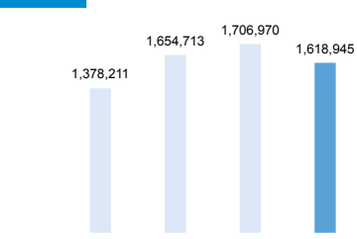
Income Tax

(1,000 NTD)



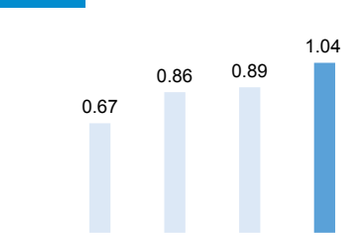
R&D Expense

(1,000 NTD)



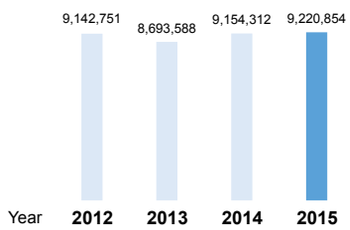
R&D Expense Ratio

(%)

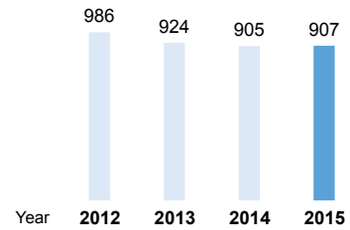


Economy Environment Society

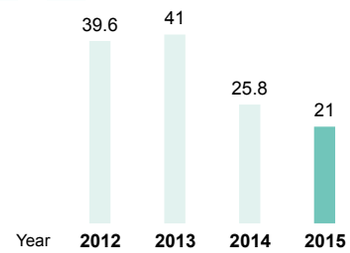
Production
(tCS)



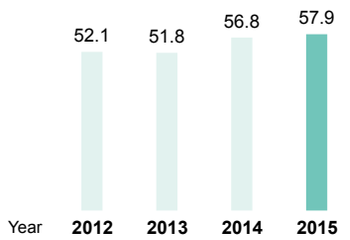
Productivity
(tCS/man-year)



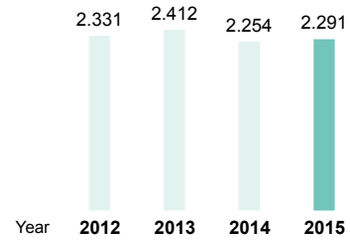
Environmental Investment
(NTD 100 million)



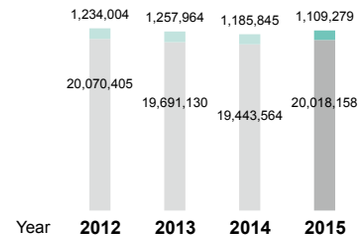
Self-generated Electricity
(%)



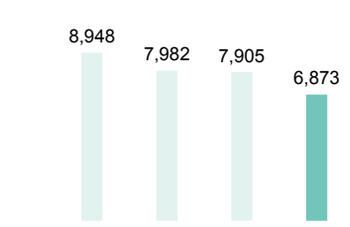
GHGs Intensity
(tCO_2 e/tCS)



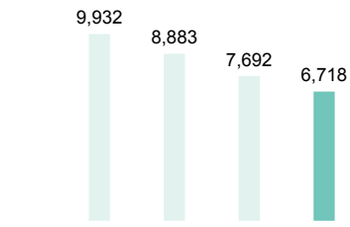
GHGs Emission
Scope 1 Scope 2
(tCO_2 e/tCS)



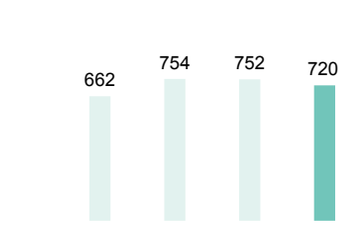
NOx Emission
(ton)



SOx Emission
(ton)

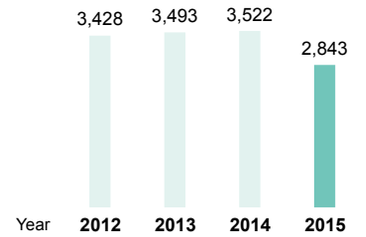


VOCs Eimssion
(ton)

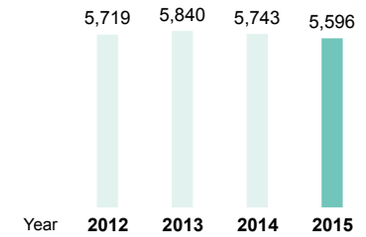


Economy Environment Society

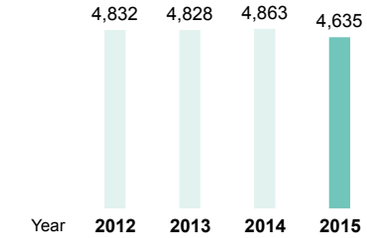
Particulate Emission
(ton)



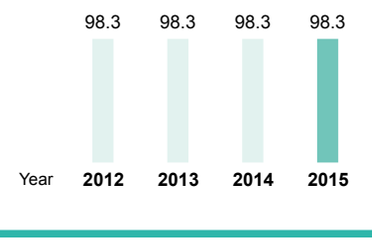
Energy Intensity
(Mcal/tCS)



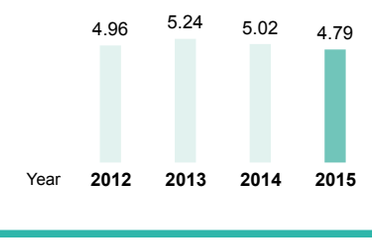
Raw Water Usage
(10,000 tons)



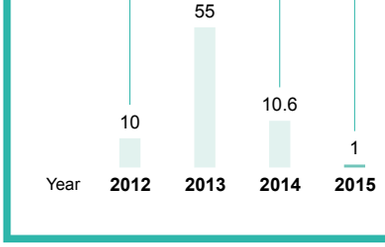
Water Recycling Rate
(%)



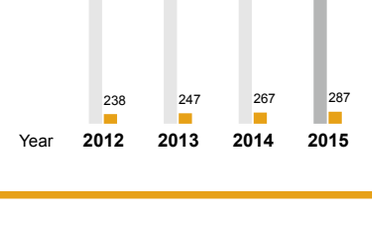
Water Intensity
(t/tCS)
(Steam output excluded)



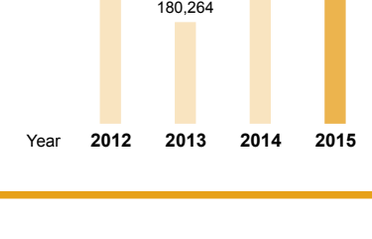
Environmental Violation Notices Amount
(NTD 10,000)



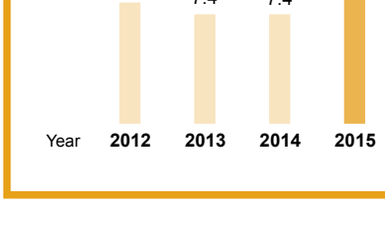
Number of Employees
Female



Total Training Hours



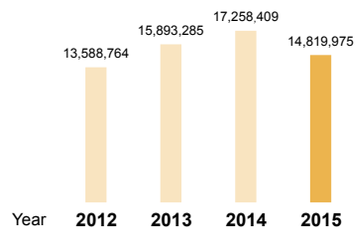
Training Expense
(10 million NTD)



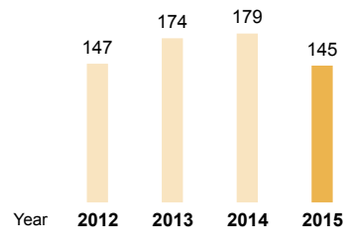
Economy Environment Society

Salaries and Welfare

(1,000 NTD)

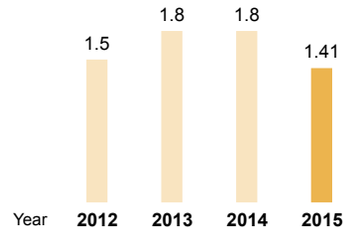


Disabled Hires



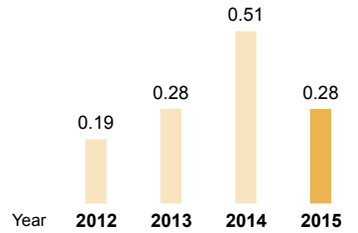
Disability Hires Ratio

(%)



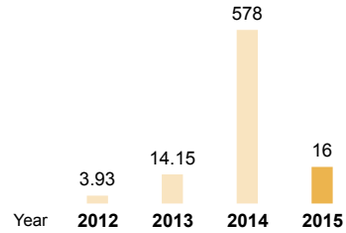
Lost Time Injury Frequency Rate

(lost time injuries / million working hours)



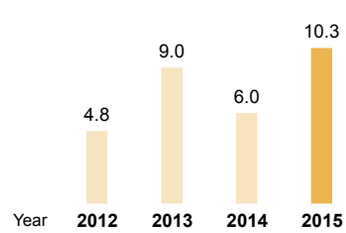
Lost Time Injury Severity Rate

(lost days / million working hours)



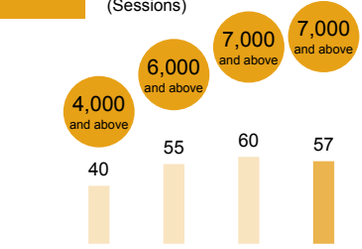
Social Expense (Including donation)

(10 million NTD)



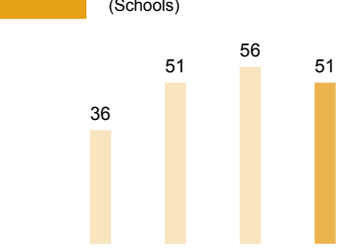
Environmental Education Bus Activities

(Sessions)



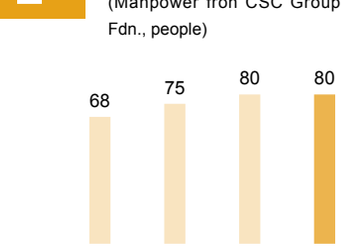
Environmental Education Bus Activities

(Schools)



Environmental Education Bus Activities

(Manpower from CSC Group Edu. Fdn., people)



1.3 Awards

Environmental Protection Administration
2015 Carbon Reduction Action Premium Award

Industrial Development Bureau, MOEA
2015 Industrial Park Green Beautifying Award No. 2

Industrial Development Bureau, MOEA
2015 Industrial GHG Voluntary Reduction Award

Water Resources Agency, MOEA
2015 Water Conservation Award

Customs Administration, Ministry of Finance
Authorized Economic Operator(AEO)

MOEA
2015 Golden Trade Award

Environmental Protection Administration
Commendable Unit of Green Procurement

Kaohsiung Environmental Protection Bureau
Commendable Unit of Green Procurement

Kaohsiung Environmental Protection Bureau
2015 Carbon Reduction Action Premium Award

Kaohsiung Environmental Protection Bureau
Excellent Construction Area
for Mao-Da Warehouse Project

Kaohsiung Environmental Protection Bureau
2015 Premium Environmental Patrol

The 18th Outstanding Photonics Product Award 2015

Taiwan Corporate Sustainability Award

Taiwan Corporate Sustainability Award

CommonWealth Award for Excellence in Corporate Social Responsibility

2015 Golden Trade Award, MOEA

Authorized Economic Operator(AEO)

BSI

Dow Jones Sustainability Indices

In 2015, Dow Jones Sustainability Indices (DJSI) selected 317 enterprises among global enterprises as components of DJSIWorld and 92 enterprises as components of DJSI-Emerging Markets, and only 2 components for steel industry in DJSI-World. In 2012, CSC participated in the Corporate Sustainability Assessment of the DJSI for the first time and it was selected for inclusion in the DJSI-Asia Pacific and DJSI-Emerging Markets. In 2013, CSC achieved industrial leader for DJSI-World. In 2014 and 2015 CSC was included as a component both in the DJSI–World and DJSI–Emerging, and received Silver Class Sustainability Award 2016 from RobecoSAM.

CDP

On November 11th, 2015, CDP report for Hong Kong and Southeast Asia was announced, and CSC was listed on Climate Disclosure Leadership Index in material category with a disclosure score of 100, which shows that CSC is highly affirmed by international institution on the information disclosure responding to climate change.

CommonWealth Award for Excellence in Corporate Social Responsibility

To promote the concepts of corporate citizen, CommonWealth Magazine set up this award to appraise with four criteria as corporate governance, corporate commitment, social engagement and environmental protection. In 2015 CSC received the Top 10 of “CommonWealth Award for Excellence in Corporate Social Responsibility” for large enterprises.

1.4 About China Steel Corporation

1.4.1 Major Milestones

China Steel Corporation (CSC), located at Kaohsiung, Taiwan, was founded in December 1971. With annual production (in terms of crude steel) around 10 million tonnes, CSC produces a range of products that includes plates, bars, wire rods, hot and cold rolled coils, electrogalvanized coils, electrical steel coils, hot-dip galvanized coils, and Ti/Ni-base alloy. The domestic market takes roughly 67% of CSC's production and the exports take the remaining 33%. CSC is the largest steel company in Taiwan, enjoying more than 50% of the domestic market. Major export destinations are Mainland China, Japan and Southeast Asia.

1971
Dec. 3 China Steel Corporation is officially registered, with head office located in Taipei.

1972
Sep. 16 Kaohsiung Plant Site Office is established.

1974
Sep. 1 Phase I construction commences.
Dec. 26 CSC stock is listed on Taiwan Stock Exchange Corporation.

1975
Sep. 15 Head office relocates to Kaohsiung. Plant Site Office closes.

1977
Jul. 1 CSC becomes a state enterprise.
Dec. 16 Phase I is completed, with capacity of 1.5 million tonnes of crude steel per year (MtCS/yr) .

1978
Jul. 1 Phase II construction commences.

1982
Jun. 30 Phase II is completed. Capacity reaches 3.25 MtCS/yr.

1984
Jul. 1 Phase III construction commences.

1988

Apr. 30 Phase III is completed. Capacity reaches 5.652 MtCS/yr.

1993

Jul. 15 Phase IV construction commences.

1995

Apr. 12 CSC is privatized.

1997

May 31 Phase IV is completed. Capacity reaches 8.054 MtCS/yr.

1998

Jun. 2 CSC Group's corporate identity system is formally introduced to the public.

2006

Apr. 15 Annual production capacity is officially raised to 9.86 MtCS/yr owing to success in equipment renovations and improvements carried out over the years.

Nov. 22 Groundbreaking for the China Steel Building takes place.

2008

Oct. 6 Dragon Steel Corporation becomes a wholly owned subsidiary of CSC.

2010

Jun. 30 DSC's stage II phase 1 expansion project is completed. CSC Group's capacity reaches 13.36 MtCS/yr.

2013

Mar. 5 DSC's stage II phase 2 expansion project is completed. CSC Group's capacity reaches 15.86 MtCS/yr.

Oct. 22 China Steel Building is inaugurated.

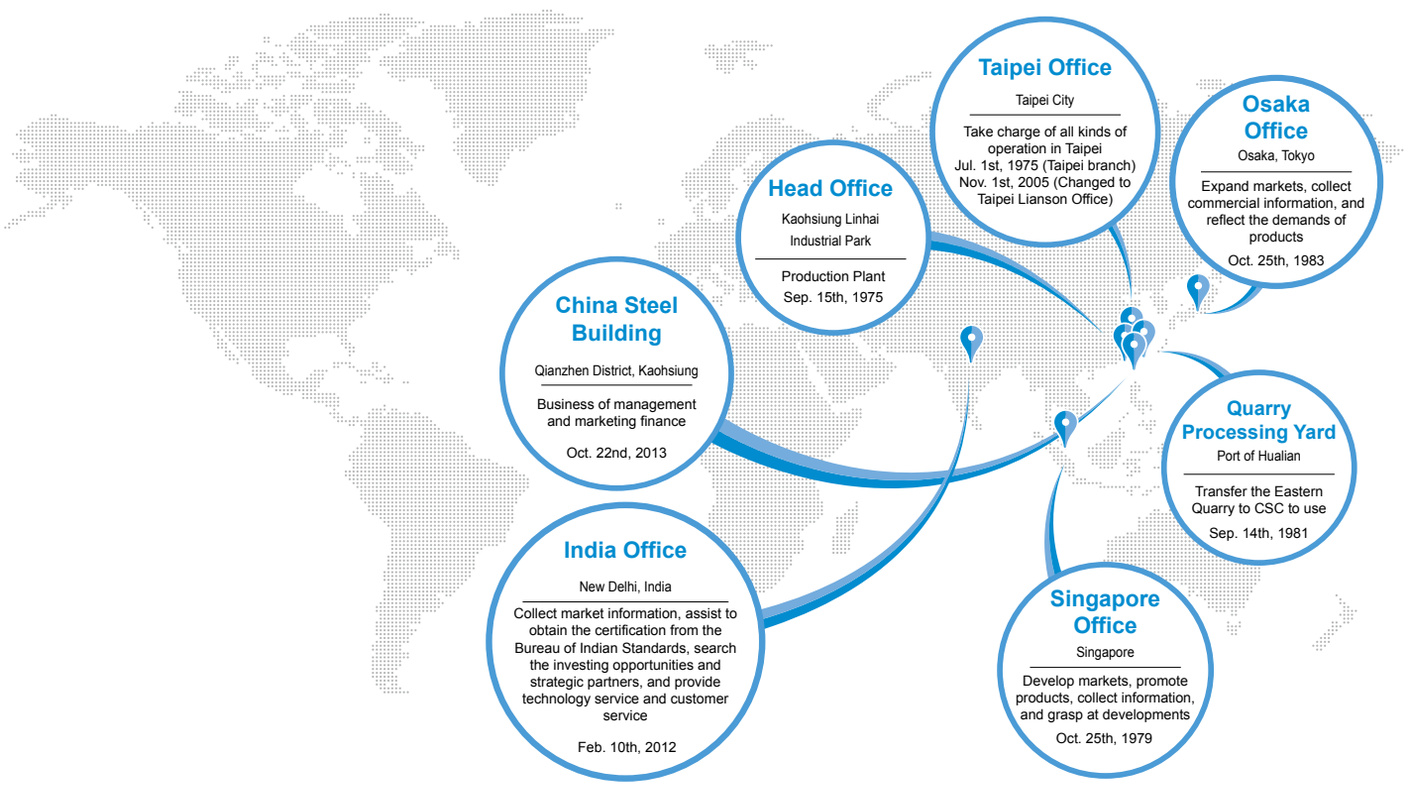
PRESENT

1.4.2 CSC's Corporate Culture

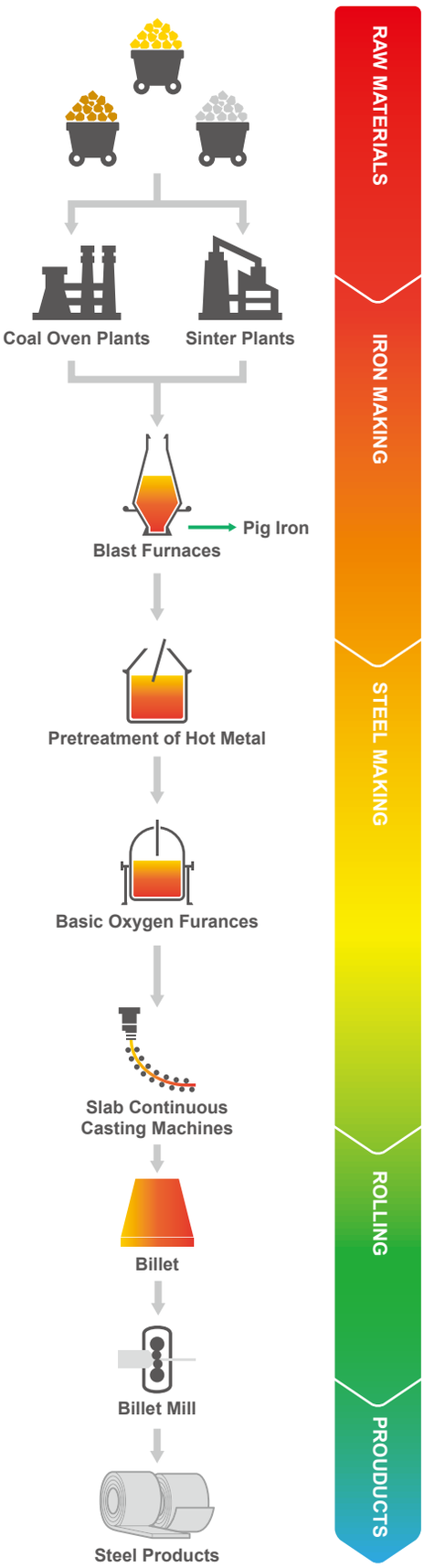
CSC has held its values of teamwork, entrepreneurial approach, down-to-earthness, and pursuit of innovation since its starting constructions to establish complete systems. CSC has also accumulated and created abundant experience and knowledge by innovating and cultivating talents unceasingly to form its excellent corporate culture and core values. With the employees getting older, the senior employees retiring and new employees being recruited, the managers are facing to be replaced substantially. Meanwhile, the opportunity of abroad assignment for managers is increasing owing to the gradual increase of the number of CSC's related companies which business domain is expanding from domestic to overseas. In order to make the appointed managers have the necessary know-how for their new positions through training, as well as fully understand CSC's corporate culture and even advance it as time goes by through corporate heritage, CSC established "CSC Corporate Culture Committee" in October 2000. The purpose of the Committee is to fulfill the corporate heritage and spread of CSC Values among employees, so as to break the tradition and start a new situation through innovation and change when facing the challenges to make CSC's excellent culture be new and everlasting for sustainability.

1.4.3. Business and Scale

CSC is a global steel corporation of which the annual production of crude steel reaches 10 million tonnes. According to Top steel-producer 2013 of World Steel Association (worldsteel), the production of CSC was ranked as the 25th in the world in 2013. While in an evaluation done by World Steel Dynamic (WSD) in June 2014 for 23 items including innovation, expansibility, and integration of industrial chain among 36 global steel makers, CSC was ranked the 18th. The major products of CSC are steel plates, steel bars, wire rods, hot-rolled and cold-rolled coils, electro-galvanized steel coils, electrical steel coils, hot-dip galvanized steel coils, and other steel products. About 65% of the products are supplied to the domestic market, and 35% are exported. CSC has a domestic market share of over 50% and currently is the largest integrated steel company in Taiwan. In order to exert operating synergy, CSC chooses diversified operation and businesses including core business in steel, engineering business, industrial materials, logistics, and serviceinvestment, etc.



1.4.4 Production Flow Chart

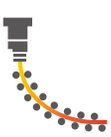


The sintering process is the combination of the blended ore, flux, coke breeze, after mixing and granulation, then charged into the sintering machine and completed the sintering process by the suction fan, then through cooling and screening process, the product of sinter will be transported to BF as the main source of iron-contained material .

The coke oven operation is one of the coking process. The mixing and crushing coking coals are charged to the coke oven, and dry distillation in oven produce hot coke and crude COG.

The blast furnace operation is one of iron-making processes. Iron ores, cokes and fluxes are charged from furnace top, then to react with the ascending gas which is introduced from tuyeres, as a result to produce the molten hot metal and slag.

Hot metal is treated by de-S or de-P process at pretreatment station first then transported to BOF for oxygen blowing, and after tapping to ladle, liquid steel is further refined at LI (ladle Injection), RH (vacuum treatment) , VOD or STN (stirring station); refined liquid steel then sent to SCC or BCC for casting to slab or bloom semi-product, finally this semiproduct is inspected or grinded, or scarfed to remove surface defects, then shifted to downstream for rolling.



Continuous casting is a process which turns liquid steel into slab or bloom. Liquid steel is filled in ladle and transferred to turret from upstream plant by crane, charged to a tundish, then distributed and flew into several molds which circulated by cooling water. Liquid steel starts cooling down, solidifying and forming a shell outside in, pulled into arc-shape strands, through secondary cooling sprays to a complete solidification, then straightened, and cut into pieces according to each order. This semi product called slab (rectangular type) or bloom (square type) is conditioned if necessary then shipped to downstream for further treatment.

Using casting blooms then go by way of reheating, descaling, scarfing, rolling and cutting into 118mm square billets. 60% billets must be inspected and removed the surface defects. Supplying these billets to bar & rod mill to produce wire rod coil and straight bar products.

2

About this Report

2. About this Report

2.1. Principles

(1) Editing and Approval

CSC compiled and edited the 2015 CSR Report through the following organizations and procedures:

○ CSR Core Working Group

Members of the group included those from the Human Resources Department, Public Affairs Department, Marketing Administration Department, Finance Department, Secretariat Department, Industrial Safety and Hygiene Department, Environmental Protection Department, Utilities Department, Iron and Steel R&D Department, and CSC Labor Union. The Office of Energy and Environmental Affairs (EA) was in charge of overall planning, compiling, coordinating, and editing.

○ Administrative review and approval

The initial draft was compiled and edited by EA and reviewed by the CSR Core Working Group. The revised draft was then reviewed by Division VPs. The VP approved version went through an administrative procedure to Chairman of the Board to be finalized and approved for publishing.

(2) Basis and Structure of the Report

○ Guidelines and principles

This report follows the Global Reporting Initiative (GRI) G4 Guidelines and Mining and Metals Sector Supplement and the AA1000 AccountAbility Principles Standard. Guidelines for general disclosure in the Organization for Economic Cooperation and Development (OECD), Earth Charter, UN Global Compact (UNGC), UN Sustainable Development Goals (SDGs), ISO 26000, and global issues and disclosure of the steel industry.

○ Data sources and management

Data and information were provided by CSC Departments in Planning, Commercial, Finance, Administration, Production, and Technology Divisions, compiled by EA, and confirmed for the functions of this report by the CSR Core Working Group and through administrative procedures. Costs and accounting information in CSC financial statements were audited by independent accounting firm; the environment, safety, and health (ESH) management system was subject to internal audits and annual external ISO 14001 and OHSAS 18001 audits; GHG inventory reports were verified by third-party auditors according to ISO 14064-3, and the ISO 50001 energy management system was verified with certification.

2.2. Range of Data

This report covers relevant operational systems and activities of CSC headquarter in Taiwan and its overseas offices from 1 Jan. to 31 Dec. 2015, not including operational performances of CSC Group affiliates. The financial statements adopt International Financial Reporting Standards (IFRS) to compile the financial performance of joint ventures, and the currency used is New Taiwan Dollars (NTD). ESH performances are presented in indicators that are in common use globally.

2.3. Assurance

Internal Review and Approval

The data and information were approved by Department Heads before provided. The initial draft was first confirmed by the CSR Core Working Group and then reviewed by Division VPs, Executive VP, President, and finally approved by Chairman of the Board. All data, minutes, reviews, and verifications were documented.

External Assurance

The 2015 CSR Report was assured by the independent third-party British Standards Institution (BSI) in accordance with the core option of GRI G4 Guidelines and type 1 AA1000 Assurance Standard.

2.4. Previous Reports

CSC started publishing environmental reports in 2002. Later reports were variously named as they were wider in scope, yet they were all centered on corporate social responsibility and sustainability. Since 2010, reports have been published annually and have followed GRI Guidelines. In 2012, the CSC CSR website was launched for more complete reporting. The reports in Chinese have been named “Corporate Social Responsibility Report” since 2014 as by Corporation Rules Governing the Preparation and Filing of Corporate Social Responsibility Reports by TWSE (Taiwan Stock Exchange) Listed Companies.


2006


2007

2008


2009

2010


2011

2012

2013

2014

More information is available on the CSR website at :

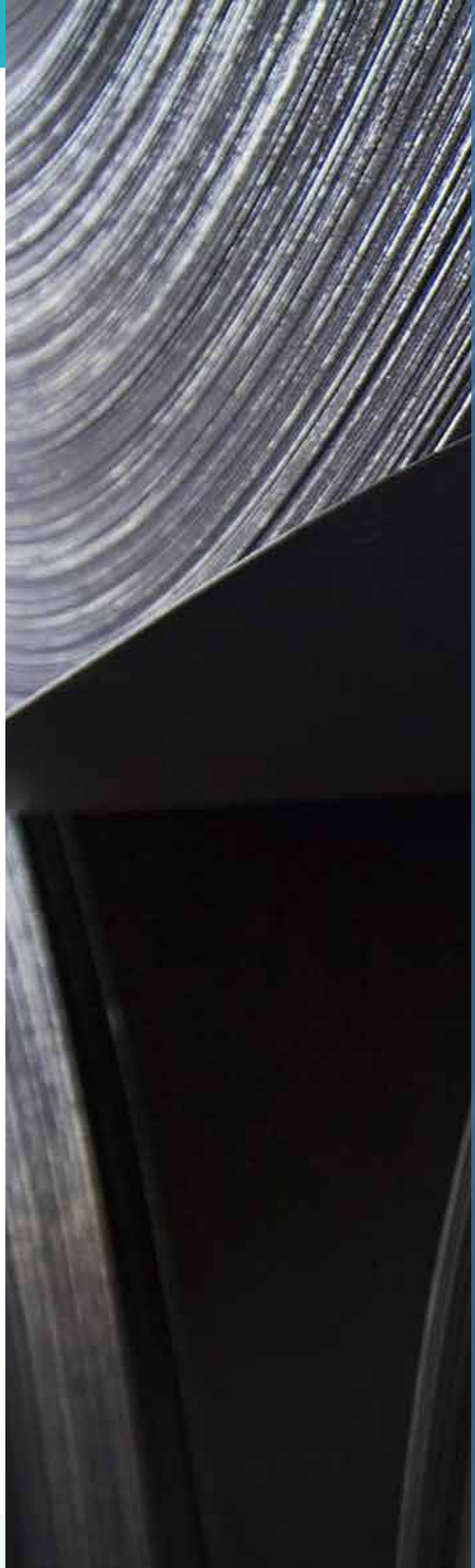
http://www.csc.com.tw/csc_e/hr/csr/index.htm

Download PDF file of this report at

http://www.csc.com.tw/csc_e/hr/e/hr-2015e.pdf

Contact us if you have any comments or questions regarding this report :

energy@mail.csc.com.tw



3

Governance

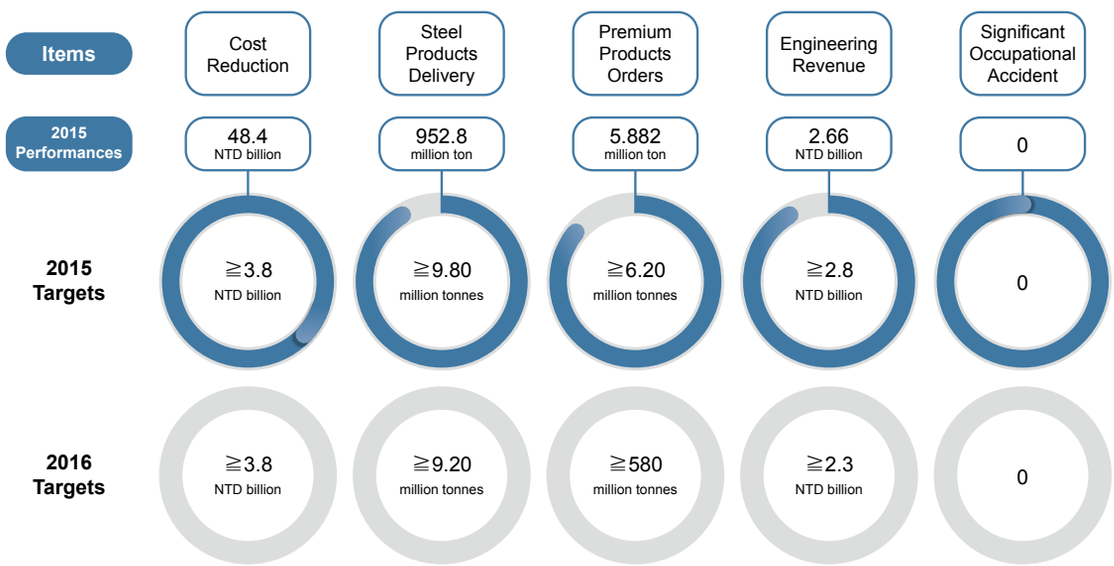
3. Governance

3.1. Sustainable Governance

3.1.1. Vision and Directives

CSC maps out its short-, mid- and long-term strategies based on its vision: “We aspire to be a trustworthy steel company of global distinction that pursues growth, environmental protection, energy saving, and value innovation” for the sustainable development. For pursuing the sustainable development, CSC focuses on the endeavors in:

2015 Performances and 2016 Targets



2015 Directives	2015 Performances	2016 Directives
Improve cost advantage and increase profit	● 4.84 billion NTD cost down in 2015, target achieved.	**Diversify enterprise to increase profit**
Innovate technology and increase the value	● 53 new products developed in 2015 ● 56.31% of Premium products order rate, target achieved.	**Endeavor to enhance original profession and reduce cost**
Develop engineering specialties and expand market	● #29 offshore wind farm site planning project applied ● Wind power technology center to establish CSC Group’s selfowned technologies set up ● Offshore meteorological mast project of TPC demonstration case completed	**Form an industry alliance to reinforce competitiveness**
Rebuild safety culture and prevent occupational injuries	● No significant occupational accident in 2015, target achieved	**Integrate to strengthen rail engineering and wind power**

○ To enhance CSC's long-term competitiveness, it has mapped out its 2016-2020 operation and development strategies for the steel business as follows:

- Succession of the corporate culture, promotion of career development, establishment of the LOHAS environment, and promotion of the Group's image.
- Enhancement of lean customer services, strengthening of strategic partnership, consolidation of the sales position in the domestic market, and expansion of the export distribution channels.
- Integration of the deployment of Group resources, mapping out of the green industry, investment in the deep processing territory, and increase of the self-sufficiency rates of raw materials.
- Research and development of advanced products, their application technology, and highly efficient green production processes to increase the values of the steel industry chain.
- Enhancement of the Group's engineering autonomy, active development of the wind power business, light rail business, and exploration of the engineering business.
- Value and quantity expansion of the Group's products, continuous reduction of costs, improvement of energy conservation and environmental protection, and enhancement of safety and health.

3.1.2. Respond to Major Impacts

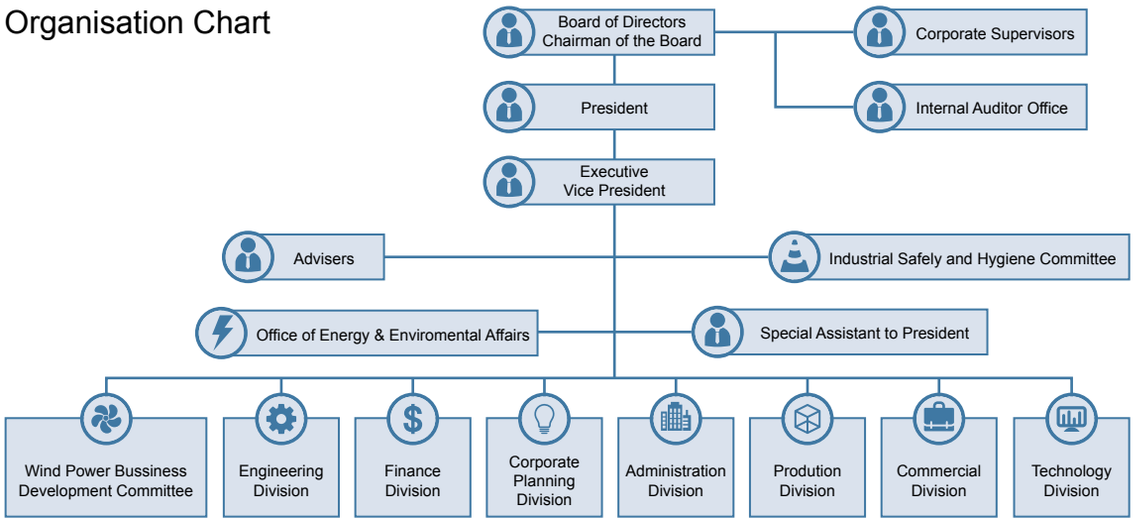
In 2015, global economic activity remained subdued. Global growth, estimated by IMF at 3.1 percent in 2015, is projected at 3.2 percent in 2016. The pickup in global activity is projected to be more gradual, especially in emerging market and developing economies.

Risks to the global outlook remain tilted to the downside, mainly facing structural adjustments in the global economy: a generalized slowdown in emerging market economies, China's re-balancing, lower commodity prices, geopolitical tensions, the gradual exit from extraordinarily accommodative monetary conditions in the United States, and renewed global risk aversion. The price of raw materials falls with the decrease of oil price and rise of USD, and prices of iron ore, coking coal, and coke fall because their supply exceeds the demand. The cost pressure on steel plants will therefore be relieved. However, the production in Asia, especially China, still exceeds the demand, This poses a great pressure on the steel market. In addition, the slow growth of downstream industries does not help to relive the gap between supply and demand. The price of steel is thus suppressed, and the downside risk for price increases greatly.

For the sales target for 2016, CSC is set to increase orders by establishing marketing channels, increasing overseas sales spots, and stabilizing customer relations. For increasing orders of high end products, CSC continues to strengthen customer relations, increase the supply of high-end and strategic steel products, examine production equipment bottlenecks, increase new equipment, and replace old equipment.

Potential Major Impacts	CSC Countermeasures
· Steel capacity exceeds the demand in global markets. The global steel trade is filled with pressure. · International trade protectionism keeps happening all over the world: Europe, America, China, and emerging economies take the measures of anti-dumping, anti-subsidies, importing safeguards to limit the imports of steel products, which is unfavorable for domestic steel mills to expand export markets. · Speedy development of global logistics causes the offshoring of downstream industries and reduction of domestic steel demand. · Economic Cooperation Framework Agreement (ECFA) will affect the survival and operation of domestic steel industries with the gradually opening of steel items to China. · Free Trade Agreement (FTA) of other countries and FTA between China and South Korea will affect the export competitiveness of Taiwan.	· Setting production bases, sale spots and coil centers in regional economic cooperation systems · Actively Developing emerging markets with explosive growth such as India and others. · Creating value by development and trial production of new products · Expanding supply scale of products, focusing on the R&D and supply of high-end industrial steel materials, such as cars, home appliances, electric motors, and so on · Actively Seeking investment opportunities in downstream steel mills and other steel consuming industries. · Actively Arranging investment for raw materials resources to increase selfsufficiency rates · Assisting the government in FTA promotion

3.1.3. Organisation Chart



3.1.4. Board of Directors and Supervisors

○ Board of Directors and Supervisors

According to Company Act and CSC's regulations, independent and non-independent directors are nominated and elected separately. At present all the directors are male with ages between 58 to 73. On Oct. 1st, 2015, the Chairman Jo-Chi Tsou retired, Mr. Jyh-Yuh Sung was elected as the Chairman of the Board of Directors. In 2015, two Supervisors who joined the meeting of the Board of Directors as observers, audited the financial reports and issued audit reports.

Chairman
Jyh-Yuh Sung
Representing Ministry of Economic Affairs, R. O. C.

Director
Jong-Chin Shen
Representing Ministry of Economic Affairs, R. O. C.

Director
Ming-Jong Liou
Representing Ministry of Economic Affairs, R. O. C.

Director
Horng-Nan Lin
Representing Gau Ruei Investment Corporation

Director
Shyi-Chin Wang
Representing Ever Wealthy International Corporation

Director
Jih-Gang Liu
Representing Chiun Yu Investment Corporation

Director
Cheng-I Weng
Representing Hung Kao Investment Corporation

Director
Chao-Chin Wei
Representing Labor Union of China Steel Corporation

Independent Director
Shen-Yi Lee

Independent Director
Juu-En Chang

Independent Director
Ting-Peng Liang

Supervisor
Ming-Te Su
Representing Hsin Kuang Steel Corporation

Supervisor
Andrew Deng
CPA of Andrew Deng & Co., CPAs

Please visit our website for more information:
http://www.csc.com.tw/csc_e/cg/bi.html

Board's Important Resolutions	
Feb	To subscribe for 939 million shares of Formosa Ha Tinh (Cayman) Limited
	To subscribe for new issued stocks by cash-capital increase of Taiwan Rolling Stock Co., Ltd. (TRSC) and purchase the shares of TRSC held by Tang Eng Iron Works Co., Ltd.
Mar	Appropriation of distributable earnings for 2014
	Date and venue for CSC's 2015 shareholders' meeting
	Revamp of No. 3 Blast Furnace 2nd Campaign
	To buy out land from China Prosperity Development Corporation (CPDC)
	To participate in cash capital increase of White Biotech Corporation for building a plant to make ethanol commercial products from basic oxygen furnace (BOF) gas.
	The meeting agreed to sell Class A preferred shares of East Asia United Steel Corporation to Nippon Steel & Sumitomo Metal
	Promotion of Mr. Hsiu-Chang Liang as Production Vice President to be effective from April 1, 2015.
May	The major item of the agenda adopted is an adjustment of employees' salary by raising 3% averagely including increase of meal allowance from NT$1,800 to NT$2,400 monthly per employee. The effective date of adjustment is traced back from April 1, 2015.
Jun	Increase of capital in Honley Auto Parts Co., Ltd. and establishment of a company for running the auto parts through Joint venture. Increase of capital in China Steel Asia Pacific Holdings Pte. Ltd. (CSAPH) by paying out CSC's holding shares in Formosa Ha Tinh (Cayman) Limited.
	To entrust steel structure construction of Mau Da cold rolling steel products warehouse to China Steel Structure Co. Ltd.
	To sell CSC's part land of ShihJia Section to on-service employees.
	Adjustment of part management positions to be effective on August 1, 2015.
Aug	The major item of the agenda adopted was "addition of the third ladle refining furnace at BOF (Basic Oxygen Furnace) plant I".
Oct	Purchase of lands and buildings from World Best Co., Ltd.
	Election of the Chairman of the Board Directors of CSC.
	Dr. Jo-Chi Tsou was engaged as Honorary Advisor of CSC from October 1, 2015.
	Change of part management positions of CSC from October 1, 2015.
Nov	The Revamping of primary motor and programmable logic control (PLC) system for No.1 Pickling & Cold Rolling Mill at Rolling Mill Department III.
	Fund endowment for the operations of CSC Group Education Foundation in 2015.
	Change of management position.

○ Committees

CSC has set up Corporate Governance Committee and Remuneration Committee to enhance the operation of the Board of Directors.

	Members	Functions	2015 Performances
Corporate Governance Committee	An independent director (convener) and 2 directors	1. To review and assess the corporate governance organizations and systems for their soundness and make suggestions to the Board. 2. To draw up the revisions of the rules of meeting procedures for the Board and submit the revisions to the Board meeting for approval. 3. To draw up or revise the drafts of the organizational rules for each committee of the Board and submit the drafts to the Board for approval.	Two meetings were held in 2015, the key points of which were the discussion of the related systems of corporate governance and revisions of the corporate governance regulations, and the minutes of the resolutions were presented to the Board of Directors.
Remuneration Committee	3 independent directors	For the Chairman, supervisors, the President, Executive Vice President, and Vice Presidents 1.To establish performance appraisal policies and review them on a regular basis. 2.To establish and review regularly policies, systems, standards and structures relevant to the remuneration including travel allowances. 3.To determine and review the level of remuneration including travel allowances.	Four meetings of the Remuneration Committee were convened in 2015, the key points of which were the discussion of the performance evaluation system for commissioned managers and their pay adjustments, and the proposals drawn from the resolutions of the meetings were presented to the Board of Directors.

From June 23th, 2016 Corporate Governance Committee and the functions of supervisors were replaced by Audit Committee. Please visit our website for more information: http://www.csc.com.tw/csc_e/cg/bof.html

3.1.5. Ethical Conduct

Avoiding Conflicts of Interest

The CSC Code of Ethics for Directors and Supervisors strictly stipulates avoiding conflicts of interest and sets anti-corruption principles. In addition, by Regulations Governing Procedure for Board of Directors Meetings of Public Companies, if there is a conflict of interest for any director with respect to any agenda item at the board meeting, the director must recuse from discussion and voting on that matter and must not exercise voting rights as proxy for another director on that matter.

Preventing Malpractice

CSC deems soliciting, accepting, and agreeing to accept bribes or other improper benefits from suppliers or stakeholders as serious misconducts. Complying with the Political Donations Act, CSC does not contribute to political donations. Political donations of CSC personnel are also bound by the Act and company regulations. In addition, CSC takes the following precautions.

Organizational Regulations	Stipulate moral requirements of CSC.
Employee Training	New employees are trained on ethical practice and organizational regulations, regularly updated by the Corporate Culture Committee and accessible to all employees through the CSC Semimonthly Journal and website.
Risk Assessment	Internal Auditors Office (IA) assesses risks and develops annual audit plans based on the assessments, complying with the Financial Supervisory Commission regulations.
Self-inspection	Every Jan., 40 Departments, 9 Divisions (including Office of Energy and Environmental Affairs, and Wind Power Business Development Committee), and 22 subsidiaries compile self-inspection reports to be reviewed by IA and presented to President.
Complaint Channels	Complaint Hotline: +886-7-8021111#2191 (Head Office) +886-7-3371111#22191 (China Steel Building) Complaint Fax: +886-7-8010736 Complaint Mailbox: P.O. BOX 47-13 Kaohsiung, Taiwan Information is also noted in the procurement inquiry (in the e-commerce system) for reporting of malpractice, bribery, and fraud. Complaints are collected and processed by IA. In 2015, 38 cases were received, all carefully examined and processed with the cooperation of Units. No case was with major drawbacks or serious loss of corporate profits.
Countermeasures against Misconduct	All cases of misconduct are reviewed by the Employee Reward & Punishment Committee and dealt with accordingly.

Socializing Guidelines

- CSC Rules Governing Gifts, Benefits, Banquets, and Social Activities Operations provide guidelines for the engagement of CSC employees in socializing activities. Items of value offered by stakeholders during business interactions, unless otherwise specified, shall be rejected or returned. If failing to be returned, the items shall be reported and sent to the General Affairs Department for handling.
- IA collects lobbying cases and reports to Chairman and in the board meeting. In 2015, 22 cases were collected, all incorporated into auditing reports for tracking and emailed to independent directors and supervisors.
- CSC Rules Governing CSC Employee Participation in Business Related Banquets provide guidelines for the participation of CSC employees in banquets for the development of external relationships.

3.1.6. Internal Auditing and Correction

○ Purpose of Internal Auditing

Internal Auditors Office (IA) is under the Board of Directors. The chief auditor reports audit performances to each supervisor on a regular basis and attends the board meeting to report the status of internal control. Main purposes of internal auditing are to assist the board and managers in checking and reviewing defects of the internal control system, to evaluate the effect and efficiency of operations, and to provide timely suggestions of improvement to ensure the continuous practice of internal control systems..

○ Correction and Operation

- IA requested that related Units revise internal control procedures and control key points of 71 operations, and assisted subsidiaries to revise their regulations for internal control systems, practice details of internal auditing, and procedures of internal control self-assessment in 2015 .
- IA reviewed internal control system self-assessment reports of Divisions and subsidiaries in 2015 and prepared a summary report combining all reviews. The summary report serves as the primary basis for evaluating the overall efficacy of all internal control systems and to produce internal control system statements.
- Audit items of 2015 include the procedure of eight operating cycles, crosschecking functions between systems, compliance with Financial Supervisory Commission regulations, and internal control systems of subsidiaries. A total of 50 auditing reports and 449 suggestions of improvement were proposed, subject to timely improvement measures by audited Units and subsidiaries and filing in the CSC IA management system for follow-up. Audit items are submitted to supervisors and independent directors for review.

3.1.7. Patent System

CSC promotes patent application through the Patent Promotion Committee and rewards units for outstanding patent promotion performances with Outstanding Patent Promotion Awards at the annual Research Outcomes Award Ceremony.

Every year There are training courses for newly recruited employees and patent reviewers to enhance their concepts of intellectual property rights and practical skills of patent. To demonstrate the corporate culture of down-to-earthness, and pursuit of innovation, CSC sets KPI for patent application and made excellent progress. In the table indicates our achievements of recent years. In 2015, we reached the new high of 275 application which is the No. 10 in Taiwan and the No. 1 in traditional industries.

To capitalize intellectual property, CSC promotes its patented technologies to acquire the most of economical benefits. In 2015, there were ‘Rubber plate for railway level crossings and rubber holddown strip thereof’ and ‘Air purification device’ licensed.

○ Patent Achievements

Year	Applications	Grants	Applications Rank*	Grants Rank*
2009	105	34	43	70
2010	121	60	30	33
2011	178	85	18	27
2012	183	123	15	18
2013	220	190	12	19
2014	236	247	8	10
2015	171	275	12	10

*Ranks of legal persons

3.1.8. Transparency of Information

CSC regards information disclosure as an essential element of corporate governance. To ensure transparency of information, CSC makes filings through designated online filing system in accordance with Guidelines for Online Filing of Public Information by Public Companies of the Securities and Futures Bureau. Information is also disclosed on CSC website and is accessible through the shareholder service hotline, spokesperson, and designated media contact.

In 2015 Securities and Futures Institute expanded Information Disclosure and Transparency Ranking into Corporate Governance Evaluation. CSC was evaluated as top 20% of TWSE companies and chosen as of the components of Corporate Governance 100 Index.

Reference web sites:

http://cgc.twse.com.tw/promoteEvent/promoteEventArticleCh/150

http://cgc.twse.com.tw/pressReleases/promoteNewsArticleCh/514

○ 2015 Stock Market Expo

This Expo is a platform for listed companies to communicate with investors to promote relationship in between. TWSE held twice the expo, one in 2011 and one in 2015, which attracted more than 40 thousand people to attain. The Expo has won praise from all sectors of society for successfully increased the familiarity for listed companies, attracted different social groups to invest in Taiwan stock market, and reviving economy. There were 6 CSC Group companies joined together to exhibit in the Expo. Through personal enlightenments of engineers and financial officers, CSC Group improved its image by clarifying its future strategies and the role for each group company in the whole production and sales process of CSC Group.

http://www.csc.com.tw/indexe.html

Spokesperson and Media Contact
886-7-802-1111#2575

3.2. CSR Management

CSC aspires to be a trustworthy steel company of global distinction that pursues growth, environmental protection, energy saving and value innovation. To realize this vision, CSC dedicates to optimizing the steel industry value chain and building the environment for sustainable development.

3.2.1. CSR Principles and Directives

Under the CSC operating principles of “promotion of social well-being, result orientation, implementation of teamwork, and emphasis on employees self-realization”, CSC develops policies for corporate social responsibility in accordance with the worldsteel sustainable development policy and Sustainable Development Charter of the World Steel Industry CSC was invited to sign in 2012. CSC strives to practice corporate social responsibility as outlined by the policy in economical, environmental, and social aspects and improve information disclosure and stakeholder engagement.

3.2.2. Communication with Stakeholders

Besides disclosing information online and in Operation Reports, CSC issues CSR Reports annually to serve as an important tool for communicating sustainability efforts. In addition, CSC enhances overall accessibility, transparency, timeliness, completeness, and interactivity of information with CSC website and the CSR webpage, and uses these for stakeholder feedback and continuous improvement.

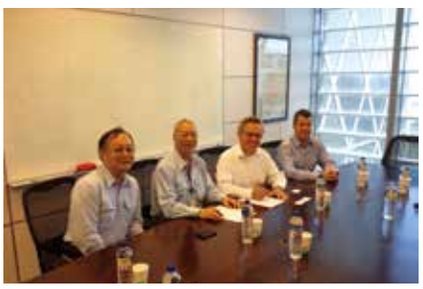
○ Identification of Stakeholders

To identify major stakeholders, the Core Working Group referred to experiences of Divisions and fellow steel companies and the AA1000 Stakeholder Engagement Standard (AA1000SES) according to dependency, responsibility, influence, diverse perspectives, and concern level. These stakeholders include employees and contractors, customers and traders, shareholders, suppliers, government, communities and local organizations, reporters, NGO and opinion leaders, academic researchers.

○ Communication with Stakeholders

CSC values the rights and opinions of stakeholders. Open and direct communication channels are set to gather and address stakeholder concerns and for CSC to improve CSR performances.

Stakeholders	Concerning Issues	Communication Channels and Frequency	2015 Engagement Highlights
Employees	· Occupational Safety and Health · Labor/Management Relations · Employee Welfare and Salary · Talent Recruit and Retention	· Chairman Suggestion Mailbox, board representation by CSC Labor Union · Top management-employee communication meeting (every week) · Departmental communication meeting, Labor Safety and Health Committee meeting (every 2 months) · Management-Labor Union Committee meeting, Pension Fund Supervisory Committee meeting (every 3 months) · Top management-Labor Union council members communication meeting, Stock holding Trustees Committee meet ing (every 6 months) · Human Resources Development Committee meetings (every year) · Collective agreement with CSC Labor Union (every 3 years) · Rewards and Punishments Review Committee (aperiodically)	· 25 mails received in Chairman Suggestion Mailbox · The fourth collective agreement signed on 5 Dec., 2014
Contractors	· Occupational Health and Safety	· Contractor job safety meeting, contractor environment, safety, and health meeting, Contractor Safety and Health Committee meeting (monthly) · Joint-work negotiation meeting, outsourcing management meeting (annually) · Contracts (renewed every 2 years)	· Communicated and promoted safety and health issues monthly · Ensured outsourcing unit price and common contract terms amendments · Assisted contractors management related affairs
Customers and Traders	· Product Quality/ Technology Development · Material Use and Recycled Materials · Hazardous Substance Control	· Production-sales meeting (every 3 months) · Customer satisfaction survey (every year) · Customer feedback through exposition (aperiodically) · R&D alliances, workshops, market investigation, visits, interviews (aperiodically) · Process customer feedback and adopt for improvement of products and services quality · Investigate market for new products, indust rial materials and trends (aperiodically) · Assist customers with process improvement and materials use (aperiodically)	· 39 joint production and marketing meetings for import, 4 for export · 12 local and international technology seminars · 128 key customer visits · 48 customer feedback items · 10 new products market investigations · 10 industrial materials and trends investigations · 204 technology services projects · Improved results of Customer Satisfaction Survey



Stakeholders	Concerning Issues	Communication Channels and Frequency	2015 Engagement Highlights
Individual Shareholders	· Operational and Financial Performance · Product Quality/ Technology Development	· Free service line (886-0800-746-006) and email (f1000@mail.csc.com.tw) · Publicly disclose operating revenues and preliminary result on the Market Observation Post System and CSC website (every month) · Convenes shareholders meeting in the second quarter and adopts e-voting with full shareholder participation in the voting process and announces results on Market Observation Post System and CSC website (every year) · Issue online and paper versions of Annual and Operation Reports (every year)	· Fourth year of e-voting adoption, utilization rate increased to 23.48% of total issued shares and over 90% for foreign investors
Institutional Shareholders	· Operational and Financial Performances · Product Quality/ Technology Development	· Announces monthly operating results and list prices · Communicates with domestic and international institutional shareholders through visits, conference calls, and video conferences (aperiodically) · Participate in domestic and international investor conferences (aperiodically)	· Participated in 1 investor conferences: UBS 2015 Taiwan Conference (Taipei) · More than 100 receptions and conference calls for domestic and foreign institutional shareholders
Suppliers	· Energy Consumption and Management · Material Use and Recycled Materials · Hazardous Substance Control	· Participate in workshops (averages 20 per month) · Visits, forums, provisions of safety design specifications (aperiodically) · Local supply partnerships (aperiodically)	· Discussed specifications, terms, and price · Visits for production and quality status · Communicated and discussed market information · Assessed and awarded suppliers for local purchase
Government	· Waste Management	· Conferences, forums, public hearings, training courses, visits (aperiodically) · Participate in communication meetings, seminars, and assessment by authorities (aperiodically) · Coordinate authorities to hold the activities related to investors (aperiodically)	· Attended the Energy Conference · Attended public hearings related to water footprint, environmental impact assessment, Kaohsiung and Pingtung air pollutants cap, power industry standards, and Kaohsiung City environmental maintenance and management · Hosted seminar series for awarded performances in energy saving by Ministry of Economic Affairs
Communities and Local Organizations	· Water Resources and Waste Water Management · Air Pollutants · Waste Management · Hazardous Substance Control	· Visits and negotiation through the Public Affairs Department (aperiodically) · Visits and negotiation through CSC Labor Union (aperiodically) · Visits and negotiation through CSC Group Education Foundation (aperiodically) · Visits and negotiation through CSC employee clubs (aperiodically)	· 300 visits and negotiation · Board of councilors of CSC Labor Union visited the president of Legislative Yuan and legislators asking to veto the budget of selling CSC's stocks of government to protect the right and interests of employees and shareholders. · Disadvantaged groups invited by the CSC Caring Club to participate in employee retreat · 24 teams participated in the Steel Cup Softball Invitation Tournament hosted by the CSC Softball Club for CSC subsidiaries and customers
Steel Industry Peers	· Product Quality/ Technology Development	· Participate in meetings held by the Taiwan Steel & Iron Industries Association, worldsteel, and South East Asia Iron and Steel Institute (aperiodically) · Bilateral and multi-lateral communication, official visits and meetings (aperiodically)	7 company-level communications · JFE · NSSMC · BaoSteel · Shougang · Anshan Iron Steel Group

Stakeholders	Concerning Issues	Communication Channels and Frequency	2015 Engagement Highlights
Reporters	· Corporate Governance · Sustainable Development Strategy · Moral/Ethical Code · Environmental Policy/ Management System	· Press release (aperiodically) · Spokesperson interview (aperiodically)	· 107 news releases · 15 spokesperson intervie
NGO and Opinion Leaders	· GHG Emissions · Sustainable Development Strategy · Communication with Stakeholders	· Participate in forums, workshops and meetings held by professional associations, institutes, and guilds (periodically and aperiodically)	· Participated in Earth Hour and educational lectures held by the Society of Wilderness · Participated in Chinese National Federation of Industries (CNFI), Formosa Association of Resource Recycling, Taiwan Institute for Sustainable Energy, Sustainable Industry Forum, etc.
Academic Researchers	· Product Quality/ Technology Development	· Progress review of Engineering Research Center and Industry and Academia Alliance (every 2 months) · Progress review of Joint Research Laboratory (every 3 months) · Mid-term report of outsourced researches, research instruction (every 6 months) · Proposal and final reports of ERC, JRL, and outsourced researches (every year) · Keynote speeches (aperiodically)	· 15 keynote speeches by international experts and scholars · 74 outsourced researches · 8 research instructions by local and international experts and scholars




3.2.3. Material Issues

○ Identification and Categorization of Issues

Stakeholder opinions in 2015 were collected through the communication channels described above and by the GRI Guidelines. Collected opinions were then analyzed by the CSR Core Working Group and categorized into three major aspects and 35 issues.

Economic

1 Corporate Governance
2 Sustainable Development Strategy
3 Operational Financial Performance
4 Risk Management
5 Privacy Policy
6 Codes of Conduct/Ethics
7 Product Quality/Technology R&D
8 Customer Satisfaction Survey
9 Customer Services Management
10 Supply Chain Management

Environmental

1 Environmental Policy/Management System
2 Environmental Grievance Mechanism
3 GHG Emissions
4 Product/Service Carbon Footprint
5 Energy Consumption and Management
6 Material Use and Recycled Materials
7 Water Use and Waste Water discharge Management
8 Air Pollutants
9 Waste Management
10 Hazardous Substance Control
11 Biodiversity and Habitat Conservation
12 Green Product/Service Design and Development
13 Green Supply Chain Management

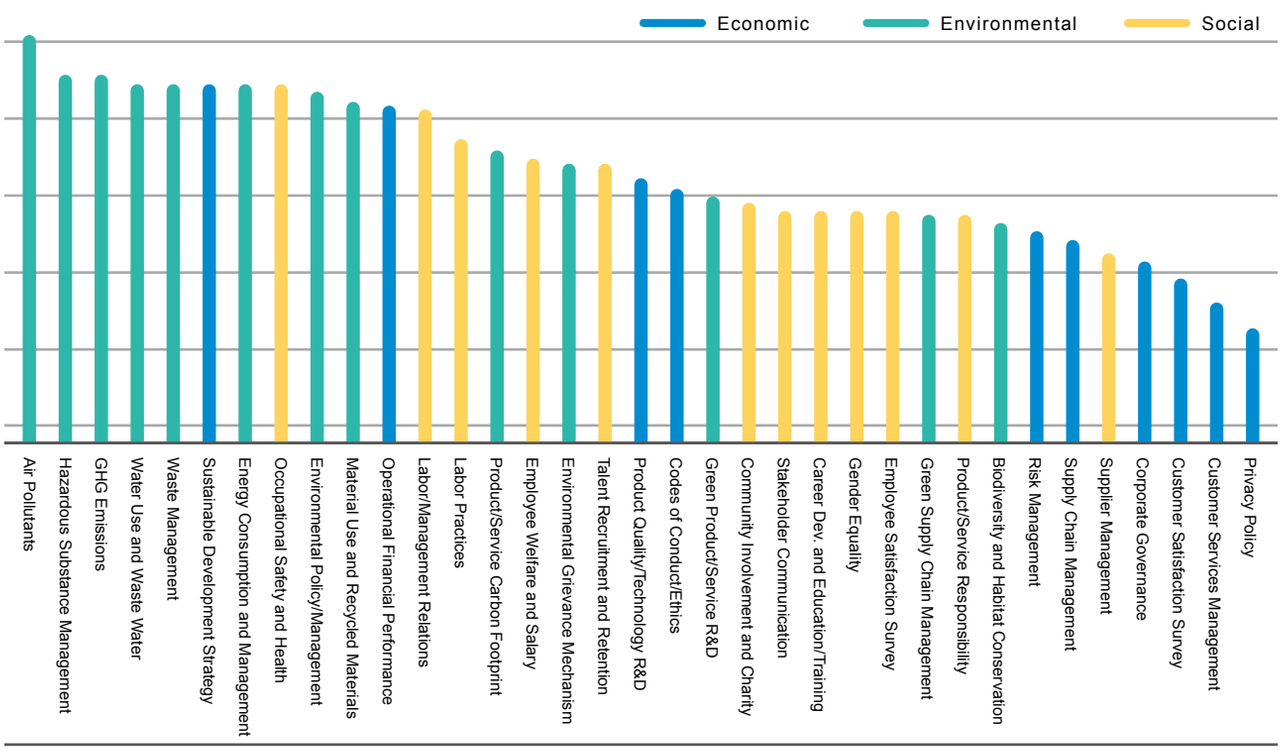
Social

1 Occupational Safety and Health
2 Labor/Management Relations
3 Labor Practices
4 Gender Equality
5 Employee Welfare and Salary
6 Talent Recruitment and Retention
7 Employee Satisfaction Survey
8 Career Development and Educational Education/Training
9 Product/Service Responsibility
10 Community Involvement and Charity
11 Stakeholder Communication
12 Supplier Management for Social Performance

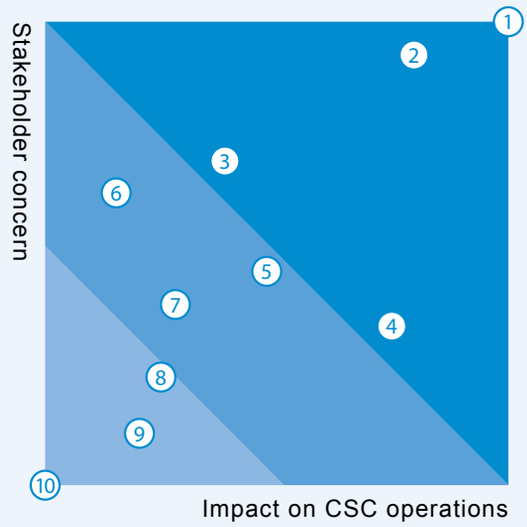
CSC collected stakeholder concerns with the following three methods and conducted materiality analysis to identify issues of materiality.

○ Survey

Concern levels of stakeholders for each of the 35 issues were quantified by means of survey. Besides equestionnaires on the CSC CSR website, questionnaires were distributed by the CSR Core Working Group to relevant CSC Units on 29 Dec. 2015 and by the Units to their stakeholders. The purpose of the survey was clearly explained to stakeholders, and the questionnaires were reclaimed by 5 Feb. 2016 and analyzed. The issues in descending order of stakeholder concern are as follows.

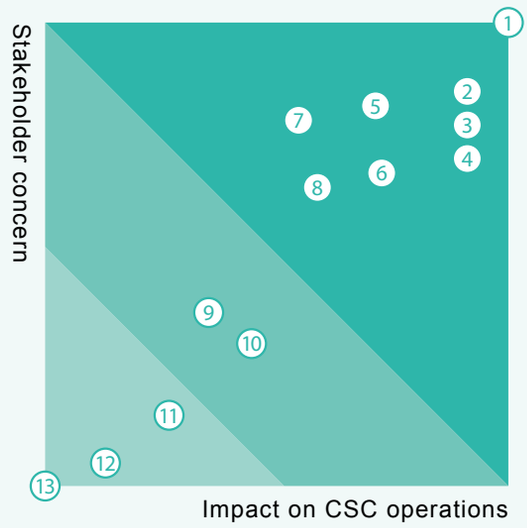


For the overall impact of each issue on the operations of CSC, the impact of each issue on the economic, environmental, and social performances of CSC and its probability were assessed by every Unit of CSC. The issues are then plotted by the concern level of stakeholders and the overall impact on CSC operations into Materiality Matrices in the three major aspects. A total of 16 issues of materiality was identified as follows.



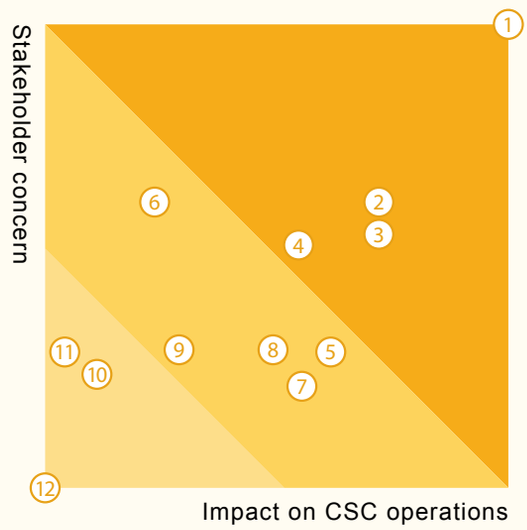
Economic aspect

①	Sustainable Development Strategy
②	Operational Financial Performance
③	Product Quality/Technology R&D
④	Corporate Governance
⑤	Risk Management
⑥	Codes of Conduct/Ethics
⑦	Supply Chain Management
⑧	Customer Satisfaction Survey
⑨	Customer Services Management
⑩	Privacy Policy



Environmental aspect

①	Air Pollutants
②	Water Use and Waste Water discharge Management
③	Waste Management
④	Energy Consumption and Management
⑤	Hazardous Substance Control
⑥	Environmental Policy/Management System
⑦	GHG Emissions
⑧	Material Use and Recycled Materials
⑨	Product/Service Carbon Footprint
⑩	Environmental Grievance Mechanism
⑪	Green Product/Service Design and Development
⑫	Green Supply Chain Management
⑬	Biodiversity and Habitat Conservation



Social aspect

①	Occupational Safety and Health
②	Labor/Management Relations
③	Employee Welfare and Salary
④	Talent Recruitment and Retention
⑤	Community Involvement and Charity
⑥	Labor Practices
⑦	Product/Service Responsibility
⑧	Stakeholder Communication
⑨	Career Development and Educational Education/ Training
⑩	Employee Satisfaction Survey
⑪	Gender Equality
⑫	Supplier Management

For the overall impact of each issue on the operations of CSC, the impact of each issue on the economic, environmental, and social performances of CSC and its probability were assessed by every Unit of CSC. The issues are then plotted by the concern level of stakeholders and the overall impact on CSC operations into Materiality Matrices in the three major aspects. A total of 16 issues of materiality was identified as follows.

Material Issue

Economic Aspect	Chapter	Environmental Aspect	Chapter	Social Aspect	Chapter
· Sustainable development strategy	3.2	· Air pollutants	6.5	· Occupational safety and health	8.3
· Operational financial performance	4.1	· Water use and waste water discharge management	6.5	· Labor/management relations	8.2
· Product quality/ technology R&D	5.2	· Waste management	6.5	· Employee welfare and salary	8.2
· Corporate governance	3.1	· Energy consumption and management	6.3	· Talent recruitment and retention	8.1
		· Hazardous substance management	6.5		
		· Environmental policy/ management system	6.1		
		· GHGs emissions	6.5		
		· Material use and recycled materials	6.3		

○ Expert Forums

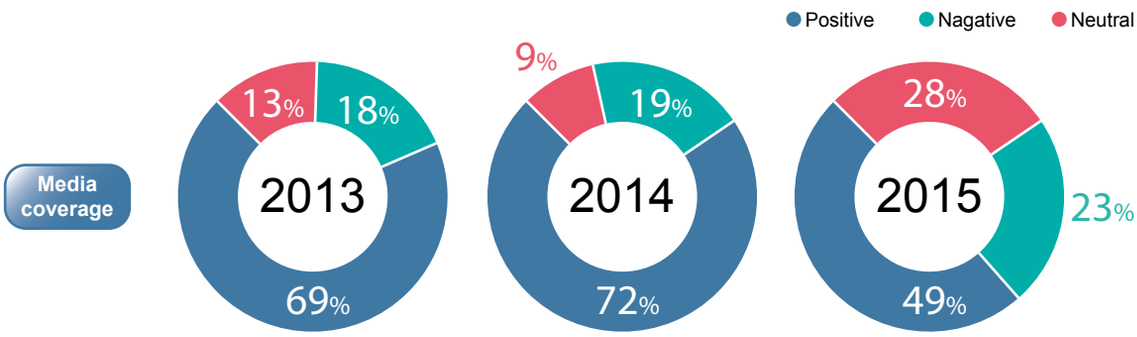
CSC convened several forums in 2015, where experts and scholars from industry and academia exchanged ideas regarding various topics. The key points related to the social responsibility of CSC are categorized and regarded as material issues in the 2015 CSC CSR report and are disclosed in respective chapters.

Key Point	Material Issue	Chapter
Development of short and long term responsive strategies	Sustainable development strategy	3.1
Risk Assessment concerning local traits	Sustainable development strategy	3.2
Establishment of steel industry research center to conduct integrated analysis on sustainable development	Sustainable development strategy	7.2
Potential policy control of steel industry	GHG emissions	6.4
Development of framework, strategy, and action plans for green competitiveness	Sustainable development strategy	4.2
Training of employees to be the force of CSC sustainability	Career development and education/ training	8.4
Employee involvement in social and environmental affairs	Community involvement and charity	9.2
Interactive CSR	Stakeholder communication	3.2

○ Media Coverage Analysis

To identify material issues, CSC furthermore refers to media coverage. CSC started collecting relevant online news pieces of China Times, Liberty Times, Apple Daily, United Daily News, and Formosa E-news for comprehensiveness and objectivity since 2013. The news pieces for 2015 were analyzed and categorized by content as environmental, social, economic, or other issues. The negative reports are regarded as material issues in the 2015 CSC CSR report and are disclosed in respective chapters.

Media Coverage	Material Issue	Chapter
Steel market recession	Operational financial performances	4.1
Slag managemen	Environmental policy/management system	6.1
Ficus tree in the CPDC parking lot	Biodiversity and habitat conservation	9.3
Management personnel change	Corporate governanc	3.1
Dih-Yeong Co. case	Codes of conduct/ethics	3.1



○ Material Aspect Boundary Identification

For every material aspect, the impact inside and outside of the organization is examined. In addition, GRI-G4, industrial characteristics, and international steel industry experiences are considered to identify the boundary for disclosure and to address the concern of stakeholders.

Aspect	Material Issue	Material Aspect	GRI Indicator	Boundary inside the Organization	Boundary outside the Organization	DMA
Economic	Sustainable development strategy	-	G4-1	CSC	-	1.1, 3.2
	Corporate governance	-	G4-34	CSC	-	3.1
	Stakeholder communication		G4-24~27	CSC	-	3.2
	Cods of conducts/ ethics	-	G4-56	CSC	-	3.1
	Operation financial performance	Economic performance	G4-EC1~4	CSC, subsidiaries, joint ventures	Shareholder	4.1, 6.5
	Product quality/ technology R&D	Indirect economic impacts	G4-EC7~8	CSC	Customer	4.2, 5.2, 7.2
Enviromental	Material use and recycled material	Material	G4-EN1~2	CSC	Supplier, customer	6.1, 6.2
	Energy consumption and management	Energy	G4-EN3~7	CSC, subsidiaries	Supplier	
	Water use and waste water discharge management	Water; Effluents and waste	G4-EN8~10; G4-EN22, 26	CSC	Community	6.5
	Biodiversity and habitat conservation	Biodiversity	G4-EN11~14	CSC	-	9.3
	GHG emissions	Emissions	G4-EN15~19	CSC	Community	6.2, 6.4, 6.5
	Air pollutants	Emissions	G4-EN20~21	CSC	Community	6.5
	Waste management	Effluents and waste	G4-EN23~25	CSC, subsidiaries	Community, government	6.5
	Hazardous substance management	Effluents and waste	G4-EN23, 25	CSC	Supplier, community, customer	6.5
	Green product/ service design and development	Products and services	G4-EN27~28	CSC	Customer	3.1, 5.3

Aspect	Material Issue	Material Aspect	GRI Indicator	Boundary inside the Organization	Boundary outside the Organization	DMA
Social	Talent recruitment and retention	Employment; Training and education	G4-LA1~3; G4-LA9~11	CSC	-	8.1, 8.4
	Employee welfare and salary	Employment	G4-LA2	CSC	-	8.2
	Labor/ management relations	Labor/ management relations	G4-LA4	CSC	-	8.2
	Occupational safety and health	Occupational health and safety	G4-LA5~8	CSC	Contractor	7.6, 8.3
	Career development and education/ training	Training and education	G4-LA9~11	CSC	-	8.4
	Community involvement and charity	-	-	CSC	Community	9.1

3.2.4. Risk Management

Type	Potential Risks	Risk Control Strategies and Measures
Finance Risk	Exchange Rate Risk	· Adopt hedging operation for foreign currencies of import /export businesses to avoid risk. As well monitor the trend of exchange rate and buy or sell currencies adequately to avoid risk. · Adopt exchange rate risk avoiding operation soon after foreign capital expenditures. · Take out loans of equivalent amounts of foreign currencies for long term foreign investment .
	Rising Interest Rates	· Set a strict tolerance rate for variable interest rate liabilities · Issue corporate bonds to lock the mid-term and long-term capital cost and avoid increasing interest rates · Use low interest rate commercial papers and short term bank loans for short term financing. · Adopt adjustable fixed rate commercial papers (FRCP) for long-term financing during the time of a relaxed capital market .
	Inflation Risk	· Monitor the effect of inflation on company's operation. Since the material price is near the lowest point of recent years, it is unlikely for CSC facing inflation risk.
	Pickup by Customers	· Assist customers in increasing bank credit amounts by negotiating with banks for forfeiting of account receivables · Use e-commerce and security mechanisms of digital signatures to simplify payment procedures
	Service Quality	· Monitor the correct operation of e-security mechanisms and computerize financial operations to ensure data accuracy and timeliness
	Capital Utilization Efficiency of CSC Group	· Use various indicators to regularly analyze financial structures of group affiliates and set up an alarm mechanism · Conduct real-time monitoring off inancial asset values to enhance capital management among group affiliates and improve the capital utilization efficiency
Production Risk	Economic Recession	· Simulate and plan for production and sales situations based on orders estimation · Coordinate cast quota · Adjust blast furnace product ion and maintenance schedule according to storage capacity · Adjust production line quarterly/yearly maintenance schedule · Adjust storage limits according to the production of molten iron · Outsource rolling when necessary
Market Risk	Concent rated sales	· Adopt marketing channel strategy of "mainly domestic sales, export sales as a supplement" and make adjustments according to market changes. Set up overseas coil centers to manage and control marketing channels.
	Imbalanced Production and Sales	· Simulate production and sales conditions based on orders received to timely adjust production plans
Transportation Risk	Interruption of Supply	· Review material reserve weekly for optimized transportation planning to avoid material interruption. Based on the capacity needed and economic benefits actively dispatch vessels of long term or temporary contracted. Continuously track the positions of vessels till unloading.
	Shipment of Finished Goods	· Request customers to buy insurances for marine transportation. For domestic in-land transportation, all the contractors are requested to provide security deposit in bank for guaranteeing goods reach their destination safely.

Type	Potential Risks	Risk Control Strategies and Measures
Raw Material Source Risk	Interruption of Supply	· For suppliers: carefully assess and actively develop material sources · For stocks: maintain adequate stocks for production flexibly · For transportation: operate with own vessels for material shipment and use chartered vessels as alternatives when necessary · Increase self-supply of raw materials · Grasps market conditions by business information collection and investigation of plants.
	Material Investment	· Choose carefully miners and/or partners for raw materials resources investment · Hire advisors to assist with feasibility evaluation · Conduct on-site due diligence on the project and miners. · Convene meetings for comprehensive evaluations · Monitoring the operation and development of the invested projects and/or companies. · Participate in the decision making process of the invested projects and/or companies. · Set up overseas branch offices to enhance business liaisons and command investment trends
Information System Risk	Information System Abnormality	· Standardized operation procedures · Enforce disaster prevention, information safety, monitoring, reporting mechanism, abnormality management and back up · Carry out training and periodic drills
Utility Risk	Unstable Supply	· Inspect pipelines to maintain a steady and reliable supply of utilities. · Conduct periodic emergency drills
	Stricter Regulations	· Comply to regulations to ensure the quality of effluent meets standards
Equipment Maintenance Risk	Mechanical Equipment Maintenance	· Spare Parts Maintenance Control: Maintain appropriate inventory level. · Information management enhancement: Promote domestic manufacturing. · Maintenance Records Establishment: Decrease equipment unscheduled downtimes through equipment shutdown and failure management. · Knowledge Management in Maintenance: Design comprehensive recruiting plans and encourage skilled technicians to participate in the apprenticeship program for smooth transitions from the experienced to the younger generations, and use information tools to enhance knowledge management.
	Electrical Equipment Maintenance	· Practice the TS 16949 Standard Maintenance Procedure · Practice the ISO 9000 Standard System Development Procedure · Established "Information Safety Management Regulations of Production Divisions" with reference to ISO 17799
Water Risk	Water Resources Management	· Collect rainwater for reuse · Add a secondary water source; participate in the municipal and industrial wastewater reclamation project of Fengshan River and conduct R&D for seawater desalination · Examine drainage and emergent submerge pumps for extreme precipitation · Set run-off pools and treatment systems to improve effluent quality · Response to the water shortage during Mar. and May, 2015: In the dry season of 2015, Taiwan Water Corporation initiated water restriction schemes in Mar. with 5%, 7.5% and 10% of 3 stage restrictions rates. · CSC adopted several water conservation measures such as stopping swimming pool and shower in the gymnasium, installing water conservation tap, pressure reducing for treated water system, increasing the operating capacity of waste water purification plant, and reducing scrubbing water for ID fans in #1 BOF plant. With these measures CSC survived the water shortage.
Climate Change Risk	Carbon Management	· Develop carbon reduction roadmap · Develop energy saving and carbon reduction steel products and perform · Life Cycle Analysis · Develop new green businesses; participate in local and international cooperative initiatives and activities for carbon reduction, capture and storage, and credit · Promote low-carbon lifestyle to the whole CSC Group
ESH Risk	Labor Safety Culture	· Conduct comprehensive hazard identification and risk assessments; adopt risk mitigation measures; conduct emergency response drills
	Environmental Protection	· Reduce air pollutants and wastewater discharge, and increase water saving and wastewater recycling · Enhance risk control and management for resource utilization andproducts
	Administrative Justice	· Watch for the imposition of various types of environmental and energy taxes to ensure that they are just
Engineering Management Risk	Internal Management	· Developed construction management system and capital investment system for control and management of labor safety, quality, schedules, and budgets
	Contractor Performance	· Track contractor financial status by entrusting local investigators and filing investigation results in the construction management system and integrated platform · Conduct periodic credit checks of specific suppliers

4

Investors

4. Investors

4.1. Operation and Finance

The steel industry is capital-intensive for production equipment demands huge amount of investment and coal and iron materials account for a high percentage of production cost. To control costs and maintain competitiveness, CSC practices various projects. The initiative of cost saving is an important strategy and a key performance indicator for the steel industry.

CSC continues to reduce operating costs systematically by using scientific methods on raw materials utilization, process improvement, technology R&D, quality upgrades, and management improvement. Divisions review executive results every month and reports in Total Quality Management (TQM) Committee and Operational Budget Execution Review meetings every quarter for timely improvement.

In 2015, 143 major items of Cost Reduction Activities were plan to implement with cost reduction target of NTD 3.5 bi. In addition with the reduction from controllable costs of general affairs, the total cost reduction was NTD 4.84 bi., a 138 % of the annual target. In 2016, 188 major items of Cost Reduction Activities will plan to implemented with cost reduction target of NTD 3.52 bi.

Unit: bi. NTD

Cost Reduction Activities	2011	2012	2013	2014	2015	2016
Target	≥2.65	≥4.47	≥4.00	≥3.70	≥3.50	≥3.80
Performance	2.70	6.03	5.52	4.39	4.84	

4.1.1. Business Performance and Dividend Distribution

○ Operating Revenues

Unit: 1,000 NTD

	2014	2015	Increase/ Decrease from 2014 to 2015
Sales Revenues	199,607,615	156,105,004	Decreased 43,502,611 due to the decrease in sales price per ton of carbon steel
Service Revenues and Others	5,551,987	4,804,460	Decreased 747,527 due to decrease in sales of utility fluids
Total Operating Revenues	205,159,602	160,909,464	Decreased 44,250,138

Note: For detailed financial information, please refer to: http://www.csc.com.tw/csc/ss/fin_month.htm

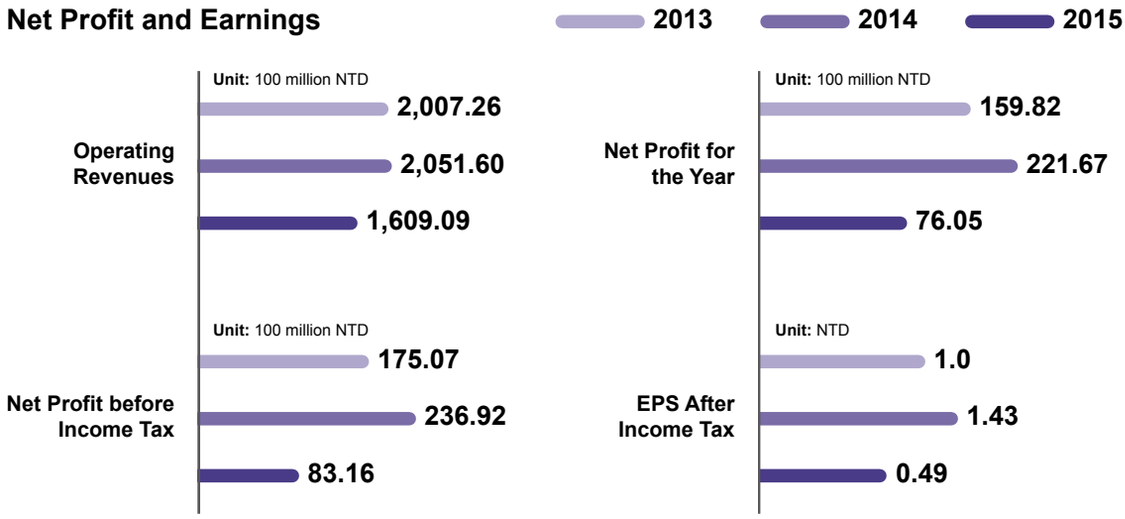
○ Operating Expenditure

Unit: 1,000 NTD

	2014	2015	Differences	Rate of Differences
Operating Costs	183,377,897	148,511,291	-34,866,606	-19.01%
Cost of Goods Sold	179,744,905	145,200,189	-34,544,716	-19.22%
Service Costs and Others	3,632,992	3,311,102	-321,890	-8.86%
Operating Expenses	8,263,257	7,469,515	-793,742	-9.61%
Total Operating Expenditure	191,641,154	155,980,806	-35,660,348	-18.61%

Note: Starting from 2015, CSC applies the amended Regulation Governing the Preparation of Financial Reports by Securities Issuers and the 2013 version of IFRSs endorsed by the FSC. Some items in 2014 financial statements were adjusted respectively.

Net Profit and Earnings



Note: The amounts were based on IFRSs.

Distribution of Earnings

In 2015, earnings available for distribution totaled NTD 9.909 bi., with dividend distribution of NTD 1.4 per preferred share and NTD 0.5 per common share. Dividend distribution and return on investment over the past five years are as follows

Unit: NTD

	2011	2012	2013	2014	2015
EPS After Income Tax	1.36	0.38	1.05	1.43	0.49
Cash Dividend	1.01	0.4	0.7	1.0	0.5
Stock Dividend	0.15	0.1	0.2	0	0
Dividend Payout Ratio	85.30%	131.60%	85.70%	69.90%	102.04%

Note: Dividend distribution of 2015 will be in effect after approval of shareholder meeting on 23 June 2016.

	2011	2012	2013	2014	2015
P/E Ratio	72.61	24.65	11.27	17.98	46.47
P/D Ratio	68.98	36.97	16.03	25.71	45.54
Cash Dividend Yield	1.45%	2.70%	6.24%	3.89%	2.20%

Note: P/E Ratio = Average closing price per share for current year /EPS
P/D Ratio = Average closing price per share for current year / cash dividend per share
Cash Dividend Yield = Cash dividend per share / average closing price per share for current year

According to CSC Articles of Incorporation, earnings of a fiscal year are distributed in the following order after tax payment, deficits offset, and appropriation of legal reserves.

- Appropriation/Reversal of special reserves according to law and regulation.
- Preferred share dividends at 14% of par value.
- Ordinary share dividends at 14% of par value.
- The remainder, if any, as additional dividends divided equally between the holders of preferred and ordinary shares.

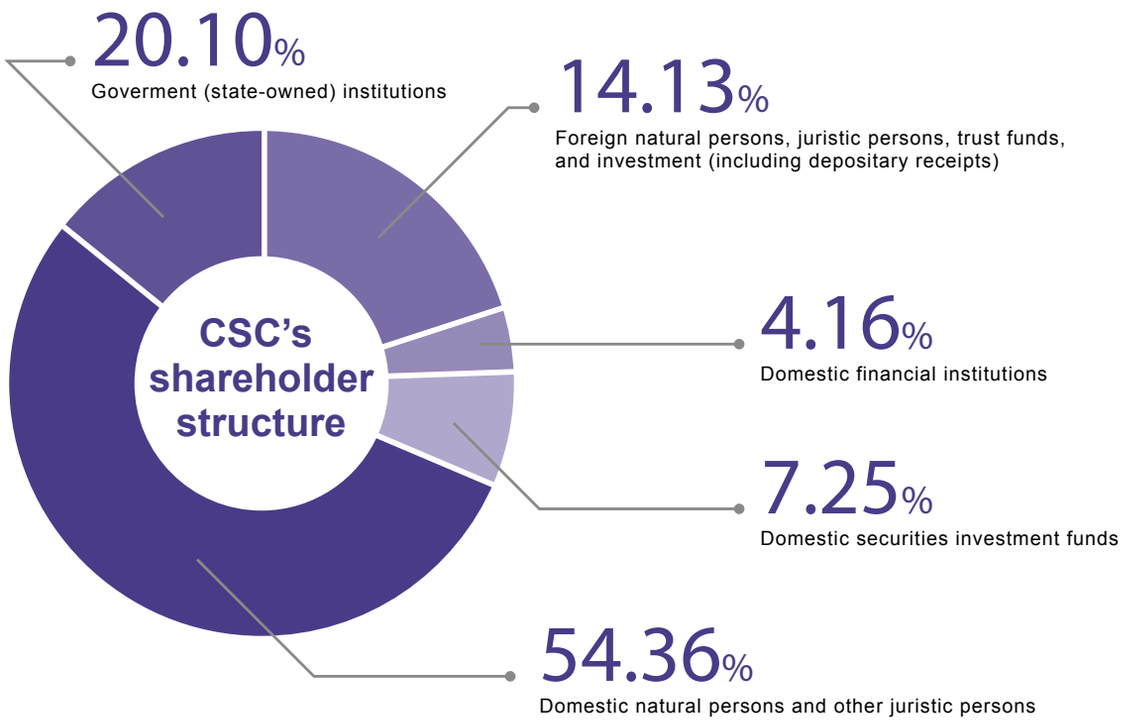
4.1.2. Invested Businesses

Based on its core steel business, CSC diversifies operations, expands the scope of investments, and enhances investment in green energy to carry out the green energy development strategies of the CSC Group. CSC will continue to prioritize its investment in emerging Asian countries with high growth of steel demands. The investment for production lines and scales are determined on the basis of deployment and cross-support capability among its production and sales bases as well as the specific steel demands in those countries and the competitive advantage that it owns in various markets.

The investments of CSC comply with laws of the respective nations, and has no additional human rights terms listed in the investment contract. Besides, CSC does not participate in the assessment of any investment project which violates human rights. There were no human rights violation case in 2015 for all 26 corporations of the CSC Group.

Business Group	Companies	2015 Business Performance
STEEL BUSINESS	Dragon Steel	The reduced sales and steel price drop resulted in decreased gross profit ratio. Both revenue and profit decreased compared to 2014.
	Chung Hung Steel	Despite the increase of sales, the steel price drop resulted in the decreased revenue compared to 2014. With recognition of losses on inventory valuation, the 2015 pre-tax loss of 1164 mi. was a drop from the 2014 pretax profit of 210 mi.
	CSC Steel Sdn. Bhd	With decreased cost of raw material and the gain from the devaluation of MYR to USD, the pretax profit was 62.44 mi. MYR in 2015 compared to loss in 2014.
	China Steel Sumikin Vietnam	The factors of affected local market by low-price imports, failed to achieve sales goal, recognition of losses on inventory valuation, and the small scale production in the initial production period resulted in loss for 2015.
	China Steel Corporation India	The electrical steel sheet production line was commenced in May 2015, and therefore resulted in a loss for the small scale production in the initial production period.
TRADING & LOGISTICS BUSINESS	China Steel Express	The bulk shipping market downturn and lack of insurance claim as for 2014 resulted in a decreased profit compared to 2014.
	China Steel Global Trading	The reduced sales of steel products and distribution sales with the decreased investment income resulted in a decreased pretax profit compared to 2014.
	Qingdao China Steel	The exchange loss from the deprecation of RMB resulted in loss for 2015.
	Kunshan China Steel	Plant completion and start of production in Q3 2015. (United Steel Engineering and Construction East China coil center)
INDUSTRIAL MATERIALS BUSINESS	C.S. Aluminum	The factors of reduced sales , the sales gross loss due to aluminum price drop and increased unit cost of sales, and recognition of investment income loss resulted in a pretax loss of 744 mi.
	China Steel Chemical	The price drop for coal tar and light oil products caused by the oil price drop resulted in a decreased profit compared to 2014.
	CHC Resources	Despite the increase of sales and revenue of BOF powder, the increased cost of water quenched slag and the reduced investment income resulted in a decreased pretax profit compared to 2014.
	HIMAG Magnetic	Despite the increased sales of special chemicals, the reduced sales of magnetic powder and the investment loss from the plant construction of Magnpower Corporation resulted in a decreased pretax profit compared to 2014.
	Changzhou China Steel Precision Materials	The reduced revenue due to market downturn in the second half of 2015 and the exchange loss from the deprecation of RMB resulted in a pretax loss of 9.99 mi. RMB in 2015.
ENGINEERING BUSINESS	China Steel Machinery, China Ecotek	The decreased revenue and investment income resulted in a decreased pre-tax income compared to 2014.
	China Steel Structure	The decrease of product sales and price drop resulted in a decreased pretax profit compared to 2014.
	InfoChamp Systems	The increased gross profit from the completion of several info systems and cost reduction resulted in an increased pretax profit compared to 2014.
SERVICES & INVESTMENTS BUSINESS	Gains Investment	The profit was affected by the market downturn and resulted in pretax profit of 441 mi., a drop from 2014.
	China Steel Security	The decreased consolidated revenue and the investment income recognized under equity method resulted in a decreased pretax profit compared to 2014.
	China Prosperity Development	The factors of stable rent income, gain on disposal of the land for Qianzhen residential building, and the increase of investment income resulted in the pretax income of 809 mi. in 2015, an increase of 283.93% compared to 2014.

4.1.3. Capital Sources and Major Subsidies



・According to Article 10 of Statute for Industrial Innovation, CSC's R&D investment are credited against its income taxes of the same year. CSC does not accept other governmental subsidies

Unit: NTD 1,000

	2011	2012	2013	2014	2015
Investment tax credit obtained	1,533,465	14,082	15,818	27,311	399,285

4.2. Industry Upgrade and Innovation

For the continuous growth of CSC and expansion of the Group businesses, CSC practices “deepened, broadened, and innovative integration” R&D transform and extends from R&D to RD&ES. E (Engineering) is the capability of industrialization and commercialization of research results and S (Service and Solution) is the capability of technology marketing and total solution services

For developing the wind power business in CSC Group, CSC established Wind Power Technical Center to introduce and innovate wind power technology and to cultivate CSC Group’s capability in design and development. CSC will continue making differences in cost, products, energy saving and environmental protection, and customers services through RD&ES to encounter the operational difficulties from the severe overproduction of mainland China. With the expansion from R&D to RD&ES, CSC could improve its competiveness through enhanced capacity of technology innovation and sustain progressing and growing.

4.2.1. Major Research Achievements

In 2015, CSC achieved outstanding R&D accomplishments on production, process, equipment technology, and other fields, and the most important research results are listed as follows:

BOF Slag Modification and Reutilization

Results

- The hot stage BOF slag modification station and technique were established.
- The residual expansion <0.4%.
- The success rate above 97%.

Benefits

- In 2015, 6900 tons of BOF slag were reutilized.
- The utilization of BOF slag can be expanded

Non-chromic lubricant coating for hot dip galvanizing

Results

- Meets the requirement of Japanese vendors of electrical appliances yet maintains the excellent anti-corrosion.
- Coil formability, anti-corrosion, refrigerator opening test, and slide rail formability were tested and certified .

Benefits

- Enhance the competitiveness in coating products and in the slide rail market.
- 2,500 tons of orders in 2015.

3104 aluminum can-body material

Results

- Hot tandem metallurgical rolling model coupled with the texture evolution behavior has been established
- Post-baked strength is enhance by adding the recycled Al alloy.

Benefits

- Cost down.
- 4000 tons of orders in 2015 with 3000 millions NTD revenues for CSAC.

15CS1000HF thin electrical steel sheet

Results

- Thin ES products such as 25CS1500HF, 20CS1500HF, 20CS1200HF, and 15CS1200HF were developed for make-to-order.
- The newly developed 15CS1000HF (W10/400 ≦ 10W/kg; B50 ≧ 1.60T) is the thinnest with least iron loss in median to thick classes of ES.

Benefits

- The NGO production line enormously enhanced productivity of thin electrical steel (ES)
- CSC is capable to fulfill orders of all the specs of 15CS1000HF ES of thickness from 0.15 to 0.3 mm.

JSC1180Y ultra high strength automotive steel

Results

- The top class of cold rolled automotive steel with TS ≧ 1 180MPa and YS ≧ 825Mpa, JSC1180Y is developed.
- The problems of strip break of the brittle steel and the unstable mechanical properties of CAL coils are resolved .
- Coils were sent to customers to test with results of good formability

Benefits

- The design, process and fundamental techniques for ultra high strength steel were established.
- Makes CSC one of the top steel companies in the world.

Hot stage BOF slag modification

Applications of modified BOF slag

4.2.2. Green Business Development

With the global trend of low-carbon economy, green industry and green growth are becoming the focus of international competition. The CSC Group has long contributed to the improvement of environmental protection and R&D for the technology of green energy, including development and wide application of energy-saving steel products, recycle and reuse of resources, and energy integration. Recent foci are emission reduction and alternative energy. CSC participates in advanced and potential low-carbon businesses to reduce emission and develop renewable energy technologies.

In response to the national energy policy announced in 2011, Bureau of Energy, Ministry of Economic Affairs, promotes the “Thousand Wind Turbines” project. The project aims for 800 offshore turbines with a 4,000 MW capacity and a total of over 1,000 turbines and 5,200 MW capacity including on-shore wind turbines. They account for 33 % of the goal for renewable energy and are expected to be one of the major sources of domestic alternative energy.

In line with the national sustainable energy policy, CSC established Committee for Wind Power Generation Business Development in 2014 to answer the governmental expectations and to create a new core business of annual production value over NTD 10 bi. The development plans and targets are as follows.

Short-term 2014-2020	Mid-term 2021-2025	Long-term 2026-
Target	**Target**	**Target**
・EPC for offshore wind farms ・Capacity in marine engineering	・Local industrial value-chain for wind turbine system ・EPC + O&M Service for offshore wind farm	・Expansion of local wind power business ・Internationalization of offshore wind power business
Scheduled work items	**Scheduled work items**	**Scheduled work items**
・Acquiring contracts of offshore demo wind farms ・Assessing the feasibility of wind farm development ・Constucting wind power ports and industrial park ・Bidding and developing offshore wind farms	・Localizing the supply chain ・Establishing capacity for offshore wind turbine maintenance ・Participating in local offshore wind farm development	・Stabilizing revenues from EPC+ O&M for offshore wind farms ・Acquiring contracts of decommissioning & retrofit for local on shore wind farms ・Developing international wind power business

Performance

- Established the committee for Wind Power Business Development
- Obtained bid for TaiPower Construction of Met Mast in South Zone
- Established Wind Power Technology R&D Center
- Partcipated in the steel exhibition of Federation of Indian Chambers of Commerce and Industry
- Submitted Changhua #29 Area Offshore Wind Power Development Site Plan Application to Bureau of Energy as China Steel Power Preparatory Office
- Installed the main structure for Met Mast in 2015 for the TaiPower Construction of Met Mast in South Zone

Met Mast

Met Mast under Construction

Besides the wind power business, the recent development of CSC in green businesses includes high vale fuel gas, motor, automobile, bio-coal, bio-energy, electrical steel sheet, waste heat recovery, hydrogen energy application, and photovoltaics.

Items		
White Biotech Co.	Summary	WBT was founded in Nov. 2012 to utilize the anaerobic fermentation technology of LanzaTech Co. to produce ethanol and other chemicals from LDG. WBT plans for green energy include commercial-scale ethanol plant investment, industrial gas and rare gas business planning, gas monitoring and PM 2.5 treatment, demo SOFC application and development, and water technology.
	Performance	WBT completed technical feasibility study for ethanol production from LDG in the demo plant by the end of 2014 as the basis for investment in commercial-scale plant. The results of 52 g/L ethanol and 79.5 % CO conversion rate were highest of international standards.
	Prospect	WBT started the planning for a commercial-scale ethanol plant in 2015 and will continue to clarify technical and engineering issues and assess the investment of an annual 20,000-tonne ethanol production plant.
Dyna RECHI Co.	Summary	Dyna RECHI was co-founded with Rechi Precision Co. to produce Brushless Direct Current (BLDC) motors.
	Performance	New plants were set in Taiwan and China, with design annual BLDC production capability of 24 mi. units.
	Prospect	Enhancement of competitiveness of the motor industry by forming a motor industrial cluster.
Honley Auto Parts Co.	Summary	Honley Auto Parts established hot stamping part plants in Taiwan and China with annual production capacity of 13 mi. units.
	Performance	Increase of CSC's automotive steel materials sales while saving energy and reducing emissions.
	Prospect	Hot stamped parts will increase in use by demands for lightweight, energy-saving, and safety for automobiles.
Bio-coal	Summary	Bio-Coal Sdn. Bhd. was founded in Malaysia and set a pilot plant in Penang.
	Performance	Development of more competitive and value innovative bio-coal technology for CSR in emission reduction and environmental protection.
	Prospect	Operation pattern is established after several adjustments. In addition to continual advancement of the process and equipment, biomass pellet reformation plan will commence according to the development of new furnace by the CSC Technology Division starting 2016.
Fukuta Motor Project	Summary	Fukuta is the major supplier of motor iron cores for TESLA Motors, and all electrical steel sheets of Fukuta are provided by CSC.
	Performance	TESLA is the leading company in electric vehicles (EV) with EVs tested positively on the market for its performance and safety. The global sales in 2015 was 50,580 vehicles.
	Prospect	The EV market is of great growing potential with the global trend for green energy.
Heat Recovery for Mid- and Low-Temperature Sources	Summary	Thermoelectric Generation (TEG)
	Performance	TEG system for a boiler flue gas duct was completed in 2015 to fully utilize the low-temperature waste heat. Its innovative channels and structure allows for a power generation efficiency of 2.4 kW, exceeding the 2 kW design target.
	Prospect	A 6kW thermoelectric system for continuous casting is set for installation in 2016 to recover radiative heat that traditional methods are unable to efficiently recover.
	Summary	Organic Rankine Cycle (ORC)
	Performance	An innovative waste heat recovery system integratiing ORC with recuperator is under construction at the billet reheating furnace.
	Prospect	This innovative system will be completed at the end of 2016, and is expected to reduce COG consumption more than 2.3% which can save energy cost over 8 million NTD every year. More ORC systems will be evaluated for other low-temperature waste heat sources, for instance boiler flue gas and BOF OG cooling water.

Items		
Bio-energy	Summary	Bio-coal from biomass.
	Performance	With mixed carbonation of lignocellulosic pellets and oil palm empty fruit bunch (EFB) pellets, the transport limit for EFB bio-coal is increased from 450 L to 3 m3 and therefore the storage and transport safety is enhanced.
	Prospect	Development of second-generation bio-coal low temperature carbonation system may eliminate the issues of self-generated heat up problem of bio-coal and application of byproducts.
	Summary	Fast pyrolysis of waste wood to bio-oil.
	Performance	The test for bio-emulsified oil in coking oven charging car has an accumulative operation of 199 hours with maximum continuous operation for 50 hours and with emission complying to the emission standard.
	Prospect	Continual testing of long-term operation.
Hydrogen Energy Application	Summary	Solid Oxide Fuel Cell (SOFC)
	Performance	The efficiency of kW class SOFC system is raised to 50% in 2015.
	Prospect	50 kW CHP system will be installed by the end of 2016.
Photovoltaics Systems	Summary	Photovoltaic (PV), the use of solar cell for direct conversion of solar energy into electric power, is the most convenient, lowpolluting, non-noise, high-safety, easy-operated, and distributed power system of renewable energy.
	Performance	Set 517.24 kWp in total and generated 538,025 kWh power (sold to TaiPower), a 280 tCO2e reduction in 2015.
	Prospect	The Mao-Da Warehouse project is expected to be finished in June 2016 with additional 499 kWp.

Solid Oxide Fuel Cells

Thermoelectric generator module

Organic Rankine Cycle

Photovoltaic Systems

Biomass Fast Pyrolysis

EFB Torrefaction System

4.2.3. Connection to Global Trend

The value elevation for steel plants can be assessed by three indicators: development of new applications, improvement of application technology, and connection to advanced steelmaking technology. CSC practices these three by participating in international auto steel affairs.

CSC participates in WorldAutoSteel (WAS), which has several big plans that focus on

1. maintaining the attention for steel materials in application,
2. showcasing application value of next-generation steel materials
3. building positive links of steel materials to clean environmental protection,
4. assisting boost of product competitiveness for steel plants, and
5. participating in international automotive market development.

○ Working in 2015

- WorldAutoSteel held several regional conferences for AHSS Application Guildlines V5.0 T3 (Train The Trainer) to enhance the understanding of WAS members. This helps to make AHSS more competitive regarding car bodies and to promote AHSS as the best material for car bodies by providing a consistent information and communication.
- A New Paradigm for Automotive Mass Benchmarking used the A2Mac1 database for vehicle weight benchmarking with statistical analysis and thus avoided bias from benchmarking using a single vehicle.
- Life cycle GHG emissions assessment of automotive material used the LCA concept to account for the whole life cycle emission for materials, manufacturing, use, and end-of-life and to represent and reflect the true impact of various materials. For legislation, WAS was in collaboration with Technical Univ. of Berlin to promote the legislation of using LCA to replace tailpipe emission and continued communication and promotion with the US, Europe, Japan, and China OEM plants.
- CSC assisted in holding the WorldAutoSteel Conference in The Grand Hi Lai Hotel, Kaohsiung, on 3~5 Nov. 2015.
- CSC held a WorldAutoSteel automotive steel application seminar on 6 Nov. 2015 for WAS and local experts and scholars. The 6 keynote speeches provided local companies with the opportunity to learn firsthand about international car body development trend. WAS research results on automotive steel application were delivered, and contents were well received by participants. The purpose of promoting steel advantage was served.

WorldAutoSteel Members

5

Customer

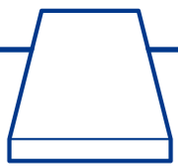
5. Customer

The major products of CSC are steel plates, steel bars, wire rods, hot-rolled coils and sheets, cold-rolled coils, electro-galvanized coils, hot-dip galvanized coils, electrical steel coils, and so on. CSC follows the quality policy, “based on customer orientation to keep the innovation of R&D, provide excellent and eco-friendly products and consequently fulfill responsibility to society.” In order to win the appreciation and trust of customers and to assist customers to succeed, CSC adopts two policies, “R&D the advanced products to speed up the development of new products and strategic steel products, and upgrade to increase the value”, and “Try best to save energy, reduce carbon, and improve the value of gas, and stop the hazardous substance, and take good care of corporate social responsibilities” to develop all kinds of operational activities. The production of crude steel in 2015 was 9,220,854 tons, which raised 66,542 tons, compared to 9,154,312 tons in 2013, and the growth rate is about 0.73%. The productivity of employees is 906.94 tCS/per person per year.

In addition to that, the rate of orders for high-end steel reached 56.31%, which meets the operational target CSC required, in 2015, theperformances of the development of new products, improvement of processes and technologies, the accreditation of quality managementsystem, and other aspects are all great.

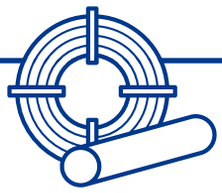
5.1. Products and Applications

5.1.1. Major Products



Steel plates

Shipbuilding, bridge, steel structure, oil country tubular good (OCTG), storage tank, boiler, pressure vessel, truck chassis, general structure part.

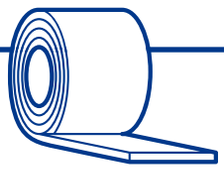


Steel bars

Bolts, nut, hand tool, loudspeaker part, automobile and motor cycle part, machinery part.

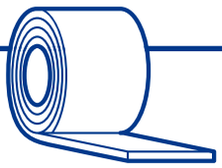
Steel rods

Bolts, Nuts, steel wire, steel rope, hand tool, welding electrode, tire cord, umbrella rib, roller chain.



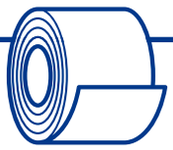
Hot-rolled coils and sheets

Steels pipe and tube, vehicle part, container, pressure vessel, hydraulic jack, cold rolled and galvanized substrate, light shape, general formed part.



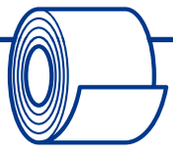
Cold-rolled coils and sheets

Steels pipe and tube, steel furniture, home appliance, oil barrel, automobile panel, substrate for galvanized and coated steel sheets, general hardware part.



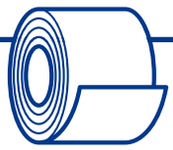
Electro-galvanized coils

Computer cases/part and accessory, home appliance panel/part and accessory, construction material, furniture hardware and components.



Hot-dip galvanized coils

Automobile and home appliance part and accessory, computer case part and accessory, PPGI, construction Material.



Electrical coils and sheets

Motor, transformer, stabilizer.

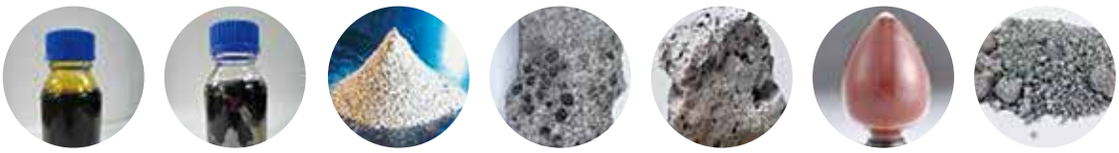
Production

Unit: 10,000 ton

	2010	2011	2012	2013	2014	2015
Steel Plate	106.3	105.7	98.4	94.2	96.4	92.1
Steel bar	57.5	70.1	56.4	59.9	62.1	55.3
Steel wire rod	126.5	128.3	109.7	132.8	131.7	118.4
Hot rolled	389.4	256.4	227.3	216.2	237.6	202.4
Cold rolled	282.4	304.3	320.6	358.5	365.9	310.5
Slab	9.3	10.1	25.0	21.3	9.8	34.8
Cast iron	0.6	0.6	0.9	0.5	0.5	0.7
Summary	972.1	875.6	838.3	883.4	904.0	814.2

5.1.2. Byproducts

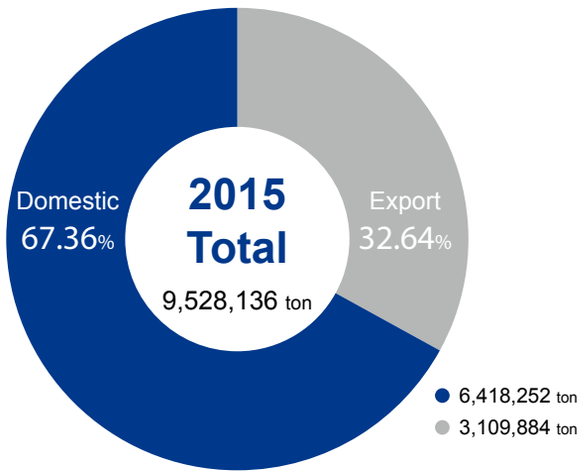
Byproducts from CSC productions include coal tar, crude light oil, BF slag, BOF slag, iron oxide powder, and residual iron of desulfurization slag. Residual iron of desulfurization slag and part of granulated BF slag are sold to domestic businesses, and others are processed through related industries to be provided to chemical, construction, civil engineering, electrical, commodity, and other industries.



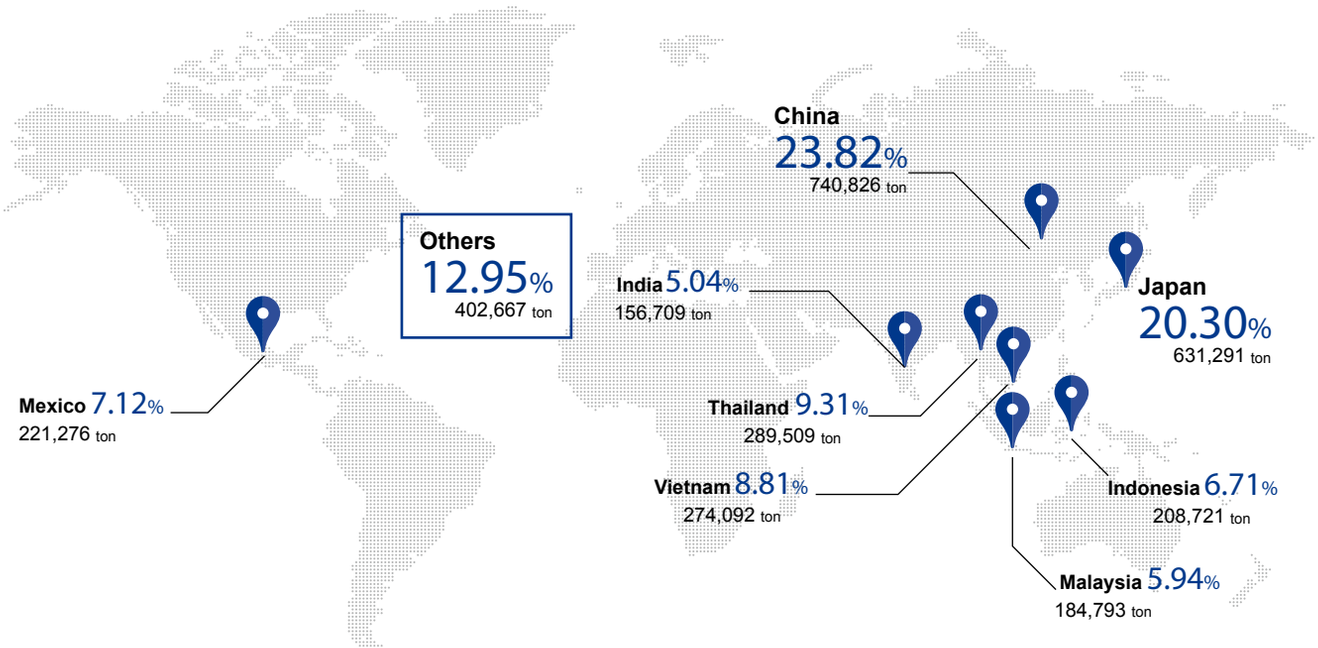
Categories	Coal Tar	Crude Light Oil	Granulated BF Slag	Air-cooled BF Slag	BOF Slag	Iron Oxide Powder	Residual Iron of Desulfurization Slag
2015 production	17.02	5.99	270.6	8.26	113.98	2.36	2.1

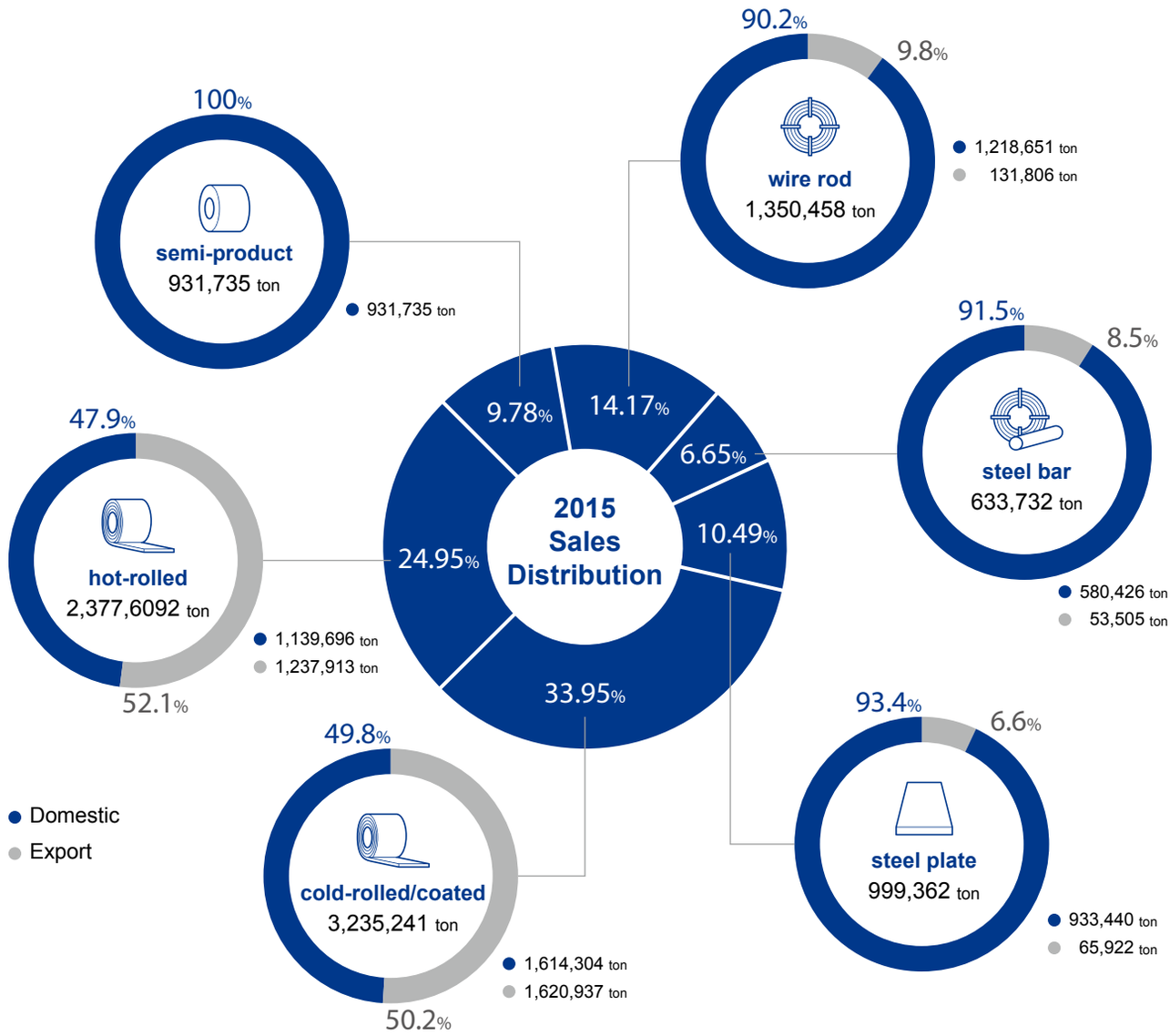
5.1.3. Product Sales

In 2015, the total sales of steel products was 9.528 Mt, a 0.172 Mt and 1.77 % decreased from 2014. Domestic sales accounted for 67.36 % (6.418 Mt), with the main items of cold-rolled/ coated steel products 33.95 % and hot-rolled products 24.95 %. Export sales accounted for 32.64 % (3.11 Mt), with the major exporting markets of China, Japan, and Southeast Asia.



Export Sales by Country in 2015





5.2. Quality Management

Under the instruction of quality policy that focuses on customers, the mandatory processes for identifying the quality management system include 11 “customer oriented processes”, 9 “supporting processes”, and 13 “management processes.” Moreover, the quality policy is promoted through the process approach to demonstrate the efficiency and effectiveness of systematic operation.

Carefully evaluate the company’s context and visions to set operating policy with sufficiently providing resources to each procedure and management activity.

Customer satisfaction is the target for all the processes, and CSC actively operates to provide high-quality products with no hazardous substance.

CSC monitors, measures, and analyzes on all kinds of products and processes, and keeps improving the system and makes the company sustainable through internal and external audit, corrective action, preventive action, improving projects of the quality and processes of products, management and reviews, and other activities.

5.2.1. Quality Management System Certification

Passed the annual surveillance audits to maintain the certifications of ISO 9001, ISO/TS 16949 and QC080000. In addition obtained product certifications from Thailand, Malaysia, Indonesia and India. Not only proved the effectiveness of CSC's quality management system but also unblocked the sales channels in Southeast Asia.

5.2.2. New products developing and process technology enhancing

○ New products developing

In 2015, 58 development projects were completed, creating the best record to date, some of the highlights are listed as follows.

Plate	95mm EN10025 S355ML for off-shore wind turbine towers meets the target of domestic supply for wind power industry.
Wire and Rod	Ultra clean steel wire rod SAE9254 for shock absorber spring with 1800MPa fatigue strength is developed. With optimized cooling process the size of high carbon wire can be reduced from 9mm to 7mm enable to supply for suspension springs of motorcycles.
Hot rolled strip	JSH780Y high strength low yield ratio two phase automotive steel passed the hydraulic forming test. Blue ocean product Fe-Ni Incoloy 800H with high temperature creep resistance better than 310S is developed.
Cold rolled	CSC CR1900T high strength hot stamping steel and JSC 1180Y high strength dual phase steel were developed to cut in the hot stamping and auto structure markets.
Hot dip galvanizing	Eco-friendly and abrasion resistant universal lubricant coating (UL) is developed for the Japanese refrigerator slide rail markets. The domestic slide rails customers also adopted this product.
Electrical steel	The new NGO line successfully developed the top class 50CS230 grade to complete full specs of 0.50mm thickness non-grain-oriented electrical steel.

○ Process technology enhancing

Steelmaking	Double slag process is developed to reduce the usage of calcium oxide and the quantity of slag. Non-symmetry metallurgy technology for continuous casting is established by measuring the quality of slab center with high frequency supersonic. This technology is helpful for developing high grade ultra thick steel plate.
Plate	The DQ equipment has just finished its FAT in Feb. 2016. Now products like S690Q, Hardox500 and alloysaving EH47 are under developing which will expand the supplying scope of TMCP products.
Wire and Rod	With experimental design, the optimized process of temperature control for high carbon wire is found which reduces rejection rate from 2.3% down to 0.86% and saves 11.5 million NTD every year.
Hot rolled strip	Loosened scale of laser cut thick plate, cavity defects of electrical steel and rejection rate of hot rolled coils for insufficient weight were all improved significantly together with enormous cost reduction.
Cold rolled	Edge wave of CQSF products and rolled-in foreign object defects were improved to raise yield rate and to reduce rejection rate and loss from claim payment.
Hot dip galvanizing	Integrated and dynamic process control system for bake hardening steel is completed, which can optimize mechanical properties, anti-aging durability, and manufacturing yield rate.
Electrical steel	Semi-process products are developed to be produced in just one annealing process to complete high skin-pass rolling and high roughness printing at the same time. This can shorten delivery time and reduce cost by saving a second annealing process.

5.3. Green Products

5.3.1. Types and Benefits

CSC is the upstream supplier of steel-using industries and is dedicated to the development and supply of more green steel products to help in establishing an efficient and profitable green steel supply chain. As CSC has received more orders for high-grade products, the percentage has increased to 56.31% in 2015. The 3.04 million tons within high-grade steel can make 5.655 million tons of external carbons reduction. The major roles of them in green supply chains are as follows.

Steel Products	Benefits in enviroment, energy saving carbon reduction	Applications
Anti-fingerprint chromate-free galvanized and passivation chromate coating steel sheets	Excludes hexavalent chromium, poses no threat to human health, and helps to extend the product life cycle(PLC) of home appliances.	home appliances, 3C, hardware parts
Contamination-free desulfurized carbon steel	Replaces lead-containing free cutting steel	Axis components of multi-function printers
Non-lead Patenting High Carbon Wire Rod	The toughness is so great that the customers don't need patenting.	Motorcycle suspension springs and pre-stresses steel wires
Steel for air screwdriver bits	Simplifies two-stage wire spheroidized and drawing manufacturing process for customers	Hand tools (air screwdriver)
Hot forging non-quenched and tempered steel	Elides the heat treatment processing(decrease costs by 10 to 15%)	Auto parts
High-strength hot- and cold-rolled and hot-dip galvanized dual phase steel sheets for cars	Enhances the safety of car body structure and reduces the weight of car bodies	Cars
Steels for off-shore wind power tower	Supports renewable energy and reduces the material for structure	Off-shore wind power
High performance steel plate for bridges	Enhances safety and prolongs life of bridges.	Bridges
Top grade ultra-thin eletrical steel sheet and High grade eletrical steel sheet with high magnetic flux density and low iron loss:	Lowers the temperature increase of motors, reduces motor weight as well as material used; it also enhances motor efficiency	Electric cars, compressor

5.3.2. Carbon Footprint and Life Cycle Assessment

○ Carbon Footprint

CSC completed the carbon footprint analysis of 20 types of steel products, and passed the verification by third party, DNV. CSC keeps providing the certificated carbon footprint information for our downstream customers. International standard relating to carbon footprint (ISO/TS 14067) was published by ISO. CSC plans to update existed verification (2012) of 20 products carbon footprint in 2016

○ Life Cycle Assessment

Moreover, high functional steels enable to reduce CO2 emissions in product's life cycle, even there are more energy consumed in advanced manufacturing processes, the applications of high functional steels can contribute the benefits for net reducing environmental footprints. CSC cooperated with ITRI to estabilish life cycle CO2 reduction assessment methodology of high strength steel, advanced electrical steel, anti-corrosion steel, and process saving steel based on the international standards, e.g., ISO 14040, PAS 2050, etc. The methodology documents were fully discussed and communicated with industrial experts and shakeholders.

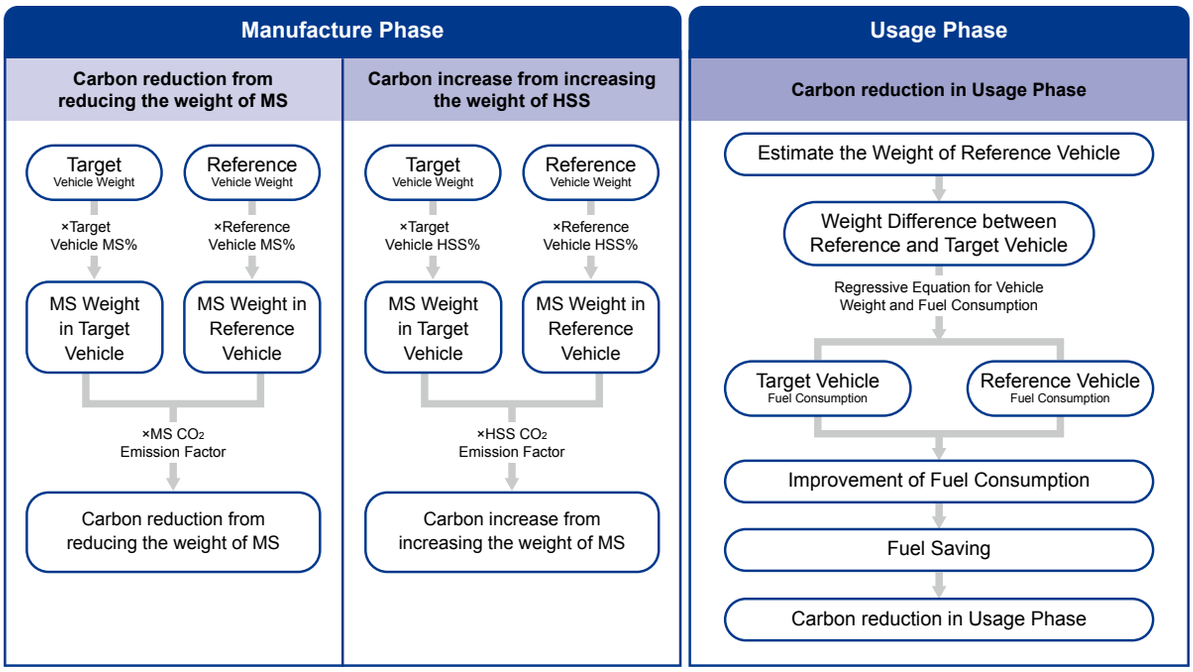
- Logics and methodologies for calculating external carbon reduction of 4 types of green steel.
- Preparation and certification of technical documents of methodology for evaluating carbon reduction in applying high strength steel in automobiles and applying high performance electrical steel in motors.
- Examples survey for process saving steel applied in bolts and anti-corrosion steel applied in bridges.
- Principle and methodology of baselines of external carbon reduction for the 4 green steels. Adopts local data to make it suitable to realize the external carbon reduction in the country.

Category of Steel	High Strength Steel	Advanced Electrical Steel	Anti-Corrosion Steel	Process Saving Steel
Application	Vehicle	Motor	Bridge	Fasten Unit
Carbon reduction benefit per tonne of high functional steel in life cycle	1.69	63.62	1.34	0.63

Unit: t CO2e / t HFS

○ Brief methodology for high functional steel reducing CO2 in life cycle

An example of analysis processes for vehicle using high strength steel



* **MS:** Mild Steel
* **HSS:** High Strength Steel

To follow the trend of LCA in global steel industry by comparing data from other companies and to ensure the certification of environmental product declaration, CSC participated LifeCycle Inventory project of World Steel Association. With data collection finished and verification undergoing, World Steel Association is expected to publish the report in the first half of 2016.

5.3.3. Hazardous Substance Control

CSC includes the index “the qualifying rate of hazardous substance in steel products meeting the regulations” into the directives of division operation, and lists it into management and tracks. The qualifying rate of the execution in 2015 was kept at 100%, same as that from 2012. CSC does not add any hazardous substances in the processing of steel products, and all products meet the requirements of national and international regulations. The SDS and chemical composition certificates of hazardous substances are available upon request to ensure safety. CSC also observes and complies with the bans imposed by the EU on RoHS restriction requirements regarding cadmium, mercury, lead, hexavalent chromium, PBB and PBDE.

5.4. Optimization of Customer Service

CSC supplies steel products with high quality, and provides multi-phase services for customers before, during, and after sale. CSC makes proper use of in-plant technical support R&D experts and outward service workforce to assist customers in fulfilling requirements, solving related technical problems when using products.

5.4.1. Customer Service Performances

With the visions of wining hearts and trust and helping customers succeed, the Technical Service Section of Metallurgical Department aims to assist customers in technical advancement and to promote steel industry upgrade. Customer service engineer who can be the role as the representatives of customers to request for developing and supplying appropriate product, fulfilling customer requirements; while they also can be the representatives of CSC to provide application knowledge and problem solving in product use.

○ Strengthening and implementing customer service

The Technical Service Section sets clear targets for relative technical services and reviews performances every month.

○ Lifting customer service quality

CSC provides differential services for individual customers and customized products, and engages in collaborative development with customers. Customer needs are fulfilled by thoroughly communicating through interviews and technical communication meetings. In addition, seminaries are also held regularly to assist down stream industries in technology advancement.

2015 service achievements

Service types	2015 service achievements
Technical Services	Market quality feedbacks for in-plant quality improvement: 42 cases. Customers’ process improvements: 197 cases.
	Industrial material usage trend surveys: 10 cases. New products development: 10 items. New auto material certification: 12 items.
	Technical seminars and workshops: 12 sessions (domestic and international). Visits to key customers: 128 times. Overseas technical missions: 570 man-days (China, Japan, Southeast Asia, Europe, and USA)
Sales Services	Domestic and export production-marketing meetings: 39 sessions, 4 sessions.
	Comprehensive business-related overall services with e-commerce and supply chain system.
	Frequent visits on customers by sales personnel and officers.
	Enhancement of on-time delivery rate by planning order acceptance volume with production capacity.
	Extended service by integrating marketing resources of CSC and Group subsidiaries.
Production/sales supply chain system	At-source management: Together with customers determine reasonable delivery time and standard procedures for orders to enhance production efficiency through shortening lead-time and raising the order fill rate of build-to-order high quality products.
	Accelerate the selling of non-ordered products: Set-up an e-commerce system for non-ordered slabs and non-ordered products to increase product value and strengthen inventory control.
	Promote e-commerce: Promote e-commerce of in-stock electromagnetic coils and hot-rolled products and leeway to increase orders for stock and enhance delivery efficiency.
	Customized message inform system: Real-time inform customers information they selected such as contract, order, payment, B/L etc.
	Data linking service: Directly link the procurement, product receipt, acceptance, and claim data of customers with the CSC's order, production, shipping, and invoice information system. There have been 30 customers enjoying the experience..

5.4.2. Customer satisfaction

CSC commissions academic institutions to conduct customer satisfaction survey every year. Domestic and export customers are surveyed, and issues of concern are reviewed as an important reference for developing operational guidelines.

In 2015 the satisfactions are 73.00 for domestic customers and 71.72 for export customers comparing to 73.00 and 71.22 in 2014. The top 3 items for domestic customers are "attitude of sales people", "response time of queries" and "expertise of sales and technical people" while "attitude of sales people", "interact between sales people and customers", and "expertise of sales people" for export customers.

For the three lowest- scored issues, responsible Units are required to establish and implement corrective action plans, specify the status of implementation in the related improvement report, and submit the results for discussion at Quality Management Review Meeting, and follow-up the effectiveness of implementation.

Customer suggestions in the survey, results of plan implementation by Units, and relevant policy documents are published on the e-commerce system. For the next year, these are delivered to customers together with the new survey questionnaire. CSC aims to strengthen mutual understanding and trust by showing respect for customers.

Items	2011	2012	2013	2014	2015
Customer Satisfaction (Domestic)	72.66	70.67	70.88	73.00	73.00
Customer Satisfaction (Export)	70.89	70.70	67.24	71.20	71.72
Customer Satisfaction Target	>60	>60	>60	>60	>60
Customer Satisfaction Coverage (Domestic) (%)	51.3	50.7	54.9	53.9	52.7
Customer Satisfaction Coverage (Export) (%)	31.3	17.5	13.3	11.3	57.8

By the regulations governing customer satisfaction measurement, the overall satisfaction score should fall in the “good” grade (60< score < =80) or above. Coverage (domestic sale) = number of questionnaires reclaimed / number of questionnaires sent (not all customers of domestic sale). Coverage (export sale) = number of questionnaires reclaimed / number of questionnaires sent (all the customers of export sale).

	Domestic	Export
Customer satisfaction	**73.00**	**71.72**
Best Items	Attitude of sales people	Attitude of sales people
	Response time of queries	Interact between sales people and customers
	Expertise of sales and technical people	Expertise of sales people

5.4.3. Customer Privacy

At CSC, we are committed to providing customers with the best service and the best protection for the information provided by customers. In 2015, no complaint regarding compromising customer privacy or customer information was recorded.

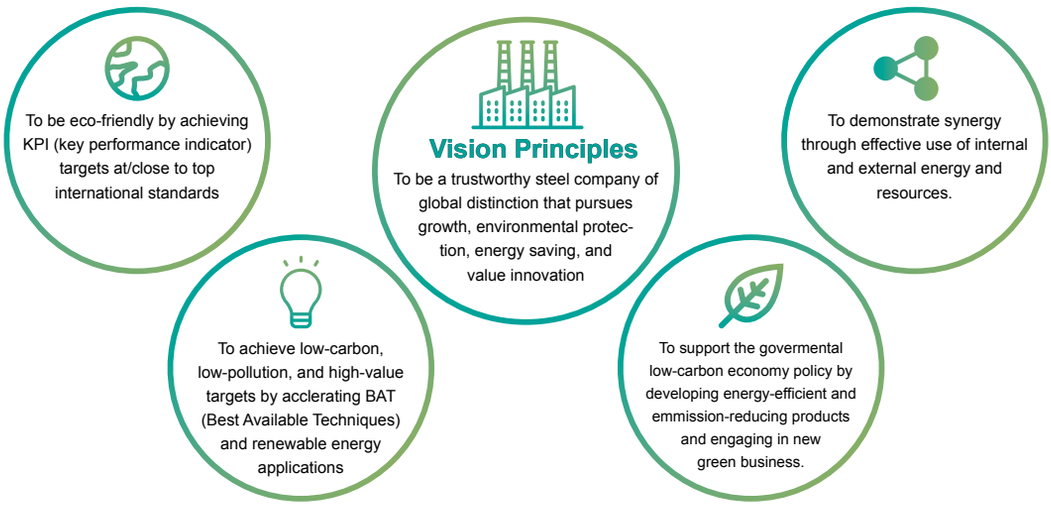
- All CSC IT equipment is protected by antivirus software to prevent computer virus spread through e-commerce.
- E-commerce inquiries and operation are account- and password-protected to ensure only corresponding customers, suppliers, and transporters access data.
- The Regulations on Management of Digital Certificates for Use on E-commerce Systems is established to ensure access to the e-commerce system only with valid digital certificates.

6

ENVIRONMEMT

6. Environment

6.1. Visions and Principles of Energy and Environment

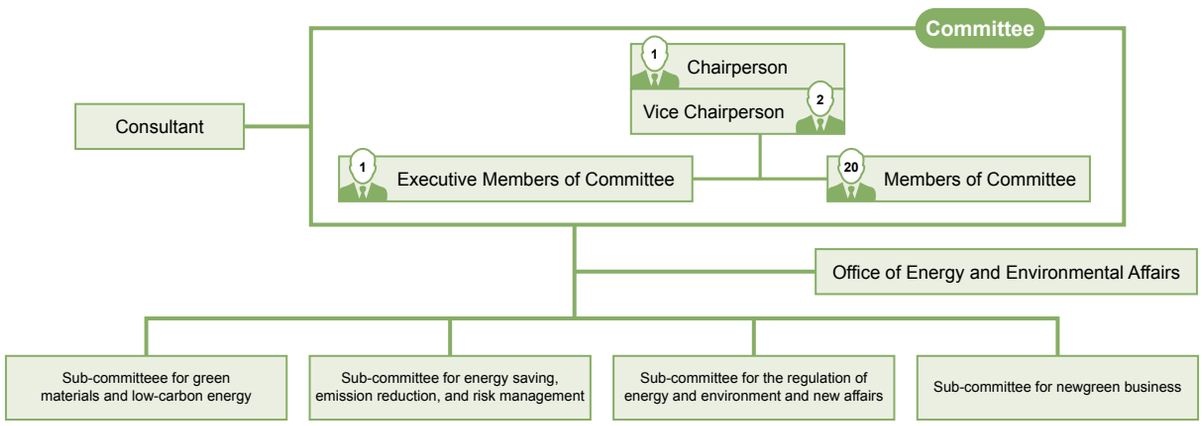


6.2. Framework of Environmental Management Organization

The Environmental Protection Department and Utilities Department under the Production Division is responsible for tasks related to environmental protection, energy conservation, and emission reduction, and the Iron and Steel Research and Development Department is responsible for developing and promoting relevant technologies. In addition, the cross-department Committee for Energy Conservation and Committee for Environmental, Safety and Health Management teams up with CSC Group Committee for Energy and EnvironmentalPromotion to reinforce communication and coordination within the Group.

The Office of Energy and Environmental Affairs (EA) was established in Mar. 2011. In Apr. 2011, CSC Group Committee for Energy and Environmental Promotion was formed and chaired by the CSC Chairperson. The Committee aims to improve the Group energy and environmental performances by strategic planning, risk management, and collaboration with international and domestic industries. EA serves to assist in implementation and PDCA continual improvement.

6.2.1. CSC Group Committee for Energy and Environmental Promotion

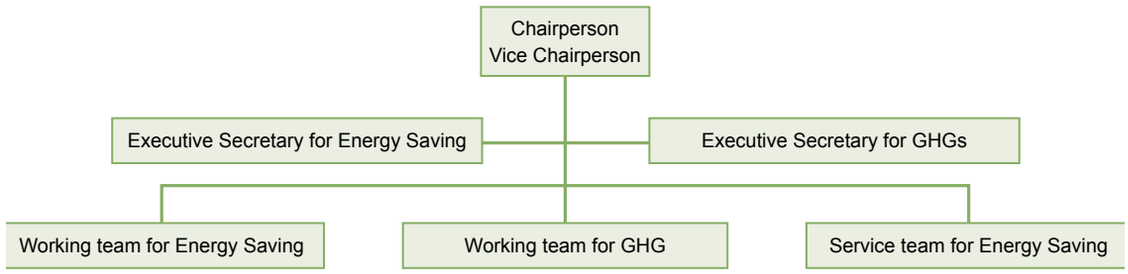


6.2.2. Environmental, Safety and Health(ESH) Management System

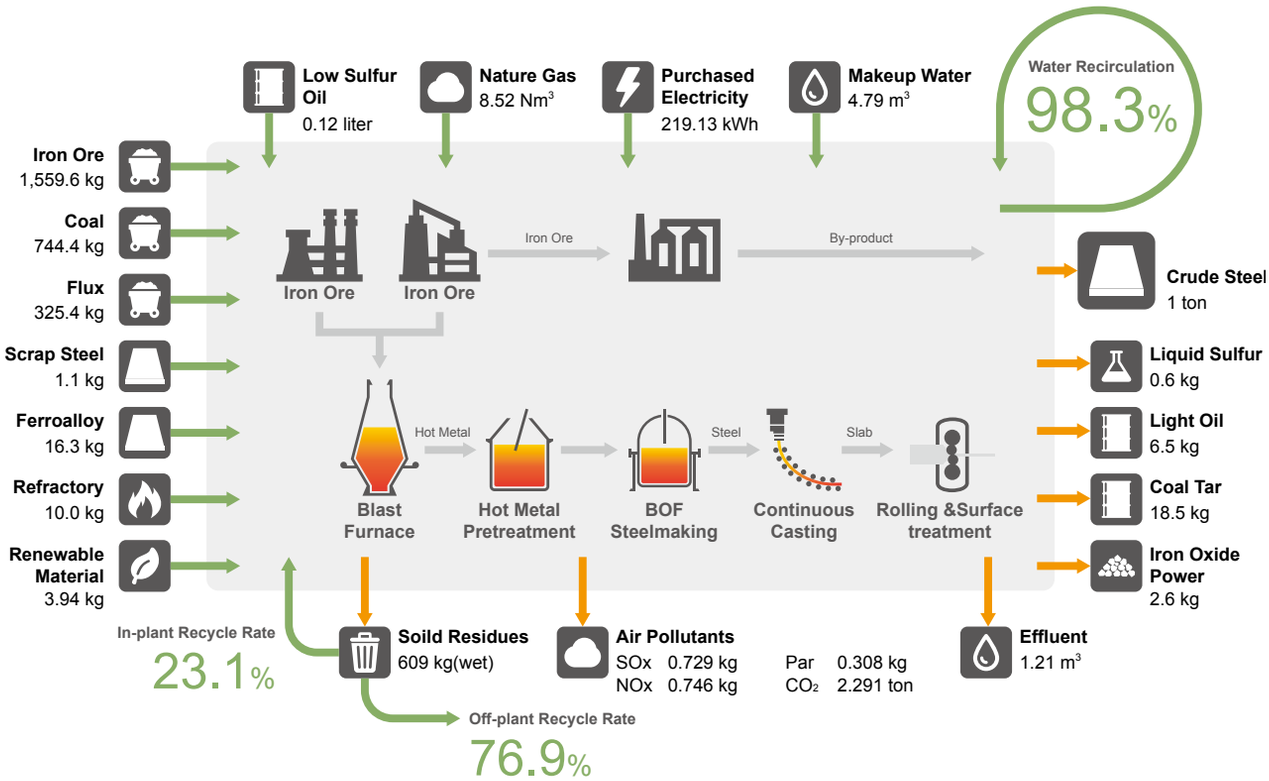
CSC obtained ISO 14001 certification for Environmental Management System (EMS) in 1997 and was approved for registration. CSC then combined EMS with OHSAS 18001 into the CSC ESH Management System, launched in 2005. Strategic decisions are made by CSC Group Committee for ESH Management, chaired by the Group Executive VP. ESH policies are approved by the Group Chairperson before implementation and subject to annual external audit.

6.2.3. Committee for Energy Conservation

For effective reduction of energy expenditure, the Committee for Energy Conservation was formed and chaired by Production Division VP. The three Teams of the Committee are responsible for energy saving and emission reduction work in CSC plants. For performance improvement, ISO 50001 Energy Management System (EnMS) were implemented in 2011 and incorporated into ESH Management System with third-party verification. The Management Systems and the Committee serve the purpose of energy conservation and continual improvement.

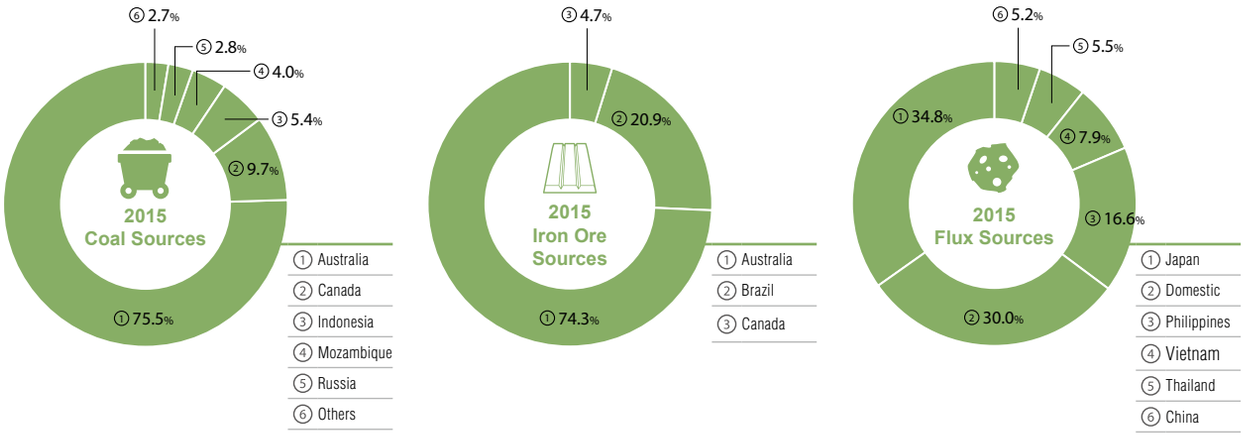


6.3. Resources and Energy Input



6.3.1. Resources and Energy Input

In 2015, a total of 3 Mt flux, 6.86 Mt coal, and 14.38 Mt iron ore were used. For flux, considering the eco-development of Kaohsiung, CSC decided to cease mining activities of Shoushan Mountain prematurely and began to use import flux from the other countries. Currently, 30% of our flux consumption, including marble, serpentine, and dolomite is from Hualien located in the east part of Taiwan. As there is no coal and iron ore in Taiwan, we purchase all of coal and iron ore abroad.



In 2015 CSC utilized 46,784 tons of renewable materials, including 10,481 tons of scrap steel, 5,065 tons of iron pellet recycled from de-sulfur slag, 19,832 tons of iron sand recycled from de-sulfur slag, 1,411 tons of marine waste oil, 9,676 tons of calcium carbonate crystal from city water plant and 319 tons of bio-coal. The usage rate of renewable materials is 0.191%. There was 1.3 million tons of solid residues recycled in-plant, which is 5.3% of the total input materials.

6.3.2. Energy Consumption

The coking coal in steel process will transform to by-product gases which can be used as fuel in steel process and in cogeneration power plants to generate steam and power. Coal, oil and nature gas can also be used in power plants while the excess power demand will be met by purchasing electricity from Taipower.

2015 Primary / Secondary Energy Consumption (GJ)

Primary	Coal	220,636,537
	NG	3,063,969
	Diesel Oil	112,355
	Gasoline	6,726.3
	LS Oil	42,681
Secondary	Purchased Electricity	18,916,289

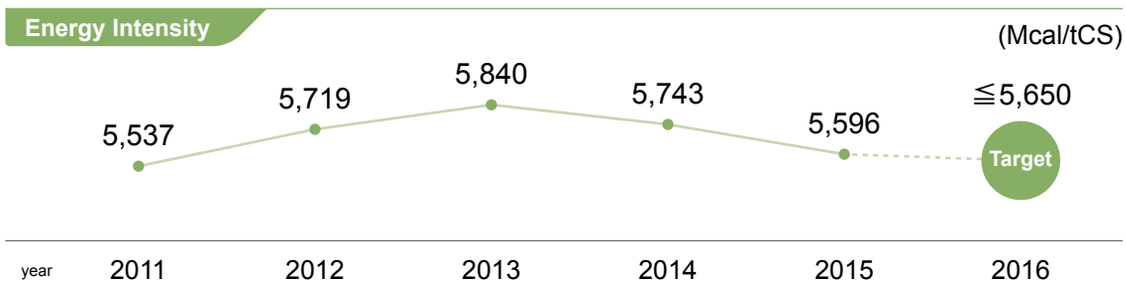
* Purchased electricity is converted to input energy with efficiency

2015 Self-Produced Secondary Energy

Steam	3.4	million ton
COG	18.62	Gm^3
BFG	140.71	Gm^3
LDG	9.43	Gm^3
Cold Blast Air	95.56	Gm^3
Oxygen	8.81	Gm^3
Nitrogen	11.26	Gm^3
Argon	17.35	Mm^3

Due to the achievement in energy saving and more back-up steel produced, the energy intensity for 2015 is 5,596 Mcal/tCS (ton Crude Steel), which is 147 Mcal/tCS lower than that of 2014. The energy intensity target for 2016 is lower than 5,650 Mcal/tCS.

The total GHG emission for the 5 energy related categories in scope 3 data is 2,043,086 ton CO2e. With an adequate GHG intensity of fuel as 66,420 kg/TJ, we estimated our scope 3 energy consumption as 30,760,108 GJ.



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6.4. Climate Change and CDP

CSC conducts GHG inventory and carbon reduction projects every year and discloses GHG management information to stakeholders. Inventory results are registered on the national GHG platform and disclosed in our CSR report. In addition, CSC participates in the Climate Action of World Steel Association, and CDP's climate change and water programs every year to continuously promote our performance in carbon reduction and climate change mitigation as to fulfill our goal for corporate sustainability.

In response to climate change and elevated awareness of energy and environmental conservation, the industry needs to take its responsibility to survive. For CSC, potential, substantial impacts include

01 External constraints of ESH issues and related policies and regulations (GHG Reduction Act, energy taxes, carbon taxes, etc.), if excessive, will affect the fairness of international competition.

02 Low-carbon energy, low-carbon electricity, and carbon footprint are gradually becoming important items for the steel industry, which will be more influential on competitiveness. For these impacts, CSC not only adjusts its organization and develops strategies inside CSC Group, but also reinforces collaboration with international and domestic peers, green energyindustries, suppliers, and the academia, to create advantageous operating conditions.

CSC has identified potential legal, physical, and reputational risks from climate changeand their corresponding opportunities. Strategies are developed respectively in threeaspects: management and development of water resource, response and adaptation todisasters, and reinforcement of city and value-chain cooperation.

	Item	Potential Risk	Impact Level	Opportunity	Positive Impact	Impact Level	Countermeasure
Legal Risk	Carbon tax	Increasing operating costs		Fuel/Energy tax	Stmulating investment in local new and renewal energy ; reducing dependency on import petrochemical fuel		・Environmental protection ・Administrative justice ・Assisting the goverment in drawing up policies and regulations that can correctly connect with the world
	Cap & trade	Increasing operating costs		Cap & trade	Reducing new plant quantity ; moderating local competition		
	Product emission Standards	Increasing operating costs		Product emission standards	Increasing demand and market for high energy-performance green steel products		
	Air Pollution limitation and control (power plant emission standards)	Increasing operating costs		Product labels and standards	Increasing demand for and sales of highly efficient products		
	Mandatory declaration	Increasing operating costs		Voluntary agreement	Reducing operating costs through voluntary reduction programs and carbon credit acquirement		
Physical Risk	Changes in extreme rainfall and drought frequency	Reducing/ interrupting production Capacity		Increasing product demand	Increasing steel demand for infrastructures damaged by floods and typhoons		・Harvesting rainwater for reuse ・Increasing seawater desalination and domestic wastewater recycling, and improving water supply pipelines ・Preparedness for extreme torrential rain ・Building facilities for collecting and processing wastewater runoff
				Reducing operational risk	Producing biomass fuel with bio-waste(e. g. driftwood) caused by increasing typhoons		
	Changes in extreme temperature frequency	Increasing operating costs		Increasing product demand	Increasing steel demand for repair and maintenance due to accelerated corrosion by high temperature		
Reputational Risk	Information and communication of climate change	Causing one-sided or incorrect information		Increasing product demand	Improving reputation by devoting to emission reduction and adaptation		・Estaarbon consumption within CSC.

High Medium-High Medium Low-Medium Low

○ SJP for Carbon Credit Trading and Management

CSC was granted 8.76 million tons of carbon credit from the Early Action and Offset projects in 2014. To enforce carbon credit management and to illustrate the procedures and responsibilities, adopting advices from experts meeting of Taiwan's EPA, CSC set up "SJP for Carbon Credit Trading and Management" on Aug. 10th, 2015. The SJP is included into CSC's ISO 14001 standard. CSC Group's Dragon Steel has already applied to purchasing carbon credit according to this SJP expecting for trading in the second season of 2016.

○ Climate Action Member

Ever since 2008 CSC has participated in the CO_2 collection action and conferences of BAT technologies in carbon reduction of World Steel Association every year to help to construct the database of GHG data and reduction technologies of international steel industries. Through this, CSC can progress in energy saving and carbon reduction by following the international trend.

Climate Action Member

○ Commit To Setting Science Based Targets

Executing GHG emission inventory every year, CSC set up 2020 carbon reduction target as 1.97 tCO_2e/tCS in 2012. We had taken into consideration the benchmark of European steel plants under the 3rd EU ETS and set up reasonable target like that of EU steel plants, which should meet the request of UN to control temperature rising below 2℃ . With confidence, CSC committed to Setting Science Based Targets promoted by CDP to contribute for the carbon reduction target of the world.

6.5. Green Process

6.5.1. GHG Inventory

CSC established GHG Inventory System and constructed GHG Management Regulations by ISO standards, referencing Taiwan Environmental Protection Administration (EPA) GHG inventory and registration guidelines, ISO 14064, and inventory guidelines of IPCC, World Steel Association, and WBCSD. Inventory data is subject to internal audits and third-party verification every year. According to EPA policy, verified data shall be submitted to the website established by EPA year by year as well.

In 2015, the audited inventory result GHG emission in total is 21,127,437 tons of CO_2e (tCO_2e) with scope 1 as 20,018,158 tCO_2e and scope 2 as 1,109,279 tCO_2e (with 2015 electricity intensity as 0.528 tCO_2e/ MWh). The total scope 3 emission is 2,043,086 tCO_2e (not audited and without investment items), with categories listed in the table.

2015 Scope 3 GHG Emissions (tCO_2e)

Capital goods	1,441
Fuel and energy related activities	1,107,551
Upstream transportation and distribution	764,967
Business travels	803
Employww Commuting	5,272
Upstream leased assets	156.90
Downstream transportation and distribution	164,494
Downstream leased assets	636
Franchises	743

6.5.2. Water footprint

With assistance of Cheng-Kung University (NCKU), CSC had got the certification of the water footprint for hot rolled coils in 2011, which is the first steel product water footprint in Taiwan. Though, no client requests for disclosing water footprint information, CSC cooperated with NCKU to start water footprint project for cold rolled products in March 2016, showing our willingness for cherishing water resource and readiness for the potential non-tariff obstacle.

6.5.3. Energy Saving

○ Energy Saving

Adopting BATs of the steel industry in the world, CSC has accomplished 132 energy saving projects in 2015, which saved 602,624 Gcal (2,523,066 GJ or 67 million liter oil equivalent) and reduced 198,000 tCO_2e emission. The major projects are #4 blast furnace reducing 5 kg/ tHM of fuel rate and #4 BOF OG boiler, etc.

Category	Items	Energy saved	Unit
Electricity	88	76,176,214	kWh
Fuel Gas	7	2,526,007	NM^3
Industrial Gas	4	1,130,830	NM^3
Steam	10	177,248	t
Water System	11	3,842,485	M^3
Others	12	23,056	KLOE
Total	132	66,958	KLOE

No.1 of Energy Saving Benchmark,2015

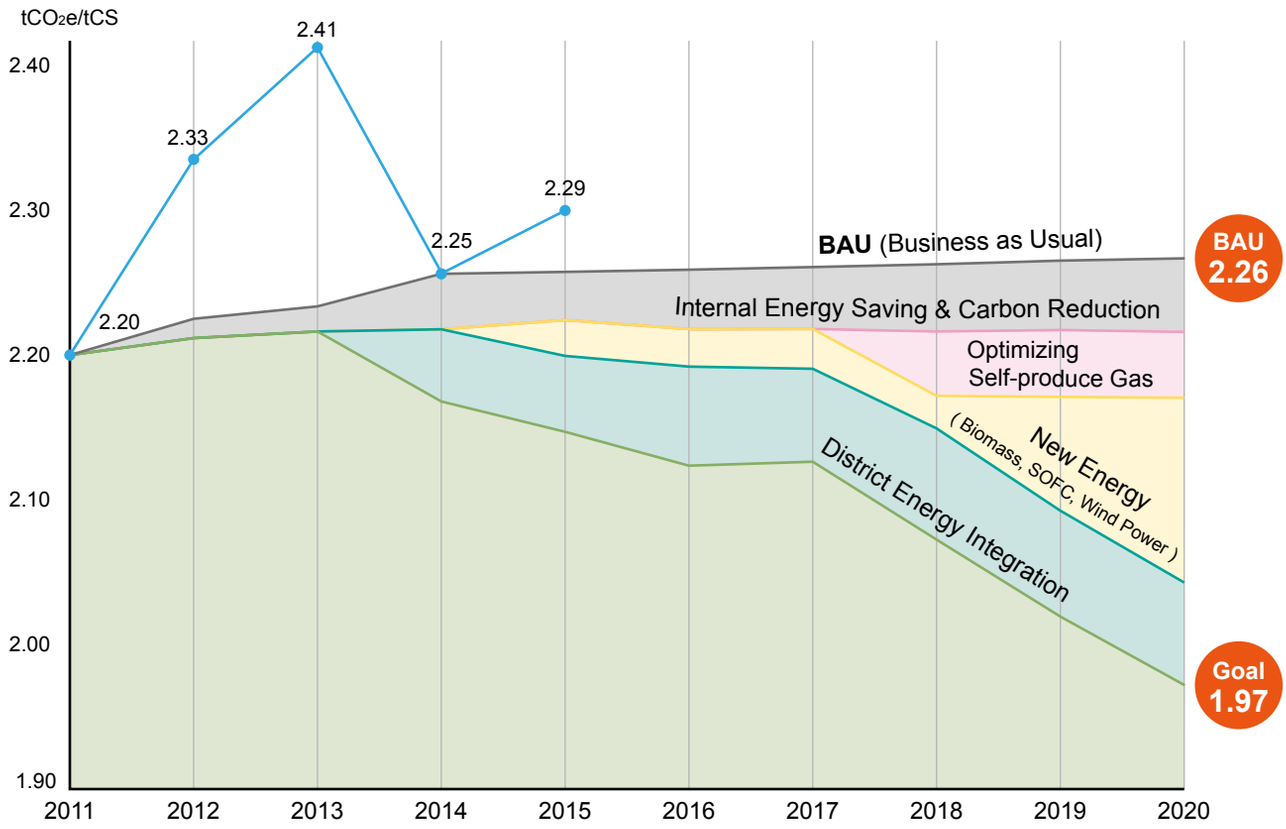
Green power certification

○ Carbon Reduction Roadmap and Strategies

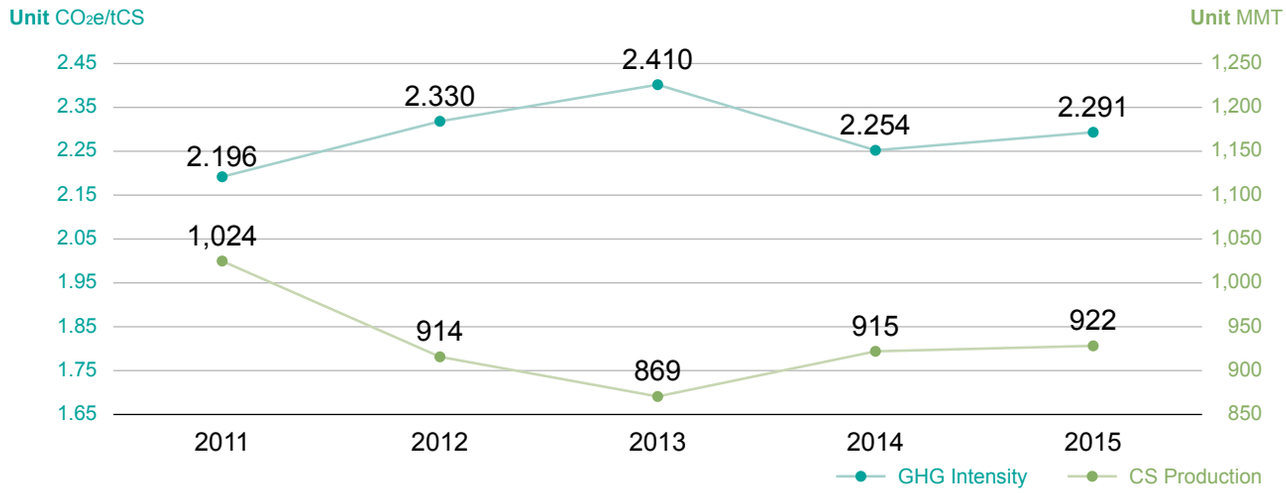
GHG intensity serves as an important indicator for GHG management performances. To clearly represent CSC GHG emission trend and reduction potential as to establish plans accordingly, CSC constructed a roadmap for emission reduction based on Business As Usual (BAU) with countermeasures taken into consideration in 2011. The emission intensity emission intensity target is 1.97 t CO_2-e/tCS for 2020 with major action plans as internal energy conservation and emission reduction, optimal use of self-produced fuel gas, use of low-carbon new energy, and acquisition of external reduction carbon credits through district resource integration.

In 2012-2015, the emission intensity did not achieve the target due to poor global economy causing steel production decrease and the drop of performance in district energy integration. Nevertheless, the drop of energy price retarded the development of low carbon energy.

Roadmap of GHG Redution



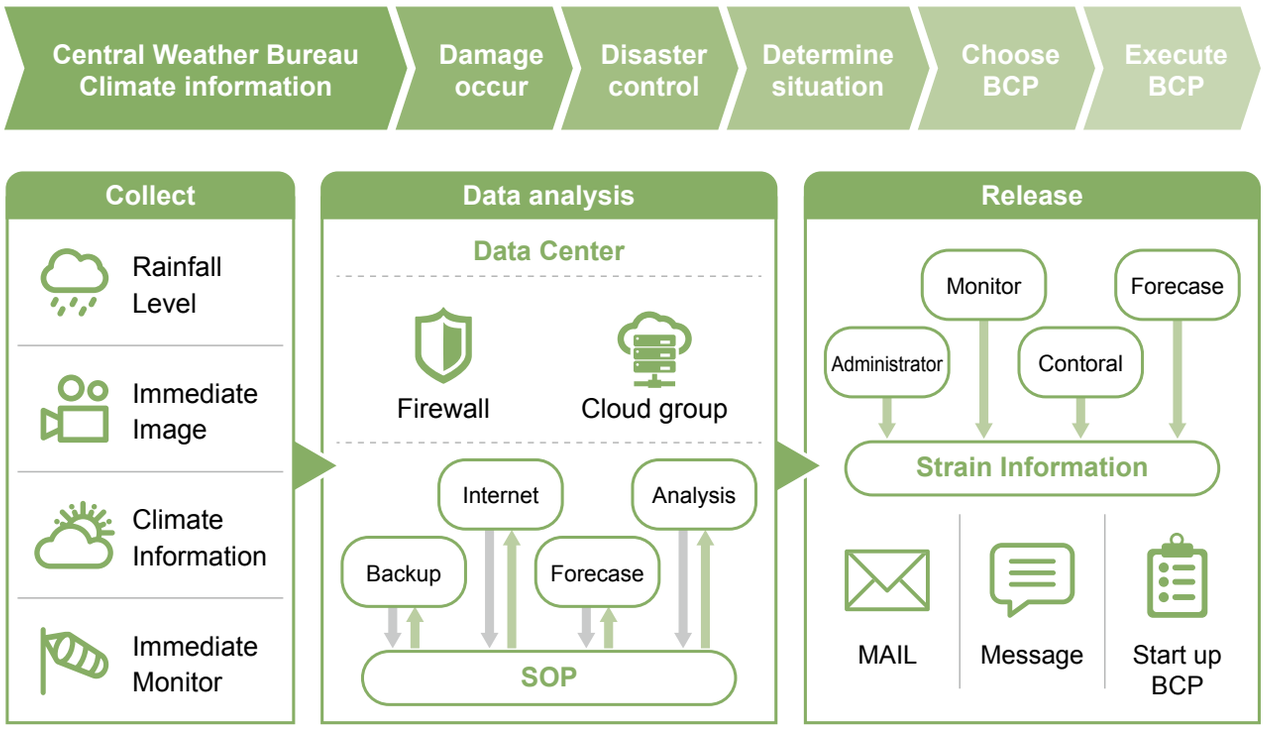
2011~2015 Production vs GHG Intensity



The diagram shows the relationship between crude steel production and GHG intensity. The Greenhouse Gas Reduction and Management Act was promulgate on Jul. 1st, 2015. To abide to the national reduction target and the nationally determined contributions 2030, CSC will set up the GHG reduction target according total amount control scheme and the related action plans.

Climate Change Adaptation System

To control the risk of climate change and to response in time, CSC cooperated with Cheng-Kung University to develop Climate Change Adaptation System. This system may provide trigging signals for decision making after analyzing the real time data from the central weather bureau together with the historic database. The system will be completed in 2017 to help CSC stabilizing production, reducing loss and increasing capability to response to disasters.



6.5.4. Environmental Loading Reduction and Commitment

The environmental load is of substantial concern regarding steel company investments, and reduction commitments and cap control have become requisites. CSC established an environmental load assessment system for investment projects. With the collaboration of CSC units, environmental load is assessed by proper scaling of existing production capacity, and CO_2 emission is evaluated by defining energy boundary and calculating energy variation.

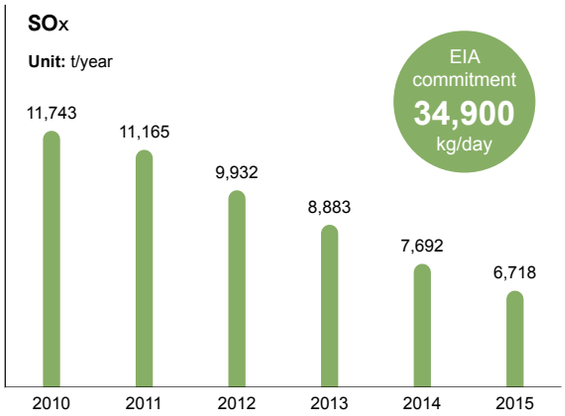
In 2015, environmental load assessment was performed for four projects.Including cooler heat recovery of #2 sinter plant, No.4 ladle furnace of #1 BOF plant, #1 BOF plant LDG holder relocation, and utilities piping for ethanol production from LDG.

6.5.5. Air Pollution Control

Environmental Monitoring and Measurement

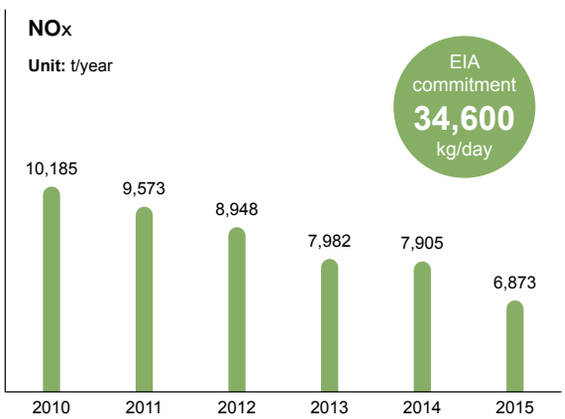
CSC Environmental Monitoring Center oversees six air quality monitoring stations and has two digital boards that display air quality data for the reference of citizens. In case of abnormality, citizens can call CSC by phone through 886-7-802-1111#3799 in office hour or #3072 in off time. For fixed pollution sources, 29 continuous emission monitoring systems serve to the control of traditional pollutants emission intensity and quantity, and 25 are connected to Kaohsiung City Environmental Protection Bureau (KSEPB) for government supervision.

Air Pollutant Emissions and Countermeasures



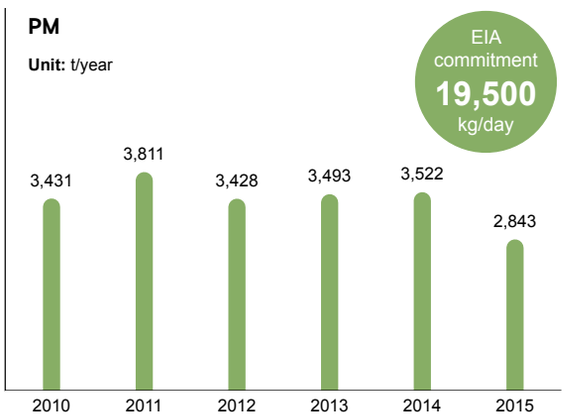
Countermeasures

Adding alkaline desulfurization equipment to #4 coke oven plant and desulfurization equipment to the sinter plant and power plant boilers to reduce SOx emissions by 4,935.5 t/year in 2018.



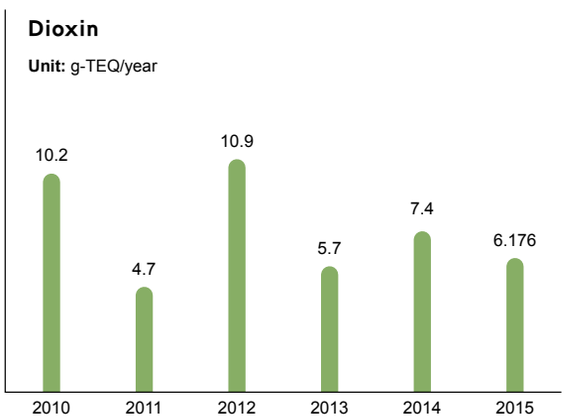
Countermeasures

Adding denitrification equipment to power plant boilers and #2 sinter plant to reduce NOx by 1,311.4 t/year in 2018.



Countermeasures

Enhancing efficiency of electrostatic precipitators in sinter plants to reduce PM by 710.3 t/year in 2018.



Countermeasures

Installing activated carbon injection equipment, replacing with denitrification/ dedioxination selective catalysts for sinter plants, improving electrostatic preceptors, and building a rotary hearth furnace to reduce recycling quantity of solid materials of sinter plants.

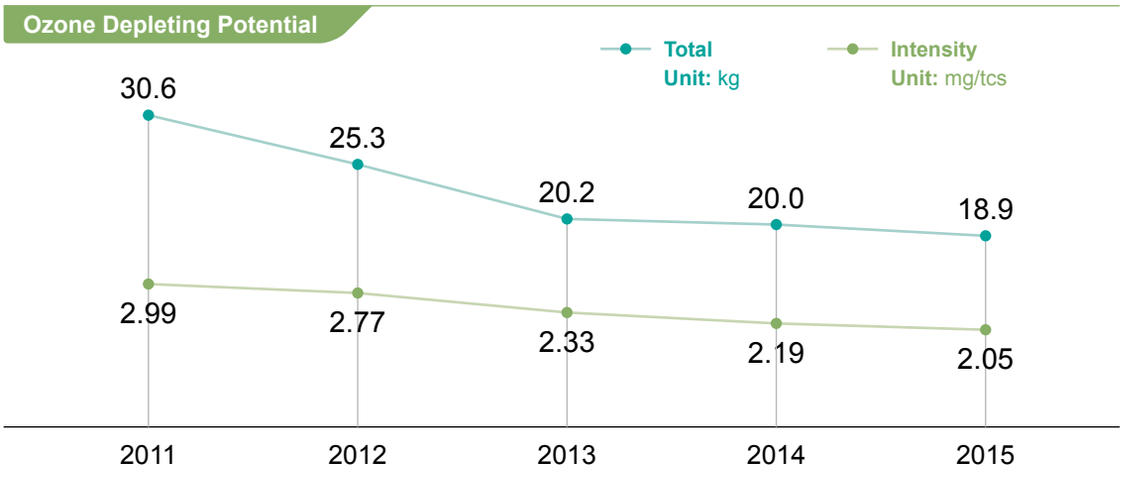
○ $PM_{2.5}$/Odor/Ozone Countermeasures

Pollutant		Reduction Project	Estimated Performance	Time of Completion
Native PM2.5		Anti-dust net for one piles	1,592 kg/day	Dec,. 2013
		Anthracite coal shelf	-	Mar,. 2013
		PM2.5 test and measurement for main stacks	-	Nov,. 2013
		De-SOx equipment at sinter plants for particulate removal	162 kg/day	Dec,. 2017
PM2.5 Precursors	SO_x	De-SOx equipment at sinter plants	12,640 kg/day	Dec,. 2017
		De-SOx on coal-fired boiler	882 kg/day	Mar,. 2017
	NO_x	De-NOx equipment at sinter plants	2,534 kg/day	Dec,. 2017
		De-NOx on coal-fired boiler	1,059 kg/day	Jan,. 2014
	VOC_s	VOCs Investigation and Reduction Measure Studyconducted by National Sun Yat Sen Univ	-	Dec,. 2012

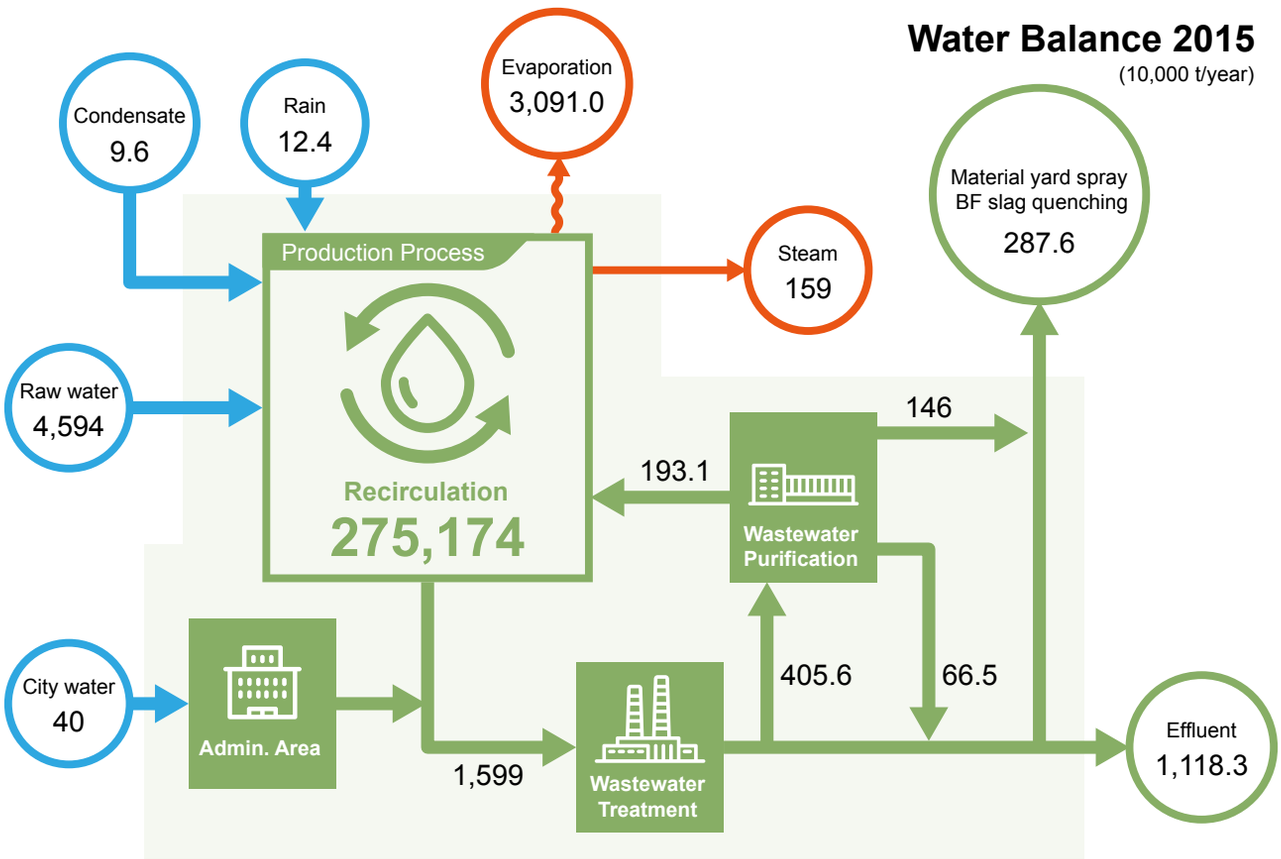
Odor reduction: Stationary odor monitoring stations, meteorological stations, and three automatically triggered sampling systems stand at the border with CSBC. In case of an odor incident, the direction of source can be traced with the meteorological information, and the sampling systems are triggered automatically to gather samples for more accurate analysis.

Control of ozone depleting substances: CSC integrates air conditions, improves equipment maintenance, develops high-efficiency models, uses eco-friendly coolants, and reuses recycled coolants.

Ozone Depleting Potential



6.5.6. Water Conservation and Pollution Prevention



○ Water Conservation

Integrated steel production needs raw water for cooling, de-rust, lubrication, dust washing, and environmental protection. For CSC plants, the source of raw water is Kaohsiung Fengshan Reservoir (FSR, current effective capacity 3.4 Mt), which provides 0.3 Mt of industrial water daily. With effective water management, recycling and reuse, and energy integration in Linhai Industrial Park, daily average raw water consumption for production has reduced to 121,000 t in 2015, which is less than half of the supply of FSR. Process water recycling rate has reached 98.3 %, and the water intensity was reduced to 4.79 t/tCS with 4.6% lower than that of 2014. For ChinaSteel Building, the water usage for 2015 was 47,944 tons of city water.

Performance	2011	2012	2013	2014	2015
Raw Water Consumption(10,000 ton)	5,269	4,832	4,828	4,863	4,635
Process Recycling Rate	98.2%	98.3%	98.3%	98.3%	98.3%
Process Recirculation(10,000 ton)	280,190	278,065	275,264	273,660	275,174
Water Intensity(t/tCS)	4.84	4.96	5.24	5.02	4.79

Water Conservation Projects

- BOF soft water conservation through heat load reducing by OG boiler project. 409,200 tons of water is saved every year.
- Roof rain collection facilities collected 124,000 tons of rain in 2015.
- Wastewater purification plant with ultra-filtration (UF), reverse osmosis (RO), and ion exchange system for to ensure output water quality meets the standard for high-pressure boilers.
- Seawater desalination technology of energy efficiency (in development).
- Recycled 3,000-5,000 t/day RO brine of Wastewater purification plant for BF slag quenching. Tertiary municipal wastewater reclamation project: CSC committed to buy the reclaimed water of this project from Fengshan River Sewage Treatment Plant. The project is expected to be completed in 2018 with capacity of 24,000 t/day.
- Installed partial filter for sealing water of LDG holder in #2 BOF plant to recycle it to indirect cooling watersystems. It saves 432,000 tons of water every year.

Waste water purification plant

rainwater harvesting

Water Pollution Control

Main tasks of water pollution control are managing existing equipment and building backup facilities water to improve quality, and improving rainwater drainage performance by monitoring and managing.

The CSC wastewater processing facility with 79,600 t/day capacity processes wastewater to effluent standards and discharges to the ocean through a 60-meter channel. In addition, a 40,000 m^3 runoff wastewater collecting pool with 36,000 t/day processing plant for the raw material yard will process runoff wastewater from heavy rain to the effluent standards and discharge into the ocean through the 60-meter channel.

In 2015, the total discharge was 11,183,000 m^3, with 2,787,000 m^3 decrease from 2014. The Chemical Oxygen Demand (COD) was 56.4 mg/L and Suspended Solids (S.S.) was 6.1 mg/L, although increased from 45.9 mg/L and 5.5 mg/L in 2014 yet remaining much lower than statutory effluent standards of 100 mg/L and 30 mg/L.

EPA announced Industrial Effluent Standard on 22 Jan. 2014 with additional ammonia control standard of 20 mg/L for chemical industry including coking and coal chemical processes. By the regulations, CSC filed a reduction plan to KSEPB and was approved on 6 Nov. 2014 allowing project to be completed by the end of 2017. The construction of coking wastewater de-nitrogen system started in May, 2015 and is expected to be completed by Oct. 2017 which will ensure legal compliance.

6.5.7. Soil and Groundwater

To control soil and groundwater quality and to prevent pollution, CSC has 16 groundwater monitoring wells for periodic examination. Analysis results have been normal. When leasing, buying, or selling lands, CSC conducts investigation for underground environment to ensure there are no pollution disputes.

- By Soil and Groundwater Pollution Remediation Act, in 2015 CSC reported and paid NTD 55,754,735 for soil and groundwater remediation, reported monitoring records for underground oil storage tanks and for oil input/output balance sheets of gas stations.

- CSC conducted soil and groundwater pollution investigation for the land purchased from LCY Chemical Corp., the land leased from Yuen Chang Stainless Steel, and the land leased from north depot of KRTC.

6.5.8. Control of Toxic Substances

CSC obtains permits, registrations, and approvals by law prior to operation and reports amount of use and release to EPA regularly. For venues where operating amounts are large by the mass operation standard, safety drills are performed annually. CSC also joined the Kaohsiung City joint prevention system and participated in relevant courses and activities for prevention and emergency response in toxic substance disasters. 2015 observed no accidental release of toxic substances.

Of the 14 toxic substances used in CSC operations in 2015, benzene and chromium trioxide were most used. Their amount of usage and handling are as follows.

Contral Code	Toxic Substance	Operation	Amount	Handling
052-01	Benzene	From light oil (more than 76% benzene content), a residual of the coking process	Approx.59,000 t/year	Sold to China Steel Chemical for refinement into high-purity benzene, toluene, and xylene for sales
055-01	Chromium Trioxide (Chromic acid)	Purchased for steel sheet surface coating	Approx.850 t/year	-

6.5.9. Handling of Hazardous Waste

Waste chemicals, which are produced in laboratories and in trivial amounts, are handled by certified vendors in Taiwan. Lead slag, produced from the rolling mill process, is appointed to legal waste recycling vendors for recycling and utilization. None hazardous waste is shipped overseas.

Hazardous waste outsourced handling and Amount

year	Handler	Waste	Weight (t)
2010	Super Max Engineering Enterprise	Chloric solvent	0.859
2011	Super Max Engineering Enterprise	Chloric solvent	0.950
	Thye Ming Industrial	Lead slag	13.07
2012	Super Max Engineering Enterprise	Chloric solvent	0.840
2013	Logos Technology Development	Lead slag	7.74
	RSEA Engineering	Corrosive waste	1.586
		Flammable waste	0.090
2014	-	-	0
2015	-	-	0

* No outsourced handling was necessary in 2014,2015 as almost all hazardous waste were recycled and reused

6.6. Products Utilization (Resourcization)

CSC demonstrates effective reduction, on-plant recycling, and off-plant utilizing of byproducts. In 2011, “zero solid waste landfill” was achieved after years of effort and close collaboration with the academia and other industries. In 2015, 5.61 Mt of process byproducts (wet base) were produced, with23.1%% (1.2973 Mt) recycled on-plant and 76.9 % (4.3187 Mt) processed off-plant.

Type	Production Characteristics	Annual Output (10,000 t)	%	On-plant Recycling (%)	Off-plant Recycling (%)	Utilization
BF slag	Produced in BF smelting of rawmaterials into liquid iron	278.9	49.7	2.0	98.0	Used to produce slag powder after granulating or engineering materials after cooling
BOF slag	Produced in BOF refining of liquid iron into liquid steel	114.0	20.3	13.3	86.7	Used (after steel recovery) as raw materials for the sinter plant or as asphalt concrete and concrete agent materials
De-S slag	Produced after desulfurization of liquid iron	32.0	5.7	0.0	100.0	Used (after iron recovery) as material for land grading,temporary roads, soil improvement, low strength concrete,and concrete materials
Dust	Collected by dust precipitator (including fly ash)	34.1	6.1	97.7	2.3	Fly ash: used as cement materials after mixture with sludge; zinc oxide powder: sold to refineries in Japan; others: used as iron making materials
Sludge	Produced after treatment, concentration, and dehydration of wastewater containing mineral dust	38.3	6.8	86.1	13.9	High-Zn sludge: sold to refineries in Japan; others: recycled for iron making on-plant or sold to cement plants as materials if not recyclable
Mill scale	Rust on steel surface during production	30.5	5.4	99.7	0.3	Recycled for iron making
Spent refractory	Scrap spent refractory from high temperature facilities	8.1	1.4	53.4	46.6	Recycled (after steel recovery) as steelmakingflux and protective base layer for slag pots or reversely recycled by suppliers for refractory
Construction residues	Waste earth from construction project	7.3	1.3	0.0	100.0	Used for soil material plants in 2013 as the South Star Project was shut down in 2012
Limestone cake	Cakes of limestone after rinsing and dehydration	1.0	0.2	100.0	0.0	Recycled as materials for iron making
Other	Slag steel, condensed steel, de-S cinder, fly ash, rubber pads, waste grease, cold rolling fluids, fluid barrels, and zinc dross	17.5	3.1	52.2	47.8	Mostly recycled on-plant and others reversely recycled by suppliers, sold, recycled by relevant agencies, or processed by vendors
Total		561.6	100	23.1	76.9	

Recycling the desulphurization slag

To eliminate non-controllable events hurting CSC's image from desulphurization slag (DS slag) handling. CSC invested 100% owned China Steel Resources Corporation (CSRC) to recycle 460,000 tons of DS slag from CSC Group and to recover iron back to CSC. The plants began construction on Mar. 28th, 2014 and started commercial operation on Jun. 1st, 2015. There several environmental protection designs such as water spray and dust net for the material yard, vehicle washing platform, enclosed conveyors and wet type design for major equipment includes ball mills, magnetic selecting machines, slag extractor, classifier, dryer, etc. With this environment friendly process, the recovered iron and the residues can be 100% reutilized to achieve the double goals of environmental protection and resource reutilization in the energy deficient era. In 2015, 242,189 tons of DS slag was recycled.

CSRC Plant View

classifier

6.7. Environmental Accounting

Environmental, Safety and Hygiene system is conducted by financial section. The system is established by simply and effectively, and collect by existing accounting system. The Office of Energy and Environmental Affairs(EA) assist in building the computer system. Environmental items is finished by The Environmental Protection Department and EA. Cost is classified by capital expenditure and recurrent expenses. The computer system has been completed.

Energy and Environmental Investments (Capital Expenditure)

Item (unit: NTD 100 million)	2011	2012	2013	2014	2015
Amount of energy and environmental investments	17.6	39.6	41.0	25.8	21.0

Energy and Environmental Investments (Recurrent Expenses) and Utilization

Item (unit: NTD 100 million)	2011	2012	2013	2014	2015
Government Charges and Fees	1.5	2.0	1.9	1.7	1.7
R&D	2.8	1.7	0.8	0.8	0.5
Depreciation	11.3	11.1	12.5	10.2	12.6
Operation and Maintenance	45.5	46.5	49.7	36.3	37.6

6.8. Legal Compliance

In 2015, CSC received only one violation notices for pollution. The number of violation notices has reduced significantly in recent years, achieving the target of under five tickets a year and suggesting the effective implementation of self-control and improvement.

	2011	2012	2013	2014	2015
Pollution	Air and water pollution	Air pollution	Air pollution	Air and water pollution	water pollution
Issuer	KSEPB	KSEPB	KSEPB	KSEPB	KSEPB

6.9. Green Building

CSC Group is one of the primary suppliers of key structural materials for green buildings. To promote the concepts and applications of green building, CSC sponsored green building constructions in Taiwan, by which CSC also contributes to GHG emission reduction of buildings. In addition, new plants and office buildings in CSC Group are all designed and built in accordance with green building specifications. Best practices include the main office building of #3 cold rolling mill and China Steel Building, both completed in 2013.

For China Steel Building, the green building concept was incorporated from the beginning, in the design in 2004. The Building became a green building candidate in 2009 based on the 8 indicators by Evaluation Manual for Green Building Material and was issued the building license in 2012. In Nov. 2014, China Steel Building was upgraded from Gold Class to Diamond Class after recalculation of indicator scores of the completed design, and was certified as a green building by Ministry of the Interior.

China Steel Building was awarded the Green Building Management and Maintenance Contribution prize on Dec. 12th, 2015 by Taiwan Green Building Council in the 2015 Green Building Awards. In order to encourage green building users to continue promoting self-management and maintenance of green building designs and facilities selected and upgraded by the builders, Taiwan Green Building Council judging panel establishes the Green Building Management and Maintenance Contribution prize to acknowledge those who retain the original design goals.

6.10 Environmental Grievances

There is only one grievance on record from formal channel which is to improve the fugitive dust emission of material yards. CSC's response is as following:

01 CSC's material yards are originally planned and designed 40 years ago with 4 phases development. The yards are separated into 2 sections to provide materials for facilities of different phases individually. It is necessary to construct facilities supporting dispatching between the 2 sections in advance as a pre-project.

02 Though the capital needed is huge and the construction work is complex as has to proceed during production, the pre-project was granted by the board of directors in mar. 2015. The total schedule for engineering, procurement,fabrication, erection and commission will be 3 years.

7

PARTNER

7. Partner

7.1. Fair Trade

As the crude steel output in Taiwan is lower than demand, a considerable amount of semi-finished and finished steel products is imported every year. After import tariff was reduced to zero in 2004, market competition became keener, and monopolization no longer exists. In compliance with Taiwan Fair Trade Act, CSC and affiliates do not engage in price fixing. In addition, CSC offers the same price to affiliates as to other customers in accordance with accounting regulations. Overseas subsidiaries and trading partners are treated fairly and equally in terms of commission and service charges, and all transactions with related parties are included in accounting audits.

7.2. Upgrading Steel-using Industries

To raise the competitiveness of steel-using industries, CSC works closely with strategic partners on R&D alliances and industrial upgrade projects launched through these alliances. The approach is increasing the value of downstream steel products through R&D, innovation collaboration, strategic investments, channel establishment, and brand development. In partnership with the government, CSC launched 13 projects through 16 R&D alliances with 66 companies during 2006-2013. In addition, CSC initiated the 5-year Industry and Academia Alliance Plan in 2013 to introduce R&D energy of academy to the needs of industries. From 2008 till 2015 8 Engineering Research Centers and 5 Joint Research Laboratories were established. Nevertheless, from 2013 CSC worked together with Corporate Synergy Development Center to promote Alliances for Steel-using Industries to optimize industry chain, supply chain and value chain. Major tasks are described as follows.

7.2.1. Engineering Research Center (ERC)

For open innovation practice and for alignment of R&D drive with industrial needs, the CSC cooperation on research projects has been gradually changed from individual commissions to strategic cooperation with schools and professors on a long-term team basis. The ERCs, established by CSC and the academic partners, integrate professional workforce and implement systemic, profound, and comprehensive fundamental research. By the end of 2015, 8 ERCs were established with another 3 of auto forming, smelting and rolling to be established.

ERC	Partner	Established time
Electric Motor Technology ERC	National Cheng Kung University	2008.05.08
Physical Properties and Microstructure of ERC	National Sun Yat-Sen Univ.	2010.12.08
Steel Structure ERC	National Taiwan Univ. of Science and Technology	2011.03.10
Advanced Steel Microstructure Control ERC	National Taiwan Univ.	2011.11.16
High-value Metal Industry ERC	Metal Industries Reserch & Development Centre	2012.04.10
Next-Generation Handtool ERC	National Yunlin University of Science and Technology	2014.10.02
Advanced Specially Alloy ERC	National Tsing Hua Univ.	2015.06.10
Forging Roll Forming	National Kaohsiung Univ. of Applied Sciences	2015.08.06

7.2.2. Joint Research Laboratory (JRL)

To provide differentiated technical services, CSC established JRLs with customers. By troubleshooting at plants and enhancing the suitability of CSC materials with customers' processes, JRL helps winning customer trust and increasing business opportunities. Moreover, long-term plans for strategic technical cooperation are tailored for mutual needs.

JRL	Partner	Established time
Compress and Motor JRL	Rechi Precision, ITRI	2011.09.13
Auto Steel JRL	HAITEC, MIRDC	2012.11.29
Motor JRL	TECO Electric and Machiner	2013.06.26
Auto Application JRL	GSK, Fine Blanking & Tool	2014.03.28
Auto Steel JRL	Changchun Engley, Honley Auto PartS	2015.12.28

7.2.3. Alliance for Steel Industries

Steel industries in Taiwan, while internationally competitive, are mostly OEM/ODM service providers without self-owned distribution channels or brands. They face low-price competition difficulties in business model transformation and quality improvement and thus are unable to expand market share. CSC aims to help improve the international marketing and service capabilities of those domestic enterprises. In cooperation with the Corporate Synergy Development Center, CSC planed world-class manufacturing and sales center for various steel-using industries. On 19th Dec. 2014, Taiwan Elite Handtool Organization was established with BBI Proferred as trade mark. and began selling on e-commerce platform of Ta Chen International on Jul. 20th, 2015, up to now more than 600 clients were developed. To ensure smoothly running, the organization of legal body has been established with a name of Taiwan High Quality Hand Tools Developing Association to assure smooth operation. The association is expected to be established in April, 2016. Another alliance for the fastener industry is in planning for 2016.

7.2.4. Industry and Academia Alliance

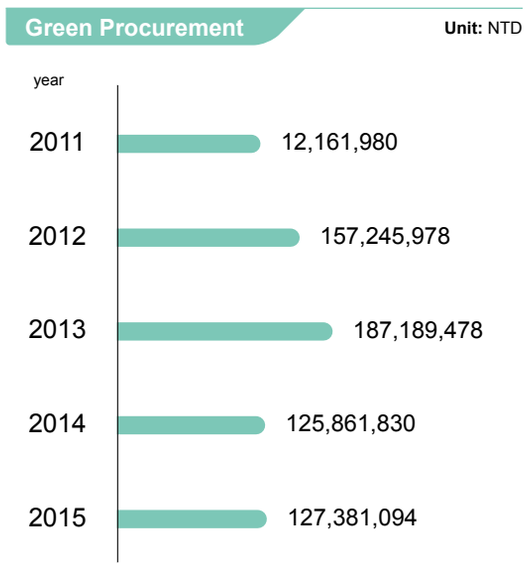
Industry and Academia Alliance is a prospective industry-university cooperation program proposed by the Ministry of Science and Technology (MOST) to enhance the value and competitiveness of industry adopting "theme from industries, academia solving". The "Next generation steel with green processes and product innovation with application" program of CSC cooperated with National Cheng Kung University granted by the MOST in July, 2013 is one of the typical Industry and Academia Alliance program. This program aims to help the domestic steel industry to develop prospective opportunities with the concept of “Material before industry upgrade”. With the theme and topics of “Advanced energy saving automobile” and “Marine structure for off-shore wind power” the program covers 3 areas of “Next generation steel,” “Cleaning metallurgy and precise and agile rolling” and “Advanced 2-3 processing and high end-value product.” It is expected to achieve the target of developing the application technology of next generation steel and evolving an environment for high value cluster of the steel industry.

7.3. Green Living

In response to the government's Golden Decade National Vision – Sustainable Environment: low-carbon LOHAS homeland and energy and water conservation, CSC voluntarily launched the Employee Green- Living Program, to turn CSC into a low-carbon green enterprise. CSC green living actions are getting into second phase. The five LOHAS categories are: Dieting, Clothing, Housing,Transportation and Education, Recreation and other living aspects. All the employees are requested to join in to ensure achieving environmental sustainable development and fulfillment of our corporate social responsibility.

○ Green Procurement

In accordance with the governmental promotion of civic green consumption, CSC started procuring products with green marks since 2007. Those procured were initially green products in the employee grocery store and office papers, later expanded to lighting, computer equipment, leasing equipment (including official vehicles and printers), printed matters, slag and cement, and green building materials. CSC also posts green consumption information online to increase the employee knowledge and will for green procurement in daily life. In 2014, the CSC green procurement was NTD 125,861,830, and CSC was awarded Commendable Green Procurement Units of Private Corporate and Groups by Taiwan Environmental Protection Administration and Kaohsiung Environmental Protection Bureau. In 2015 the amount is NTD 127,381,094 also far beyond the benchmark of 3 million for awarding.



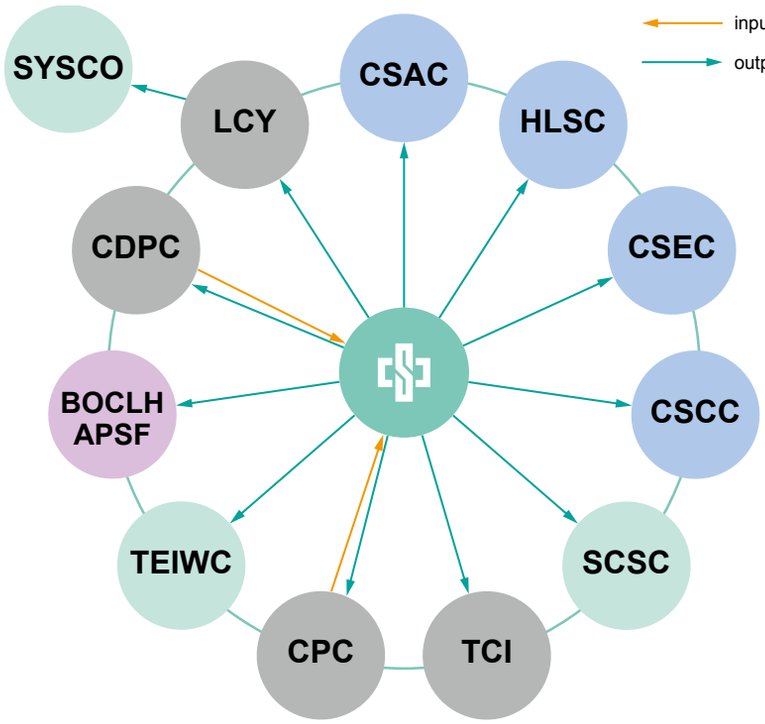
7.4. Green Partner

7.4.1. District Energy Integration

In an integrated steel mill like China Steel Corporation (CSC), a large quantity of by-product fuel gases (COG, BFG, LDG) and high-temperaturewaste heat is generated. To fully utilize these fuel gases and waste heat, CSC since establishment has implemented combined heat and power (CHP) to suffice the demand of energy based on the characteristics of production processes. However, it is not possible to constitute an ideal case for efficient CHP simply inside a steel mill, as the most efficient CHP requires an integration of various industries within a specific district.

CSC's oxygen plant, for another example, produces O2, N2, and Ar simultaneously with air separation units. The demand of the steelmaking process for O2 is significantly larger than the other two, making O2 the main product of the oxygen plant while the other by-products. In general, Ar can be effectively used in the steelmaking process, yet N2 cannot be fully utilized. To eliminate waste, it is crucial to integrate the demands ofneighbouring factories in the industrial park for complementary use of resources.

On the other hand, besides natural gas and fuel oil, CSC also recovers steam condensate and purchases crude hydrogen and waste fuel gas from neighbouring factories. The Linhai Industrial Park in Kaohsiung City hosts CSC and various factories. CSC has been promoting the District Energy Integration Plan (the Plan) since 1992. The Plan not only increases energy efficiency but also reduces resource consumption and pollutant emissions in the region. As the environmental quality is improved, the Plan brings substantial benefits to the economy, the environment, and the society.



Input

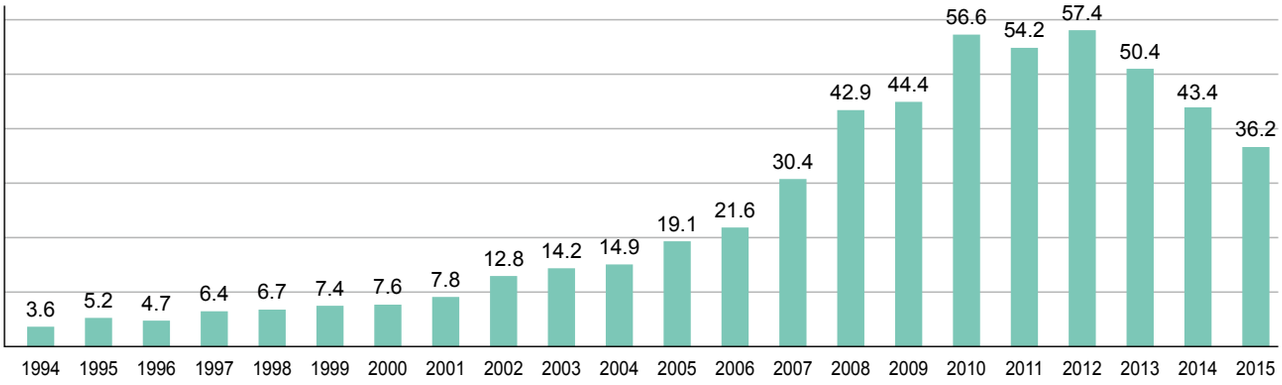
China Petrochemical Development (CPDC)	Condensated water Waste Fuel Gas, H_2
CPC Corporation, Taiwan (CPC)	H_2, Fuel

Output

C.S. Aluminum (CSAC)	Steam, N_2, Ar
Hung-Li Steel (HLSC)	Steam
China Steel Express (CSEC)	Electricity
China Steel Chemical (CSCC)	Steam, Air, COG, N_2, Electricity
Shang Chen Steel (SCSC)	Steam
Taiwan Chlorine Industries (TCI)	Steam
CPC Corporation, Taiwan (CPC)	Steam, N_2
Tang Eng Iron Work (TEIWC)	Steam, O2, N_2, Ar
BOC Lien Hwa Industrial (BOCLH) Air Products San Fu (APSF)	N_2
China Petrochemical Development (CPDC)	Steam, N_2
LCY Chemical (LCY)	Steam, N_2
Sheng Yu Steel (SYSCO)	Steam, N_2

External CO_2 reduction from steam sales

Unit: ten thousand tons CO_2

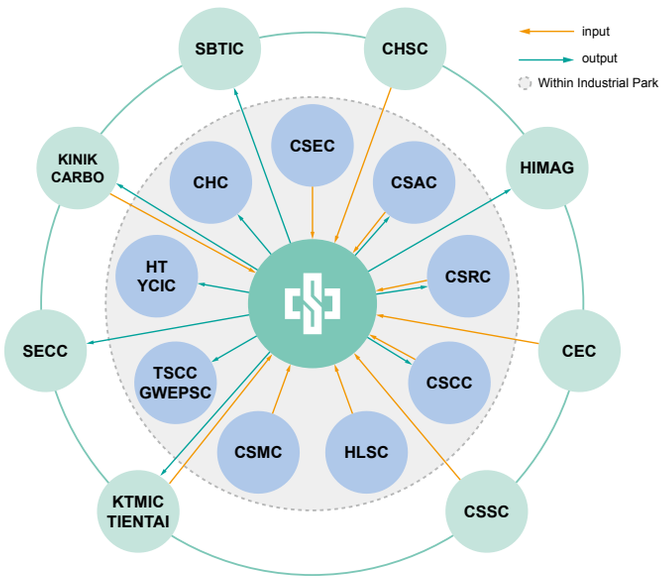


7.4.2. Energy Saving Service

CSC Energy Saving Service Team was formed in 2007 upon the call of the Bureau of Energy. Through vertical integration and horizontal coordination, the Team enhances energy conservation of the Group and provides services for customers. In 2015, CSC accompanied the Kaohsiung City Government Energy Saving Service Group to provide energy audit and services in Oriental Union Chemical Corporation and Yuan Long Stainless Steel Corp.

7.4.3. Construction of an Eco-Society

Upon the call of EPA and Industrial Development Bureau, CSC expanded the industry ecological network inside and outside of Linhai Industrial Park to ensure effective recycling and reusing of industrial waste. In 2015, the CSC-centered industry ecological network included 21 enterprises, mostly traditional industries, including recycling industries for BF slag, BOF slag, sludge, waste oil, zinc dross, waste acid, and refractory. CSC will continue promote industry ecological network to reutilize waste from Linhai Industrial Park so as to improve operating condition and competiveness and to follow the global trend of sustainable development.



Company	Output	Input
CHC Resources (CHC)	Granulated Slag, Sludge, Coal Ash, Spent Refractory, Granulated Slag, Coarse ZnO, Air Cooling BF/BOF Slag	
C.S. Aluminum (CSAC)	Scrap aluminum, Copper, Zinc	Scrap iron, Aluminum slag, Aluminum dust
China Steel Chemical (CSCC)	Coal Tar	Tar, Scrap iron
China Steel Resources (CSRC)	De-S Slag	Recycled iron pellet, Recycled iron sand
China Steel Machinery (CSMC)		Waste acid, Scrap iron
Hung-Li Steel (HLSC)		Waste acid
Chung Hung Steel (CHSC)		Waste acid, Sludge
HIMAG Magnetic (HIMAG)	Iron Oxide Powder	
China Steel Express (CSEC)		Vessel Waste Oil
China Ecotech (CEC)		Calcium carbonaten crystal
China Steel Structure (CSSC)		Scrap iron
Southeast Cement (SECC)	Granulated slag, Sludge, Calcium carbide cake	
Kinik Company (KINIK) **Carbo Tzujan Industrial (CARBO)**	Scrap Grinding wheel	Grinding wheel
Kuang Tai Metal Industrial (KTMIC) **Tientai Electrode (TIENTAI)**	Welding slags	Welding flux
Sun Beam Tech Industrial (SBTIC	Zinc dross	
Tai Share Chemicals (TSCC) **Green World Environmental Preservation Service (GWEPSC)**	De-S Slag	
Ho Tung Cement (HT)	Granulated slag	
Young Ching Industry (YCIC)	Granulated slag	

7.5. External Communication and Cooperation

7.5.1. Domestic Associations and Institutes

As the supplier of products and byproducts for domestic industries, CSC participates in various activities organized by domestic industry unions, institutes, and associations to reinforce communication and cooperation.

Steel Industry	· Taiwan Steel and Iron Industry Association · CSC Chairman Sung as the President	· For collaboration and development of the steel and iron industry
	· Chinese Institute of Engineers · CSC Chairman Sung as the managing director	· Help developing national construction, promote engineering expertise, aim to the targets of a social responsible, sustainable and prospoerous future
	· Taiwan Institute of Steel Construction · CSC President Lin as the President	· For steel construction technology development and infrastructure safety improvement
	· Taiwan Wind Turbine Industry Association CSC Cheif Hsu of Wind Power Business Development Committee as the President	· For technology transfer from worldwide leading wind turbine makers and market development of domestic wind power industry
Corporate Sustainability	· Business Council for Sustainable Development of Taiwan · Formosa Association of Resource Recycling · Taiwan Resource Recycling Industries Association · Taiwan Carbon Capture, Storage and Utilization Association · Association of Industry for Environmental Protection ROC	· Promote corporate sustainability and environmental protection

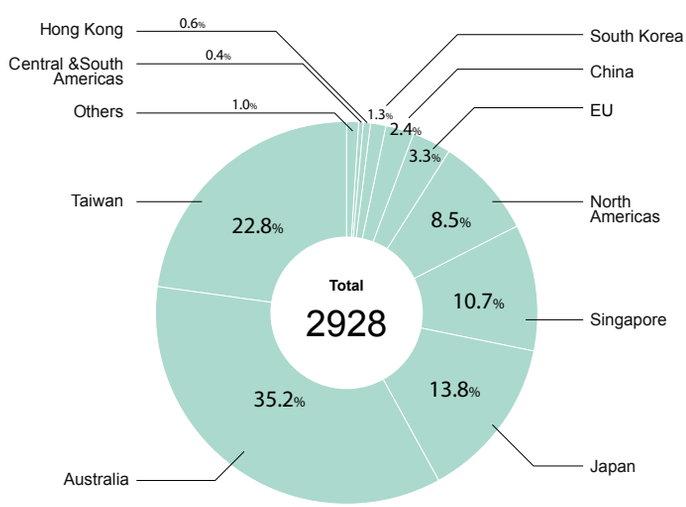
7.5.2. International Consociation in Steel Industry

Organization	Program	Benefit
World Steel Association	**Membership participate** ・Join sustainability expert group, provide reporting data and comment, support propaganda ・Participate the committees of technology, safety, environment, raw materials, economy, product sustainability ・Join data collection of CO2, life cycle inventory and energy expert groups **Fellowship support** ・Chih-Cheng Wu, Ph.D., Scientist, was seconded worldsteel for two years (January 2014 to January 2016) ・Managed the project of Energy use in steel industry ・Promoted energy on-line benchmarking system and energy saving technology ・Communicated steel industry's energy used issues with international stakeholders	CSC shares our experiences via exchanges, cooperation, and services, thereby CSC connects and updates the latest development of global steel industry. 
South East Asia Iron and Steel Institute	1.CSC is a key supporting member and serves as the chairman of its EHS committee assisting in the development of the technology and implementation of EHS affairs. 2.Supports the arrangement of steel technology and EHS conferences, as well as visiting plants and sharing in the production of national reports every year.	Through maintaining good interactive and cooperative relationships with other members, CSC obtains information on the development of regional industries and technologies as well as relevant policies, which provides a good basis for business development and strategic cooperation in the future.
OECD	CSC has participated in the meetings of the steel committee on a regular basis under the instruction of the Ministry of Economic Affairs, R.O.C.;	As an excellent international platform, it is not only a channel to obtain new and important information on the steel industry and environmental protection, but also an opportunity for Taiwan to increase its visibility and participation in international activities.

7.6. Supply Chain Management

CSC's supply chain management can be categorized in equipment and material procurement, and contractor management, described as follows: Equipment and Material Procurement

Conflict Minerals Declaration	China Steel has committed to not use any metals coming from Democratic Republic of the Congo, its neighboring countries or any mines controlled by armies or rebel groups, in its products or packing. Through enhancing supply chain management, China Steel effectively identifies and traces material sources, to eliminate the use of conflict minerals. Regarding material source investment, any mines that is suspected to involve in conflict minerals would be disregarded in investment evaluations.
Human Rights Management	Other than conflict minerals declaration, China Steel also pays attention to human rights conditions in the countries providing equipment and materials in procurement process, and adjusts procurement decisions accordingly. The following table shows the global distribution of China Steel's suppliers in 2015.



Country	Supplier Number	% of Total Procurement
Taiwan	2156	22.8%
Australia	15	35.2%
Japan	210	13.8%
Singapore	40	10.7%
North Americas	90	8.5%
EU	267	3.3%
China	78	2.4%
South Korea	25	1.3%
Hong Kong	24	0.6%
Central & South Americas	3	0.4%
Others	20	1.0%
Total	2928	100.0%

7.6.1. Contractor Management

China Steel has never outsourced its tasks to freelance workers, and has always demanded its contractors to hire Taiwan nationals for works in China Steel. Workers sent by contractors to work in China Steel must have insurance mandated by the government, wear uniforms and use safety equipment regulated by China Steel, and comply with China Steel's safety and health work rules. A penalty will be imposed for any violation, and the fine will be designated exclusively to a fund for supervision, correction and improvement of the safety and health of contractor employees. China Steel is responsible for monitoring and supervising the working conditions of contractor employees to ensure contractors' compliance with national labor laws. There was no reported incidents related to child labor or forced labor in 2015.

Due to the nature of the outsourced works, disaster prevention is of the highest priority and the most crucial issue. Apart from enhancing facility safety by way of inherent safety, China Steel has also improved interactions with contractor employees and their working conditions through partnership and has enhanced their basic professional skills through training.

According to China Steel's local maintenance job management regulations, monthly evaluations are conducted for assigning bonus to encourage contractors to improve management and work quality. Safety, health and environment related issues take up 35% in the monthly evaluation, and there was no cases of bonus being affected by substandard performance in such areas in 2015. China Steel has always been devoted in the nurturing, training and management of contractors. The practices of frequent inspection and comprehensive reward and punishment program have already rooted in China Steel over the years. Immediate action must be taken and a penalty will be imposed for any breach of safety, health and environment related regulations. The fine is collected and exclusively designated for the monitoring, training and improvement of contractors.

During on-site contractor evaluation process, Plant Engineering and Maintenance Department personnel is required to fill out an evaluation form with 4 major criteria: quality management system, business management, manufacturing and equipment capacity and technical capabilities. Contractors are selected based on total performance, and are requested to supply documents such as business entity registration, memorandum of association, tax receipts for the previous 6 months, credit report, proof of labor insurance, proof of certifications, etc., to prove that they are legally registered with healthy financial status. Furthermore, contractors must be verified that they comply with Taiwan's Labor Standards Act in the aspects of human rights and working conditions. Employers must be insured with employer's liability insurance and provide employees with labor insurance and health insurance. Plant Engineering and Maintenance Department personnel is responsible for confirming all documents are up-to-date during contractor re-evaluation conducted every 3 years.

All contracts between Plant Engineering and Maintenance Department and service providers are signed according to law. As an ISO 9000 certified company, China Steel conducts contractor evaluations as a part of its supply chain management and reevaluations are done every 3 years to ensure that all contractors abide by the national regulations with no violation against human rights, use of child labor, freedom of association, right to organize, and right to collective bargaining. China Steel also dedicates in the supervision of contractors to enhance the working conditions of their employees and to ensure the compliance with the Labor Standards Act.

Contract Management

In order to pursuit the goal of extensive contract management, China Steel started drafting its Contractor Management Regulations in 1980. It specifies work contents, types, associated managing units and their responsibilities. There is also additional guidelines such as Contractor Safety and Health Management Regulations, and Contractor Environment Protection Management Regulations. All regulations, including penalties are incorporated in all contracts. Key rules regarding aspects of human rights, company governance, job safety, and energy and environment, are summarized as follows:

Human Rights	・Prevention of sexual harassment in the workplace should be in place. ・Violation of child labor is subjected to a fine of TWD 30,000 for each incident. ・Must provide insurance for employees as regulated by law, and present proof of insurance to Plant Engineering and Maintenance Department before monthly payment process, otherwise an incomplete process would result in delayed payment.
Company Governance	China Steel is allowed to terminate all contracts signed with the particular contractor if one of the following conditions is present. ・Contractors fail to provide a written notice when owner(s) of the contractor or personnel related to the contract are also appointed managers, employees, part-time employees or their spouses, immediate family members or consultants of China Steel. ・Give any form of bribery, gifts, commission, rewards or other illegitimate benefits to appointed managers, employees, part-time employees or their spouses, immediate family members or consultants of China Steel. ・Obtain an annual evaluation score below 70 would be prohibited to continue the contract for another term.

Safety and Health	· Must comply with Contractor Safety and Health Management Regulations, Work Permit Management Rules, and Safety and Health Work Rules. · Contractors disqualified for any work in China Steel or had contracts terminated due to occupational hazards must provide full job safety improvement plans for approval before resuming their qualifications. · Must have and implement incentive programs designed for good performance in job safety, and provide program details to China Steel. · Participate in trainings and job safety-related activities organized by China Steel and get reimbursed for TWD 160/hour per person once certified.
Energy and Environment	· Comply with Contractor Environmental Protection Management Regulations. · Contractors' use of electricity would be billed by China Steel based on electric meter readings. · Use of air conditioner must follow these instructions: **a.** Filters must be cleaned every week. **b.** Windows must be closed when air conditioner is on. **c.** Air conditioners must be turned off when rooms are to be emptied for more than half an hour. **d.** The temperature of air conditioners must be set between 26 to 28 degree Celsius.

Establish Solid Partnerships

Under the notion of partnerships, China Steel actively helps contractors improve human resource structure and working conditions, including increasing safety and health management fees, establishing vacation policies and compensation for working on holidays, and adjusting contracting fees for contractors to lower turnover rate. Meanwhile, this also helps lower the risks of occupational hazards, in order to foster true partnerships between China Steel and contractors.

Nurture and Establish Mutual Trust	1.Provide contractors with stable workload.
	2.Reasonably assure contractors with good evaluation score with priority in contracting.
	3.Promote sensible bidding process for contracts.
	4.Support reasonable pay for contractor employees.
	5.Implement vacation policies for contractor employees.
Guidance and Training	1.Coach contractors to abide by national regulations.
	2.Assist contractors in safety trainings.
	3.Create communication platforms.
Evaluation and Implementation	1.Revise China Steel's Production, Maintenance, and Cleaning Contractor Management Regulations.
	2.Update contract-related articles.
	3.Conduct audits on contractor working conditions.

Contractor Safety and Health Management Measures are listed in the chart below:

Contractor Safety and Health Propaganda	Gather contractors every month to announce new safety and health related information and new demands by China Steel.
New Contractor ID Issuing Assessment	New contractors must attend mandatory safety trainings and have interviews with managers of ID issuing organization. (Listed in Safety and Health Department's system)
Safety Care	Conducted every month (Listed in Safety and Health Department's system)
Report of Near Misses	Report of near misses is encouraged with rewards.
Implement and Promote Inherent Safety	Continuously introduce system scaffolds and elevating work platforms to increase scaffold safety and decrease scaffold related hazards.
Safety Inspections	All levels of management personnel regularly conducts safety inspections in contractors' workplace and keeps records. (Listed in Safety and Health Department's system)

Based on the management concepts of collaborating and building mutual trust with contractors, and to build a relationship of coexistence and mutual prosperity, China Steel started to actively promote creating a safety culture in contractors in 2015, and has proposed numerous measures in the aspects of regulations, management, and education.

Regulations	· Minimize subcontracting
	· Stabilize contractor employees pay and lower turnover rate
	· Reinforce reward programs for contractors
	· Urge contractors to establish incentives for job safety
	· Implement contractor performance evaluation to identify contractors with established safety culture as recommended contractors
Management	· Reinforce new contractor employee assessment
	· Self-management and audits of contractor's job safety
	· Arrange contractors to study and emulate the management models of CSC Group companies
Education	· Operation leaders receive safety and health education and training for class-3 manager of Occupational Safety and Health Affairs
	· Reimbursement from China Steel for contractor participation in trainings
	· Increase the percentage of job safety trainings organized by contractors

○ Education Trainings for Contractor Employees

CSC maintenance units are responsible for arranging training courses and certifications in accordance with the needs of safety and health as well as professional techniques required for workers to perform their work at CSC. Over the years, the trainings have been proven to be effective. In 2015, contractor employees received a total of 36,700 hours of training in CSC.

Item	Training Course/Purpose	Training Contents	Persons	Hours/ Course	Frequency	Total Hours
Safety training	New hire training: Designed for new hires to pay attention to all safety hazards in work environment.	General safety and health training, Zero-Accident Program exercise, and safety and health regulation propaganda	5,884	6	3 /week	35,304
Technical training	Scaffolding: Designed to prevent occupational hazards.	Scaffolding machinery operation, equipment, tools, operating environment and operation safety introduction	164	3	2 /year	492
	Corrugated roofing: Designed to prevent safety hazards such as falling through.	Hazard identification, falling prevention, and personal protective gear introduction	199	1	2 /month	199
	Fire watch personnel: Designed to prevent fire hazards.	Hazard identification, firefighting equipment introduction, and flammable item identification	71	3	1 /year	213
Skill certification	Scaffolding certification: To ensure scaffolding procecure could be proceeded properly according to requirement.	Technical drawing reading, construction layout, structure transportation and assembly skills assessment	164	3	2 /year	492

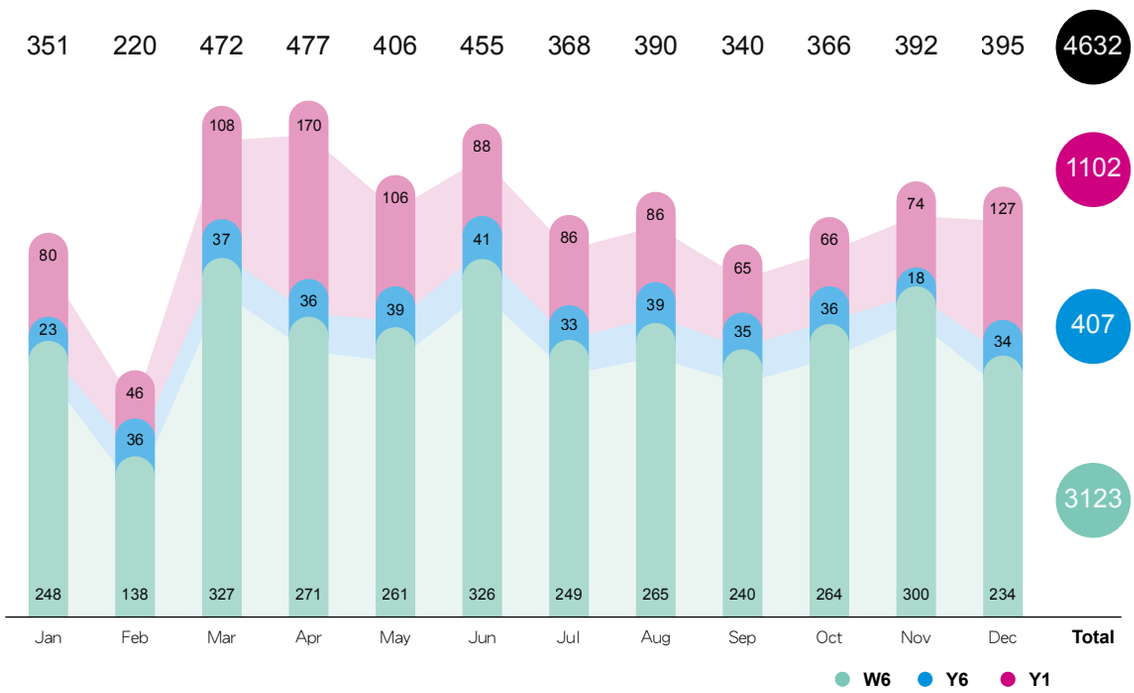
○ Contractor Electricity Management

Objectives	Advocate “Beneficiary Pays Principle” to encourage contractors in electricity conservation to avoid inefficient management.
Methods	Install electric meters in contractors' offices and warehouses in China Steel, and bill them monthly based on meter readings.
Outcomes	China Steel’s contractors were billed NTD 4.126 million dollars with an electricity consumption of 1129.2 MWh.

Inspections and Audits

Industrial Safety and Hygiene Department, Plant Engineering and Maintenance Department, Electrical and Control Department, and all maintenance units in production lines frequently conduct inspections and audits on contractors. On top of job safety, inspection items also include energy conservation and environment protection.

Inspection frequency in 2015 is as follows:



7.6.2. Domestic Procurement

CSC has increased investments in high value-added downstream production lines, environmental protection and energy saving facilities, and replacement of outdated equipment, and has also requested suppliers to maximize the percentage of domestic supply, aiming to reduce costs and foster domestic industries. Large quantities of hardware equipment, refractory materials, parts and components for repairing and maintenance are required. In addition to requesting its suppliers to increase local portions, CSC also contributes to the upgrade of related domestic industries, and lessen the dependency on foreign suppliers, to ensure on-time delivery, exceptional service, and lower cost. Moreover, CSC actively promotes all kinds of domestic manufacturing activities, and signs long-term contracts with domestic refractory material manufacturers to effectively cut down inventory level. The goal for domestic manufacturing in 2015 was set to be 274,260 thousand NT dollars, and the result reached 298,515 thousand NT dollars.

Item	Result of Domestic Manufacturing in 2015
Refractory materials	1,994 billion NTD (65.3%), 76,27 tons (82.5%)
Spare parts and eqiupment	Mech. Part: 109 work orders, 169,055 thousand NTD
	Ele. Part: 96 work orders, 129,460 thousand NTD
Production line eqiupment	51 production line and turnkey engineering project were completed with an amount of 2,150 billion NT dollars

8

Employees

8.Employees

8.1. Recruitment and Retention

CSC strictly follows the Labor Standards Act of Taiwan and never hires child labor. To ensure the basic human rights of employment equality, employees are hired only by expertise and by experience, eliminating discriminations upon ethnic origin, thought, religion, political affiliation, place of origin, place of birth, gender, sexual orientation, marital status, appearance, disability, or past labor union membership. In 2015, no incident involving human rights abuse or discrimination was reported.

8.1.1. Apprenticeship Cooperation

○ Apprenticeship cooperation with vocational high school

It has been more than 45 years from the beginning of CSC. We have walked through all the hardships and prospered into internationally renowned enterprise group. With 10,251 employees and 49.08 as average age at the end of 2015, CSC will face a retirement boom with about 2,800 people within 2017 to 2024. It is a critical issue for CSC to effectively inherit the experiences and techniques of production, operation and management form the senior employees.

To reduce the time of learning curve for the new employees, CSC cooperates with vocational high schools to provide apprenticeships. Through courses designed according to the need of CSC with mechatronics, industrial bricklaying, etc., the students are expected to join the company with capability they gained through apprenticeship directly after graduation. There are “Staged apprenticeship class” and “Job oriented apprenticeship class” described as following:

Staged apprenticeship class	To meet the technician manpower needs of our company and the expectation of students in Kaohsiung, CSC cooperated with Kaohsiung Municipal Chung Cheng Industrial High School (CCVS) for the first staged apprenticeship class in 2013. The class is set up to approach students willing to experience theory and practice by doing. With a promise of over 70% of the students can enter CSC after graduation, this class attracted the eyes of parents and public. The acceptance rate is only 2.89% and there are several students who were in top 10 of their junior high schools. With this success, in 2014 the Education Bureau of Kaohsiung supported to expand this project to 2 classes with total 80 students, one in CCVS, the other in Kaohsiung Industrial High School. The students will study in school during their freshman and sophomore years. As for the last year there will be 11 months for students to come to CSC for internship from Monday to Thursday every week. CSC will allocate them according to the recruitment needs and assign them mentors for one-by-one instruction. The courses of internship includes process introduction, mechanical and electrical maintenance, occupation safety, etc. The first internship in Aug., 2016.  

Job oriented apprenticeship class	At least 1% of the our employees should be aboriginal in order to comply with Aborigine Employment Rights Protection Act. Though the requirement is fulfilled, CSC is willing to provide more job opportunities for the aboriginal. With the demography data of aboriginal and the ranking of the national skill and technique competition, CSC chose National Hualien Industrial Vocational Senior High School (HIVH) to cooperate with for aboriginal job oriented apprenticeship class with 10 students major in mechanical and electrical. CSC together with HIVH redesigned some of the courses of the 3rd year with practice courses and scheduled additional professional courses on Saturdays. 9 students of the first class were recruited in 2015 and the second class has finished their 6-week internship in the Plant Engineering and Maintenance Department of CSC during the Sumer of 2015. In order to cope with the special demand of technician in bricklaying of furnaces and civil works, CSC cooperated with National Kangshan Agricultural and Industrial Vocational Senior High School (KAIVH) to design and offer job-oriented class related to civil, architecture and bricklaying with CSC specialists to instruct refractory bricklaying to 7 students (4 as male and 3 as female). Internship was launched during April 23rd to June 9th, 2015. These 7 students were recruited as employees 2015 and the second class had started their training in the Sumer, 2015. In addition CSC sponsored KAIVH to construct bricklaying practice plant expecting to sustain the furnace bricklaying technology through bi-direction technical exchange between industry and schools .

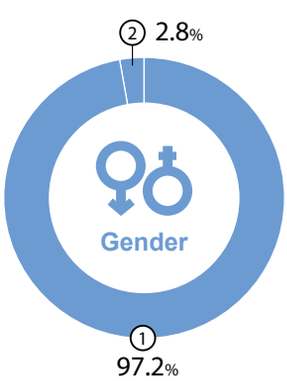



8.1.2. Workforce Structure

By the end of 2015, the CSC workforce totaled at 18,457 people, of whom 10,251 were official employees, 8,163 were contractors (6,743 male and 1,420 female, mainly work contractors and engineering contractors), and 38 were dispatched workers (1 male and 37 female, mainly for paperwork and general affairs). All official employees are locals from Taiwan. The average age of employees was 49.08 and the average service years was 22.96. The male-female ratio is due to the characteristics of the integrated steel mill.

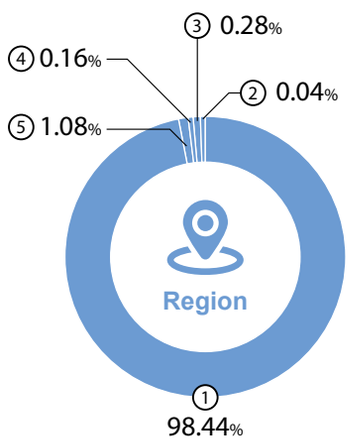
In 2015, 9 employees newly applied for maternity leave without pay (3 male, 6 female) and 2 female reapplied. In the same year, there were 8 employees (4 male and 4 female) reinstated, one male quitted without reinstatement, 3 employees (2 male, 1 female) retained more than one year with no one quit before one year. The reinstatement rate is 89% and the retention rate is 100%. For disability employment, 145 employees by the end of 2015 account for 1.41 % of all employees, exceeding the 1 % requirement of the People with Disabilities Rights Protection Act.

○ 2015 Employee Distribution



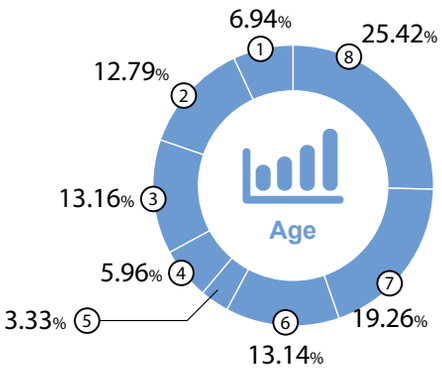
Unit: Persons

①	**Male**	9,964
②	**Female**	287



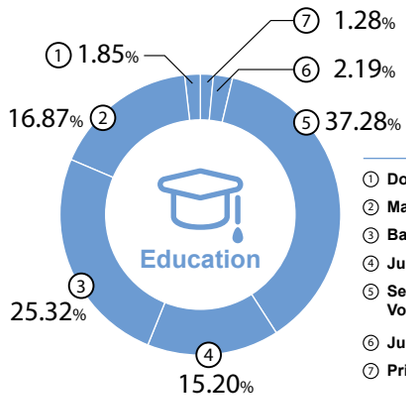
Unit: Persons

①	**Kaohsiung**	10,091
②	**Taipei**	4
③	**New Taipei**	29
④	**Hualien**	16
⑤	**Overseas**	111



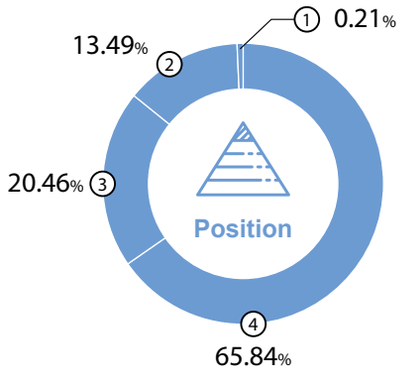
Unit: Persons

①	**20-29**	711
②	**30-34**	1,311
③	**35-39**	1,349
④	**40-44**	611
⑤	**45-49**	341
⑥	**50-54**	1,347
⑦	**55-59**	1,974
⑧	**60+yrs.**	2,607



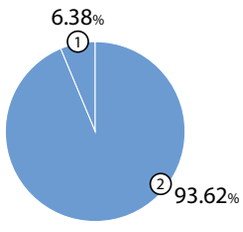
Unit: Persons

①	**Doctorate**	190
②	**Master**	1,729
③	**Bachelor**	2,596
④	**Junior college**	1,558
⑤	**Senior High / Vocational**	3,822
⑥	**Junior high**	225
⑦	**Primary School**	131



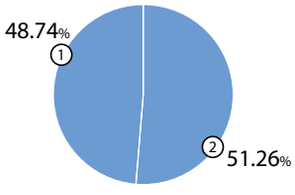
	① Top Management	② Management	③ Professionals	④ Base Level	Total
Female	0	10	178	99	287
Male	22	1,373	1,919	6,650	9,964
Total	22	1,383	2,097	6,749	10,251

For the one external recruitment in 2015, the number of job vacancies, test subjects, and job contents were open to public. Applicants were asked to take the written test on common and professional subjects. Based on test results, at least twice the number of vacancies was selected for interviews. The final decision for employment was made based on both written test and interview scores, and 517 new employees were hired.



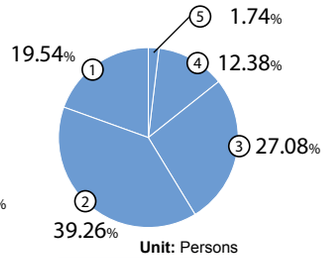
Unit: Persons

①	**Female**	33
②	**Male**	484



Unit: Persons

①	**Professional Level**	252
②	**Base-level**	265



Unit: Persons

①	**18-25 yrs.**	101
②	**26-30 yrs.**	203
③	**31-35 yrs.**	140
④	**36-40 yrs.**	64
⑤	**41+ yrs.**	9

8.1.3. Retention

Salary adjustment and bonus distribution based on performance and position	**1. Midyear Salary Adjustment** Those qualified will receive respectively 1~8% of raise according to their midyear performance grade.
	2. Annual Salary Adjustment Those qualified will receive annual salary adjustment according to their yearend performance grade. The average percentage of annual salary adjustment for the past 10 years is around 2%.
	3. Promotion Raise Those qualified can get a raise within 0~4%.
Production/sale profit bonus and other incentives	**1. Production/Sale Profit Bonus** With revenue at the end of the month, 90% of it will be distributed to employees in next month, while 10% of it will be hold until next February as the key bonus. The amount of each employee will get as monthly bonus depends on their salary, weights of the department they serve, and their days of duty within a month.
	2. Key Bonus These qualified will be given a key bonus based on their contribution during the past year, with the amount of 3-months of salary as maximum.
	3. Incentive Bonus With revenue at the end of the year, those qualified will get an incentive bonus based on their yearend performance grade and their basic salary, with ratios differencing from 0.5~1.25.
Promotion for technical positions	With the qualification been approved, 12 entry level technicians were promoted as foremen during 2015.
Domestic and overseas training	With the needs of diversified and international operation strategies, respectively 7 and 101 employees were chosen for medium/long-term and short-term courses at overseas academic institutions and enterprises while 8 were selected to receive continuing education in domestic universities.
Welfare	CSC provides well-planned welfare policies and facilities.
Extra days of leave	The days annual leave increase as the seniority accumulates, with the maximum of 30 days

8.1.4. Employee Turnover

The personnel change, resignation, and retirement of employees are handled according to relevant CSC regulations. Official employees can apply for retirement at the age 65 or for voluntary retirement at an earlier age with reference to the Labor Standards Act. Regulations governing personnel change and voluntary resignation or retirement are as follows.

○ Personnel change

Personnel change is discussed by the line manager with the employee weeks in advance and will be announced only after and with employee consent. In the case of difficulties in labor service performance arising from a personnel change, employees may request for termination of employment contract or file a grievance within 24 calendar days of personnel change. If grievance is rejected, employees can request for termination of employment contract within 7 calendar days of grievance rejection.

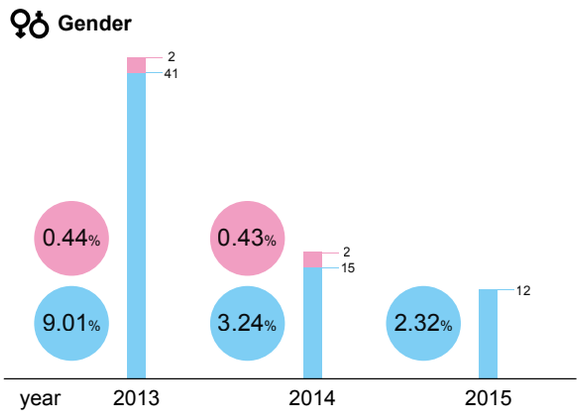
○ Voluntary resignation/retirement

Directions for Handling Employee Voluntary Resignation and Retirement and Directions for Handling Compensations for Retirement, Relief, Occupational Accidents, and Layoffs institutionalize the application for voluntary resignation and retirement

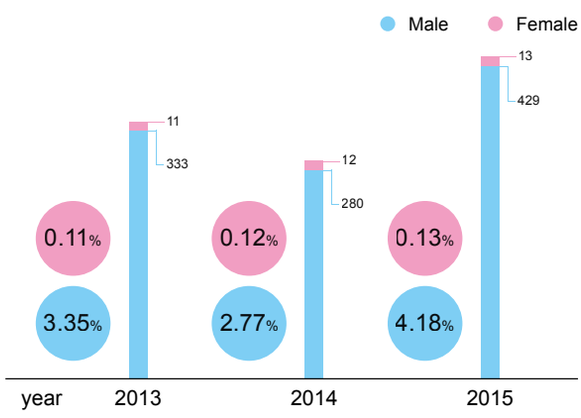
○ Attrition

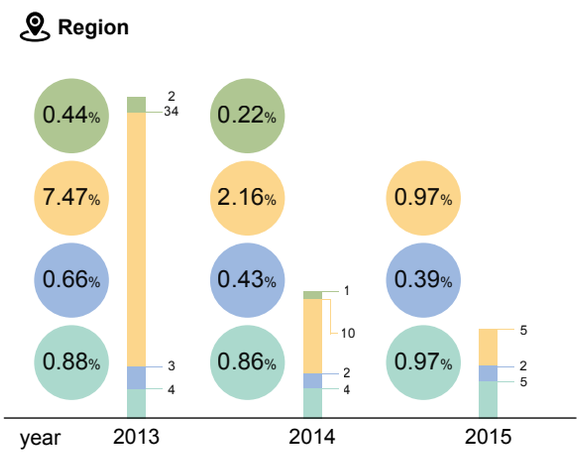
In 2015 a total of 442 employees left, with an attrition rate (number of personnel left/active employees at the end of year) of 4.33 %. 337 personnel left were aged 60 and up, and retirement was the main reason attrition.

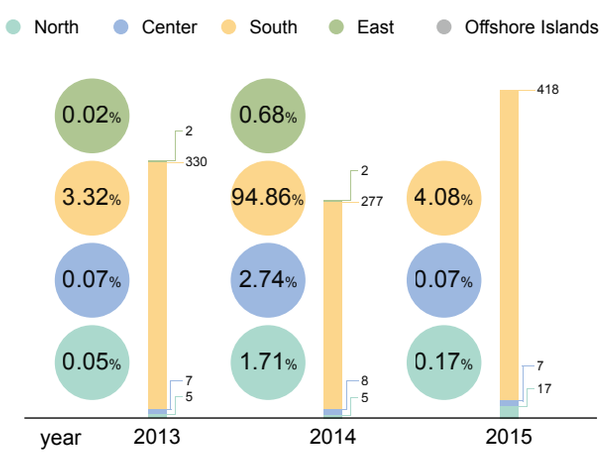
Newcomer Attrition / Attrition Rate

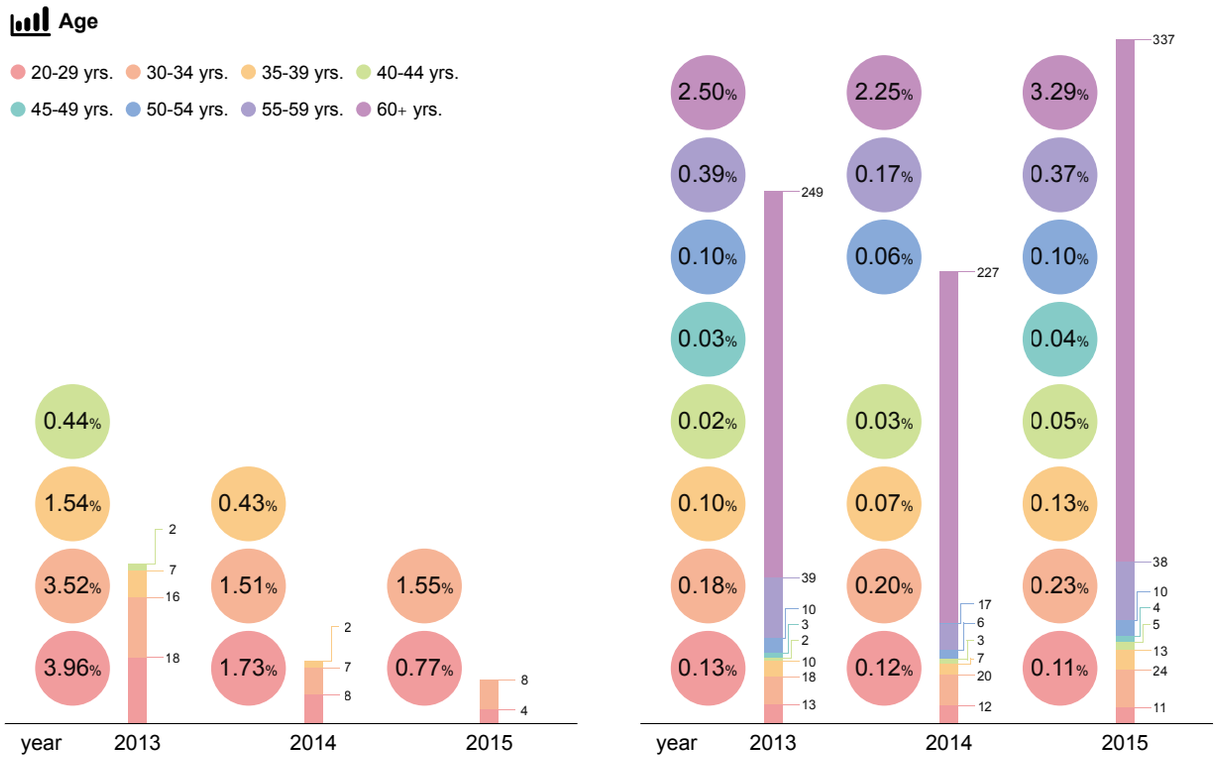


General Employees Attrition/Attrition Rate









8.2. Human Rights and Welfares

8.2.1. Human Rights Management

CSC adheres to domestic and international codes on labor and human rights to treat and respect all employees equally.

Practices include:

- Establish labor conditions with reference to relevant laws and regulations.
- Ensure diversity and equal opportunities for all jobseekers with reference to the Employment Services Act.
- Establish the Employee Reward and Punishment Review Committee to review major rewards and punishments of employees.
- Establish the Workplace Sexual Harassment Prevention, Grievance, and Disciplinary Action Regulations to provide employees and jobseekers with a work environment free from sexual harassment.

8.2.2. Remunerations, Welfares, and Promotion and Transfer

○ Remunerations

Employee remunerations include basic salary (base salary, meal allowance, and allowance for special work environments or special maintenance), yearend bonus, and production/sales profit bonus. Employees are remunerated based on their duty, current market wage standards, the company financialstatus, and organizational structure. Remunerations for male and female employees are equal, and the basic salary of male and female employees of the same position and grade is the same. However, the pay grade of the same position may vary due to difference in seniority due to the link between salary and length of service. For employees at the same position and with the same length of service, remunerations are the same regardless of gender.

Remuneration by Position	Female	Male
Basic Management	1	1.42
Professional	1	1.26
Base level	1	1.15

New Employees Remunerations

Pay standard of new employee is determined with reference to workforce supply and demand and remuneration standards on the market. The pay is to be superior to the basic wage specified in Labor Standards Act of Taiwan, with reference to the duty, education background, length of service in related fields, market workforce demand, and the pay of current CSC employees of the same position and with similar length of service. The starting point for base-level employees and engineer employees is NTD 27,100 and NTD 36,600 per month respectively. After the three-month trial, the wage is adjusted with reference to the employee's past work experience and current work performance.

Appraisal

Employees are evaluated by performance given a grade between A to E. The performance grade and remuneration structure of employees affect the amount of rewards, bonus, and salary adjustment. Employees receiving an E in the evaluation will be dismissed. Employees receiving a C will receive no salary raise. In addition, the supervisor must interview these employees and submit a performance improvement plan.

	2012	2013	2014	2015
Employees receiving an "A"	697	647	701	708
Employees receiving a "E"	0	0	0	0

Welfare

CSC provides decent working conditions for employees and commits to meet their demanded Welfare. CSC Employee Welfare Committee with 26 members from the employer and employees sets welfare facilities, and CSC Employee Welfare Section handles welfare services. CSC subsidizes employee family activities every year through departments in the company. In 2015, 10,273 people (including employees and their family) participated in these activities. Employees are also encouraged to join employees' clubs as a channel for work-life balance and to social involvement. In 2015 there were 43 clubs and 484 activities with 18,135 participants of employees and family.

Welfare Facilities
Employees' Welfare Canteen
Employee cafeteria (including subbuilding) & Mingbong Restaurant
Single employee dormitory
Gymnasium
23 routes of shuttle bus
Self-service laundry center
Reading room
recreation center(1-4F)

Welfare Services
Credit loans
Benefits for four Chinese holiday festivals and birthday cash gift
Subsidy for marriage, childbirth cash gift, and scholarships and loans for children
Emergency care and assistance
Union employee member activities
Subsidy for year-end dinner and year-end lucky lottery
Flexible subsidies for welfare points of Union employee members
Contract stores






○ Employees Residence

Building Cozy Employees' Residence For caring employees, especially the new comers without house, and efficiently utilizing land resources, CSC Group company, China Prosperity Development Corporation have started to build employees' residence just by CSC Group building. This is another employees' residence project after phase-5 employees' residence in 1981. There are 211 houses to be sold to CSC Group employees. It is expected to get the usage license in the end of 2018.

8.2.3. Communication

Human Resources Department arranges forums every week for top management to communicate with employees from selected departments. Subjects discussed in the meeting will be followed up. Besides, every department holds communication meeting with employees and representatives of union. Subjects will also be followed up.

In 2010, the Chairman Suggestion Mailbox was set up on the CSC EIP homepage for direct communication with employees. All employees are free to express opinions and give suggestions directly to Chairman. In 2015, the main topic was Cost Reduction and Care for Employees. 25 mails were received and 3 are under followed-up.

From Jan. 28th, 1976 published CSC's semimonthly bulletin to promote corporate culture, codes of ethics and discipline. Through this communication the corporate culture of values of teamwork, entrepreneurial approach, down-to-earthness, and pursuit of innovation, and the morale of probity and integrity are maintained.

8.2.4. CSC Labor Union

http://www.cscunion.org.tw/

A healthful labor union can speak for employees and make suggestions for the company, so as to strive for a decent work environment, benefits, and career development for employees. The labor union helps to promote balanced development of business operations and extend social involvement of the company.

○ Members and Aims

CSC Labor Union was established on 30 Dec. 1980 with members from each Department, except for top managements. The Union aims to promote business development from the labor's point of view, to urge unification among members, to protect the rights and benefits of members, to improve the living of members, and to enhance competency.

○ Union Organization Framework

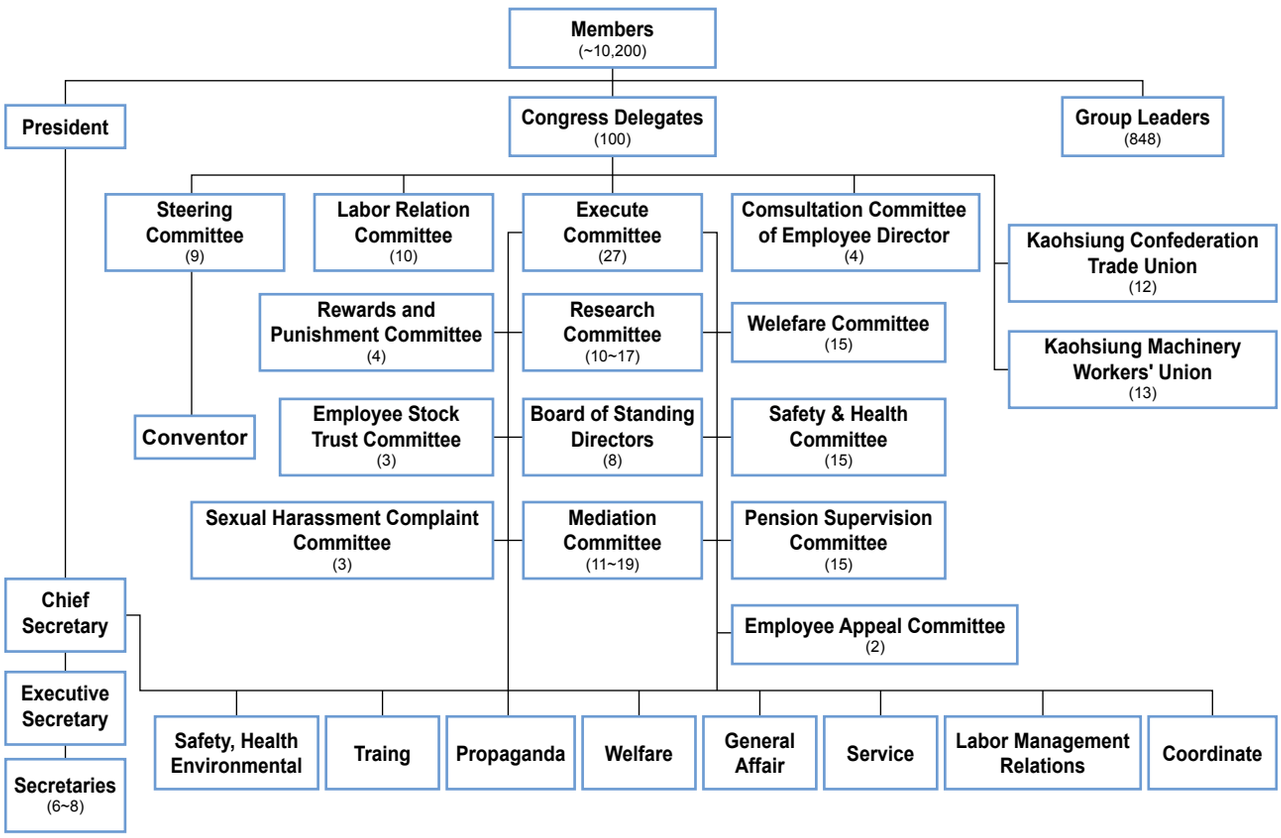
The delegate congress is the highest authority of the union, with 100 delegates elected by members from each Department in each plant site. The Board of Directors with 27 directors elected by delegates is the supreme authority during the adjournment of the delegate congress. The Steering Board with 9 members elected by delegates is set to supervise the Board of Directors. The convener for the Steering Board is elected from among members of the Steering Board. The Chairperson of the Union is directly elected by all members to represent the Union and to administer routine Union affairs. The Secretariat and 8 functional groups implement routine union affairs. Membership is compulsory for all qualified employees; these exclude certain managements from certain Sections.

Collective Agreement

CSC values the employer-employee relationship. To maintain unobstructed communication channels for both parties, to ensure fair and decent labor conditions, to provide a dependable reference, and to develop a stable and harmonious relationship, CSC signed the 1st Collective Agreement with CSC Labor Union on 4 Feb. 1997. This set a milestone for employer-employee harmony and settlement of affairs. Because the comprehensive Collective Agreement was ahead of time for then relevant legal requirements, it has since become a benchmark for other labor unions. In 2014, the 4th Collective Agreement was signed on 5 Dec. to further protect the rights and benefits of both parties, enhance work efficiency, and improve employer-employee harmony. Protection for the health and safety of employees was also specified.

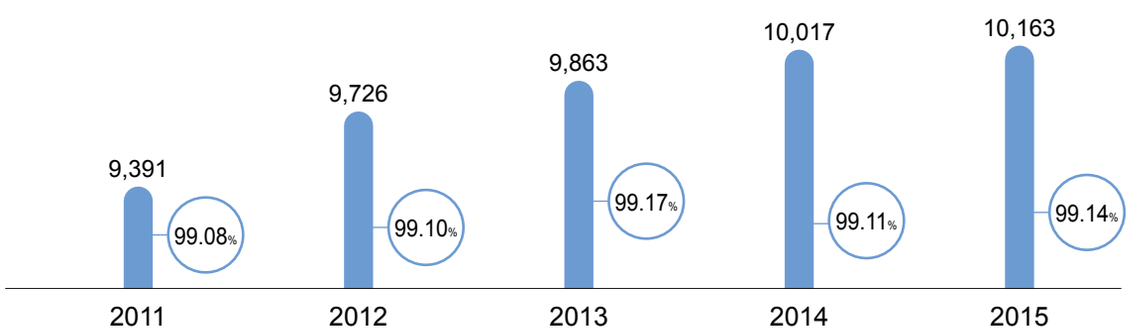
Involvement in Corporate Governance

CSC holds periodic employer-employee meetings and helped the Union to get a directorship on the CSC Board of Directors. Since 31 May 2001, industrial democracy is realized as an employee representative has been on the Board to participate in company decision-making and to provide labor perspective. The Union also participates in the Corporate Governance Committee and in the Employee Reward and Punishment Review Committee.



Union Members

Membership rate %
Unit: Persons



○ Pursuit of Labor Rights and Benefits

The Union pursues labor rights and benefits with rational and peaceful means, including employer-employee meetings, seminars with directors, supervisors, and management, and collective bargaining. Protests or litigations were only used in rare situations. In 2015, no major employer-employee dispute was reported.

○ External Exchange and Cooperation

The Union has exchanged with and visited domestic and international trade unions on a regular basis and engaged in frequent exchange with leading domestic labor unions. The Union has participated in the Labor Day Parade organized by the Taiwan Confederation of Trade Unions in northern Taiwan many times to express concern and to speak for workers.

Oct. 2nd, 2015, Board of councilors of CSC Labor Union visited the president of Legislative Yuan and legislators asking to veto the budget of selling CSC's stocks of government to protect the right and interests of employees and shareholders.

8.3. Occupational Safety and Health

8.3.1. Principles and Management

○ CSC Safety Culture & Intrinsic Safety

CSC Safety Culture

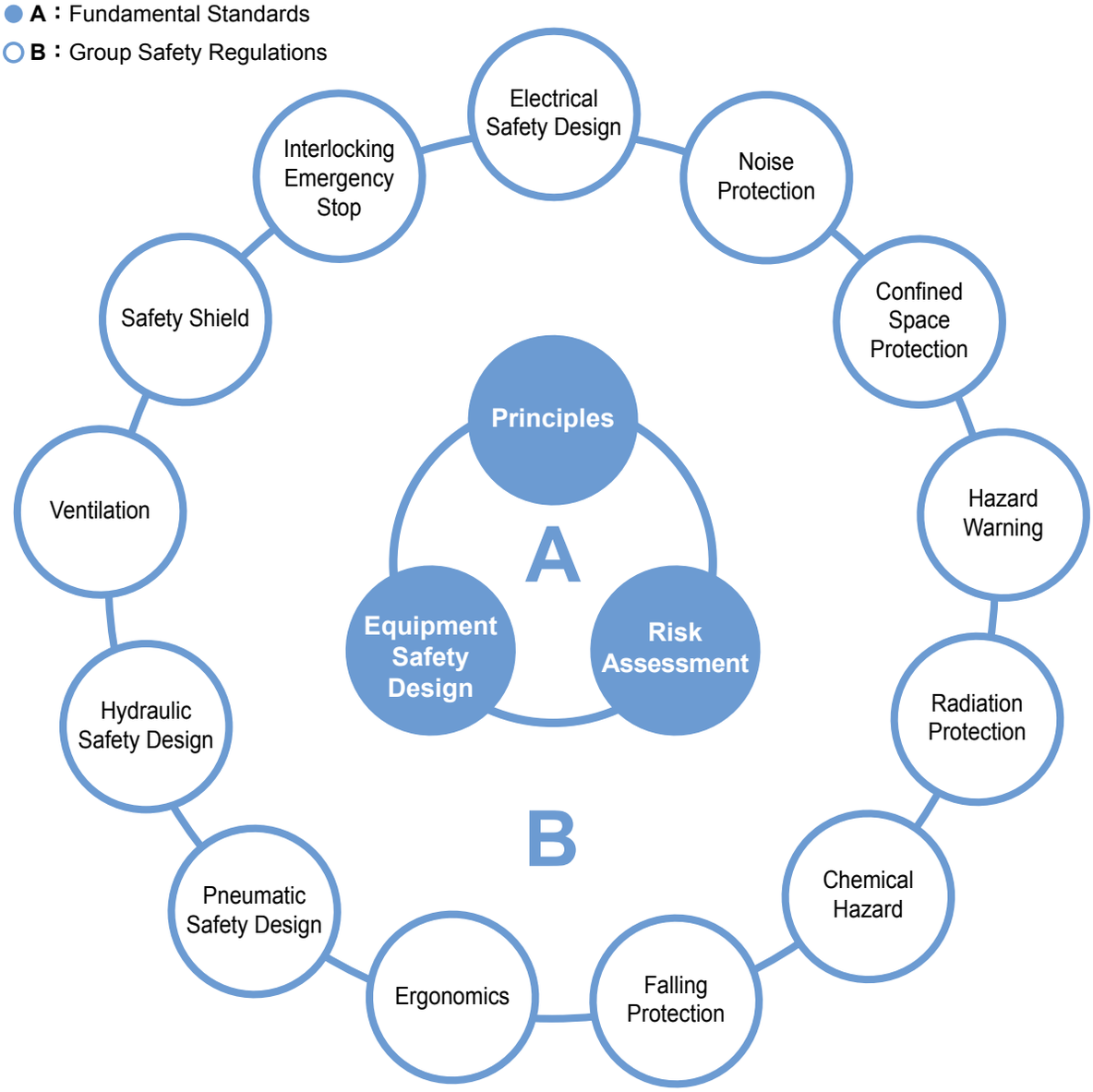
Safety culture is a multi-oriented concept, must learn to be analyzed from different aspects. CSC's safety culture composed of three aspects, including Policy, Management and Individuals, as described below:

Policy	Safety policy statement, management organization, and resource provision.
Management	Building the corporate system framework with responsibility, control of safe practices, licenses and training, rewards and punishment, adults, improvement results, and promotion of safety concerns plans.
Individuals	Changing employee safety concept and improving personal safety culture throughwith training/ education, employee involvement, safety concerns, health concerns, and two-way communications

Intrinsic Safety

Workplace safety is essential to ensure worker safety. To implement and improve equipment intrinsic safety, CSC established facility safety guidelines with reference to domestic and international standards, including ISO standards for machinery safety, IEC specifications, European standards (EN), and Chinese National Standards (CNS). These facility safety guidelines aim to identify hazards and assess risks. When planning and designing equipment, basic safety design principles, relevant safety conditions, and safety devices serve as the reference for CSC to discuss equipment safety with equipment suppliers

● **A**：Fundamental Standards
○ **B**：Group Safety Regulations



○ ESH Policy

Given that environmental management is crucial to safety and health management, CSC combined Environmental Management System (EMS) with OHSAS 18001 into the CSC ESH Management System.

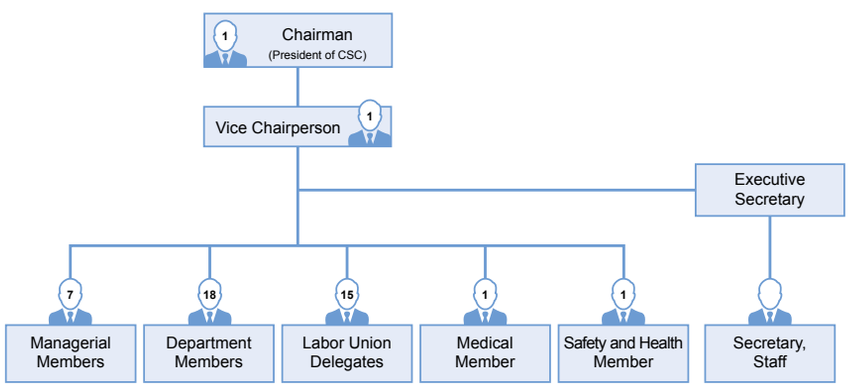
Care of Life	Respect life and practice environmental protection, safety, and health management to prevent occupational injury and illness and promote employee health
Risk Management	Assess risks and environment aspects and reinforce risk control and pollution prevention.
Training & Communication	Educate employees with ESH concepts, establish a self-motivated culture, encourage involvement, and strengthen communication with stakeholders.
Legal Compliance	Enforce the identification and execution of legal requirements and strengthen correction and prevention functions.
Continual Improvement	Promote zero incident, energy conservation, and emission reduction, improve ESH performance, and pursue sustainable operation.

Safety and Health Management System

For continual improvement regarding system certification requirements, the occupational safety and health management system (OSHMS) was introduced in 2000, OHSAS 18001 certification was obtained in 2002, and TOSHMS certification was obtained in 2008. In 2015, the internal audit of the TOSHMS/OHSAS 18001 system was completed in Mar. with no nonconformity and 64 recommendations. Audited Units took corrective and preventive actions. The external audit by the Bureau of Standards, Metrology & Inspection, was completed in July 2015 with continual certification.

Occupational Safety and Health Committee

CSC Occupational Safety and Health (OSH) Committee is set for effective discussion and solution. CSC President serves as the concurrent Chairperson, Executive VP serves as the concurrent Vice Chairperson, and 15 representatives of the CSC Labor Union account for 35 % of all committee members. The Committee holds bi-monthly meetings and reports OSH management performances at the shareholder meeting for public review.



Certification for National Safety Week Activity by Ministry of Labor

Safety and Health Targets

Performance in 2016

Targets in 2016

Countermeasure

- Promote safety Creative Development Activities (CDA)
- Request every department to interview with employee who violated transportation regulation or had accidents.
- Propagate transportation safety monthly and enforce clampdown on violating transportation regulation.
- Plan on-site safety diagnoses for sections with priority for those having 2 or more accidents within a half year and one of them is disabling.

Management of Change (MOC)

Accidents often occur when there are significant changes in personnel and working conditions; therefore, it is crucial to establish a Change Management System to ensure that every change goes through a hazard identification and risk assessment process. Appropriate measures are implemented at CSC according to the results of the assessment to ensure the safety of all manufacturing processes, activities and services.

8.3.2. Training, Education, and Advocating

As accidents are prone to happen when there is a major change of working condition, change management is crucial. The CSC change management focuses on hazards identification and risks assessment prior to making a change and necessary precautions to ensure safety of all processes, activities, and services. Since most accidents occur out of human negligence, how to train employees to prevent avoid negligence at work has become the focus of the CSC training and education. The computerized safety and health training management system allows instant updates of data and online enquiries, thus making safety and health training control and audit more effective. In addition, bottom-up SJP revision activities are held for employees and contractors. Discussions for revisions complements combined with zero incident call recognition training are to elevate capability of hazard identification and for the ultimate goal of occupational accident prevention.

Industrial safety trainings in 2015

Description of classes	Classes	Persons
On-job training for Occupational Safety and Health legal certificate	78 (13 types)	2,542
Radiation protection and detection	4	284
Contractors' personnel training for pass application	30	1,301
Physical Safety Training	199 (8 types)	2,253
Transportation Safety Training	6	228
TOSHMS/OHSAS 18001 Lead Auditor Training	1	26
TOSHMS/OHSAS 18001 Internal Auditor Training	2	60
Lectures from Labor Standards Inspection Office	5	527
Hot work fire watch training	4	79

8.3.3. Environment Inspection and Accident-Prevention

Work Environment Inspection

By the Regulations for Implementing Work Environment Monitoring, every unit identifies health hazards in the work environment and assesses risks. High risks are high priorities of environmental monitoring. For hazards exceeding control thresholds, improvement and follow-up measures should be submitted to ensure the acceptable risk of personnel exposure.

In 2015, work environment inspection was completed on 3,314 testing points (including areas and personnel), as in the inspection plan. Subjects for inspection include noise, wet bulb globe temperature (WBGT) index, carbon dioxide, chemical substances, and dust.

Emergency Drills

To improve emergence response and to prevent personnel injury, property loss, and environmental impact, each plant organizes emergency drills designed for their specific needs. In 2015, 5 enterprise-wide emergency drills were held. No severe leak incident was reported since 2010.

Emergency Drills in 2015	Date
Emergency drill for liquid ammonia leak of sinter plants	11 Nov.
Emergency drill for COG holder leak	21 Apr.
Utilities failure emergency drill	10 Feb.
Emergency drill for #1 LDG holder leak	30 Oct.
Emergency drill for #2 LDG holder leak	22 Oct.



8.3.4. Abnormally Control and Prevention

○ Over Time Work Control

For health reasons, employees should not work over 12 hours a day, including regular and overtime work. Overtime should not exceed 46 hours each month, except for special needs such as authorized emergency repair . Nonetheless, sufficient rest should be arranged afterwards.

○ Disaster Prevention Plan

Meeting the TOSHMS requirements of the Council of Labor Affairs, CSC sets safety targets and adopts PDCA steps to achieve comprehensive safety and health management and zero-disaster work environment.

○ Safety Observation and Audit

For early discovery and correction of unsafe work behavior and improvement of work environment and equipment, site managers are asked to patrol work sites regularly. Employees, contractors, and the work environment are reviewed with reference to the 5-step procedure of “decide, stop, observe, act, and report” and subject to timely correction and encouragement. For safety violations, employees and contractors are requested of communication and immediate correction without affecting operation safety. In 2014, safety observation and audit of site managers (including site inspection) totaled 29,627 times.

○ Safety Concerns

To raise the awareness and ability for safety and health awareness and ability, CSC encourages all employees and contractors to communicate with and help others. Care for the mental health of workers is also an important element in CSC safety concerns. For employees or contractors who seem anxious, slow in response, or drunk, the site manager is responsible for taking care by suspending their work or sending them to medical attention according to relevant regulations.

○ Near Misses

After a near miss occurs, the responsible unit, personnel, or contractor should register the near miss at Near Miss Report Registration on the CSC EIP website. After the approval of section or plant manager, the case is referred to the Occupational Safety and Health Department for confirmation, documentation, publication, or announcement on the EIP. In 2014, a total of 1,408 near misses were reported. Potential hazards were reviewed and improved for prevention.

Item	2012	2013	2014	2015
Fall near misses	396	425	497	411
Crash near misses	242	261	271	234
Falling objects and collapse near misses	173	163	154	116
Commutation(traffic) near misses	184	150	158	208
Other near misses	292	282	328	293
Total near misses	1,287	1,281	1,408	1,262

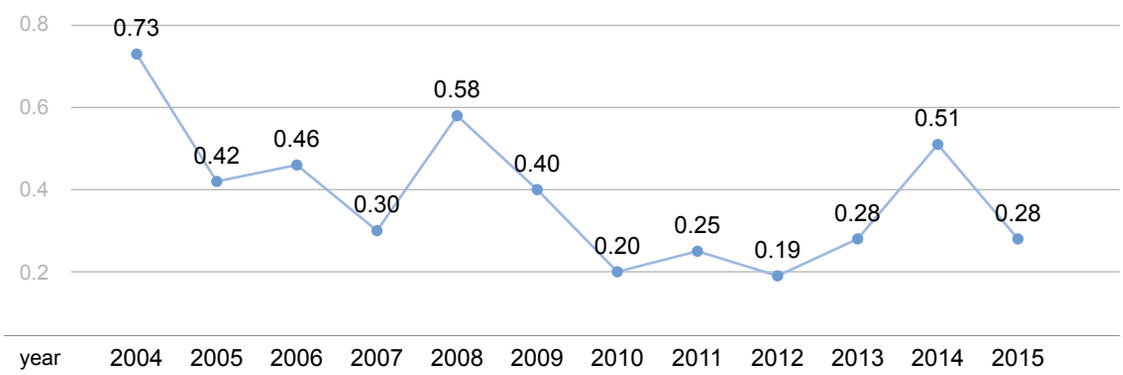
8.3.5. Absence and Disabling Injury

In 2015, 11 minor workplace injuries, 6 disabling injuries (no deaths), 8 minor commutation injuries, and 13 traffic-disabling injuries were reported. For employees and contractors of incident units, continual improvement measures include reinforced physical training, management by walking around, and occupational safety diagnosis, near miss reporting management, 5S self-management, self protection, mutual protection, and mutual supervision. Bottom-up occupational safety activities are arranged with basic-level employees or in collaboration with labor union team leaders. In addition, good management practices have significantly reduced personnel from exposure to health hazards. The implementation of work environment monitoring, special health examination and management, hazard training/education, use of personal protective equipment, and audit have minimized the rate of occupational illness. No occupational illness case was reported in the past five years.

Stats of Absent Rate	Work-related injuries		Sick Leave	
Gender	**Female**	**Male**	**Female**	**Male**
Number of absent days	0	1,028	728	10,897
Absent Rate (AR)	0.00	76.16	54.00	807.32
Absent Rate (AR)	76.16		861.32	
Absent Rate (AR)	937.48			

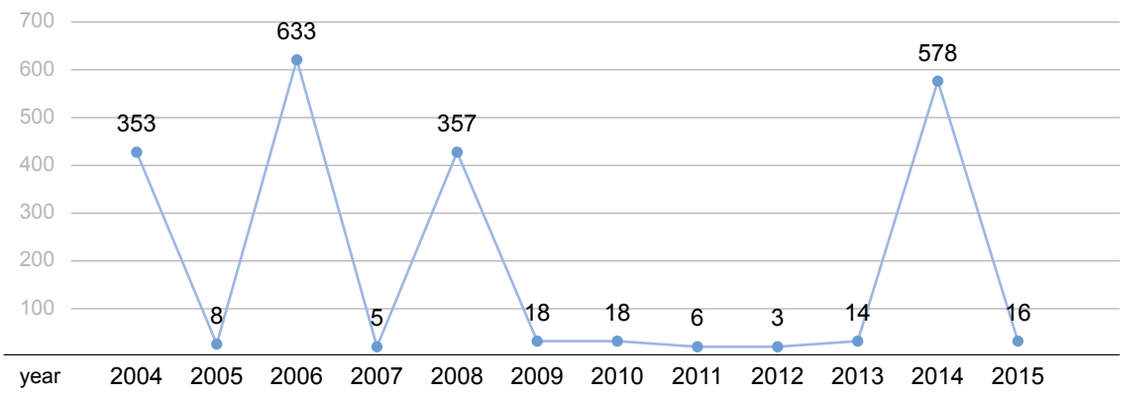
Note: Absent Rate (AR)= total absent days during the reports/ total working days during the reportsx200,000
Total real work hours in 2015 were 21,596,755 hour, which were 2,699,549 days

Employee Disabling Frequency Rate



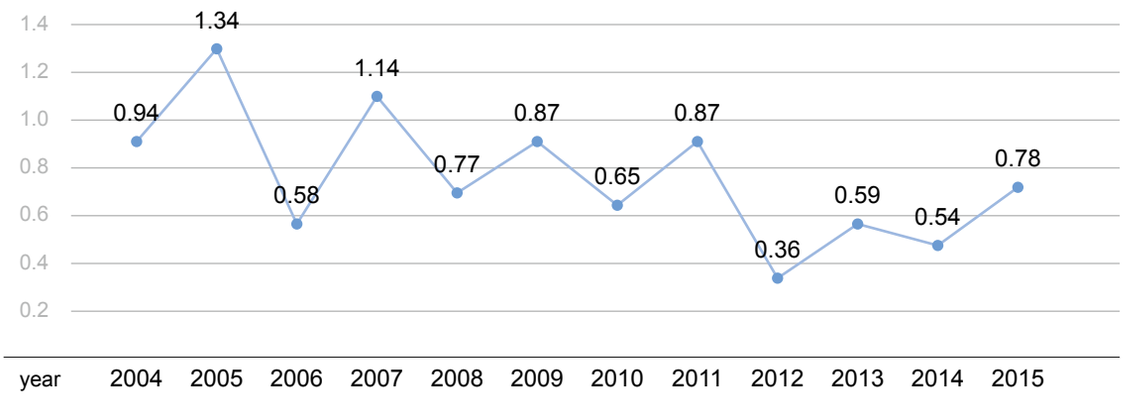
Note: Disabling Frequency Rate (F.R.) is the times of disabling per million work hours, and the formula is, disabling times x 1,000,000÷ total work hours during the year.

Employee Disabling Severity Rate



Note: Disabling Severity Rate (F.R.) is the times of disabling per million work hours, and the formula is, disabling times x 1,000,000÷ total work hours during the year.

Contractor Disabling Frequency Rate



Note: Disabling Frequency Rate (F.R.) is the times of disabling per million work hours, and the formula is, disabling times x 1,000,000÷total work hours during the time.

Employee Disabling injury statistics by gender in 2015

Gender	Male	Female
Count of disability	6	0
Total work time	21,000,206	596,549
Disabling Frequency Rate	0.29	0.00

Employee Disabling injury statistics by category in 2015

	Drop and falling	Inhalation/ poisoning/ anoxic	Compressed and pinched	Burning	Caught In	Electrified	Cuts and abrasions
Employee	1	0	2	2	0	0	0
Contractor	1	0	2	1	0	0	3

	Noise	Sprained	Impact	Fire and Explosion	Trans-portation	Objects falling
Employee	0	1	0	0	0	0
Contractor	0	1	2	0	4	2

○ Employee Commutation Traffic Accidents

To prevent traffic accidents during employee commute, CSC advocates traffic safety by promoting preventive driving, recommending public transport, and offering company shuffle buses. Employees who ride motorcycle to work are subject to conversation with their supervisor for traffic safety awareness. To eliminate traffic blind spots in the plant, it is requested that at least 5 traffic improvement plans are submitted each year.

8.3.6. Legal Compliance

The OHSAS 18001 and ISO 14001 management systems request company commitment to legal compliances and identification of relevant laws and regulations. CSC distributes relevant ESH legal requirements to relevant Units for identification of those applicable and for precautionary measures. In 2015 the Kaohsiung Labor Standards Inspection Office (KLSIO) conducted 54 in-plant inspections and issued fine for two cases of operation negligence.

	2011	2012	2013	2014	2015
Reported unit	KLSIO	none	KLSIO	KLSIO	KLSIO
Cases(Fine, NTD)	1 (60,000)	0	1 (60,000)	2 (120,000)	2 (120,000)

8.3.7. Employee Health Examination

○ Health Examination

CSC Infirmary is well-equipped and tended by medical professionals to provide employees with early diagnosis and treatment, and the medical fee is subsidized. CSC takes responsibility for health examination to all employees and medical advice to prevent critical illness, especially as employees age. For employees working in special environments, special health examinations are arranged for high temperature, noise, lead, dust, and organic and special chemicals. In 2015, 2,463 employees working in special environments received these examinations, there are two persons to be included in level 4 health management.

○ Care for employees' health

CSC's Clinic according to the results of health examinations reminds employees the key points to improve health and appoints experts to survey the working environment data to realize the dangerous factors and to propose training courses to prevent.

○ Health Management

Health Management Center of CSC Infirmary is designed specifically for employees and contractor employees. Based on health examination results, it reminds employees of health improvement targets every year. Experts are also hired to conduct research on health examination results and work environment tests to identify hazard factors and make preventive training plans. Various health activities were organized in 2015. For the local community, spiritual growth talks are organized by the CSC Group Education Foundation, and training activities on critical diseases and risk control are held.

Major Activities in 2015	
Employees and contractors' personnel	They are the major service objects group. In 2015 there were 18 health promoting activities such as physical fitness, lectures, bone density inspections, etc., with 3,567 person-times participating. In that 465 people joined weight reducing classes with 898.2 kg reduced, 652 person-times participated 14 sessions of health lectures.
Community	In 2015, besides held mind developing conferences together with CSC Group Education Foundation, CSC held educational lectures of major diseases, infectious disease and risk control for employees and their family, and local community to participated.

Participants of Health Promotion Activities				
Item	**2012**	**2013**	**2014**	**2015**
Physical Fitness	616	549	606	1,382
Talks	1,142	1,610	1,246	800
Bone Density Test	913	604	531	506
Remote nursing-care Project	133	–	36	36
Female Employee Health Project	694	395	409	482
Precision Body Fat Analyzer	806	600	515	487
Others (health concerns, health promotion, cardiovascular disease, and blood donation)	–	2,035	2,057	1,507
Total	4,304	5,793	5,400	5,200

8.4. Career Development and Life Planning

8.4.1. Training Framework

With over 5,800 senior employees to retire in the next 15 years, the CSC workforce development is focused on corporate culture, knowledge management, and trainings.

Unit:man/hours	Female	Male	Average people per hour every level
Managers*	-	40.05	40.05
Management job(1st level)	25.00	39.05	38.62
Management job (middle-level)	32.25	38.98	38.95
Management job(4th level)	107.00	40.86	41.39
Professional job	26.34	26.07	26.09
Basic level	14.33	21.04	20.94
Average training hours/person by gender	23.91	24.65	24.63

* There was no female top management in CSC in 2015

○ Talent Cultivation

CSC Talent Cultivation and Development Framework is constructed with 6 major building blocks. New employees are subject to trainings on human rights, and all employees are subject to continuous career development trainings designed for organizational and individual needs. Performances and duty of all employees are examined in year-end performance evaluations. In 2015, the average physical and online training per employee was 28.5 hours and 2.4 hours respectively totaling 316,179 hours with 1,676 hours of humane right training.

New hire training

1 Sales person training (CSC Group)
2 Steel simulation competition
3 Professinal technological training
4 Basic training(CSC Group)

General education

1 Seminar
2 Technology lectures
3 Health lectures
4 Cultural lectures

Training of group managerial talents

1 Managerial employee
2 Mid-management staff
3 Bass management staff
4 Reseave personal

e-Learning

1 Application of computer
2 Language learning
3 Professional knowledge
4 Management knowledge
5 Corporate Culture

Training of group expatriates

1 Experience exchange with returned expatriates
2 Adoption of cross culture
3 Local language
4 Corporate Culturel

Professional and quality control training

1 Creative agitation
2 6-σ
3 CDA quality control circle
4 Professional knowledge

○ New Employee Cultivation and Experience Inheritance

The CSC workforce planning is constructed based on the demand of company development strategy, investment plans, and employee retirement/resignation status. Short-, medium-, and long-term plans are made. Successor planning is also constructed based on periodic inventories of higher-level workforce. For new employees, amounting 1,000 in recent years, trainings include the mentorship program, knowledge management, and various courses. In addition, CSC built the knowledge management system for systematic inventory, inheritance, and innovation of workforce and documents as a precaution for the future retirement peak.

New Employee Training	CSC Corporate Culture Course (Including CSR programs)	479 participants
	Fundamental Training	2.5 day off-plant collective training on CSC basics
	Sales Personnel Training	Introduction to CSC steel product applications at downstream industries
	Professional Skill Training	Training on mechanical and electrical engineering and maintenance for steelmaking practices
	Steel Vitality Camp	Online steelmaking simulation competition organized by the Steel University of worldsteel. There were 120 trainees and 48 instructors to participated in 2015 for cultivating colleagues selfless sharing and team spirit of cooperation.
e-Learning	Knowledge Map and Inheritance	Domestic and overseas continuing education and management/technology best practice knowledge-sharing forum led by high-level managers every Apr. and knowledge -sharing with other enterprises. 5,085 knowledge documents and 116 e-Learning courses were constructed in 2015.
	Knowledge Community	To reinforce knowledge sharing through discussions in various fields. 82 knowledge communities were established in 2015.
	Successor Training Program and Mentorship System	To maintain organizational core competitiveness, develop sharing culture, stimulate learning enthusiasm, and foster organizational learning. CSC was awarded the Workforce Innovation Award and Outstanding Enterprise Learning Network Award .

○ Group Management Staff Training

Group management trainings for production, R&D, technology, management, and foreign language respond to the needs of diversified and international operation strategies. In 2014, 81 employees were send for courses at overseas academic institutions and enterprises, and employees were selected to receive continuing education in domestic universities.

High-level managers	Overseas short-term business management studying (in cooperation with the London Business School & Columbia University)
	High-level civilian cultvating project (National Civil Service College)
	Humanities Lecture Series
Mid-level managers	CSC Group Mid-level Managers Management Course (in collaboration with NCKU, NSYSU)
	Instructor cultivation of Management Training Program for Mid-level managers (China Productivity Center)
	Courses by internal instructor on management skills and management talent evaluation
Basic level	Courses on leadership, communication , coordination, systematic thinking, and conflict management
	Practical mechanical and electrical techniques
	Courses by mid-level managers on operation status and corporate culture

8.4.2. Expatriates Training

○ Work Experience and Living Culture Workshops

CSC has set up rolling plants in Vietnam and India. For the expatriates to learn local languages and understand local cultures, CSC organized work experience and living culture workshops.

○ Training for Directors and Supervisors for CSC and subsidiary companies

In compliance with Directions for the Implementation of Continuing Education for Directors and Supervisors of TWSE Listed and GTSM Listed Companies, CSC organizes three hours of advanced management training every year. Trainees include CSC directors, supervisors, and Division VPs, reinvested companies directors and supervisors, and relevant personnel in Group affiants. And often send training information to the directors and supervisors. Depended on individual needs to enroll and born the cost by CSC.

Training for Directors and Supervisors of CSC in 2015

Title	Name	Description	Hours
Chairman	J.C. Tsou	Business judgment vs securities fraud, false information and embezzlement	3.0
Chairman	J.Y. Sung	Business judgment vs securities fraud, false information and embezzlement	3.0
		Blue ocean of the mind -- password to happiness enterprise	3.0
Director	M.J. Liou	The operation of boards of directors and the effectiveness of its resolution	3.0
		Examples of legal risks for cross strait investment	3.0
Director	J.C. Shen	Trend of internal control and audit	3.0
Director	H.N. Lin	Business judgment vs securities fraud, false information and embezzlement	3.0
		Blue ocean of the mind -- password to happiness enterprise	3.0
Director	S.C. Wang	Business judgment vs securities fraud, false information and embezzlement	3.0
		Blue ocean of the mind -- password to happiness enterprise	3.0

Title	Name	Description	Hours
Director	J.G. Liu	Business judgment vs securities fraud, false information and embezzlement	3.0
		Blue ocean of the mind -- password to happiness enterprise	3.0
Independent Director	S.Y. Lee	Blue ocean of the mind -- password to happiness enterprise	3.0
		Blue ocean of the mind -- From regulation complience to gaining money the right way	3.0
Independent Director	J.E.Chang	The operation of boards of directors and the effectiveness of its resolution Risk management and practice	6.0
Independent Director	T.P. Liang	Corporate Social Responsibility Report -- Present the value of sustainable operation	3.0
Supervisor	M.T. Su	The conference of ethical leaders in the listed companies	3.0
		Examples of insider trade	3.0
		The key operating points of corporate governance, board of directors and shareholders' meeting according to the amendment of Company Act	3.0
		The amendment of Company Act and its practice	3.0
		How to negotiate merges and acquisitions with examples	3.0
Supervisor	A. Deng	Corporate Social Responsibility Report -- Present the value of sustainable operation	3.0
		Won't directors and supervisors be claimed without crime?	3.0
		Accounting and tax practice for Taiwan business in mainland China	6.0
		The differences and key issues for iIntegrated housing and land taxation	3.0
		The practice of profits and reserve allotment turn to capital , dividends and staff compensation	3.0
		The contents and benefits of thecross-strait taxation agreement	3.0
		Scandals and legal risks	3.0

8.4.3. Employee Self-Management

Creative Development Activities (CDA) and Suggest System (SS)

CSC promotes CDA and SS to encourage base-level employees to voluntarily find and solve problems and to inspire suggestions for corporate policy.

Items	Contents	Benefits
CDA	597 activity circles; 5,610 participants (88.0 % of base-level employees); 501 completed topics	Over NTD 57 mi.
SS	Received 24,454 recommendations and accepted suggestions; 24,340 recommendations acceptances (acceptance rate 99.5 %)	Over NTD 80 mi.

9

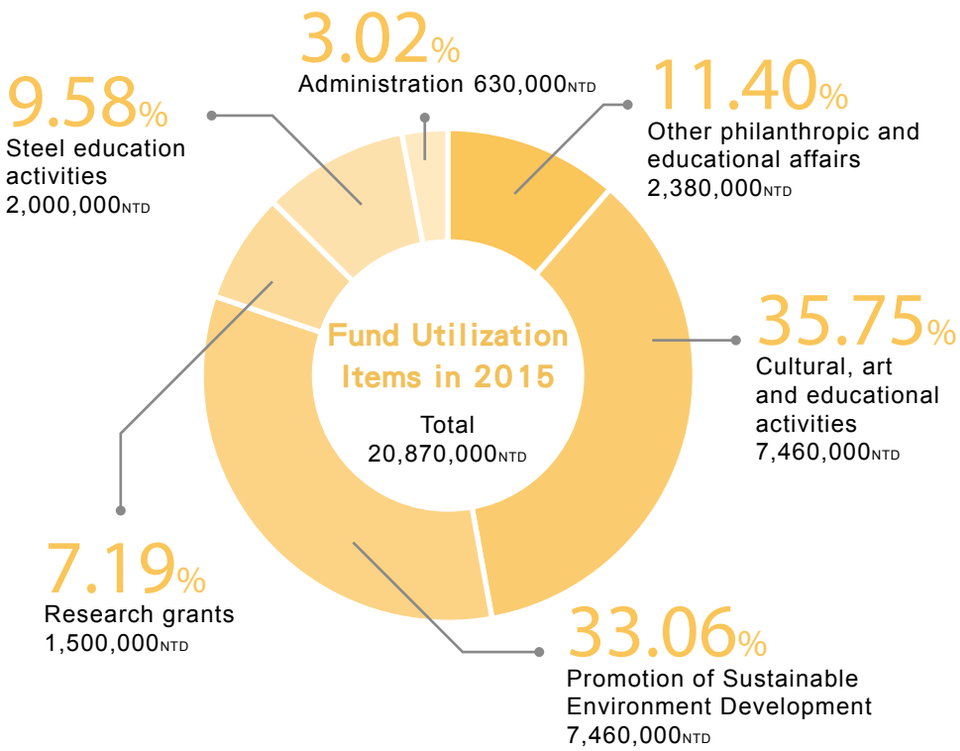
Society

9. Society

9.1. CSC Group Education Foundation

http://www.csc.com.tw/csc/gef

To promote steel-related education and talent cultivation, express concerns about ecology conservation, improve humanity spirit, and pursue sustainable development, the foundation develop and implement education activities and business upon "holistic social education".



○ Regular Work Items

Targeted Audience	Activity	Achievements in 2015	
Elementary Schools	Ecology Education Camp	3 sessions; over 100 students participated (accumulated more than 1500 participants)	Co-organized the 9th ecology education camp with Bao-shan elementary schooxl. Ecology observations, plant searches, and insects observations at nights were arranged.




Targeted Audience	Activity	Achievements in 2015	
Elementary Schools	Environmental Education Tour Bus	2 buses with 80 more volunteer workers; 57 tours with 55 school visits; more than 7,000 students participated.	CSC provides buses and the funding for operation. CSC Group Ed. Fdn. plotted the portable teaching instruments, including interactive experiments on carbon footprint, greenhouse effect instruction, and solar energy application.





Junior High Schools	Wanderer's Story Talk	2 sessions with more than 500 participants.	Co-organized with Cloud Gate Foundation to invite Shi-yi Yang and Sin-Je Wu, Wanderer instructors from Cloud Gate, giving speeches at Sipu and Tia-sha junior high schools to encourage students to walk out of school to learn and experience life, so as to find own direction of life.
Senior High (Vocational) Schools	e-week Popular Science Education Activity	3 sessions with more than 800 participants.	Co-organized the Kaohsiung Session with the IBM: With the topic "Philae landing boat", this program encouraged students to step out of the box and demonstrate team creativity by solving problems together.


	Humanistic and Social Talks	4 sessions with more than 1,500 participants	Co-organized with United Daily News and invited speakers to senior high schools in Kaohsiung City.
Colleges and Universities	CSC Camp	60 out of 180 applicants were accepted.	The 8th CSC Camp was organized under the name of "The Jackson of CSC". Visits on Stellar Tec. and CSBC, downstream of CSC, were arranged to attract students to engage in metal-related industries though edutainment.


Targeted Audience	Activity	Achievements in 2015	
General Public	Introductory Course of Steelmaking	About 200 enrollments	It is opened in National Cheng Kung Univ. and National Tsing Hua Univ. in the first semester of 2015. As well in the second semester, it is opened in National Taiwan Univ and National Sun Yat-sen Univ.
	Industrial Talent Training Project	About 60 enrollments	Continued to sponsor Department of Chemical and Materials Engineering (C&ME), National Univ. of Kaohsiung to offer courses about steel making technologies. Besides professors, the instructors are from CSC and downstream industries.
	Steelmaking Talent Scholarship	15 recipients	Scholarship recipients were named in November.
	Seminars and Conferences about Steelmaking and Environmental Technology	About 1,000 participants	Seminars on offshore marine steel structures, non-oriented electrical steel, manual tool innovation, hot stamping and auto parts weight reduction, fastener development, laser welding, construction steel structure, steel industry operational management, metallographic practices and analysis, and steel technology 2014. 9.1 Seminar of Steel use for manual tools Workshop of Metallography, Steel Industry Engineering and Technology Conference, Technology Exchange Conference for Electromagnetic Steel, Conference of Steel Technology in high Performance Steel Structure, etc.
	CSC Citizen Lecture	12 lectures; more than 3,000 participants	Invited experts from different fields to give lectures.  
	Spirit Growth Lectures	4 lectures; more than 1,000 participants	Co-organized with Teacher Chang Foundation to host lectures on spiritual growth and parenting.

Other Events in 2015

- World Island Youth Travelers: 30 employees of CSC and affiliates participated the nomination process in the World Island Youth Travelers.
- Science Magic Camp: Co-organized with the Creativity Center of Kaohsiung Education Bureau and the designer of teaching instruments of environmental education buses, Ci-ping Chao. About 50 teachers joined the teacher session and about 150 elementary students participated in three student sessions.
- Sponsored the KRTC to organize art and charitable activities to encourage citizens to take the KRTC.
- Sponsored Baroque community concert in CSC Group Building with about 200 people attended.
- Sponsored the Creativity Center of Kaohsiung Education Bureau to organize the “Creativity Sports Game”. Contents included creativitybuilding related activities in mathematics, language, and natural sciences. About 3,500 elementary and junior high school students and teachers participated in the event
- Sponsored 2015 Yushan sustainable forum held ‘Environmental Nanotechnology Symposium’.
- Sponsor wheelchair Concert: Co-organized with cellist Chen-Chieh Chang, with over 500 went to the concert.

9.2. Corporate Citizen

9.2.1. Principles

- **Proactivity and responsibility**

  Fulfills corporate responsibility for the safety, health, wages, benefits, human rights, and training of employees and contractors.

- **Local first**

  Emphasizes on local environments and safety, pays Kaohsiung City Government with business income tax and environmental protection fees, and promotes regional development.

- **Diversity**

  Tends to rights and benefits of shareholders, employees, contractors, local communities, and contribute to public policies and international affairs.

- **Accountability**

  Assumes social responsibility through Departments, CSC Labor Union, employee clubs, and CSC Group Education Foundation.

9.2.2. Diverse Social Involvement

CSC broadly engages in the society through diverse channels. Regular social involvements include:

Category	Responsible CSC Department	Work
Energy and environmental policies	Office of Energy and Environmental Affairs	Advice on energy and environmental regulation amendments.
		Advice on low-carbon economy, carbon credit policy, and industrial development of southern Taiwan
		Advice on carbon emission responsibility for maintaining fairness of international competition
Human rights and workforce development	Human Resources Department	Negotiation for decent work environment policies
		Share of knowledge
Safety and Health	Industrial Safety and Health Department	Prevention of occupational accidents and epidemic diseases
		Domestic and international exchanges
National and local public affairs	Public Affairs Department	Good-neighbor acts, social care, and emergency relief
		Engagement with congresspersons, government agencies, media, and opinion leaders
Social education	CSC Group Education Foundation	Educational activities regarding steelmaking and steel applications
		Cultural, arts, technology, and science educational activities sponsorship
Labor policy	CSC Labor Union	National labor rights, benefits, and welfare policies
		Exchanges, collaboration, and interactions with other union groups
Social concerns and cultural and arts activities	CSC, CSC Group Education Foundation, CSC Labor Union, and employee clubs	Emergency relieve and post-disaster reconstruction
		Care for underprivileged groups
		Environment protection
		Improvement of humanities and art literacy in Kaohsiung

9.2.3. Volunteer Groups

CSC employees actively volunteer for external organizations. The CSR Caring Club is registered at Kaohsiung City Social Welfare Bureau as a legal group under the name of “Kaohsiung City Charity Association” and has participated in various community activities, services, and reliefs.

9.2.4. Feedback to Society and Good-neighbor Acts

For environmental protection, CSC pays business income tax and air pollution fee to Kaohsiung City Government. CSC also implements various good-neighbor policies to build a better living environment and to maintain a good relationship with local communities.

Local Culture and Education

- Sponsors schools in Hsiaokang District for equipment renewal and assists with plantation and landscaping to mitigate global warming.
- For equipment renewal: Ming-yi Elementary School, Chun-Shan Junior High School, Siao Gang Senior High School
- For plantation and landscaping :Ganghe Elementary School, Siaogang Elementary School, Taiping Elementary School, Hanmin Elementary School, Huashan Elementary School
- Sponsors communities and social clubs in Hsiaokang District for various activities.
- Assists the district office in distributing aids to low-income families in Hsiaokang District on major festivals and for emergency relief.
- Offers extra points for candidates from Hsiaokang District in the CSC employee recruitment.
- Offers scholarships for academic achievements and to underprivileged schoolchildren in Hsiaokang District
- Organizes activities for underprivileged groups to foster public care.
- Hosts movie viewings every Saturday for the local community, opens sports facilities for locals, and invites the locals to join the CSC Anniversary Fair.
- CSC Kindergarten: Established by CSC Welfare Committee, the kindergarten accepts children of CSC employees and citizens living in Hsiaokang District.
- Organizes summer camps for elementary schoolchildren with priority acceptance for underprivileged students.
- Plans the “Steel Journey” fieldtrip for elementary schools in Hsiaokang District to improve the environmental and science literacy of students. A total of 13 elementary schools and Hsiaokang 1,500 6-graders participated in 2015.
- To celebrate Mother's Day and promote the virtues of filial piety, CSC invited about 600 children of 17 elementary and junior high school to participate in 2015 awarding ceremony for filial model recognition and scholarship for excellent grades .
- Assists in local cultural and arts activities. In 2015, CSC assisted Kaohsiung City Cultural Affairs Bureau in organizing the Lawn Concert during Kaohsiung Spring Art Festival.

Emergency Assistance and Post-disaster Reconstruction

To demonstrate empathy and philanthropy, CSC Group employees and CSC, the company donated NTD 10 million for Nepal's earthquake on April 25th, 2015 and another NTD 10 million for the Taiwan waterpark dust explosion on June 27th, 2015. In addition, CSC actively participates in post-Morakot reconstruction and assists affected residents to support themselves.

Award for contribution to reconstruction of aftermath of Typhoon Morakot from the President of Taiwan

Contract farming of organic white jade radish

Employees and family activities

Four activities were held in 2015 with 13,022 participants.

One-day Farmer Activity

Contract growing of organic rice and radish. Two activities were held in 2015 with 153 participants.

Special Events: Chun-Lin road sinking

On Sep. 18th, 2015 Chun-Lin road section near CSC's south boundary suffered a severe pavement collapse as a result of nearby underground construction, causing damage on CSC's fence, buildings, equipment and piping. CSC immediately set up an emergency center on the same day and organized maintenance teams from related department and contractors executing emergency repair to avoid further damages.

Considering that the interruption of transportation on Chun-Lin road would cause significant inconvenience for local residents, CSC provided part of its land to quickly construct a temporary two-way street for motorbike and also reconstructed road drainage system. The two-way street was made available on Nov. 15th, 2015 and this fully demonstrates CSC has empathy for local residents and responds promptly to their need.

The damages caused inside CSC were also recovered in time with well-organized manpower and meticulous planning to resume production at the earliest possible time.

Path of Temporary Motorbike Way

Temporary Motorbike Way

9.2.5. Services for Retired Employees

CSC Retirees Services Department was established on 25 Jan. 2011 to provide retirees services regarding health, finances, partner, leisure, and friendship. In addition, CSC Retirees LOHAS Society was established on 27 Feb. 2014 by CSC Group retirees for healthy lifestyles and social welfare activities.

Target	Item	Content	Achievements in 2015
Employees near Retirement	Retirees LOHAS Seminar	Assistance for life management after retirement	2 sessions
	Farewell Party		4 sessions
	Retiree Talent Pool	Utilization of specific expertise of retirees for CSC and subsidiaries	90 retirees were newly enlisted after evaluation and made the cumulative total to 351
Retired Employees	Health	Discounted health examination	40 retirees participated
	Finances	CSC Stock ownership Trust Committee for Retired Employees	16 newly participated and accumulated to 136
	Partner, Leisure and Friendship	Basic training for volunteer workers of plant tours	10 newly participated and accumulated to 38
		Professional training for environmental volunteer workers	16 newly participated and accumulated to 61 to join CSC Group Fdn. Environmental Education Bus Tours
		Monthly retiree birthday parties	12 sessions
		Invitations to CSC activities	Corporate anniversary and 4 Employees Recreation Activities
			2 The health lectures and 12 citizen lectures

9.2.6. Social Responsibility Expenditures

Item	Content	Amount in 2015	
Donations for institutes and associations	Sponsorship for seminars and conferences	NTD	3.48 mi.
Donations for philanthropy	For good-neighbor acts, local philanthropic activities, emergency relief, and post-disaster reconstruction.	NTD	48.34 mi.
	Donation of 4,783 shuttle bikes for Kaohsiung citizens to take KRT	NTD	11.95 mi.
Donations to CSC Group Education Foundation	For cultural and arts education, steel education, and steel talent cultivation	NTD	12.55 mi.
CSC Retirees Services Department	Retiree benefits reserve	NTD	15.59 mi.
	Personnel costs	NTD	8.57 mi.
	Administrative costs	NTD	2.68 mi.
	Subtotal	NTD	26.84 mi.
Total amount		NTD	103.16 mi.

CSC joins domestic and international associations and participates in their activities. To build diverse communication channels between CSC and others and to elevate the company competivity, CSC sponsors seminars, forums, and conferences held by those organizations. In 2014, the CSC donation for seminars and conference totaled NTD 3.825 mi. Of the CSC sponsored institutes and associations, those related to environmental protection, sustainable energy, and safety and health were as follows.

Sponsored Institute and Association	Sponsored Event
The Society of Wilderness	Earth Hour “one-hour light out” on Earth Day in 2015
Occupational Hygiene Association of Taiwan	Annual Conference and Occupational Health Seminar
Chinese Environmental Analytical Society	2015 Environmental Analytical Chemistry Conference
National University of Kaohsiung	East Asia Forum on Climate Change Adaptation and Disaster Management Law and Policy
SAE International Taipei Section	The National Colleges and Universities Environment-friendly and Energy-efficient Car Competition
Taiwan safety council	Safety Culture Forum
Taiwan Institute for Sustainable Energy (TAISE)	Operating cost
National Sun Yat-sen University	Cross-Strait Environmental Protection Conference - Kaohsiung Forum
National Association for the Promotion of Community Universities	2015 Climate and Energy World Citizen Summit
Taiwan Environmental Management Association	Waste seminars
National Sun Yat-sen University	International Conference on Emerging Contaminants
Taiwan Research Institute	Energy Industry Sustainable Development Seminar
Taiwan Public Health Association	International Symposium of Environmental Medicine
National Cheng-Kung University	International Symposium on Advanced Ceramics and Technology for Sustainable Energy Applications (ACTSEA)

9.2.7. Advice for Public Policies

CSC collates the experiences of advanced countries and hosts open forums with the industry, the government, and the academia. Through representative institutes and associations, CSC contributes advice on regulations and policies.

GHG Reduction and Management Act	· Collecting and studying carbon reduction acts in EU, Japan, Korea, and the U.K., inviting domestic experts to a forum for discussion, and building consensus to help the government rationalize the Act
	· It's identified the reason that the Act cannot pass is mainly due to poor communication. The CNFI commissioned professional consultants to call different stakeholders for discussion and communication to build consensus.
	· Participated in the legislation process via the CNFI and proposed the industry’s suggestions to the Act, which helped the Act to pass in the shortest time.
Environmental Impact Assessment (EIA) Act	· After a developing project acquires an EIA permit, it has to modify the permit whenever there is any change to the project. The process for the modification of the EIA permit is long and difficult and has affected competitiveness of relevant companies. To change this, CSC participated in several public hearings during 2014~2015 and supported the EPA’s reasonable modifications to the EIA Act which can help to simplify the process when the modification is good to the environment.
Water Pollution Control Act	· 47 articles of the Water Pollution Prevention Act were modified in 2015, while many regulations under this Act were also modified afterwards. CSC representing TSIIA participated in the public hearings of these regulations and provided suggestions to them.
Air Pollution Control Act	· CSC via the CNFI commissioned the ERM Consultancy to hold three round table forums to build consensus to modify the Control Standard for Soil Contamination. The government, the academia, the industries, and NGOs all joined the forum.
Air Pollution Control	· CSC proposed to the government to control GHGs via the GHG Reduction and Management Act instead of Air Pollution Control Act, after the GHG Reduction and Management Act was promulgated in July 2015.
	· The principles of cost effectiveness, economical feasibility, and lowest cost should be fully considered in the air pollution cap and trade scheme, to protect business competetiveness.
	· The member allocation of the “Supervision and Following Committee to the Air Pollution Cap and Trade Scheme” should consider the principle of uniformity between power and responsibility and assign proper amount of industrial representatives.
	· There are many concurrents between air pollution fee and energy tax. Only after cross-miniterial communication has determined the nature of carbon tax and the differences between the two can the government start to evaluate the tax rate of carbon tax.
The Kaohsiung City Selfgovernment Ordinance of Environment Management	· The Ordinance has been approved with modifications by the Exeutive Yuan in 2015, in which the designated air pollution reduction was removed and corrosion inspection of industrial pipelines was imposed.
	· Regarding corrosion inspection of industrial pipelines, because of unclear definition of industrial pipelines that could lead to unacceptable cost and difficulty for pipeline inspection, It was suggested that clear definition is required. The city government has provided positive feedback.

Carbon Credit Operation	· CSC aquired 8.76 million early reduction carbon credits in August 2014. In order to better manage these credits and establish rules and responsibilities for credits trading, the “CSC Operational Standard for Carbon Credits Trading and Management” was promulgated in August 2015. The process and responsible departments for carbon credits trading are determined.
	· CSC keeps communicating with the government in the determination of accounting rules for carbon credit trading.
Others	· CSC proposed suggestions in regulatory rationalization of “ambient air monitoring fee of special industrial parks” and “resudual heat and energy recovery” to the government in a dialogue conference between the industries and ministers on October 28 2015.

9.3. LOHAS Homeland

9.3.1. Environmental Impact Mitigation

○ Ecology conservation

CSC complies with EIA commitments in Linhai Industrial Park. In addition, CSC participates in River Watch of the KSPEB to patrol Yanshuigang River three times a week. In Nov. 2015, CSC was awarded with 2015 Outstanding River Watch by KSPEB.

○ Energy conservation and emissions reduction

For continual improvement and to meet with international standards, CSC reduces environmental impacts through target management and EMS operations. Outstanding performances have been made in air pollutant reduction, waste to resource, river protection, and dioxin prevention and control.

○ Public transportation sponsorship

To encourage employees to commute by KRT, CSC launched monthly business card in collaboration with KRT Co., for which CSC sponsors part of the fare, and provides free shuttle bus service to and from KRT R3 Hsiaokang Station. In 2015, 6,446 monthly business card were used and free shuttle bus services to Hsiaokang were provided to 65,979 persons. CSC presented a total of 10,084 MRT gift vouchers valued NT$ 200 for each one in 2015 factory celebration as well.

9.3.2. Eco-city Development

Eco-city is a global trend and one of the administrative foci of central and local governments in Taiwan. In recent years, the CSC eco-city development efforts include as follows:

- Donation shuttle bikes for Kaohsiung citizens to take KRT, so as to reduce emissions from commutation.
- Participation in reuse of waste energy and application of waste energy to processes to conserve energy, reduce emissions, and reduce pollutants.
- Expansion of the scope of CSC Group green procurement and employee green consumption to promote green product development in Kaohsiung.
- Promotion of smart grid applications in Linhai Industrial Park.
- Enlarging green procurement of CSC group and green consumption of employees to assist in the development of green products in Kaohsiung.
- Implementation of low-carbon life calculators for employees to record carbon footprint in daily lives and to promote emission reduction.

9.3.3. Afforestation and Greenery

CSC enriches the ecosystem with trees, shrubs, and vegetation for multilayer greening, and building roofs and walls are included for total greenery and beautification. Green area on the CSC plant site totals at 44.4 hectares, with a greening rate at 8.43%. These plants can reduce up to 5,116 CO2-e every year. CSC sponsors the greening and beautification of Kaohsiung Park near Kaohsiung airport and Chongshan 4th Road, Kaohsiung City.

Afforestation and Greenery

Item	2012	2013	2014	2015
Greening area (m^2)	441,742	439,652	443,871	444,236
Greening rate	8.38%	8.34%	8.42%	8.43%
Trees	16,783	16,704	16,831	16,692
Shrubs	1,476,435	1,510,052	1,596,710	1,655,660
Total of trees and shrubs	1,493,218	1,526,756	1,613,541	1,672,352
Trees and shrubs per hectare	2,833	2,897	3,062	3,173
Lawn (m^2)	173,724	174,161	175,270	180,066
Vegetation (m^2)	258,973	253,188	248,513	243,684
Resident and migratory birds (species)	75	78	80	80
CO_2e reduction (t/year)*	4,711	4,786	5,003	5,116

*Calculated based on "CO_2 Reduction Efficiency of CSC Greening Report" by Pingtung Univ. of Science and Technology, 2008

About the ficus tree in the CPDC parking lot concerned by media, it is found that the age of the tree is less than 60 not 250 as declared on papers. Because there are more and more tall buildings around which is not good for the tree, CSC will do its best for the tree according to laws.

9.3.4. Biodiversity

CSC is not located in or near ecological reserves, yet CSC has built an environment for biodiversity. CSC Bird watching Club has observed 3 mammal species, 5 reptile species, 1 reptiles species, 34 insect species, 1 annelid specy, 3 fish species and 80 bird species living on the CSC plant site. The efforts on biodiversity help to improve the ecosystem in Hsiaokang District.

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Appendix

10. Appendix

Appendix 1 Global Reporting Initiative (GRI) G4 Indicator Comparison Table

Indicator	Description	Disclosure And Assurance	Chapter	Section	Page	Remark
G4-1	Provide a statement from the most senior decision-maker of the organization about the relevance of sustainability to the organization and the organization's strategy for addressing sustainability.	V	1.1	Message from Top Management	2	
G4-2	Provide a description of key impacts, risks, and opportunities.	V	3.1	Sustainable Governance	18	
			3.2	CSR Management	28	
G4-3	Report the name of the organization.	V	1.4	About CSC	10	
G4-4	Report the primary brands, products, and services.	V	1.4	About CSC	12	
			5.1	Products and Applications	46	
G4-5	Report the location of the organization's headquarters.	V	1.4	About CSC	12	
G4-6	Report the number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report.	V	1.4	About CSC	12	
G4-7	Report the nature of ownership and legal form.	V	1.4	About CSC	12	
G4-8	Report the markets served.	V	1.4	About CSC	12	
G4-9	Report the scale of the organization.	V	1.4	About CSC	12	
G4-10	Report the total number of employees.	V	8.1	Recruitment and Retention	86	
G4-11	Report the percentage of total employees covered by collective bargaining agreements.	V	8.2	Human Rights and Benefits	92	
G4-12	Describe the organization's supply chain.	V	6.3	Resources and Energy	57	
			7.6	Supply Chain Management	79	
G4-13	Report any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain.	V	-	-	-	None
G4-14	Report whether and how the precautionary approach or principle is addressed by the organization.	V	3.1	Sustainable Governance	19	
			3.2	CSR Management	33	
G4-15	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses.	V	3.1	Sustainable Governance	18	
			3.2	CSR Management	25	
G4-16	List memberships of associations and national or international advocacy organizations in which the organization.	V	7.5	External Communication and Cooperation	78	
G4-17	a. List all entities included in the organization's consolidated financial statements or equivalent documents.	V	2.2	Data Range	15	
			3.2	CSR Management	25	
	b. Report whether any entity included in the organization's consolidated financial statements or quivalent documents is not covered by the report.	V	2.2	Data Range	15	
			3.2	CSR Management	25	
G4-18	a. Explain the process for defining the report content and the Aspect Boundaries.	V	3.2	CSR Management	25	
	b. Explain how the organization has implemented the Reporting Principles for Defining Report Content.	V	3.2	CSR Management	25	
G4-19	List all the material Aspects identified in the process for defining report content.	V	3.2	CSR Management	25	
G4-20	For each material Aspect, report the Aspect Boundary within the organization.	V	3.2	CSR Management	25	
G4-21	For each material Aspect, report the Aspect Boundary outside the organization.	V	3.2	CSR Management	25	
G4-22	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements.	V	-	-	-	None
G4-23	Report significant changes from previous reporting periods in the Scope and Aspect Boundaries.	V	3.2	CSR Management	25	
G4-24	Provide a list of stakeholder groups engaged by the organization.	V	3.2	CSR Management	25	
G4-25	Report the basis for identification and selection of stakeholders with whom to engage.	V	3.2	CSR Management	25	
G4-26	Report the organization's approach to stakeholder engagement.	V	3.2	CSR Management	25	
G4-27	Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns.	V	3.2	CSR Management	25	

Indicator	Description	Disclosure And Assurance	Chapter	Section	Page	Remark
G4-28	Reporting period for information provided.	V	2.2	Data Range	15	
G4-29	Date of most recent previous report.	V	2.4	Previous Reports	16	
G4-30	Reporting cycle.	V	2.4	Previous Reports	16	
G4-31	Provide the contact point for questions regarding the report or its contents.	V	2.4	Previous Reports	16	
G4-32	a. Report the "in accordance" option the organization has chosen.	V	2.3	Assurance	16	
	b. Report the GRI Content Index for the chosen option.		Appendix	Appendix 1	117	
	c. Report the reference to the External Assurance Report		Appendix	Appendix 5	126	
G4-33	a. Report the organization's policy and current practice with regard to seeking external assurance for the report.	V	2.1	Editing Principles	15	
	b. If not included in the assurance report accompanying the sustainability report, report the scope and basis of any external assurance provided.					
	c. Report the relationship between the organization and the assurance providers.		2.3	Assurance	16	
	d. Report whether the highest governance body or senior executives are involved					
G4-34	Report the governance structure of the organization, including committees of the highest governance body Identify any committees responsible for decision-making on economic, environmental and social impacts.	V	3.1	Sustainable Governance	20	
G4-56	Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics.	V	3.1	Sustainable Governance	22	

Disclosure on Management Approach (DMA)

Category – Sub-Category	Material Aspect	Disclosure and Assurance	Chapter	Section	Page	Remark
Economic	Economic Performance	V	4.1	Operation and Finance	36	
			6.5	Green Process	63	
	Indirect Economic Impacts	V	4.2	Industry Upgrade and Innovation	40	
			5.2	Quality Control	50	
			7.2	Upgrading Steel-using Industries	74	
Environmental	Materials	V	6.1	Vision	56	
			6.3	Resources and Energy	57	
	Energy	V	6.1	Vision	56	
			6.2	Framework of Environmental Management Organization	56	
	Water	V	6.5	Green Process	67	
	Biodiversity	V	9.3	LOHAS Homeland	115	
	Emissions	V	6.2	Framework of Environmental Management Organization	56	
			6.4	Climate Change and CDP	59	
			6.5	Green Process	63	
	Effluents and Waste	V	6.5	Green Process	67	
	Products and Services	V	3.1	Sustainable Governance	18	
			5.3	Green Products	52	
Social - Labor Practices and Decent Work	Employment	V	8.1	Recruitment and Retention	85	
		V	8.2	Human Rights and Benefits	89	
	Labor/Management Relations	V	8.2	Human Rights and Benefits	91	
	Occupational Health and Safety	V	7.6	Supply Chain Management	80	
			8.3	Occupational Safety and Health	93	
	Training and Education	V	8.4	Career Development and Life Planning	101	

Indicator	Description	Disclosure and Assurance	Chapter	Section	Page	Remark
Economic						
G4-EC1	Direct economic value generated and distributed from the organization.	V	4.1	Operation and Finance	36	
G4-EC2	Financial implications and other risks and opportunities on the organization's activities due to climate change.	V	6.4	Climate Change and CDP	59	
G4-EC3	Coverage of the organization's defined benefit plan obligations.	V	8.2	Human Rights and Benefits	89	
G4-EC4	Financial assistance received from government.	V	4.1	Operation and Finance	39	
G4-EC5	Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation.	V	8.2	Human Rights and Benefits	89	
G4-EC6	Proportion of senior management hired from the local community at significant locations of operation.	V	8.1	Recruitment and Retention	86	
G4-EC7	Development and impact of infrastructure investments and supporting services.	V	9.2	Corporate Citizen	109	
G4-EC8	Significant indirect economic impacts, including the extent of impacts.	V	3.1	Sustainable Governance	19	
G4-EC9	Proportion of spending on local suppliers at significant locations of operation.	V	7.6	Supply Chain Management	83	
Environment						
G4-EN1	The weight or volume of Materials used	V	6.3	Energy and Resources Usage	57	
G4-EN2	Percentage of materials using recycled raw materials.	V	6.6	By-products Recycling	58	
G4-EN3	Energy consumption within the organization.	V	6.3	Energy and Resources Usage	58	
G4-EN4	Energy consumption outside of the organization.	V	6.3	Energy and Resources Usage	59	
G4-EN5	Energy intensity	V	6.3	Energy and Resources Usage	59	
G4-EN6	Reduction of energy consumption	V	6.5	Green Process	62	
G4-EN7	Reductions in energy demands of products and services	V	6.5	Green Process	62	
G4-EN8	Total water withdrawn classified according to sources.	V	6.5	Green Process	67	
G4-EN9	Water sources significantly affected by withdrawal of water.	V	6.5	Green Process	67	
G4-EN10	Percentage and total volume of water recycled and reused.	V	6.5	Green Process	67	
G4-EN11	Operation sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	V	9.3	LOHAS Homeland	115	
G4-EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	V	9.3	LOHAS Homeland	115	
G4-EN13	Protected or restored habitats.	V	9.3	LOHAS Homeland	115	
G4-EN14	Explain the total number of species listed on IUCN Red List and national conservation list in the habitats affected by operations according to the level of extinction risk.	V	-	-	-	None
G4-EN15	Direct greenhouse gas (GHG) emission	V	6.5	Green Process	61	
G4-EN16	Indirect greenhouse gas (GHG) emission of energy	V	6.5	Green Process	61	
G4-EN17	Other indirect greenhouse gas emissions	V	6.5	Green Process	61	
G4-EN18	The intensity of Greenhouse gas emissions	V	6.5	Green Process	63	
G4-EN19	Reduction of greenhouse gas (GHG) emissions	V	6.5	Green Process	62	
G4-EN20	Emissions of ozone-depleting substances (ODS).	V	6.5	Green Process	66	
G4-EN21	NOx, SOx, and other significant air emissions.	V	6.5	Green Process	65	
G4-EN22	Total water discharge classified according to quality and destination.	V	6.5	Green Process	68	
G4-EN23	Total weight of waste classified according to type and disposal method.	V	6.5	Green Process	69	
G4-EN24	Total number and volume of significant spills.	V	6.8	Legal Compliance	72	
G4-EN25	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.	V	-	-	-	None
G4-EN26	Features, area, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff.	V	6.5	Green Process	68	
G4-EN27	Reduce the level of the impacts of products and service on the environment.	V	5.3	Green Products	51	
G4-EN28	Explain the percentage of products sold and their packaging materials recycled according to the category.	V	6.6	By-products Recycling	70	
G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	V	6.8	Legal Compliance	72	
G4-EN30	Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce.	V	6.5	Green Process	61	

Indicator	Description	Disclosure and Assurance	Chapter	Section	Page	Remark
G4-EN31	Explain the total environmental protection expenditures and investments according to type.	V	6.7	Environmental Accounting	71	
G4-EN32	Percentage of new suppliers that were screened using environmental criteria.	V	3.1	Sustainable Governance	18	
			7.6	Supply Chain Management	80	
G4-EN33	Significant actual and potential negative impacts for labor practices in the supply chain and actions taken	V	3.1	Sustainable Governance	18	
			7.6	Supply Chain Management	80	
G4-EN34	Number of grievances about environmental impacts filed, addressed, and solved through formal grievance mechanisms.	V	6.10	Environmental Grievances	72	
Social: Labor Practices and Decent Work						
G4-LA1	Total number and rates of new employee hired and employee resigning by age group, gender, and region.	V	8.1	Recruitment and Retention	86	
G4-LA2	Benefits provided to only full-time employees, classified by significant locations of operation.	V	8.2	Human Rights and Benefits	89	
G4-LA3	The rate of returning to work and retention after parental leave, by gender.	V	8.1	Recruitment and Retention	86	
G4-LA4	Minimum notice periods regarding operational changes, including whether there are specified in collective agreements.	V	8.1	Recruitment and Retention	88	
G4-LA5	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.	V	8.3	Occupational Safety and Health	93	
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities by region and by gender.	V	8.3	Occupational Safety and Health	98	
G4-LA7	Workers with high incidence or high risk of diseases related to their occupation.	V	8.3	Occupational Safety and Health	98	
G4-LA8	Health and safety topics covered in formal agreements with trade unions.	V	8.2	Human Rights and Benefits	91	
G4-LA9	Average hours of training per year per employee by gender and by employee category.	V	8.4	Career Development and Life Planning	101	
G4-LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	V	8.4	Career Development and Life Planning	101	
G4-LA11	Percentage of employees receiving regular performance and career development reviews by gender and by employee category	V	8.2	Human Rights and Benefits	89	
G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity.	V	8.1	Recruitment and Retention	88	
G4-LA13	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation.	V	8.2	Human Rights and Benefits	89	
G4-LA14	Percentage of new suppliers that were screened using labor practices criteria.	V	7.6	Supply Chain Management	80	
G4-LA15	Significant actual and potential negative impacts on labor practices in the supply chain and actions taken.	V	3.1	Sustainable Governance	18	
			7.6	Supply Chain Management	80	
G4-LA16	Number of grievances about labor practices filed, addressed, and resolved through formal grievance	V	8.2	Human Rights and Benefits	91	
Social: Human Rights						
G4-HR1	Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening.	V	7.6	Supply Chain Management	79	0
G4-HR2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	V	8.4	Career Development and Life Planning	101	
G4-HR3	Total number of incidents of discrimination and corrective actions taken.	V	8.1	Recruitment and Retention	86	0
G4-HR4	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights.	V	3.1	Sustainable Governance	18	
			7.6	Supply Chain Management	79	
G4-HR5	Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor.	V	3.1	Sustainable Governance	18	
			7.6	Supply Chain Management	79	
G4-HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor.	V	3.1	Sustainable Governance	18	
			7.6	Supply Chain Management	79	
G4-HR7	Percentage of security personnel trained in the organization's human rights policies or procedures that are relevant to operations.	V	-	-	-	100%
G4-HR8	Total number of incidents of violations involving rights of aborigines and actions taken.	V	-	-	-	0

Indicator	Description	Disclosure and Assurance	Chapter	Section	Page	Remark
G4-HR9	Total number and percentage of operations that have been subject to human rights reviews or impact assessments.	V	3.1	Sustainable Governance	18	0
			7.6	Supply Chain Management	79	
G4-HR10	Percentage of new suppliers that were screened using human rights criteria.	V	3.1	Sustainable Governance	18	0
			7.6	Supply Chain Management	79	
G4-HR11	Significant actual and potential negative impacts on human rights in the supply chain and actions taken.	V	3.1	Sustainable Governance	18	None
			7.6	Supply Chain Management	79	
G4-HR12	Number of grievances about human rights filed, addressed, and resolved through formal grievance	V	8.2	Human Rights and Benefits	91	0

Social: Society

G4-SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs.	V	9.2	Corporate Citizen	106	
G4-SO2	Operations with significant actual and potential negative impacts on local communities.	V	9.3	LOHAS Homeland	114	
G4-SO3	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified.	V	3.1	Sustainable Governance	20	
G4-SO4	Communication and training on anti-corruption policies and procedures	V	3.1	Sustainable Governance	22	
G4-SO5	Confirmed incidents of corruption and actions taken	V	-	-	-	0
G4-SO6	Total value of political contributions by country and recipient/ beneficiary.	V	3.1	Sustainable Governance	20	
G4-SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.	V	7.1	Fair Trade	74	0
G4-SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.	V	8.3	Occupational Safety and Health	100	
G4-SO9	Percentage of new suppliers that were screened using criteria for impacts on society.	V	3.1	Sustainable Governance	18	0
			7.6	Supply Chain Management	79	
G4-SO10	Significant actual and potential negative impacts on society in the supply chain and actions taken.	V	3.1	Sustainable Governance	18	0
			7.6	Supply Chain Management	79	
G4-SO11	Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms.	V	3.1	Sustainable Governance	22	0

Social: Product Responsibility

G4-PR1	Percentage of significant product and service categories of which the impacts are assessed for improving health and safety.	V	5.3	Green Products	51	100%
G4-PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes.	V	-	-	-	0
G4-PR3	Type of product and service information required by the organization's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements.	V	-	-	-	100%
G4-PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.	V	-	-	-	0
G4-PR5	Results of surveys measuring customer satisfaction.	V	5.4	Optimization of Customer Service	54	
G4-PR6	Sale of banned or disputed products.	V	-	-	-	None
G4-PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications (including advertising, promotion, and sponsorship), by type of outcomes.	V	-	-	-	0
G4-PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	V	5.4	Optimization of Customer Service	54	0
G4-PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.	V	-	-	-	0

Mining and Metals Supplement

Indicator	Description	Disclosure and Assurance	Chapter	Section	Page	Remark
MM1	Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated.	V	-	-	-	Not located in protected areas or areas of high biodiversity value outside protected areas
MM2	The number and percentage of total sites identified as requiring biodiversity management plans according to stated criteria, and the number (percentage) of those sites with plans in place.	V	-	-	-	Not located in protected areas or areas of high biodiversity value outside protected areas
MM3	Total amounts of overburden, rock, tailings, and sludge and their associated risks.	V	-	-	-	This indicator is applicable to mining industry
MM4	Number of strikes and lock-outs exceeding one week's duration, by country.	V	-	-	-	No strikes or lock-outs
MM5	Total number of operations taking place in or adjacent to Indigenous Peoples' territories, and number and percentage of operations or sites where there are formal agreements with Indigenous Peoples' communities.	V	-	-	-	Not located in or close to the aboriginal areas
MM6	Number and description of significant disputes relating to land use, customary rights of local communities and Indigenous Peoples	V	-	-	-	Zero dispute
MM7	The extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communitiesand Indigenous Peoples, and the outcomes.	V	-	-	-	Not located in or close to the aboriginal areas, and no problems of land usage and rights invasion
MM8	Number (and percentage) or company operating sites where artisanal and small-scale mining (ASM) takes place on, or adjacent to, the site; the associated risks and the actions taken to manage and mitigate these risks.	V	-	-	-	Zero ASM
MM9	Sites where resettlements took place, the number of households resettled in each, and how their livelihoods were affected in the process.	V	-	-	-	No resettlement took place
MM10	Number and percentage of operations with closure plans.	V	-	-	-	No closure plan
MM11	Programs and progress relating to materials stewardship.	V	6.3	Resources and Energy	57	

Appendix 2 ISO 26000 Comparison Table

	Material Aspect	Disclosure	Chapter	Section	Page	Remark
Organizational Governance	Decision-making processes and structures	V	3.1	Sustainable Governance	18	
Human Rights	Due diligence	V	8.2	Human Rights and Benefits	89	
	Human right risk situations	V	8.2	Human Rights and Benefits	89	
	Avoidance of complicity	V	3.1	Sustainable Governance	20	
	Resolving grievances	V	8.2	Human Rights and Benefits	89	
	Discrimination and vulnerable groups	V	8.2	Human Rights and Benefits	89	
	Civil and political rights	V	8.2	Human Rights and Benefits	89	
	Economic, social and cultural rights	V	8.2	Human Rights and Benefits	89	
	Fundamental principles and rights at work	V	8.2	Human Rights and Benefits	89	
Labor Practices	Employment and employment relationships	V	8.2	Human Rights and Benefits	89	
	Conditions of work and social protection	V	8.2	Human Rights and Benefits	89	
	Social dialogue	V	8.2	Human Rights and Benefits	89	
	Health and safety at work	V	8.3	Occupational Safety and Health	93	
	Human development and training in the workplace	V	8.4	Career Development and Life Planning	101	
Environment	Prevention of pollution	V	6.5	Green Process	61	
	Sustainable resource use	V	6.5	Green Process	61	
		V	6.6	Byproduct Resourcization	70	
	Climate change mitigation and adaptation	V	6.4	Climate Change and CDP	59	
	Protection of the environment, biodiversity and restoration of natural habitats	V	9.3	LOHAS Homeland	114	
Fair Operating Practices	Anti-corruption	V	3.1	Sustainable Governance	18	
	Responsible political involvement	V	9.2	Corporate Citizen	109	
	Fair competition	V	7.1	Fair Trade	74	
	Promoting social responsibility in the value chain	V	7.6	Supply Chain Management	79	
	Respect for property rights	V	8.4	Career Development and Life Planning	101	
Consumer Issues	Fair marketing, factual and unbiased information and fair contractual practices	V	3.1	Sustainable Governance	18	
		V	7.1	Fair Trade	74	
	Protecting consumers' health and safety	V	5.3	Green Products	51	
	Sustainable consumption	V	5.3	Green Products	51	
	Consumer service, support, and complaint and dispute resolution	V	5.4	Optimization of Customer Service	53	
	Consumer data protection and privacy	V	5.4	Optimization of Customer Service	53	
	Access to essential services	V	5.4	Optimization of Customer Service	53	
	R&D efforts	V	5.4	Optimization of Customer Service	53	
Community Involvement and Development	Community involvement	V	9.2	Corporate Citizen	109	
	Education and culture	V	9.1	CSC Group Education Foundation	106	
	Employment creation and skills development	V	9.2	Corporate Citizen	109	
	Technology development and access	V	9.1	CSC Group Education Foundation	106	
	Wealth and income creation	V	9.3	LOHAS Homeland	114	
	Health	V	9.3	LOHAS Homeland	114	
	Social investment	V	9.2	Corporate Citizen	109	

Appendix 3 UN Global Compact

Category	Ten principles	Disclosure	Chapter		Page
Human Rights	Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights.	V	3.1	Sustainable Governance	18
			8.2	Human Rights and Benefits	89
	Principle 2: Make sure that they are not complicit in human rights abuses.	V	3.1	Sustainable Governance	18
			7.6	Supply Chain Management	79
Labour	Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	V	8.2	Human Rights and Benefits	89
	Principle 4: The elimination of all forms of forced and compulsory labour.	V	8.2	Human Rights and Benefits	89
	Principle 5: The effective abolition of child labour.	V	8.1	Recruitment and Retention	85
	Principle 6: The elimination of discrimination in respect of employment and occupation.	V	8.1	Recruitment and Retention	85
			8.2	Human Rights and Benefits	89
Environment	Principle 7: Businesses should support a precautionary approach to environmental challenges	V	6.1	Vision	56
	Principle 8: Undertake initiatives to promote greater environmental responsibility	V	6.1	Vision	56
	Principle 9: Encourage the development and diffusion of environmentally friendly technologies.	V	5.3	Green Products	51
Anti-Corruption	Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.	V	3.1	Sustainable Governance	18

Appendix 4 UN SDGs

	SDG	Target	Chapter	Page
Goal 1.	End poverty in all its forms everywhere	-	-	-
Goal 2.	End hunger, achieve food security and improved nutrition and promote sustainable agriculture	-	-	-
Goal 3.	Ensure healthy lives and promote well-being for all at all ages	3.4, 3.6	8.3 Occupational Safety and Health	93
Goal 4.	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	4.4	8.1 Recruitment and Retention	85
		4.7	9.1 CSC Group Education Foundation	106
Goal 5.	Achieve gender equality and empower all women and girls	5.1	8.1 Recruitment and Retention	85
		5.2	8.2 Human Rights and Benefits	89
Goal 6.	Ensure availability and sustainable management of water and sanitation for all	6.3, 6.4, 6.5	6.5 Green Process	61
Goal 7.	Ensure access to affordable, reliable, sustainable and modern energy for all	7.2	6.1 Vision	56
		7.3	6.5 Green Process	61
		7.a	4.2 Industry Upgrade and Innovation	39
Goal 8.	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	8.2	4.2 Industry Upgrade and Innovation 5.3 Green Products 7.2 Upgrading Steel-using Industries	39, 51, 74
		8.5, 8.6, 8.8	8.1 Recruitment and Retention	85
		8.7	8.1 Recruitment and Retention 7.6 Supply Chain Management	85, 79
Goal 9.	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	9.1	5.3.Green Products	51
		9.4	7.4 Green Partners	76
		9.5	4.2.Industry Upgrade and Innovation	39
Goal 10.	Reduce inequality within and among countries	-	-	-
Goal 11.	Make cities and human settlements inclusive, safe, resilient and sustainable	11.2	9.3 LOHAS Homeland	114
		11.3	6.9.Green Building	72
		11.6	6.5 Green Process	61
Goal 12.	Make cities and human settlements inclusive, safe, resilient and sustainable	12.2	6.3 Resources and Energy	57
		12.4, 12.5	6.5 Green Process 6.6 Byproduct Resourcization	61, 70
		12.6	2 About this Report	15
		12.8	9.1 CSC Group Education Foundation	106
Goal 13.	Take urgent action to combat climate change and its impacts	13.1, 13.2	6.4 Climate Change and CDP	59
		13.3	9.1 CSC Group Education Foundation	106
Goal 14.	Conserve and sustainably use the oceans, seas and marine resources for sustainable development	-	-	-
Goal 15.	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	15.a	9.3 LOHAS Homeland	114
Goal 16.	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	16.5	3.1 Sustainable Governance	18
Goal 17.	Strengthen the means of implementation and revitalize the global partnership for sustainable development	17.6	4.2 Industry Upgrade and Innovation 7.2 Upgrading Steelusing Industries 7.5 External Communication and Cooperation	39,74,78

INDEPENDENT ASSURANCE OPINION STATEMENT

2015 China Steel Corporation Corporate Sustainability Report

The British Standards Institution is independent to China Steel Corporation (hereafter referred to as CSC in this statement) and has no financial interest in the operation of CSC other than for the assessment and verification of the sustainability statements contained in this report.

This independent assurance opinion statement has been prepared for the stakeholders of CSC only for the purposes of verifying its statements relating to its sustainability, more particularly described in the Scope below. It was not prepared for any other purpose. The British Standards Institution will not, in providing this independent assurance opinion statement, accept or assume responsibility (legal or otherwise) or accept liability for or in connection with any other purpose for which it may be used, or to any person by whom the independent assurance opinion statement may be read.

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Any queries that may arise by virtue of this independent assurance opinion statement or matters relating to it should be addressed to CSC only.

Scope

The scope of engagement agreed upon with CSC includes the followings:

1. The assurance covers the whole report focused on systems and activities during the 2015 calendar year on the CSC headquarter and overseas office.
2. The evaluation of the nature and extent of the CSC's adherence to all three AA1000 AccountAbility Principles in this report as conducted in accordance with type 1 of AA1000AS (2008) assurance engagement and therefore, the information/data disclosed in the report is not verified through the verification process.

This statement was prepared in English and translated into Chinese for reference only.

Opinion Statement

We conclude that the 2015 CSC Corporate Sustainability Report (CSR) review provides a fair view of the CSC programmes and performances during 2015. We believe that the 2015 economic, social and environmental performance indicators are fairly represented.

Our work was carried out by a team of (CSR) report assurors in accordance with the AA1000 Assurance Standard (2008). We planned and performed this part of our work to obtain the necessary information and explanations we considered to provide sufficient evidence that CSC's description of their approach to AA1000 Assurance Standard and their self-declaration of 'in accordance' with the G4 Sustainability Reporting Guidelines: the Core option were fairly stated.

Methodology

Our work was designed to gather evidence on which to base our conclusion. We undertook the following activities:

- a top level review of issues raised by external parties that could be relevant to CSC's policies to provide a check on the appropriateness of statements made in the report
- discussion with managers and staffs on CSC's approach to stakeholder engagement. However, we had no direct contact with external stakeholders
- 20 interviews with staffs involved in sustainability management, report preparation and provision of report information were carried out
- review of key organizational developments
- review of the findings of internal audits
- review of supporting evidence for claims made in the reports
- an assessment of the company's reporting and management processes concerning this reporting against the principles of inclusivity, materiality and responsiveness as described in the AA1000 AccountAbility Principles Standard (2008)

Conclusions

A detailed review against the AA1000 AccountAbility Principles of Inclusivity, Materiality and Responsiveness as well as the GRI G4 guidelines is set out below:

Inclusivity

This report has reflected a fact that CSC has continually made a commitment to its stakeholders, as the participation of stakeholders has been conducted in developing and achieving an accountable and strategic response to sustainability. There are fair reporting and disclosures for economic, social and environmental information in this report, so that appropriate planning and target-setting can be supported. In our professional opinion the report covers the CSC's inclusivity issues.

Materiality

The CSC has established relative procedure in company level, as the issues which were identified by all departments have been prioritized according to the extent of impact and applicable criterion for sustainable development of company. Therefore, material issues were completely analyzed and the relative information of sustainable development was disclosed to enable its stakeholders to make informed judgments about the company's management and performance. In our professional opinion the report covers the CSC's material issues; however, the future report should be further enhanced by the following areas:

- Encouraging the inclusion for more diversified material issues to incorporate with current risk and opportunity analysis as for the further development of company's core strategy.

Responsiveness

CSC has implemented the practice to respond to the expectations and perceptions of its stakeholders. An Ethical Policy for the CSC is developed and provides the opportunity to further enhance the CSC's responsiveness to stakeholder concerns. In our professional opinion the report covers the CSC's responsiveness issues; however, the future report should be further enhanced by the following areas:

- Encouraging work towards a Type 2 of AA1000AS (2008) engagement with a view to providing the reliability of sustainability performance information that stakeholder concerns.

GRI-reporting

CSC provided us with their self declaration of 'in accordance' with the G4 Sustainability Reporting Guidelines: the Core option (at least one indicator related to each identified material Aspect). Based on our review, we confirm that social responsibility and sustainable development performance indicators with reference to the GRI Index are reported, partially reported or omitted. In our professional opinion the self declaration covers the CSC's social and sustainability issues; however, the future report will be improved by the following areas:

- Based on transparency principle, encouraging disclosure 'in accordance' with the GRI G4 Guidelines: the Comprehensive option in order to strengthen stakeholder's confidence.

Assurance level

The moderate level assurance provided is in accordance with AA1000 Assurance Standard (2008) in our review, as defined by the scope and methodology described in this statement.

Responsibility

This CSR report is the responsibility of the CSC's chairman as declared in his responsibility letter. Our responsibility is to provide an independent assurance opinion statement to stakeholders giving our professional opinion based on the scope and methodology described.

Competency and Independence

The assurance team was composed of Lead auditors and Carbon Footprint Verifiers experienced in Engineering sector, and trained in a range of sustainability, environmental and social standards including AA1000 AS, ISO14001, OHSAS18001, ISO14064 and ISO 9001. BSI is a leading global standards and assessment body founded in 1901. The assurance is carried out in line with the BSI Fair Trading Code of Practice.

For and on behalf of BSI:

Peter Pu
Managing Director BSI Taiwan
09 May, 2016

bsi.

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