CHINA STEEL

2012
CORPORATION SUSTAINABILITY REPORT

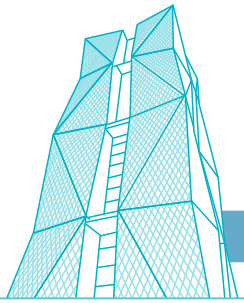
Dow Jones Sustainability Indexes
Member 2012/13

ROBECOSAM Sustainability Award
Sector Mover 2013

CLIMATE ACTION Member
worldsteel

2012

Corporation Sustainability Report



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Chairman of Board

Jo-Chi Tsou

China Steel Corporation (CSC) has abided by the highest standards to fulfill its Corporate Social Responsibility (CSR) due to its belief in CSR as the only way to benefit all stakeholders, to improve management efficiency and to contribute to social harmony. The philosophy of Corporate Social Responsibility inspires CSC to pursue the spirit of the Sustainable Development Charter of the World Steel Association and has established the following CSR policies：

- **Strengthen competitiveness and create profits for shareholders to ensure corporate sustainability;**
- **Meet the requirements of customers and enhance service advantages to create a situation for co-prosperity;**
- **Take care of employees' well-being and create a premium environment to facilitate the development of employees;**
- **Optimize the supply chain system and improve the communication system to share sustainable practices efficiently;**
- **Join professional organizations and provide a strong foundation for incorporating new techniques to upgrade domestic industries;**
- **Support governmental policies and engage in engineering construction to improve overall effectiveness;**
- **Be devoted to social harmony and assist in the promotion of public welfare efforts that benefit local communities;**
- **Enhance industrial safety practices to eliminate occupational hazards and embrace environmental protection policies to improve pollution-reduction performance;**
- **Persist in saving energy and reducing carbon programs, and make use of renewable energy to create a low-carbon society.**

Management efficiency, despite the turbulent market conditions in 2012, allowed CSC to earn a profit due to the efforts of its staff in outperforming other steel making competitors. In response to the economic downturn in 2012, CSC took various measures to reduce its

impact. In addition to reducing its production volume, CSC, at the same time, examined its structure and proposed improvement suggestions to widen product differentiation, enhance channel positioning, lower production cost, enhance industrial safety, plan development strategies, and implement relevant initiatives.

For environmental protection and energy saving, CSC was devoted to the reduction and elimination of not only traditional pollutants but also contributors to global warming and carbon emission. In 2011, CSC received an ISO-50001 Energy Management System certification and requested that its relevant affiliates follow its example to ensure the energy saving effectiveness of the entire CSC group. CSC also continues developing advanced and higher strength green steel material to provide to relevant steel makers and to reduce the carbon footprint of steel products. As water is a precious natural resource, the CSC has made great progress in both reducing water consumption for production and actively utilizing industrial and domestic waste water to reduce its water footprint.

For the promotion of social harmony, CSC pursues a "friendly relationship" with its neighbors and cooperates with the planning activities devoted to remaking Kaohsiung into a low carbon city as promoted by the Kaohsiung City Government and its efforts to build a better living environment. In March, 2012, CSC launched the "Environmental Education Shuttle Bus" services to elementary schools in remote areas of Kaohsiung to promote environmental education and help disadvantaged school students. It is hoped that with this hands-on experience in environmental education and energy saving, school students are able to improve their environmental awareness and scientific literacy. In February 2013, an additional larger Environmental Education Shuttle Bus joined the service.

In 2012, CSC, for the first time, joined the Down Jones Sustainability Index (DJSI) and was selected for inclusion in the Dow Jones Sustainability Asia Pacific Index. In the same year, CSC was qualified for the CDP's inclusion in the Taiwan leadership index. These honors indicate that CSC has been recognized by international competency organizations for its disclosure of sustainable development and response to climate change related information. From A to A+, CSC promises to continue fulfilling its CSR in each aspect and contributing to the sustainable development of society.

President

China Steel Corporation (CSC) is located in Linhai Industrial Park, Kaohsiung City. Occupying an area of 560 hectares, CSC is Taiwan's first integrated steel plant. It was founded in December 1971 as one of Taiwan's ten major infrastructure projects at that time.

CSC won the "National Quality Award" from the Executive Yuan (Cabinet) in 1991, and was honored with the "Distinguished Innovation Accomplishment Award" by the Ministry of Economic Affairs in 2009, signifying that CSC's innovative accomplishments have long been acknowledged by domestic industries, government organizations, academia and research establishments.

CSC has the courage to innovate, as well as the strong capability to put its innovations into practice. The Company's vision is: "We aspire to be a trustworthy steel company of global distinction that pursues growth, environmental protection, energy saving and value-innovation." CSC actively puts into practice its four corporate values of teamwork, entrepreneurial approach, down-to-earth nature and pursuit of innovation. With the application of the latest technology and the most modern management concepts, it continuously grows its core business in steel and promotes the establishment of "R&D alliances" and integration of related downstream industries to foster the healthy development of Taiwan's steel industry.

December 03, 1971
Establishment of CSC with Headquarters in Taipei City

September 16, 1972
Establishment of the Kaohsiung Office

September 15, 1975
Headquarters relocated to Kaohsiung and terminating the use of the Kaohsiung Office

July 1, 1978
Commencement of Phase 2 Construction Expansion

July 1, 1984
Completion of Phase 3 Construction Expansion

1971 | 1972 | 1974 | 1975 | 1977 | 1978 | 1982 | 1984 | 1988 | 1993

December 16, 1977
Completion of Phase 1 Plant Construction; annual crude steel capacity of CSC amounting to 1.5 million tons.

July 1, 1977
CSC becomes a state-owned enterprise

December 26, 1974
Listed by the Taiwan Stock Exchange Corporation (TWSE)

September 1, 1974
Commencement of Phase 1 Plant Construction

June 30, 1982
Completion of Phase 2 Construction Expansion; annual crude steel capacity of CSC amounting to 3.25 million tons.

April 30, 1988
Commencement of Phase 3 Construction Expansion; annual crude steel capacity of CSC amounting to 5.652 million tons.

July 15, 1993
Completion of Phase 4 Construction Expansion

CSC, at the same time, moves toward diversification and makes investments in steel-related businesses that extend to industrial materials, trade, transportation, engineering, finance, services, land development and state-of-the-art technology.

Management Philosophy

Contribute to social welfare
Realize practical effectiveness
Promote group power
Focus on humanized management

April 12, 1995
Privatization of CSC

May 31, 1997
Commencement of Phase 4 Construction Expansion; annual crude steel capacity of CSC amounting to 8.054 million tons.

June 2, 1998
Official Launch of CSC Group's Business Identification System

April 15, 2006
Improved production capacity due to upgraded and improved production equipment; annual crude steel capacity of CSC amounting to 9.86 million tons.

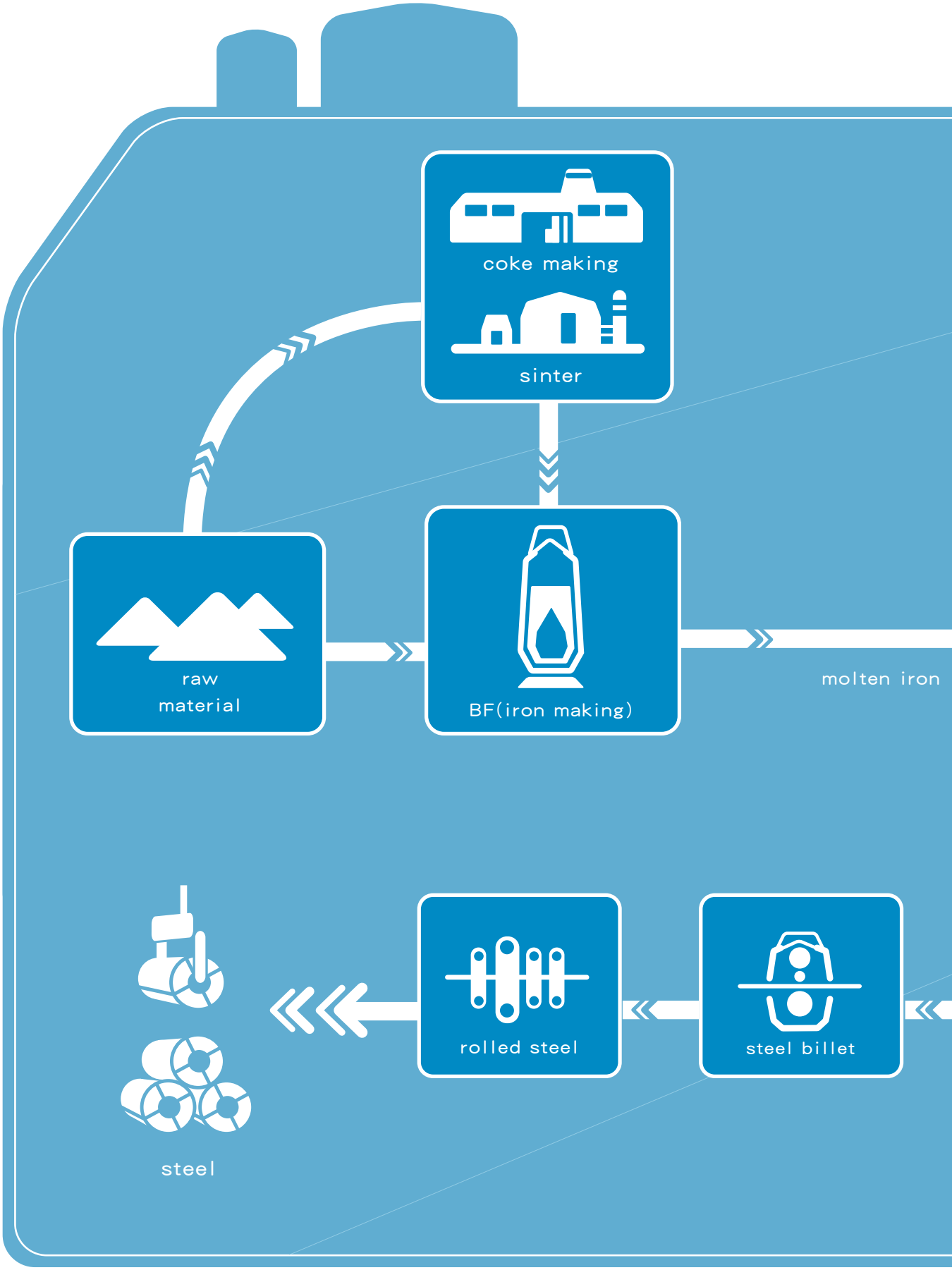
November 22, 2006
Construction Commencement of CSC Headquarters Building

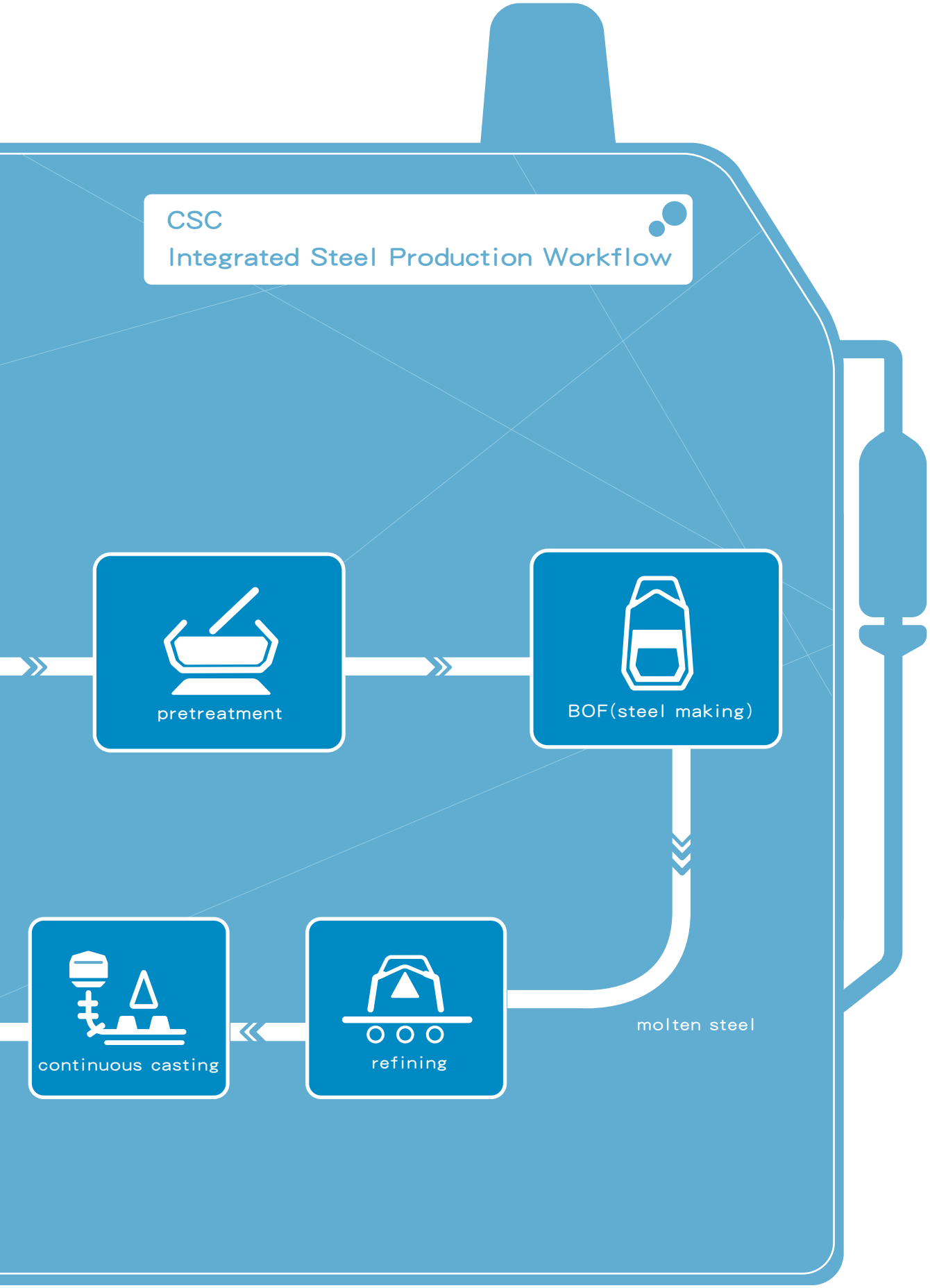
October 6, 2008
Acquires 100% ownership of Dragon Steel

June 30, 2010
Commencement of Phase 1, Term 2 Expansion Construction of Dragon Steel; annual crude steel capacity of CSC amounting to 13.36 million tons.

March 5, 2013
Commencement of Phase 2, Term 2 Expansion Construction of Dragon Steel; annual crude steel capacity of CSC amounting to 15.86 million tons.

1995 | 1997 | 1998 | 2006 | 2008 | 2010 | 2013


coke making
sinter
raw
material
BF(iron making)
molten iron
steel
rolled steel
steel billet


CSC
Integrated Steel Production Workflow
pretreatment
BOF(steel making)
molten steel
refining
continuous casting

Snapshot of CSR Data：

Corporate Governance	2010	2011	2012
Operating revenue (NTD：100 million)	2,391.87	2,403.76	2,071.93
Pre-tax earnings (NTD：100 million)	440.94	202.85	61.31
Pre-tax EPS (NTD：dollars)	3.29	1.42	0.38
Debt / Asset ratio	30%	32%	35%
Long-term capital / fixed assets ratio	179%	192%	185%
ROA ratio	11%	5%	2%
ROE ratio	15%	7%	2%
Income tax (NTD：1,000 dollars)	6,507,445	791,014	319,081
Net profit after tax (NTD：1,000 dollars)	37,586,826	19,493,679	5,811,490
Crude Steel production (ton)	9,582,450	10,243,750	9,142,751
Crude Steel production per employee (ton/man-year)	1,079	1,143	986
Investment credit of the year (NTD：1,000 dollars)	1,629,595	1,533,465	14,082

Energy and Environment	2010	2011	2012
Energy investment amount (NTD：100 million)	17.35	17.62	39.55
Energy cost / manufacturing cost ratio (%)	26.3	29.3	28.0
Self-produced electricity ratio (%)	56.0	56.5	52.1
GHGs emission intensity(CO_2e / ton of crude steel)	2.29	2.196	2.331
GHGs emission：Scope 1(CO_2e ton)	20,691,432	21,128,989	20,070,402
Scope 2(CO_2e ton)	1,325,496	1,371,359	1,243,282
NOx emission(ton)	10,184	9,573	8,948
SOx emission (ton)	11,743	11,165	9,932
VOCs emission (ton)	662	661	662
Particulate emission (ton)	3,431	3,811	3,428
Unit energy consumption of crude steel (MTCE/ ton of crude steel)	5,672	5537	5,719
Energy consumption(GWh)	63,200	65,951	60,799
Direct energy utilization (GJoule-coal, NG, gasoline and diesel, LSO)	234,225.3	242,898.2	225,881.4
Indirect energy use (GJoule－purchased electricity)	19,940.4	22,146.3	21,319.5
Replenishing volume of raw water(ten thousand tons)	5,200	5,269	4,832
Recycling rate of the water used for production(%)	97.9	98.2	98.3
Cycling volume of the water used for production(ten thousand tons)	237,632	280,190	278,065

Water intensity (cubic meter / ton of crude steel)	5.09	4.84	4.96
Output of byproducts (ten thousand tons - wet basis)	573.8	640.2	603.0
Output of hazardous waste (tons)	0.859	14.02	0.84
Number of environmental violation penalty / amount(NTD)	7/700,000	4/580,000	1/100,000

Social aspect	2010	2011	2012
Number of employees	9,147	9,478	9,814
Number of female employees	191	218	238
Total employee training hours (hours)	194,831	249,271	245,350
Total spending on employee training (NTD：10 million)	9.017	7.179	8.163
Disabled employee hired /employment rate	131/1.42%	137/1.44%	147/1.54%
Lost time injury Frequency Rate	0.2	0.25	0.20
Lost time injury Severity Rate	18	6.03	3.93
Social spending(including charitable donations) (NTD：10 million)	10.2 Note 1	56.3 Note 2	4.8

Note 1：includes approximately 60 million in donations to build the Dungsi Bridge in Liouguei.
Note 2：includes approximately 500 million in donations to build the Sinfa Bridge.

01 CSR Report and CSC Status Quo

1.1 CSC CSR policies

In 2012, worldsteel invited responsible persons in global steel enterprises to sign the **SUSTAINABLE DEVELOPMENT CHARTER OF THE WORLD STEEL INDUSTRY** with the following goals：

- **We operate our business efficiently and in a financially sustainable way, to supply steel products and solutions that satisfy customers' needs and provide value to stakeholders.**
- **We strive to optimize the eco-efficiency of products throughout their life cycle. We promote the recovery, reuse and recycling of steel.**
- **We foster the well-being of employees and provide a safe and healthy working environment.**
- **We promote values and initiatives that show respect for the people and communities associated with our business.**
- **We conduct our business with high ethical standards in our dealings with employees, customers, suppliers and the community.**
- **We engage our stakeholders and independent third parties in constructive dialogue to help fulfill our sustainable development commitments.**
- **We build and share our knowledge of sustainability through open and active communications. We help others in the supply chain to implement sustainable practices.**

CSC pursues the spirit of the Sustainable Development Charter of the worldsteel and has established the following CSR policies：

- **Strengthen competitiveness and create profits for shareholders to ensure corporate sustainability;**
- **Meet the requirements of customers and enhance service advantages to create a situation for co-prosperity;**
- **Take care of employees' well-being and create a premium environment to facilitate the development of employees;**
- **Optimize the supply chain system and improve the communication system to share sustainable practices efficiently;**
- **Join professional organizations and provide a strong foundation for incorporating new techniques to upgrade domestic industries;**
- **Support governmental policies and engage in engineering construction to improve overall effectiveness;**
- **Be devoted to social harmony and assist in the promotion of public welfare efforts that benefit local communities;**
- **Enhance industrial safety practices to eliminate occupational hazards and embrace environmental protection policies to improve pollution-reduction performance;**
- **Persist in saving energy and reducing carbon programs, and make use of renewable energy to create a low-carbon society.**

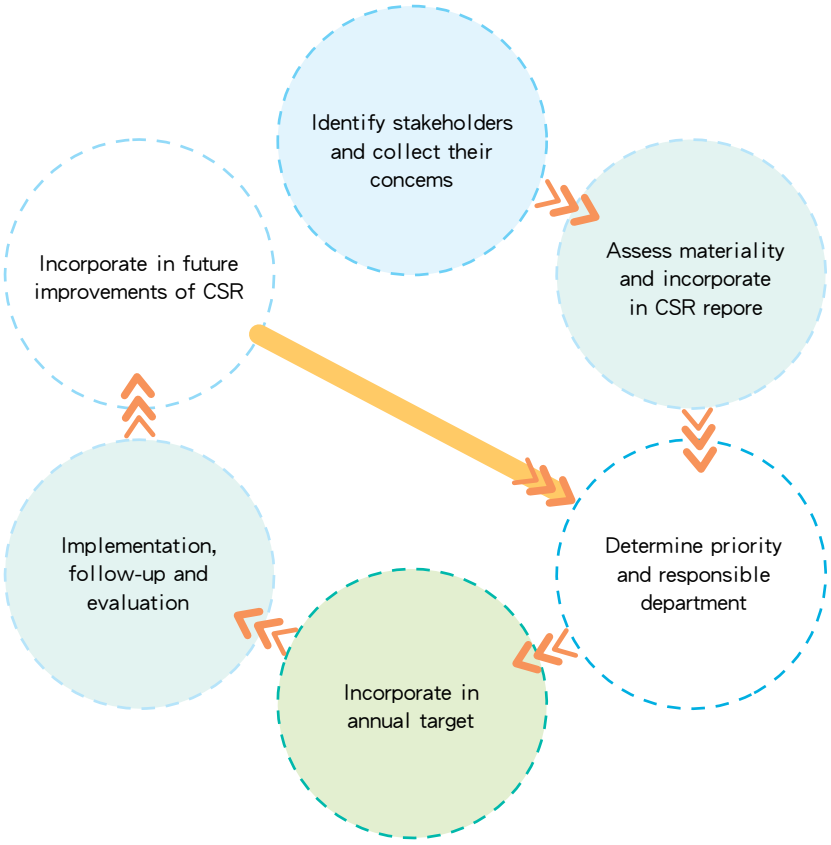
1.2 Fundamentals of CSR

1.2.1 Co-prosperity with society

CSC's basic principles of corporate social responsibility include promoting：decent operation and fair competition, shareholder's benefits and trust, green supply chains, environmental conservation, labor training and care, social participation and social well-being. Bearing these in mind, CSC is dedicated to corporate governance, energy and environmental management and engagement in social harmony, and realizes them in our daily operation to achieve the goal of "take from society, return to society."

1.2.2 Information disclosure and continuous improvement

In addition to providing information on corporate governance, energy and environmental management and engagement in social harmony in our operation report and website, CSC has issued CSR reports annually in recent years to further disclose information concerning efforts in corporate social responsibility.
Since 2012, CSC has provided a comprehensive CSR area on our CSC's website (http：//www.csc.com.tw/csc_e/hr/csr/index.htm). It not only provides a convenient location for stakeholders to access and make enquiries, but also enhances overall accessibility, transparency, timeliness, completeness and interactivity. Visitor feedback is used as a reference for continuous improvement and to increase the satisfaction of stakeholders. CSC has adopted a continuously improving process, as shown in the figure below：



1.3 Stakeholders and communication

CSC's core working group for CSR has identified eight major stakeholders with reference to the experiences of related departments at CSC and its peers：communities and local groups, central and local governments, shareholders and the Financial Supervisory Commission, opinion leaders and professional bodies, employees and contractors, customers and traders, suppliers, and peers in the steel industry. In addition to communicating with stakeholders via the website, operation reports, annual reports and CSR reports, we investigated issues that concerned stakeholders through many other approaches and responded appropriately.

Stakeholder	Communication paths	
Communities and local groups	Public Affairs Department, Labor Union, CSC Group Education Foundation and CSC social clubs meet and negotiate with communities, local groups, legislators and opinion leaders.	
Central and local governments	Conferences, forums, public hearings, training courses, informal visits to address different policies and laws	
Shareholders and Financial Supervisory Commission (FSC)	Individual shareholders	1.Annual general meeting (AGM) for shareholders is convened in the 2nd quarter of the year regularly. Issues are resolved individually so that investors may participate in the voting process for each proposal. 2.The investors may access the annual report for AGM and operation report online. Hardcopy is available by request. 3.Preliminary result of the previous month is announced voluntarily on the Market Observation Post System and CSC's corporate website every month. 4.Shareholders can communicate with us using a toll-free hot line or e-mail. 5.The content of the CSC's corporate website is comprehensive for shareholders to understand the operation of the Company.
	Corporate shareholders	1.Attend conferences hosted by domestic and foreign shareholders irregularly for face to face communication 2.Participate in the investment expositions of domestic and foreign securities firms 3.Preliminary financial result and price adjustment are sent to the investors.
	FSC	1.Participate in symposiums, workshops and various evaluations organized by competent authorities 2.Organize investor-related activities in cooperation with competent authorities
Employees and contractors	Employees	Collective agreement with the Labor Union (revised every three years), Labor/Management Committee meetings (monthly), regular departmental communication meetings (every 2 to 3 months, Labor Union representative is a board member, communication meetings between top management and council members of the Labor Union (every six months), Chairman's mailbox, communication meetings between top management and employees (every week), Labor Welfare Committee, Stock-holding Trustees Committee meetings (every six months), Labor Safety and Health Committee meetings (every two months), Human Resources Development Committee meetings (every year), Pension Fund Supervisory Committee meetings (every three months) and Rewards and Punishments Review Committee meetings (irregularly)
	Contractors	Contract Lease and Safety Job meetings, Co-operation Organization, Contractors' SHE meeting (monthly) and Outsourcing Management meetings (every year)

Opinion leaders and professional groups	Participate in forums, workshops and meetings held by professional associations, institutes, industrial associations, federation of industries, Taiwan Steel & Iron Industries Association, World Steel Association, South East Asia Iron and Steel Institute, Formosa Association of Resources Recycling, Taiwan Association of Soil and Groundwater Environmental Protection, Association of Industry for Environmental Protection, Taiwan Institute for Sustainable Energy, Business Council for Sustainable Development Taiwan and Taiwan Corporate Sustainabilty Forum
Customers and traders	1.Organize production-sales meetings every quarter 2.Collect feedback from customers through exposition (irregular), customer satisfaction surveys (every year), R&D alliances, professional training, market investigation, irregular visits and customer interviews 3.Provide comprehensive service to customers through computerization and introduction of the supply chain system 4.Integrate CSC's marketing resources to expand the range of services for customers 5.Enhance technical services and implement technical marketing to respond to the requests of customers and provide customized services immediately 6.Assist customers with process improvements and solve problems involving materials and processing techniques 7.Organize technical workshops and top management workshops to improve the capability of the iron and steel industry to understand trends and respond appropriately 8.Visit important customers and gain insights into their requirements to improve product quality 9.Carry out market demand investigations and quality function deployment for new products, and implement material consumption and quality needs of individual industries
Suppliers	Mutual visits, partnerships to promote localized supplies, forums, professional workshops and provision of safety design specifications
Peers in the steel industry	Participate in the meetings held by the Taiwan Steel & Iron Industries Association, World Steel Association and South East Asia Iron and Steel Institute, bilateral or multi-lateral communication with other iron and steel companies, official visits and meetings

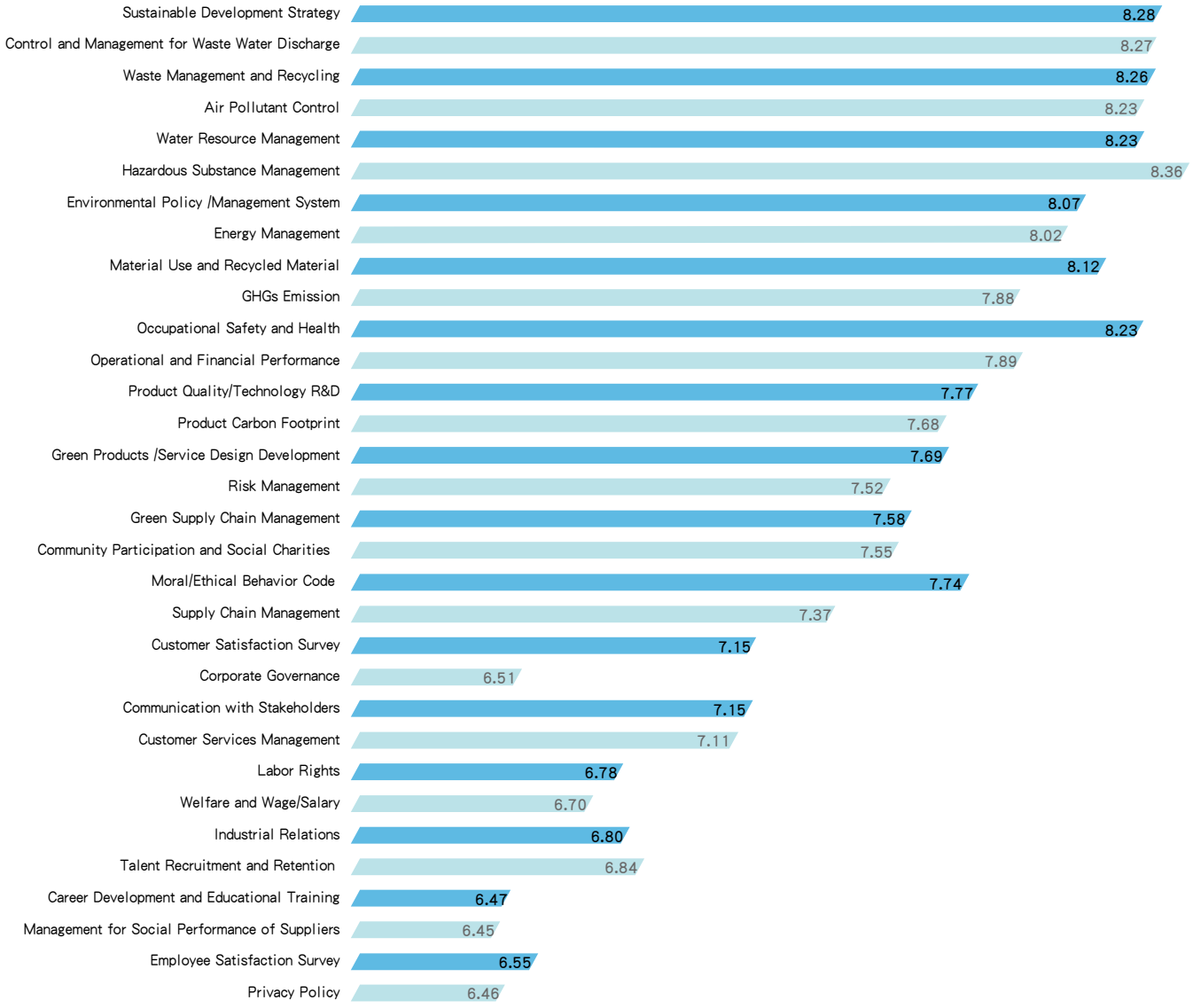
Through much negotiation and communication, CSC's core working group for CSR compiled the 32 issues of most concern to stakeholders below：

Item	Issue of Most Concern	Item	Issue of Most Concern
1	Corporate Governance	17	Air Pollutant Control
2	Sustainable Development Strategy	18	Waste Management and Recycling
3	Operational and Financial Performance	19	Material Use and Recycled Material
4	Risk Management	20	Hazardous Substance Management
5	Privacy Policy	21	Green Products /Service Design Development
6	Moral/Ethical Behavior Code	22	Green Supply Chain Management
7	Product Quality/Technology R&D	23	Occupational Safety and Health
8	Customer Satisfaction Survey	24	Industrial Relations
9	Customer Services Management	25	Labor Rights
10	Supply Chain Management	26	Career Development and Educational Training
11	Environmental Policy /Management System	27	Welfare and Wage/Salary
12	GHGs Emission	28	Talent Recruitment and Retention
13	Product Carbon Footprint	29	Employee Satisfaction Survey
14	Resource Management	30	Management for Social Performance of Suppliers
15	Water Resource Management	31	Community Participation and Social Charities
16	Control and Management for Waste Water Discharge	32	Communication with Stakeholders

After carrying out the deployment to address the concerns of the stakeholders, CSC's core working group for CSR summarized them into several important issues and identified the core materiality in regard to "economic concern" "environmental concern" and "social concern".

1.4 Identifying the materiality

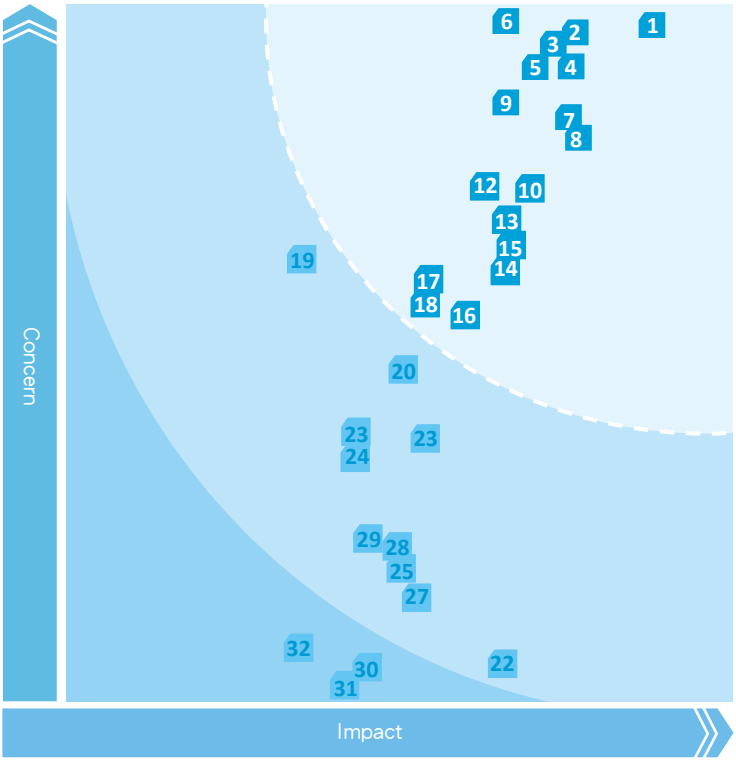
In order to identify the materiality of stakeholder's concerns, CSC's CSR team used a questionnaire investigation to collect and compile issues that interest stakeholders. About 296 stakeholders participated in this questionnaire survey. The questionnaire analysis is shown below (provided by Professor Hsu Chia-Wei of Tungnan University):



According to statistical information related to the impacts and concerns, we compiled the matrix diagram of issue materiality below：

The concerned issues

1 Sustainable Development Strategy
2 Control and Management for Waste Water Discharge
3 Waste Management and Recycling
4 Air Pollutant Management and Control
5 Water Resource Management
6 Hazardous Substance Management
7 Environmental Policy/Management System
8 Energy Management
9 Material Use and Recycled Material
10 GHGs Emissions
11 Occupational Safety and Health
12 Operational and Financial Performance
13 Product Quality/Technology Development
14 Product Carbon Footprint
15 Green Products/Service Design Development
16 Risk Management
17 Green Supply Chain Management
18 Community Participation and Social Charities



There are 18 issues that need to be prioritized and require disclosure. Please refer to relevant chapters of this CSR Report for the disclosure of the following 18 priority issues

Issue	Disclosure in CSR Report	Page Number
Sustainable Development Strategy	1.1 CSC's CSR Policies	14
Control and Management for Waste Water Discharge	3.2.3(11) Water Conservation and Water Pollution Prevention and Treatment	79
Waste Management and Recycling	3.2.3(6) By Product Resources and Achievements	73
Air Pollutant Management and Control	3.2.3(5) Air Pollution Prevention and Control	71
Water Resource Management	3.2.3(11) Water Conservation and Water Pollution Prevention and Treatment	79
Hazardous Substance Management	3.2.3(9) Hazardous Substance Treatment	77
Environmental Policy/Management System	2.4 Energy Environment Management	44

Issue	Disclosure in CSR Report	Page Number
Energy Management	3.2.3(2) Energy Saving and Carbon Reduction	68
Material Use and Recycled Material	1.6.4 Material and Energy	23
GHGs Emissions	3.2.3(4) GHGs Inventory and Reduction	70
Occupational Safety and Health	3.3.1 Labor Safety and Health	92
Operational and Financial Performance	3.1.3 Operational Performance and Profit Distribution	51
Product Quality/Technology Development	3.1.9 Upgrading of Iron and Steel Industries	58
Product Carbon Footprint	3.2.2(4) Carbon Footprint and Life Cycle Evaluation	66
Green Products/Service Design Development	3.2.2 Green Products	65
Risk Management	2.2.6 Risk Control and Management	35
Green Supply Chain Management	3.2.2(3) Green Supply Chain	66
Community Participation and Social Charities	3.3.8 Social Participation	116

1.5 About the CSR Report

1.5.1 Editing and approval

CSC compiled and edited the CSR report through the following organizations and procedures.

(1)Core working group：Composed of the chief secretary of the Labor Union and representatives from closely related departments such as：the Human Resources Dept., Public Affairs Dept., Marketing Administration Dept., Finance Dept., General Secretariat Dept., Industrial Safety and Hygiene Dept., Environmental Protection Dept., Utility Dept. and New Materials R&D Dept. The core working group is organized and managed by the Office of Energy and Environmental Affairs (OEEA) which is responsible for information collection, coordination, editing and modifications.

(2)Consulting Group：During the compiling and editing process, OEEA invited other concerned departments as consulting members to provide information on specific topics and enhance internal consensus on major issues. With this process, the contents of this report will be comprehensive and representative.

(3)Management Review and Approval：After the initial draft had been compiled and edited by OEEA, it was sent to the core working group for checking and modification. The modified draft was then sent to the Division Vice Presidents for review and forwarded to the Executive Vice President, President and Chairman of the Board for approval.

1.5.2 Framework of the Report

(1)Guidelines and principles

The framework of the Report is formulated by combining the G3.1 Guidelines, Mining and Metals Sector Supplement (MMSS) of the Global Reporting Initiative (GRI), AA1000APS, and the guiding document prepared by the Taiwan Institute for Sustainable Energy (TAISE) for CSR Report Competitions, with reference to OECD (Organization of Economic Cooperation and Development) documents, Earth Charter,

UN Global Compact Principles, ISO 26000 Guidelines and the issues that the global steel industry considers important.

(2)Boundary and Indicators

This CSR Report covers the operation of CSC headquarters in Taiwan and its offices in foreign countries in the year 2012 (from January 1, 2012 to December 31, 2012). It excludes the operational performance of subsidiary companies. The financial statement is compiled in accordance with International Financial Reporting Standards (IFRS) and provided in NTD. The SHE performance is presented based on globally-used general indicators. Footnotes are used for quantitative indicators that have special meanings.

(3)Data sources and management

The information in this Report was provided by the various divisions of CSC including planning, sales, finance, administration, production, and technology and was integrated and compiled by the OEEA, with CSC's core working group for CSR and administrative procedure confirming the compliance with CSR reporting standards. Cost and accounting information included in CSC's financial statements have been audited by certified accountants. The SHE management system is audited internally on a regular basis and subject to an external audit every year according to ISO 14001 and OHSAS 18001. The GHG inventory data of 2006 ~ 2012 have been verified by external auditors.

1.5.3 Review and verification of the Report

(1)Internal review and approval

The information provided by each department and disclosed in this Report has been reviewed and approved by the relevant managers, and further confirmed by the core working group for CSR and consulting groups during the editing process. After being confirmed, the initial draft was reviewed by the general manager of the departments and the Vice President, Executive Vice President, President and finally approved by the Chairman of the Board. All data, minutes, reviews and verifications have been documented.

(2)External verification

This report was attested to by BSI (British Standards Institution) based on GRI G3.1 A+ Guidelines and AA1000AS standards.

1.5.4 Use of the CSR Report

(1)Self-comparison

The practices and performance of corporate governance, energy and environment management and engagement in social harmony in the Report are presented using concise texts, figures, tables and indicators to show the highlights of CSC and its development tendencies in recent years. These data are used for comparison with the past and future to understand trends and changes.

(2)Comparison with peers

All performance indicators in the Report may be used for comparison with those of other steel companies. They can also be used for comparison with international benchmark values to understand the development of CSC. Footnotes are provided in cases where a misunderstanding might occur as a result of a difference from peers in regard to process, boundary, scope or definition.

1.6 CSC profile

1.6.1 Business scale

At present, CSC's annual capacity of crude steel exceeds 10 million tons. Its major products are hot-rolled, cold-rolled, coated, plate, wire rod and bar steel. About 66% of the products are supplied to the domestic market, and 34% are exported. CSC currently has a market share of 24.2% in Taiwan for steel products and is the largest iron and steel company in Taiwan. Major export destinations are mainland China, Japan and Southeast Asian countries.

According to the Top Steel Producer 2012 list reported by the worldsteel, CSC was ranked as the world's 27th steel producer. While an evaluation done by the World Steel Dynamic (WSD) in January for 23 items including innovation, scalability, and integration of industrial chain among 34 global steel makers, CSC was ranked as the 16th.

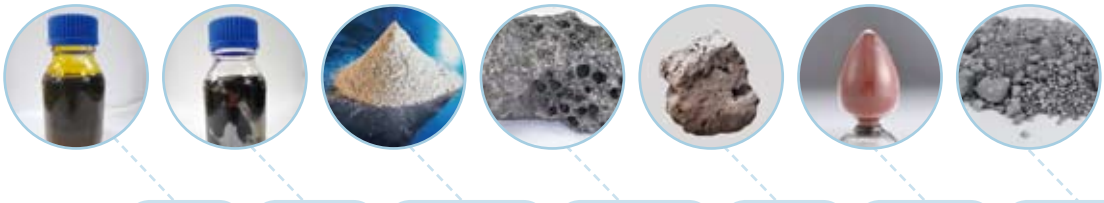
1.6.2 Major products and applications

Steel plate	Ships, bridges, steel structures, oil country tubular goods(OCTGs), storage tanks, boilers, pressure vessels, truck chassis, and general structures
Steel bar	Bolts and nuts, hand tools, loudspeaker parts, automobile and motorcycle parts, and machinery parts
Wire rod	Bolts and nuts, steel wires, steel cables, hand tools, welding electrodes, steel wires for tires, umbrella ribs, and chains
Hot- rolled steel coil and sheet	Steel pipes, automotive parts, containers, pressure vessels, lifting jacks, cold rolled and coated steel products, light gauge steel and general shaping for processed products
Cold-rolled steel	Steel pipes, furniture, home electronics products, oil buckets, automobile coating, electroplating, and general hardware parts
Coated steel products	Computer and home electronics cases and parts, automobile coating, construction materials, furniture, and general hardware parts
Galvanized steel products	Automobile and home electronics parts and components, computer cases, coated coil, and construction materials
Electric magnetic steel sheet	Motors, transformers, and stabilizers

In 2012, CSC produced 9.1427 million tons of semi-finished products and 8.383 million tons of finished products.

1.6.3 Major by-products

The processed by-products of CSC include coal tar, crude light oil, blast furnace slag, basic oxygen furnace slag, iron oxide powder and desulfurization slag. The output of the major by-products in 2012 is listed below：



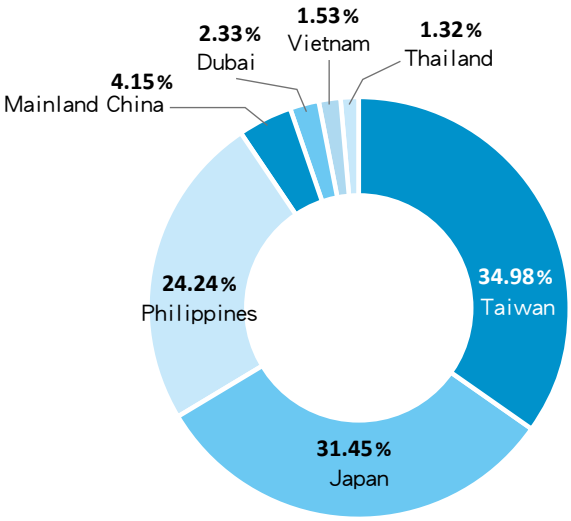
By-product	Coaltar	Crude light oil	Granulated BF slag	Air-cooled BF slag	BOF slag	Iron Oxide Powder	Desulfurization slag
Output (10,000 tons)	15.44	5.97	239.03	32.43	113.7	2.67	33.98

Except for desulfurization slag and some of the BF slag sold to domestic customers, the by-products are recycled and processed by CSC's subsidiary companies to supply chemical, construction, civil, electrical and consumer industries for various applications.

1.6.4 Raw materials and energy

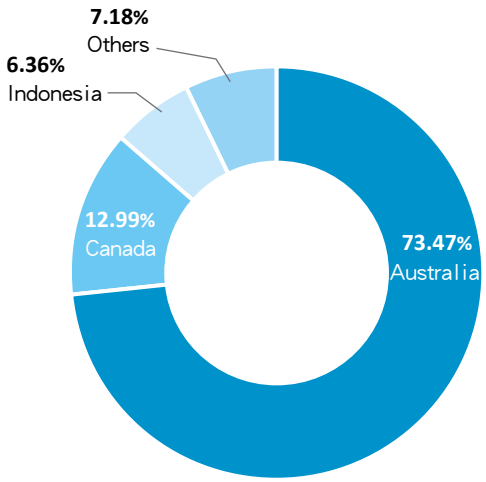
The flux materials for the metallurgical operations of CSC had been 100% supplied by domestic sources in the past; however, since the termination of the nearby Mountain Longevity limestone mine to foster local ecological development in the Kaohsiung area, part of the required limestone has been supplied by overseas sources. Currently, 35% of our needs for marble, dolomite and serpentine come from the Hualien area, and 65% comes from overseas sources.

CSC consumed 3,342 thousand tons of flux materials (wet basis) in 2012. The sources of the flux materials are identified in the right：

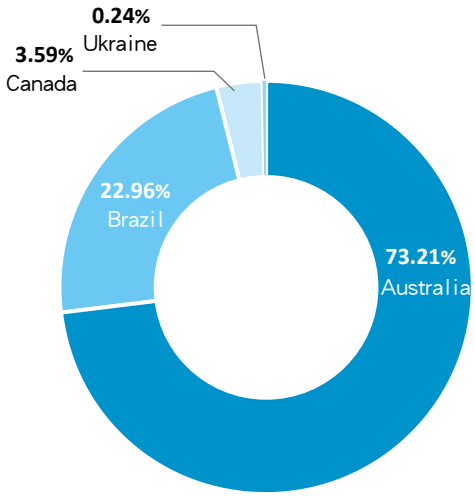


Taiwan does not have the coal and iron core that CSC needs for production. Thus, 100% of coal and iron core are imported. In the first half of 2012, the price of coal remained stable but in the second half of 2012, due to the European debt crisis and economic slowdown in Mainland China, steel prices plunged and the cash price of coal also dropped. It was not until October that a series of urbanization polices launched in Mainland China stimulated domestic needs. At the same time, cold winter season in Mainland China reduced coal output and tornado and floods in summer hit coal production sites in Australia and Brazil. The coal supply shortage, thus, resulted in a price rebound. Iron ore prices increased sharply by 63% from early September to the end of December while coal increased mildly by 14% from late September to the end of December.

CSC consumed 7,913 thousand tons of coal (wet basis) in 2012. The sources of the coal are identified below：



CSC consumed 14,812 thousand tons of iron ore (wet basis) in 2012. The sources are identified below：



The coal that CSC uses produces fuel gas during the metallurgical process. Part of the fuel gas is used for heating during the process, and part is supplied to the cogeneration unit for the production of steam and electric power. The cogeneration unit also uses coal, fuel and natural gas to produce steam and electric power. The rest of the required power is attained by purchased electricity. Information regarding the energy that CSC consumed directly and indirectly, as well as its self-produced secondary energy in 2012 is provided below：

Direct energy (GJ) note1	
Coal	222,713 GJ
Natural gas	2,810.9 GJ
Diesel	119.4 GJ
Gasoline	6.2 GJ
Low sulfur oil	231.9 GJ
Indirect energy(GJ)	
Purchased electricity note2	21,319.5 GJ

Self-produced secondary energy	
Steam of medium pressure	3.60 million tons
COG	1.96 billion M^3
BFG	14.0 billion M^3
LDG	0.916 billion M^3
Cold blast air	9.42 billion M^3
Oxygen	0.909 billion M^3
Nitrogen	11.1 billion M^3
Argon	19.5 million M^3

Note 1：1GJ=10^9 Joule

Note 2：Purchased electricity has included the conversion value of heat efficiency into energy.

No Conflict Minerals Commitment

Based on taking corporate social responsibility, CSC promises：

(1)Conflict minerals from Congo and involved countries including areas controlled by the arm force of these countries are not used or contained in all commodities and packing while providing to Reliance.

(2)CSC will strengthen supply chain management, establishing related management systems and regulations to effectively identify and trace the origin of metal material, ensuring the legality and prohibiting from using. Audit from the origin of material from Reliance is acceptable.

Remarks：

■Congo and related countries are (a). R publique d mocratique du Congo, The Republic of Congo, The Republic of Sudan, Republic of South Sudan, The Republic of Uganda, Republika y'u Rwanda,

The Republic of Burundi, The United Republic of Tanzania, The Republic of Zambia, The Republic of Angola, The Central African Republic and (b). new and present nations covering aforementioned districts .

- "Conflict Minerals" count not only limited to Cassiterite, Wolframite, Columbite-tantalite, Gold and derivatives but rare metals from Congo and involved countries including areas controlled by the arm force of these countries, especially metal material of Cassiterite, Wolframite, Columbite-tantalite, and Gold etc.
- "No Use or Contain Metal Minerals from Congo and involved countries including areas controlled by the arm force of these countries" includes metal mining, refining, forging and other processing procedures not occurred in those districts.

1.6.5 External communication and cooperation

(1)Domestic professional associations and institutes

The products and by-products of CSC are mainly sold to domestic industries. Participation in related associations and institutes is a good way to enhance mutual communication and cooperation. In the steel industry, Mr. Jo-Chi Tsou, Chairman of the Board of CSC, is the President of the Taiwan Steel & Iron Industries Association. He has long emphasized the need for internationalization of Taiwan's steel and iron industries as well as employee cultivation; Vice President of CSC, Mr. Wen-Du Hsu, is the President of the Taiwan Wind Turbine Industry Association. He is dedicated to promoting technology transfer from globally well-known wind turbine makers. In terms of the sustainable development of business, CSC is a member of the Business Council for Sustainable Development of Taiwan (BCSD-Taiwan) and Taiwan Corporate Sustainability Forum (TCSF), and cooperates with other member companies to promote the corporate sustainability responsibility throughout Taiwan.

(2)Steel associations and institutes

- **World Steel Association (worldsteel)**：CSC is a core member of worldsteel. In addition to participating in its sustainability reporting work group, providing data, making proposals and promotion activities, CSC has also joined its committees on technology, safety and health, and environmental policy as well as other work groups for the collection of CO2 emission data and life cycle assessment. CSC is able to obtain the latest information and closely follow global trends through this interaction and cooperation.
- **South East Asia Iron and Steel Institute (SEAISI)**：CSC is a key supporting member of this institute. Helping its peers in Southeast Asia on a mutually beneficial basis is a long-term commitment of CSC. Its activities include：serving as the chairman of its SHE committee, assisting in the development of the techniques and implementation of SHE affairs, supporting the arrangement of steel technique workshops and SHE workshops, as well as visiting plants and sharing in the production of national reports every year. In addition to 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 Steel Committee**：The Steel Committee of the OECD is an excellent international platform for the exchange of information and the provision of advice. CSC has participated in the meetings of the steel committee on a regular basis, under the instruction of Taiwan Ministry of Economic Affairs; 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.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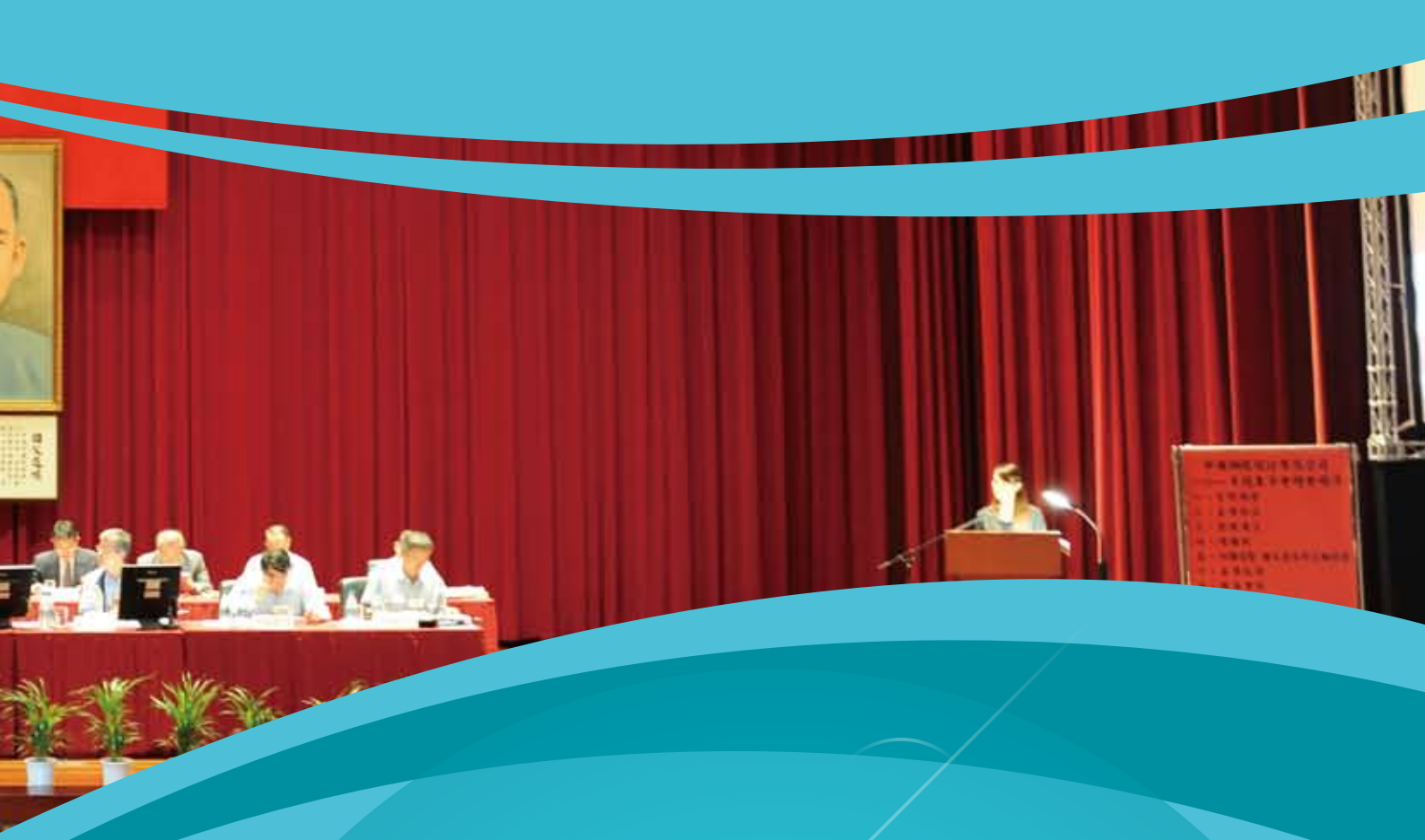


02 Management Structure

2.1 Management

2.1.1 Board of Directors

The members of the Board must be elected for a term of three years and are eligible for reelection. The members of the Board must have the following competencies：

(1)Judgment of the business operation
(2)Accounting and financial analysis
(3)Business operation and management
(4)Crisis control and management
(5)Industrial knowledge
(6)International market outlook
(7)Leadership skills
(8)Decision making

Currently, CSC's Board of Directors consists of 11 directors, including three independent directors; all are males over 50 years of age. They are specialists in the fields of business administration, finance, engineering, environmental protection, etc. The current directors are listed below.

Title	Name
Chairman of the Board	Jo-Chi Tsou (Representative of the Ministry of Economic Affairs)
Director	Ming-Chung Liu (Representative of the Ministry of Economic Affairs)
Director	Chia-Rui Ou (Representative of the Ministry of Economic Affairs)
Director	Jyh-Yuh Sung (Representative of Ever Wealthy International Corporation)
Director	Kin-Tsau Lee (Representative of Gau Ruei International Investment Corporation)
Director	Jih-Gang Liu (Representative of Joint Focus Investment Corporation)
Director	Cheng-I Weng (Representative of Hung Kao Investment Corporation)
Director	Chao-Chin Wei (Representative of CSC Labor Union)

Title	Name/Educational background/Professional career
Independent directors	Shen-Yi Lee Ph.D. in Law, Chinese Culture University Managing Partner Emeritus, Chien Yeh Law Offices
Independent directors	Juu-En Chang Ph.D. in Civil Engineering, Tohoku University, Japan Professor, Department of Environmental Engineering, National Cheng Kung University
Independent directors	Ting-Peng Liang Ph.D. in information management, University of Pennsylvania, USA National Chair Professor and Director of the Electronic Commerce Research Center, National Sun Yat-Sen University

2.1.2 Supervisors

CSC has three supervisors. In addition to attending the meetings of the Board of Directors, the supervisors regularly convene the financial statement communication meetings with the internal chief auditor and certified public accountant to discuss and communicate with each other regarding all affairs related to

the financial statement. The bi-annual financial report and annual financial statement, surplus allocation proposal and operation report, which are issued after each fiscal year after having been certified by a public accountant, are submitted to the supervisors for review. A review report must be made and issued accordingly. The supervisors must have the following competencies：

(1)Trustworthy and practical (2)Unbiased judgment (3)Professional knowledge
(4)Extensive experience (5)Understanding of financial statements

The supervisors from CSC are males more than 50 years old, on average, and are specialists in the fields of engineering, finance, legal affairs and labor rights.

Title	Name
Supervisor	Ming-Te Su
Supervisor	I-Lin Cheng
Supervisor	Andrew Deng

2.1.3 Profession committees

CSC has set up the Corporate Governance Committee and Compensation Committee with the functions described below：

(1)Corporate Governance Committee

CSC, in June 2007, established the Corporate Governance Committee. The Committee is comprised of three directors, including one independent director acting as the convener and chairman of the meeting; at least one director shall have legal or management professional background. Major tasks of the Committee are described below.

- Review and assess the corporate governance organization and system for their soundness, and make suggestions to the Board of Directors.
- Draw up the revisions of the rules of meeting procedures for the Board of Directors and submit them at the Board meeting for approval.
- Draw up or revise the drafts of the organizational rules for each subcommittee of the Board of Directors and submit them to the Board of Directors for approval.

On April 23, 2012 and October 25, 2012 the 4th and 5th of the 14th Corporate Governance Committee Meetings were convened, respectively. The resolutions adopted by the Committee have been compiled into meeting minute and have been distributed to the Directors and Supervisors as well as submitted to the Board of Directors.

(2)Compensation Committee

In order to evaluate the operation and management performance of the top managers, and rationalize the compensation system of the directors, supervisors and managers in order to protect the rights and interests of investors, the Board of Directors of CSC approved the "Organizational Regulations for the Compensation Committee of China Steel Corporation" in August 2011, based on Article 14-6, Section 1 of the Securities and Exchange Act and the "Regulations Governing the Appointment and Exercise of

Powers by the Remuneration Committee of a Company Whose Stock is Listed on the Stock Exchange or Traded Over the Counter", as announced by the Financial Supervisory Commission on March 18, 2011. The three independent directors were invited to act as members of the Compensation Committee. In 2012, three meetings of the Compensation Committee were convened and according to "Organizational Regulations for the Compensation Committee of China Steel Corporation," seven cases related to the systems of appraisal, salary, and compensation of managers were discussed and reviewed with suggestions resolved and submitted to the Board of Directors for approval.

2.1.4 Internal Auditor Office

The Internal Auditor (IA) Office is under the direct supervision of the Board of Directors. Its task is to audit operations and make improvement suggestions to ensure the achievement of the goals of "operating effectiveness and efficiency", "reliability of financial reports" and "compliance with the laws and regulations." The major audit tasks in 2012 included the following items:

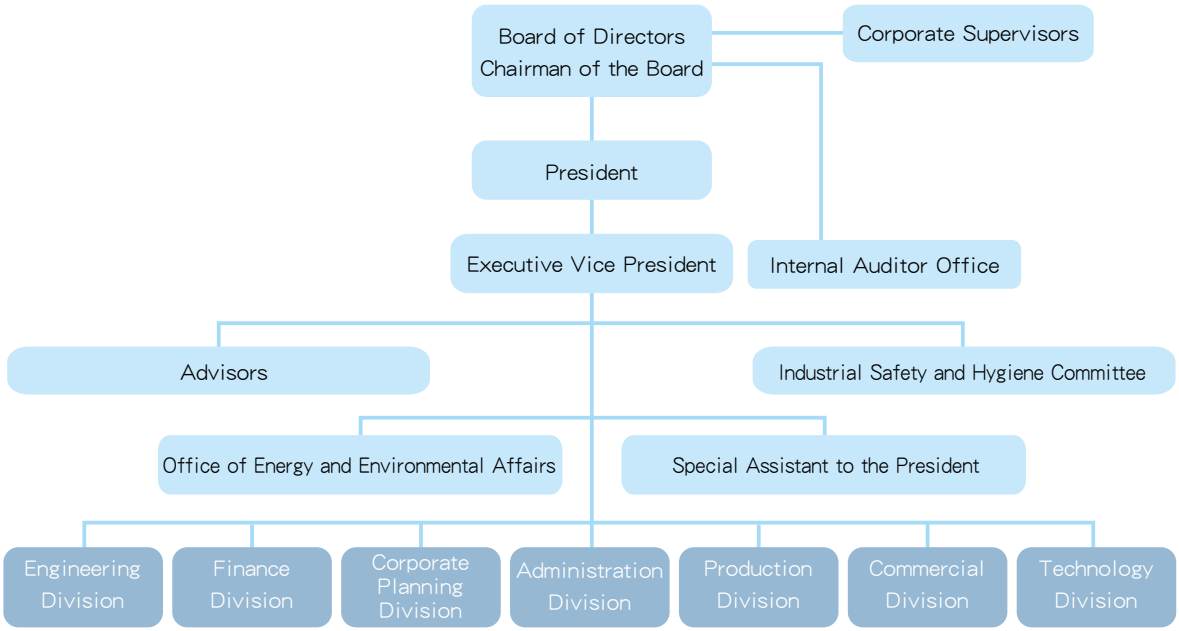
(1)Test and assess the control procedures of high-risk operations in the eight operational cycles (procurement and payment, sales and collection of payments, investment, financing, production, fixed assets, salary/wage, R&D) for completeness and degree of risk.
(2)Cross-check the functions in the design of the system.
(3)Conduct audits according to the regulations of the Financial Supervisory Commission, Executive Yuan, including: asset management, budget management, derivatives, related party transactions, supervision over and management of subsidiaries, operation of the Board of Directors' meeting, information and communications security check, internal transactions monitoring, and management of the compliance to international accounting standards. The audit results are submitted to the supervisors and independent directors for review.
(4)Conduct assessment and field check of CSC's subsidiaries for their internal control systems.
(5) Handle complaints and ad hoc assignments.

The IA enacted a 2012 auditing plan and reviewed IA system. In 2012, 48 auditing reports were proposed for each operational item of the transactional cycle. Suggestions for improving drawbacks and abnormal items were raised in the reports. A total of 443 items were addressed. Units and subsidiaries audited shall adopt proper improvement measures and key in information in the CSC IA management system to comply with control and management and follow-up procedures. There were 43 cases of complaints and ad hoc assignments and after careful investigation, relevant units were placed in charge of handling them.

2.1.5 Administrative system

The Chairman of the Board of Directors presides over the meetings of shareholders and the Board of Directors. The President and Executive Vice President assist the Chairman in handling related matters. The President takes full responsibility for carrying out the business of the Company according to the resolution of the Board of Directors and has the right to sign documents in the name of the Company.
CSC has established seven divisions based on the requirements for the development and management of the Company. Each division is led by a vice president. The "Industrial Safety and Hygiene Committee" and "Office of Energy and Environmental Affairs" are permanent organizations of the Company that creates and implements comprehensive projects that address issues related to industrial safety and hygiene, energy and the environment. CSC may appoint advisors, special assistants to the President, task-oriented committees and task forces, if needed.

The structure of our administrative system is shown in the figure below :



2.1.6 Senior Management

The senior managers, higher than the vice-manager (incl.), and their inauguration dates are listed below :

Title	Name	Inauguration date
Chairman of the Board	Jo-Chi Tsou	2010.06.23
President	Jyh-Yuh Sung	2012.02.01
Executive Vice President	Kin-Tsau Lee	2012.03.01
Vice President -Administration	Hsiung Li	2011.03.01
Vice President -Commercial	Jih-Gang Liu	2011.03.01
Vice President -Finance	Chung-I Lin	2011.10.01
Vice President -Corporate Planning	Mao-Pin Wang	2012.03.01
Vice President -Technology	Shin-Chin Wang	2012.01.01
Vice President -Engineering	Wen-Du Hsu	2012.02.01
Vice President -Production	Tsung-Ren Zjeng	2012.02.01

2.1.7 Change in organizational structure

CSC, in 2012, decided to focus more on market development, enhance added value, and expand the export volume of steel products produced by CSC Group through its 100% owned subsidiary China Steel Global Trading Corporation (CSGT International Corporation), established Cutting Centers in mainland China, Thailand, Vietnam, Malaysia, and Italy in order to serve international customers more efficiently. In order to collect market information and communicate with customers in India, CSC, under the approval of the Bureau of Indian Standards (BIS), established a CSC India Representative Office.

2.2 Corporate Governance

2.2.1 Basic Concept

We persist in maintaining the transparency and openness of our operating information according to global standards for measuring the accountability and fairness of an enterprise. The basic concepts of CSC in corporate government are described below：

(1)Committed to meeting the highest standards of corporate governance

(2)Persist in legal and transparent operations

(3)Impose more responsibilities on management and improve operational performance while taking care of the rights and interests of the stakeholders and

(4)Benefit local communities and assist in their social and economic development.

2.2.2 Decent Operation

(1)Abstain due to conflict of interests

Director must abstain from any motion at the meeting of the Board of Directors where there is a conflict of interest, and an abstention is required during the voting of any director-related regulation. A director who has to abstain for the abovementioned reasons is not allowed to participate in the discussion, vote at the meeting, or exercise voting rights on behalf of other directors. We have strictly abided by this rule all along.

(2)Fair trade

Since the production volume of crude steel in Taiwan is less than market demand, a considerable number of semi-finished and finished steel products are imported every year from overseas sources. Since the import tariff rate was reduced to zero in 2004, market competition has become fiercer; the opportunity for cartels to form and for monopolization no longer exists. CSC and its affiliates do not fix prices for their steel products of the same type, but rather act in compliance with the Taiwan Fair Trade Act. CSC's transfer pricing policy offers the same price to CSC's affiliates as to external customers. CSC treats its subsidiaries and trading partners fairly and equally in terms of commission and service charge; all transactions with related parties are included in the accounting audits.

2.2.3 Employee participation

CSC highly appreciates the opinion of employees not only to enhance the internal consensus, but also to collect good ideas. Employees may offer their opinions through the following channels.

(1)The representative of the Labor Union, as a board member, participates in the meetings of CSC's Board of Directors and corporate governance.

(2)The Chairman of the Board of Directors and the President hold weekly communication meetings with employees to collect opinions from the representatives of the departments.

(3)The Labor and Management Committee holds a meeting (every month); the Welfare Board and the Occupational Safety and Health Committee hold a meeting (every two months).

(4)The Pension Fund Supervisory Committee holds a meeting every quarter.

(5)Departments hold an internal communication meeting (every two or three months as decided by each department).

(6)The Human Resources Development Committee and CSC Labor Union hold meetings regularly.
(7)A mailbox for the Chairman has been set up on the CSC internal website for employees to provide their opinions, and responses are always made immediately.
(8)Meetings between top management and the councilmen of CSC's Labor Union are held every six months.

2.2.4 Information disclosure

To ensure transparency and sufficiency, information of CSC is disclosed on the corporate website and is accessible through the shareholder service hotline, spokesperson and designated press contact window.

	Type	Disclosed information
Company website	About CSC	CSC profile, news center, web service Corporate citizen : Community care, public service, web pages on saving energy and environmental protection, labor safety and health, and corporate social responsibility Research and development : R&D results and R&D alliance
	Investor relations	Shareholder service : Includes stock information, financial information, shareholders' meeting data, and shareholders' Q&A Corporate governance : Provides important internal regulations and rules such as : articles of incorporation, financial rules, rules of meeting procedures for the Board of Directors, code of ethics; discloses information on the directors of the Board, important resolutions of the Board meeting, organization and operation of internal audits, and selection process for independent directors Investment : Includes information on the primary and other businesses of the CSC Group
	Customer services	Customer services, production and e-commerce
Shareholders' equity	Shareholder service hotline and e-mail box	CSC has established a toll-free shareholder service hotline and e-mail box. The hotline is made public on our annual report and website, so that investors can contact the Company directly. Designated personnel are responsible for responding to the questions of the shareholders.
	Real-time announcement of important information	CSC has established a name list for delivery of important messages. The information, including : monthly revenue, production and sales data, and results of seasonal price adjustment, is delivered to the industry analysts and investors by e-mail at the first opportunity to ensure transparency and openness of the information.
	Interaction with investors	CSC has designated personnel to receive investors who visit the Company, take the responsibility for the visit and for troubleshooting issues. Management also attends investors' discussion meetings and make investor conference presentations.
Business operation	Established spokesperson system and media contact section	New messages and information from divisions or departments
		Press release after meetings of the Board of Directors
		Press release after steel price adjustment
		News announced by subsidiaries or affiliates of the CSC Group
		News of unexpected incidents

CSC has established the Online Information Disclosure System to disclosure the relative information. CSC earned the "CG 6004 Advanced Corporate Governance System Evaluation Certification" from the Taiwan Corporation Governance Association and obtained a rating of A+ in the "Information Disclosure Evaluation of Public and OTC companies" carried out by the Securities & Futures Institute for the 5th(2007), 6th (2008), 7th (2009), 8th (2010) evaluations and is one of the companies that are listed as providing "more transparent and voluntary disclosure of information" in that evaluation. In the 9th Evaluation (2011), CSC was A++ level, In the 10th Evaluation (2012), CSC was A++ level, the top 29 of 1,297 Public and OTC companies.

2.2.5 Operational performance and policy

Operational performance management

The operational performance of CSC is improved continuously by each unit with a Plan-Do-Check-Act (PDCA) loop. The major points of the loop are described below.

Plan	Set the annual operation policy of CSC based on CSC's operation philosophy, operating plan, quality policy, the performance of the previous year and perspective of the next year.
Do	Each Division deliberates the consistency of direction in adhering to CSC's Annual Operration Policy, and ascertains the completeness in accepting the deployed objective. Then the divisions shall establish their own Division Operation Policy. The division and department start implementing the approved annual operation policy at the beginning of the year and encourage employees to improve by making proposals, participating in self-management activities and carrying out the self-management thoroughly.
Check	The division and department make an evaluation report for the implementation of each operation operation policy on a quarterly basis and submit it to the Total Quality Management Committee of the quarter for discussion.
Act	The departments make Evaluation Reports on Implementation of the Operation Policy at the end of the year and, after it has been approved, sbmit it to the Department of Industrial Engineering for follow-up actions.

Operation policy

(1) Adjustment of production and sales to reduce inventory level and conduct lean production.
(2) Reduce costs with scientific methods and energy saving and waste reduction programs.
(3) Invest in lean production R&D to create value with low cost.
(4) Channel development to maintain good customer relationships and develop alliances.

Major strategies：

(1)Implement lean production to eliminate LEEWAY and secondary grade products to enhance outlet deployment and to reduce inventory.
(2)Utilize scientific and systematic methods to improve yield and increase the use of secondary materials to reduce cost.

(3)Actively reduce material procurement costs and optimize delivery arrangement as well as continuously develop investment resources.
(4)Improve R&D efforts by cooperating with academia to speed up development of special grade steel materials and strategic steel product development to add value to its products.
(5)Implement innovative R&D in the special alloy and steel material fields.
(6)Expand market channels, increase positioning points, look for cooperative alliances, and to stabilize customer relationships.
(7)Control and manage the expansion of Dragon Steel, production line of non-grain oriented electrical steel, as well as the schedule and construction quality of a hot-rolling line in Vietnam and India.
(8)Integrate and develop engineering and technology service business to improve the profitability of the group.
(9)Develop green production and sales efforts, continue efforts to save energy and reduce waste, and to fulfill CSR.
(10)Control capital expenditure, manage risks, and improve financial efficiency.
(11)Conduct labor safety education and management, reduce occupational accidents, and assure the safety of employees and contractors.
(12)Strengthen talent management, promote premium corporate culture, and enhance leadership and technique learning.

2.2.6 Risk control

CSC adopted the following measures to reduce operation risks.

Type of risk	Risk control measures
Finance risk	(1)Check balances after collection, payment and fund procurement in NTD and foreign currencies and adjust the positions of strong and weak foreign currencies based on the requirements to increase the efficiency of fund usage. (2)Determine a strict and acceptable tolerance for the interest rate risk of floating rate liabilities. Responsive measures to floating interest rates include： -Continuous use of low-interest rate promissory notes and short-term bank loans as tools for short-term NTD loans. -For the mid-term NTD capital demands that belong to capital expenditure, loose market capital shall be utilized to issue corporate bonds for low interest rate mid-term and long-term financing to reduce risk from floating interest rate. -Discuss and research foreign currency loan channels from non-banking systems to reduce limits on bank credit amounts. (3)Responsive measures to the floating exchange rate include： -Foreign currencies generated from import and export sales are natural hedged as they are mutually offset. The company may pre-purchase or pre-sell foreign currencies considering trends of international foreign exchange in order to hedge and reduce the exchange risk of the floating rates. -For foreign capital needed for overseas investment, long-term borrowing of foreign currencies with equivalent values shall be used to avoid the exchange risk of floating rates. -Capital in foreign currencies needed for overseas long-term investment shall be funded through loans at the equivalent values and in the same currencies to avoid risks of foreign exchange fluctuation.

Type of risk	Risk control measures
Finance risk	(4)Assist customers in increasing their bank credit amounts and negotiate with banks for forfeiting of account receivables. Use e-commerce security mechanisms and digital signatures to simplify payment procedures and ensure delivery for customers. (5)Monitor the correct operation of security mechanisms and computerize financial operations to enhance customer satisfaction. (6)Use various indicators to regularly analyze financial structure, solvency, managerial abilities, profitability, cash flow, and leverage of the Company to set up an alarm system, prevent all types of risks, and conduct real time monitoring of the financial asset value of the Company, and make suggestions for investing or divesting.
Raw material source risk	(1)Carefully assess material sources and select suppliers. (2)Maintain safety stocks appropriately (3)Diversify raw material sources and enter into long-term agreements with multiple suppliers in different countries (4)Fulfill agreements honestly and faithfully in order to maintain mutual trust and strengthen our relationships with suppliers (5)Develop new sources to improve our competitiveness (6)Select good raw materials as a target for investment and make the investment if it is feasible to control raw material sources on a long-term basis
Transportation risk	(1)Ensure a continuous supply of raw materials as the core policy of the transportation control. The stock of raw materials is reviewed regularly at the weekly internal meeting to make the best plans for transportation. We arrange long-term or temporary chartered vessels for scheduled shipments to ports according to vessel size and economic efficiency. Conditions of chartered vessels shall be traced and monitored until our products are unloaded. (2)The buyer assumes the risk of sea transportation and is responsible for arranging insurance. (3)The carrier responsible for the land transportation of steel products must submit an affidavit and an irrevocable bank guarantee with a fixed guarantee amount to ensure that the steel products will be transported to the destination on time and with the quantity specified. If any damages, losses, or delays occur, CSC shall deduct the amount arising from guarantee amount or shipment fees paid to the transportation companies to control and manage transportation risks.
Market risk	(1)Use the resources of the CSC Group effectively to ensure integration, coordination and mutual support (2)Improve the flexibility of production and broaden the range of products to be offered (3)Actively seek investment opportunities in downstream steel plants and other parts of the iron and steel industry. (4)Control distribution channels (5)Participate in major government infrastructure projects and invest in state-of-the-art technologies to improve the development and testing capacities of new products and to create new value for customers. (6)Command the development dynamic of correlative industries and expand the scope of product supply. (7)Diversify the risk of our distribution system by adopting distribution channel services for “primary domestic sales and supplementary export sales” and make adjustments according to market changes. (8)Set up cutting centers overseas to manage and control distribution channels and actively improve the self-sufficient rate of upstream material sources.
Utility risk	(1)Carry out inspections and change all of the old COG pipes to maintain steady and reliable supplies of water, electricity ,oil and gas. (2)Carry out regular drills for abnormal utilities operation to prepare for unexpected situations. (3)Develop ammonia removal technology for biochemical wastewater in cooperation with the R&D department in order to ensure that the quality of the effluent meets the future given standards. (4)Participate in municipal wastewater reclamation project of the Kaohsiung City Government to develop a diverse system of water resources.

Type of risk	Risk control measures
Mechanical equipment maintenance risk	(1)Select experienced subcontractors for high-risk maintenance work (2)Carry out scaffolding skill evaluation tests; only those who pass the test can participate in construction work. (3)Report high-risk construction items every day and request external safety inspection personnel to enhance the inspection of individual high-risk construction areas (4)Submit the "Safety and Health Management Plan" according to TOSHMS/OHSAS 18001 before construction commences. A meeting of the joint operation organization must be held before construction commences. (5)The construction coordinator must provide a construction risk notification in the zero-accident activity report every day.
Electric control equipment maintenance risk	(1)The TS-16949 Standard Maintenance Procedure was established to prevent abnormalities in the electrical control system from affecting production. The Procedure covers the following items : software and hardware maintenance, data access, redundancy mechanisms, backup management, network protection, UPS, door control systems, disaster prevention and response actions. Strict monitoring measures and regular exercises have been taken accordingly. (2)The ISO-9001 Standard System Development Procedure was established with the concept of "safety originates in design" to ensure consideration of the maintenance risk at the design stage. Internal and external audits are held regularly to maintain the effectiveness of the system. (3)Establish the "Information Safety Management Regulations of Production Division" with reference to ISO-17799, promote information safety awareness and check each production unit on an irregular basis to ensure implementation of information safety measures.
Production risk	Make plans and simulate response measures for different sales and production situations based on the order forecasts of the Commercial Division, so as to be able to make adjustments flexibly at any time including those that involve the purchasing of Sumikin slabs to adjust to distribution, reduced blast furnace production, blast furnace overhaul adjustments, quarterly production line/annual maintenance adjustments, material deliveries adjustments, and outsourcing rolling from time to time. (1) Purchasing Sumikin slabs to adjust distribution : Allocate pick up amounts for CSC, Dragon Steel, and Chung Hung Steel according to the order forecast of the Commercial Division and estimated slab inventory levels. (2) Reduce blast furnace production and blast furnace overhaul adjustments : Use the order forecast of the Commercial Division and the estimation slab inventory level to adjust molten iron reduction levels and overhaul schedules when needed. (3) Adjust quarterly production line/annual maintenance : Use the order forecast of the Commercial Division and inventory levels of finished and semi-finished goods to adjust the monthly scheduled material repair and quarterly repair schedule from time to time. (4) Material allocation : Use the order forecast of the Commercial Division to change material inventory levels so that they match the increase or decrease of molten iron production and re-plan coal and iron allocation as needed. (5) Outsourcing rolling : Use the order forecast of the Commercial Division to determine if the production capacities of a plant can or cannot meet demand and if rolling should be outsourced to other steel plants.
Information system risk	Establish standard operation procedures and carry out training and education activities to prevent abnormalities in the information system from interfering with normal business operations of the Company. Take strict monitoring actions and carry out regular drills in regard to the development and maintenance of application systems, access to data, redundancy mechanisms, network protection, and automatic fire extinguishing systems for all machine rooms, UPS systems, door controls and video systems.

Type of risk	Risk control measures
SHE risk	(1)Enhance the labor safety culture. Conduct hazard identification and risk assessments for all processes and constructions. (2)For high and major risks, take risk mitigation measures and conduct drills to respond to emergencies. (3)Assist in the taxation process regarding environmental and energy taxes to ensure fairness, reasonability and justice. (4)Be devoted to the reduction of air pollutants and wastewater discharge; increase water saving and wastewater recycling. (5)Actively respond to trends in energy saving and carbon reduction efforts as well as reducing climate change risks. (6)Enhance control and management of the utilization risk of resource products.
Engineering management risk	(1)Establish Capital Expense Management & Information and Construction Management Systems; practice strict control of labor safety, quality, schedules and budgets. (2)Ensure the fairness and openness of construction outsourcing operations and preserve and hand down engineering experience and knowledge documents. (3)Compile a "Construction Management & Operation System Manual for Extension Projects" as a basis for the engineers of domestic and overseas extension projects to help with the outsourcing of construction projects. (4)In response to the impact of the soaring price of materials, production expansion of international steel plants, the input production of Steel Dragon's Furnace #5, and external environmental factors on the operation of the Company, we have reviewed responsive strategies towards the Phase II Term 2 expansion of Dragon Steel to reduce plant construction costs and enhance construction quality for establishing a production niche after construction is completed.
Incident reporting and risk control	(1)The "SHE Emergency Response Management Regulations" has been established. Therefore, the unit where an incident occurs will report to the responsible supervisor by phone, if needed. (2)An "Emergency Reporting System" has been established. When an incident occurs, the safety control center will report to the responsible supervisor with a short message, if needed. (3)The "Emergency Command System" responsible supervisors will receive a short message and a report when an incident occurs so that they can take action immediately. (4)The unit concerned will give a report according to the abovementioned procedure when a major incident occurs to any affiliate of the CSC Group or its customers or suppliers. The Emergency Command System will give assistance through the "emergency response organization" to reduce loss.
AEO risk control	Work on four aspects to avoid illegal invasion, ensure the physical safety of containers, assist in the risk management of business partners and emphasize information safety.

2.2.7 Response to major economic impacts

According to the International Monetary Fund, in 2012, the global economy grew by 3.2% and Taiwan grew by 1.3% in the same year, both lower than that of the previous year. worldsteel estimated that global apparent steel use in 2012 grew by 1.2%, lower than the previous year. In 2012, Taiwan's apparent steel use was less than the previous year. For the prospect of 2013, European debt crisis should be controlled, the US should effectively handle its financial problems, and a soft landing should be realized in China

with economic stimulation packages. The economy worldwide should rebound gradually. The IMF and worldsteel estimated that global apparent steel use would increase by 2.9% respectively. Taiwan is estimated to grow its economy by 2.4% in 2013. Apparent steel use would increase slightly due to a mild growth in demand.

After the adjustment of the 2012 market slowdown, in 2013, the international operating environment for steel should gradually recover with the increase of downstream steel demands and the need to replenish stock. In the other hand, production control measures taken by the main global steel makers are expected to rebalance the supply and demand relationship and benefit the operation of the steel industry.

CSC may face the following impacts in the future：

- Mainland China supplies more steel products than is demanded, which will lead steel plants to enter an age of meager profits and exert stress on steel markets.
- Global trade protectionism grows continuously and anti-dumping and import safeguard measures are adopted to restrict the import of steel materials and impose barriers on the expansion of export markets for domestic steel plants in Taiwan.
- The accelerated development of global logistics will lead to a migration of downstream manufacturers to foreign countries and, thus, reduce growth opportunities for steel in the domestic market.
- Steel products from China, under the Economic Cooperation Framework Agreement (ECFA), will be gradually allowed into the Taiwanese market. This will impact the survival and operation of the domestic steel industry in Taiwan.
- A price rebound of steel producing materials such as iron core, coal, and coke will result in an increase in the operating and production costs of steel plants.
- After the conclusion of an FTA between Korea and the EU, and an FTA between Korea and the USA, Taiwan would be marginalized if it does not participate in a regional economic cooperation organization. This is adverse to Taiwan’ s development and competition in the global market.
- The risks of sovereign debt in Euro regions and the US financial deficit remain high.
- Excessive external restriction conditions resulting from energy and environmental safety and health issues and relevant policies and regulations (for example, GHGs Reduction Act, energy tax, and carbon taxes) will impact the fairness of international competition.
- Low carbon energy and power as well as carbon footprints will gradually become important operational items in the steel industry and have a greater impact on overall competitiveness.

To respond to the above mentioned impacts, CSC has established a group to develop responsive strategies and conduct strategic cooperation programs with domestic and international counterparts in the industry, green industry, suppliers, academia, and research institutions. CSC has also set up production sites and a cutting center under a regional economic cooperation system and is proactively expanding into newly emerging markets with growth potential such as India. Moreover, it is also enhancing the R&D and testing capacities of new products, creating new value by expanding its product offering scope and focusing on the R&D and supply of high-end industrial steel materials for automotive, household appliances, and electric motor industries. It is aggressively looking for investment opportunities in downstream steel plants or iron and steel industries and trying to develop positions in upstream material industries to improve its self-sufficient rate and assist the Taiwanese government with promoting free trade agreements.

2.3 Employment Management

2.3.1 Human rights management

CSC strictly complies with national and international codes on labor and human rights. We treat and respect all employees equally by complying with the following :

- **Safe working conditions :** Comply with governmental labor-related laws and regulations
- **Equal employment opportunities :** Provide employment opportunities fairly to all applicants according to the Employment Services Act.
- **Fair appeal :** Employees are entitled to an appeal if their rights have been infringed upon, or when they are treated inappropriately and the complaint cannot be handled reasonably.
- **Rewards and punishments :** The "Employee Award and Punishment Committee" was established to assess major rewards and punishments for employees.
- **Prevention of sexual harassment :** The "Complaint Committee against Sexual Harassment" was established to provide employees with a workplace free from sexual harassment.

2.3.2 Participation in public affairs

It is a tradition of CSC's employees not to be involved in politics. CSC has never provided contributions to political parties. In public affairs, CSC considers the giving of advice through industrial associations as a social responsibility to ensure full communication and coordination with government and society, while assisting the government in making decisions that the public can trust and depend on. To do this, CSC acts carefully in regard to the following principles :

(1)**For the greater good :** Not only to consider Company benefits, but also those of stakeholders as well as the social responsibility of CSC.

(2)**Appropriate statements :** Statements are made with empathy in a customer-oriented manner and obtain wide acceptance through an open, fair and democratic procedure.

(3)**Consistency with global trends :** Investigate and understand the thoughts and experiences of advanced countries and make adjustments appropriately according to the specific conditions of our country.

(4)**Sound professional basis :** Give advice based on domestic and international professional information; to be more deeply involved in public affairs; and increase the credibility of statements.

(5) **Pursuit of fairness and reasonableness :** Adhere to fair competition principles in order to realize social and substantive justice.

2.3.3 Prevention of malpractice

Since its establishment, CSC has deemed requesting, agreeing to accept or accepting bribes or other improper benefits, or accepting entertainment from suppliers or stakeholders as serious misconduct. In addition to continuing this good tradition through passing-on the corporate culture, CSC prevents such misconduct through organizational regulations, control mechanisms and employee training such as :

(1)**Employee morality :** CSC established a "Code of Conduct for the General Manager" and "Code of Ethics for CSC Group Employees" so that employees can understand the moral requirements of the Company.

(2)Risk assessment：The internal auditors of CSC carry out risk assessments for each operational cycle and operation item, including compliance with the related laws and regulations and develop an annual audit plan based on the results of the risk assessment.

(3)Self-inspection：The inspection items include staff's personal integrity. The self-inspection report is then reviewed by the Internal Audit Office (IA) and President, in order to understand whether each department has achieved the purpose of the self-inspection mechanism in a timely manner. Then, the IA can adjust the design and implementation of the internal control system in response to environmental changes and requirements. As required, subsidiaries shall be monitored and re-audited to compile the self-inspection reports to realize the implementation mechanism.

(4)Employee training：The training program for new employees includes：morality, Company regulations, and discipline. The Corporate Culture Committee meeting is held regularly to review the spirit, corporate culture and values of CSC, as well as review cases that both positively and adversely affect the transmission of CSC's corporate culture. CSC's Semimonthly Journal and website also provide relevant training and promotion information for all employees.

(5)Complaint mailbox：The complaint hotline and mailbox were set up to collect information on misconduct for the entire CSC Group. An investigation of the misconduct complaint will be carried out, and the misconduct will be handled in coordination with the responsible department.

(6)Countermeasures against misconduct：The personnel management system requires an employee guilty of malpractice to be removed. All cases of misconduct are sent to the "Employee Award and Punishment Committee" and dealt with according to the results of the review.

2.3.4 Socializing guidelines

(1)To implement a premium corporate culture and maintain the image of the company, CSC establishes regulations and requests that employees not accept gifts or benefits offered by any stakeholders related to their duties or to participate in any banquets and social activities arranged by such stakeholders (except for special cases approved by the general manager). In the case of subordinating relationships, reasonable interaction is taken into account in the regulations.

(2)To implement a premium corporate culture and maintain the image of the company, CSC establishes the principles for the staff to handle the receipt of valuable gifts and participating in banquets and social activities; when dealing with the receipt of valuable gifts from stakeholders during business interaction, unless mentioned above, shall be rejected or returned. When there is a failure to return a valuable gift, the report shall be submitted to the general manger and the valuable gifts shall be sent to the Department of General Affairs for further handling.

(3)CSC has been established principles to guide the participation of CSC employees in banquets due to the need of the development of external relationships.

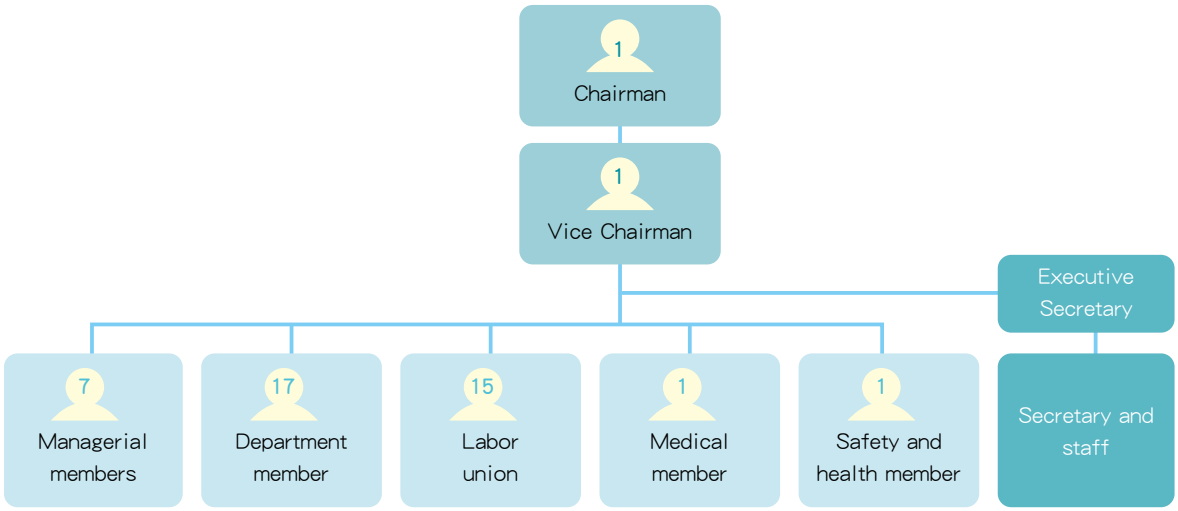
2.3.5 Labor Safety and Health

CSC's belief in labor safety and health： "Employees are the most valuable asset of the Company, and ensuring the safety and health of employees is CSC's most important basic responsibility." CSC established the following "Basic Beliefs of Safety and Health" to advocate the protection of safety and health for all employees：

(1)All occupational injuries and diseases can be avoided.
(2)It is everyone's responsibility to maintain safety.
(3)It is the responsibility of management to prevent occupational hazards.
(4)Safety starts with planning, and disaster prevention starts with hazard identification.
(5)Education, communication and audits are important for ensuring safety.
(6)Working safety is the basic requirement for employees and contractors.
(7)Contractors are our partners in ensuring working safely.
(8)Unsafe behaviors and workplaces must be corrected and improved immediately.
(9)Implement industrial safety measures and achieve the goal of zero accidents by determination, attentiveness and care.
(10)No performance makes sense without safety.

Labor safety and health management system

CSC obtained the TOSHMS[note] (Taiwan Occupational Safety and Health Management System) certification in 2008 as required by the Council of Labor Affairs. To ensure effective discussion and resolution of problems, CSC set up the Occupational Safety and Health Committee with the President acting as the chairman and the Executive Vice President acting as the vice chairman; 15 representatives from the labor union are appointed as members of the Committee (constituting more than 1/3 of the total members). The Committee meeting is convened once every two months. The implementation performance of the safety and health practices is reported in the annual report and is open to the shareholders for review. The structure of the committee is shown below：



Note：TOSHMS in 2011 was renamed as CNS 15506.

2.3.6 Human resources development

Based on CSC's development strategies, investment projects and the resignation/retirement status of employees, the departments regularly review the requirements for human resources and make short-term and long-term human resources utilization plans. New employees are hired adequately and on a timely basis for positions which become available when the current responsible employees are due to retire. A mentoring system is used to ensure that key know-how is passed on to new employees.

The Manpower Development Section under the Human Resources Department is responsible for developing the system and regulations for the development of human resources, as well as preparing and executing the budget and training program. It is also responsible for planning and promoting the development of management capability, organizational vitality management, knowledge management and e-Learning programs. An annual training program is arranged and implemented every year to train employees for the Company and to pass key know-how to them. Further training programs are established to select outstanding employees and have them participate in training programs in Taiwan and foreign countries to cultivate the employees needed for the operation of the Company：

CSC established the Human Resources Development Committee to review, promote and evaluate the following affairs：

(1)Strategies and objectives of human resources management.

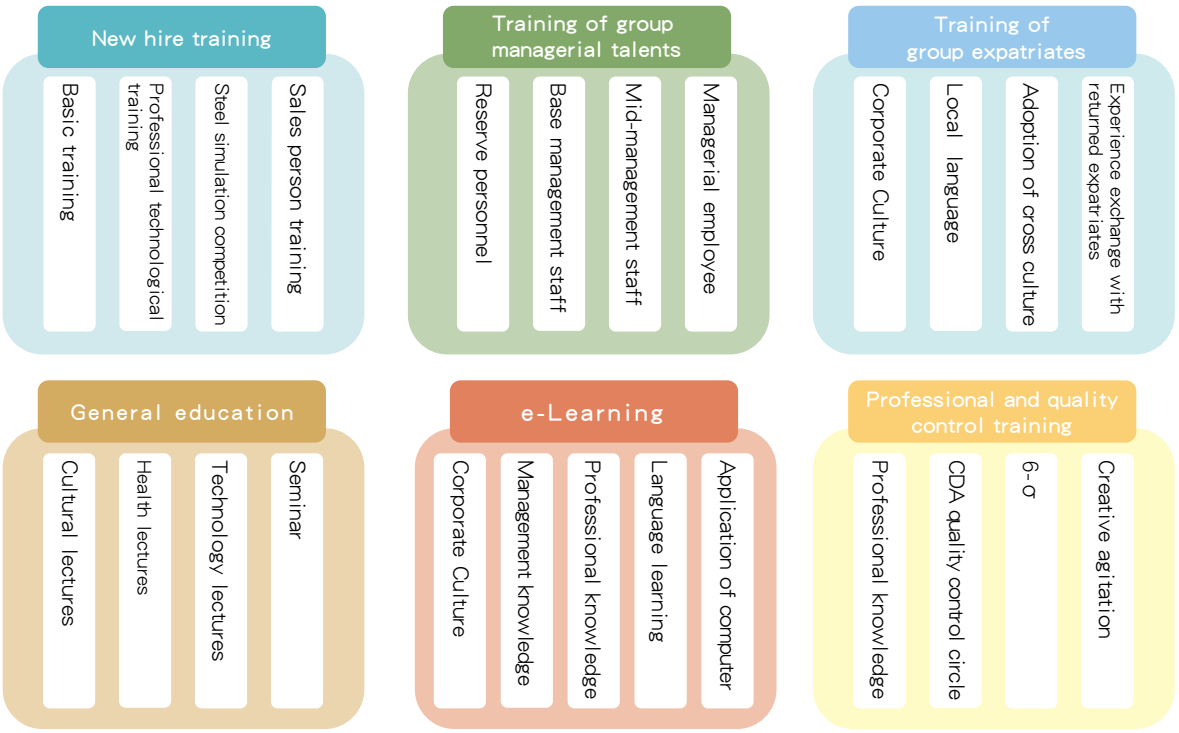
(2)Organizational development and human resources utilization plans.

(3)Human resources development strategies and talent training plans.

(4)Important human resources management systems.

Employee cultivation and development structure

CSC's talent cultivation development structure covers six items—training of group managerial talents, training of group expatriates, general education, orientation training for new employees, e-Learning and knowledge management, and professional and quality control training.



2.4 Energy and environment management

2.4.1 Policy and concepts

CSC has combined the environmental management system with the safety and health system into one system. The SHE policy of CSC is described below：

(1)Care of lives：Respect lives; implement environmental protection and SH management to prevent injuries and illness and contribute to the health of employees.

(2)Risk management：Carry out risk assessment and environmental consideration; enhance overall risk control and pollution prevention to eliminate potential risks.

(3)Training and communication：Teach employees the concept of environmental protection, safety and health; establish a trustful culture to encourage communication among employees, contractors and the community for more harmonious relationships.

(4)Compliance with regulations：Identify and implement regulatory requirements to enhance preventive and corrective functions, and take on corporate social responsibilities earnestly

(5)Continuous improvement：Make efforts to improve energy saving, carbon reduction and ensure zero accidents; improve SHE performance and contribute to the sustainability of the business operation.

CSC's visions in energy and environment are to promote **"continuous energy saving, environmental protection and become a reliable green steel maker."** The concepts for energy and environmental management are：

(1)Improve KPIs (Key Performance Indexes) to achieve world-class level and be an international and environmentally-friendly enterprise.

(2)Make use of internal and external resources for maximum effectiveness.

(3)Speed up the application of BATs (Best Available Technologies) and renewable energy to meet low carbon, low pollution and high value goals.

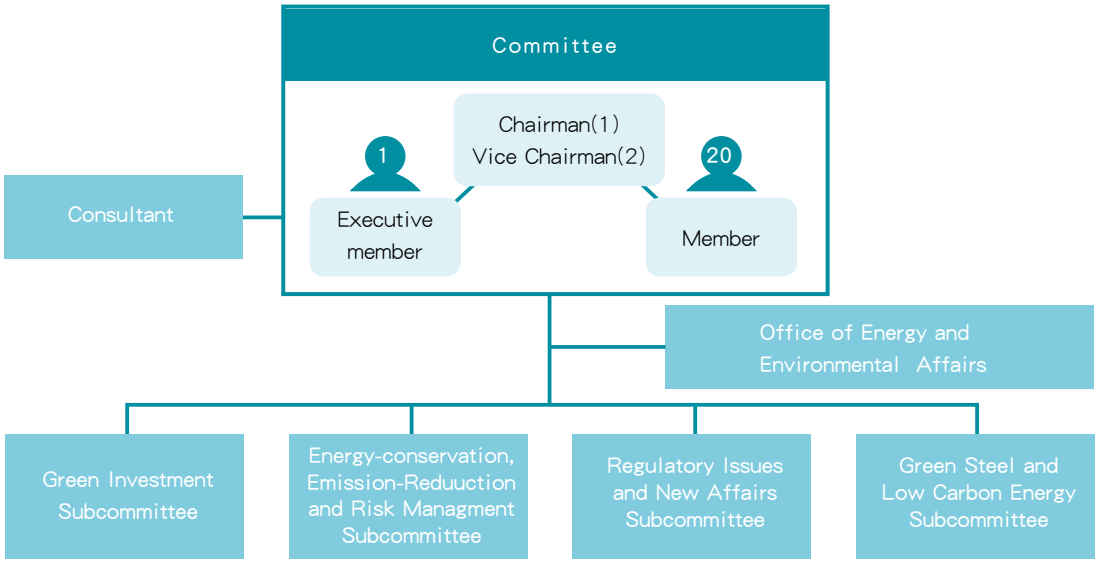
(4)Develop energy-saving products and new green businesses in coordination with the development of the low-carbon green economy in Taiwan.

2.4.2 Organizational structure

To take responsibility for environmental protection, energy saving and carbon reduction, CSC has set up the Environmental Protection Department and Utilities Department under the Production Division to handle specific issues with the support of technologies from the R&D Division. The cross-department "Energy Saving Committee" and "Environment, Safety and Hygiene Management Committee" and the "CSC Group Committee for Energy and Environment Promotion" were also set up to enhance communication and improve overall effectiveness.

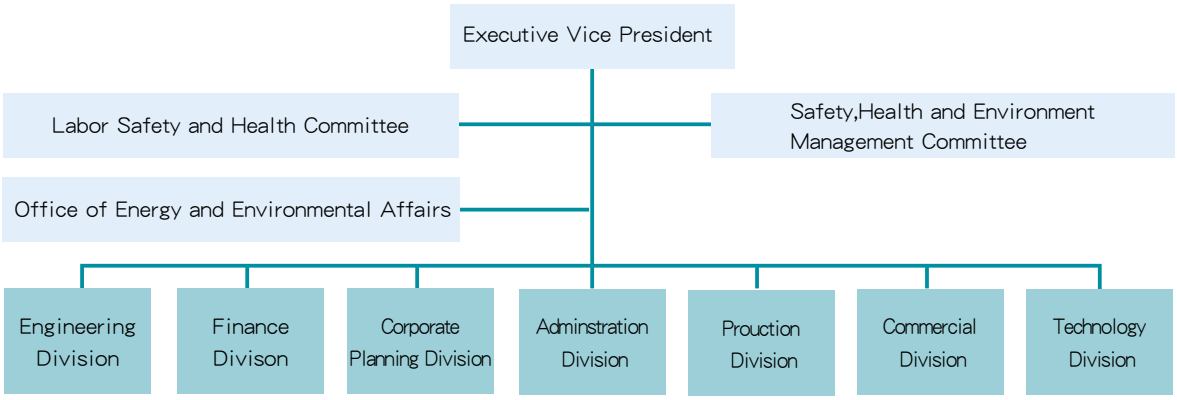
(1)**CSC Group Committee for Energy and Environmental Promotion**

CSC set up the CSC Group Committee for Energy and Environmental Promotion in April of 2011, with the Chairman of CSC acting as the chairman of the Committee to assist the Company with the implementation of its related tasks with PDCA.



(2)SHE management system

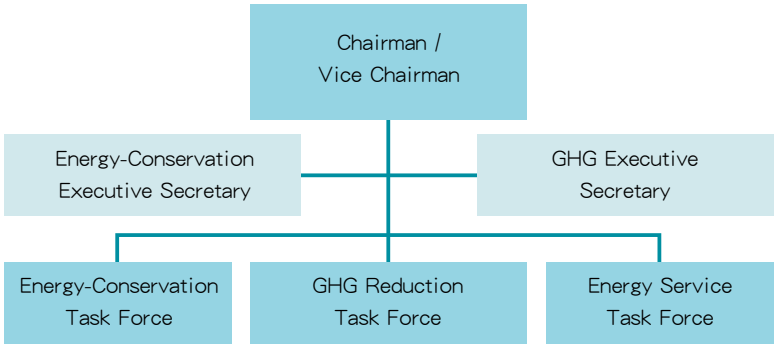
CSC earned ISO 14001 certification in 1997. This system was then integrated with the OHSAS 18001 occupational safety system to form the "Environment, Safety and Health Management system" in 2005. Environmental Safety and Health policies are announced and implemented after being approved by the Chairman of the Board. The "Environment, Safety and Health Management Committee" was established with the Executive Vice President acting as the chairman of the Committee. The function of the Committee is to make decisions on all SHE-related affairs.



CSC introduced the ISO 50001 energy management system in February 2011 to improve its energy saving and carbon reduction performance. CSC integrated the energy management system with the achievement of the SHE management system and was certified on December 19, 2011, after having undertaken two external audits. Between November 27-28 2012, CSC completed follow-up auditing to maintain the validity of the certificates.

(3)Energy -Conservation Committee

To lower energy costs effectively, CSC set up the "Energy-Conservation Committee" in 1978 with the Vice President of Production Division acting as the chairman of the Committee. It has three task forces responsible for the implementation of energy conservation and carbon reducing affairs within the Company.



2.5 Engagement in social harmony

2.5.1 Concept and scope：

(1)**Proactive and responsible**：Not only is CSC obligated to the safety and health of employees and contractors, but it is also responsible for their salary/wages, welfare, equal rights and job training.

(2)**Local needs first**：Bearing the concept and attitude of harmony and prosperity together with local communities in mind, CSC takes the responsibility of local environment quality and safety very seriously. We pay business income tax and environmental charges in Kaohsiung City and provide assistance to local development in many aspects.

(3)**Multiple approaches and inputs**：CSC places great importance on the rights and interests of the shareholders, employees, contractors and the public. In addition to operating the business legally and maintaining fair competition as one of our commitments, we fulfill our obligation to give the government our advice on public policies and international affairs.

(4)**Shouldering responsibility willingly**：With the awareness of the need to do well, CSC takes on many responsibilities in public welfare, culture, art and education areas through its business units, CSC Labor Union, CSC social clubs and CSC Group Education Foundation.

2.5.2 CSC Group Education Foundation

CSC set up the "CSC Group Education Foundation" in 2006 in order to engage in relevant social participation activities with a broader, deeper and more diversified approach. The Foundation aims to promote education and employee cultivation in steel-related fields, care for ecological conservation, promote humanist ideas and cultural spirit, and encourage sustainability.

The Vice President of the Administration Division serves as its general secretary. There are additionally one executive secretary and one accountant. Most of the needed professional and general affairs are supported by CSC's related departments.

Web：http：//www.csc.com.tw/CSC/gef/index.asp

Facebook：https：//www.facebook.com/CSCGEF (CSC Group Education Foundation)

2.5.3 Social participation

CSC practices social participation through different channels including internal responsible units, CSC Group Education Foundation, CSC Labor Union and CSC social clubs. The regular activities are described below：

Type of task	Responsible unit	Tasks
Advice on energy and environmental policies	Office of Energy and Environmental Affairs	-Amendment of rules according to central and local regulations, including energy saving and carbon reduction, soil and groundwater, energy tax, Air Pollution Control Act, Waste Disposal Act -Advice regarding the low-carbon economy, carbon credit policy, development of industries in southern Taiwan -Promoting carbon reduction responsibility with global competitors
Development of human rights and resources	Human Resources Department	-Negotiating reasonable work environment policies -Sharing knowledge
Safety and Hygiene	Industrial Safety and Hygiene Department	-Prevention of occupational accidents and epidemic diseases -Participation in national/international communication and sharing activities
National and local public affairs	Public Affairs Department	-Good-neighbor activities, social support and assistance, and participation in emergency assistance -Good interaction with legislators, administrative agencies, media and opinion leaders
Social education and culture	CSC Group Education Foundation	-Promotion of educational activities regarding steel production and application techniques -Act as a sponsor for science and technology, social education and other cultural activities
Labor policy	CSC Labor Union	-National labor interests and welfare policies -Communication, cooperation and interaction with groups of the same nature
Social care, art, and culture activities	CSC, CSC Group Education Foundation , Labor Union, CSC social clubs	-Emergency assistance and re-construction after disasters -Take care of minorities (Philanthropy Club) -Promote environment protection efforts (Bird Watching Club) -Participate in the dragon boat contest for the Dragon Boat Festival every year and receive an award for excellent competition performance -Performances by the chorus and National Music Club; exhibition of art works (Photography Club, Fine Arts Club)

03 Performance Indicators

3.1 Corporate governance

World Steel Dynamics (WSD), in January 2013, released its evaluation for 34 world class steel makers on 23 criteria including farsightedness, scalability, and comprehensiveness of their industrial chain; CSC's ranking on this list improved from 17th in June 2012 to 16th this year.

In 2012, CSC participated in the evaluation of the Dow Jones Sustainability Indexes (DJSI) for the first time and was selected for inclusion in the Dow Jones Sustainability Asia Pacific Index. Moreover, in the 2013 RobecoSAM sustainable report, CSC was named "Sector Mover" for the steel industry.

Dow Jones Sustainability Indexes
Member 2012/13

ROBECOSAM
Sustainability Award
Sector Mover 2013

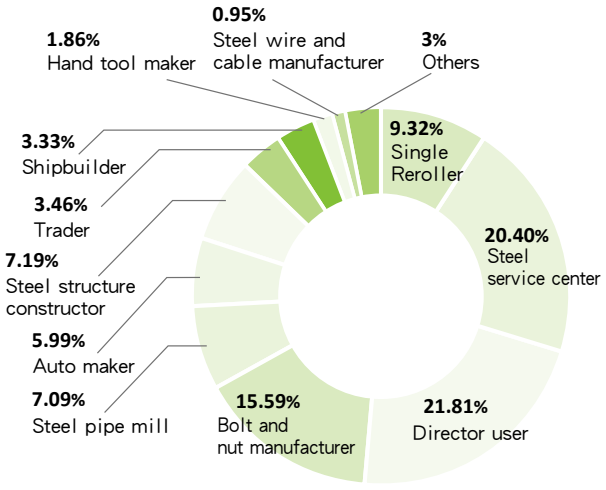
3.1.1 Sales volume and revenue

In 2012, CSC's domestic sales of steel products amounted to 5.763 million tons while 3.03 million tons went to export markets for an overall total of 8.793 million tons.

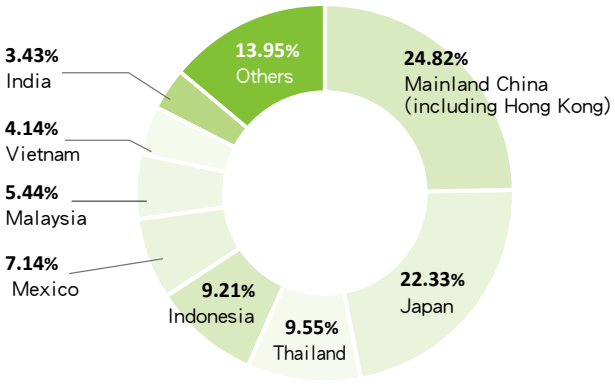
CSC's sales distribution in 2012

	Hot-rolled	Cold-rolled/coated	Steel plate	Bar steel	Wire rod	Semi-product	Total	%
Domestic	1,352,001	1,615,996	944,633	590,660	1,086,220	173,166	5,762,676	65.5%
Export	1,133,014	1,664,492	40,821	57,750	133,882	50	3,030,009	34.5%
Total	2,485,015	3,280,488	985,454	648,410	1,220,102	173,216	8,792,685	100.0%
%	28.3%	37.3%	11.2%	7.4%	13.9%	2%	100.0%	

CSC's Domestic Sales in 2012 by Sector

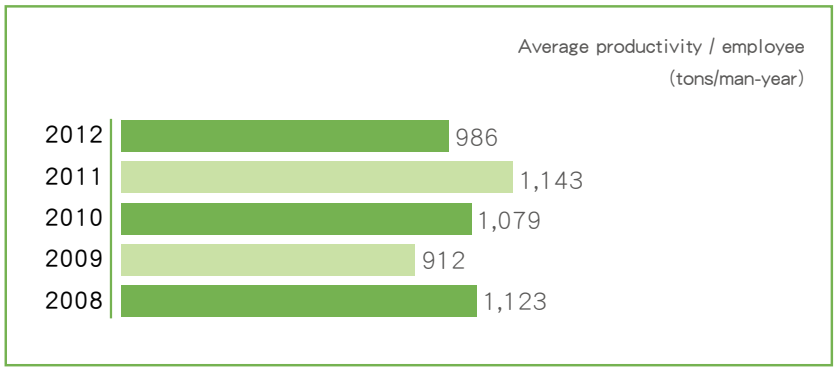


CSC's Export Sales in 2012 by Country



3.1.2 Productivity and performance indicators

In 2012, the production volume of crude steel reached 986 tons per employee, and 2.09 hours were used to produce one ton of crude steel. That was very competitive in the global steel market.



The steel industry is capital-intensive since it requires a huge amount of investment in production equipment. Additionally, coal and iron materials account for a high percentage of the production cost of steel products. In order to control and manage costs and maintain competitiveness, CSC continuously promotes various advancement initiatives. Among them, costs saving initiatives are part of an important strategy to respond to the existing steel making environment as well as a key performance indicator in the steel industry.

In 2012, the Production Division, Commercial Division, and Technology Division of CSC proposed about 125 key items called "Cost Reduction Activities" with the aim of reducing costs by 4.472 billion dollars. The key improvement items include : (1) the use of low price coal and iron ore to reduce material cost; (2) improvement of outside sales efficiency for steam by-products derived from the manufacturing processes; (3) promotion of the domestic development of equipment, parts and components, and spare parts; and (4) advancement of steel making and rolling capacities. In 2012, annual costs saved amounted to 6.034 billion, reaching an execution ratio of 135%.

3.1.3 Operating performance and distribution of earnings

Operating revenue

Due to the economic slowdown, the decrease in both the prices of steel products and sales volume in 2012, caused the revenues to decrease.

Unit : NT thousand dollars

Item	2012	2011	+(-)Amount	+(-)(%)
Operating revenues	207,193,105	240,376,019	-33,182,914	-13.80
Sales revenues	201,072,107	234,417,553	-33,345,446	-14.22
Service revenue and others	6,120,998	5,958,466	162,532	2.73

Operating expenses

Unit：NT thousand dollars

Item	2012	2011	+(-)Amount	+(-)(%)
Operating costs	198,229,265	218,781,975	-20,552,710	-9.39
Cost of goods sold	194,223,145	215,021,873	-20,798,728	-9.67
Service costs and others	4,006,120	3,760,102	246,018	6.54
Operating expenses	6,237,929	7,056,957	-819,028	-11.61
Total operating expenses	204,467,194	225,838,932	-21,371,738	-9.46

Non-operating revenues

In 2012, CSC's non-operating revenues and earnings were 5,274,278 thousand dollars, a decrease of 1,600,705 than those of 2011 due to the reduction of investment income recognized under the equity method at the amount of 2,798,349 thousand dollars.

Non-operating expenses

In 2012, CSC's non-operating expenses and losses totaled 1,833,281 thousand dollars, an increase of 644,010 thousand dollars than those of 2011 mainly because of the increase of interest expenses in 2012 at the amount of 588,687 thousand dollars.

Deferred credits on inter-affiliate accounts

In 2012, CSC's deferred credits on inter-affiliate accounts were 36,337 thousand dollars, an increase of 98,231 due to the increase of deferred credits on inter-affiliate accounts.

To sum up, CSC's net profit before taxes in 2012 totaled 6,130,571 thousand dollars, a decrease of 14,154,122 dollars (-69.78%) from 20,284,693 thousand dollars in 2011.

Year	Operating Revenues NTD billions	Net Profit before Tax NTD billions	NTD for EPS
2012	207.193	6.131	0.41
2011	240.376	20.285	1.42
2010	239.187	44.094	3.29
2009	165.409	20.160	1.52
2008	256.358	30.255	2.43

Distribution of earnings

In 2012, CSC's earnings available totaled 7.706 billion dollars, with a dividend distribution of 1.4 dollars per preferred share (stock of 0.1 dollar and cash of 1.3 dollars) and 0.5 dollar per common share (stock of 0.1 dollar and cash of 0.4 dollar). The dividend distribution and return on investment over the past five years are listed below：

Year	EPS after tax	Cash dividend	Stock dividend	Dividend payout ratio
2012	0.38	0.40	0.10	131.6%
2011	1.36	1.01	0.15	85.3%
2010	2.83	1.99	0.50	88.0%
2009	1.54	1.01	0.33	87.0%
2008	2.03	1.3	0.43	85.2%

Year	P/E ratio	P/D ratio	Cash dividend yield (%)
2012	72.61	68.98	1.45%
2011	23.51	31.66	3.16%
2010	11.27	16.03	6.24%
2009	17.97	27.40	3.65%
2008	19.57	30.55	3.27%

Notes：P/E ratio = Average closing price per share in the current year/EPS
P/D ratio = Average closing price per share in the current year/cash dividend per share
Cash dividend yield = Cash dividend per share/average closing price per share in the current year

According to CSC's Articles of Incorporation, the earnings of a fiscal year are distributed in the following order after payment of all taxes, deficits offset and appropriation of legal reserves：

(1)Dividends for preferred stocks at 14% of the par value

(2)The Company may set aside special reserves or retain earnings when necessary.

(3)Appropriation of 0.15% from the remaining earnings as remuneration for directors and supervisors; appropriation of 8% as bonuses for employees

(4)If distributable earnings remain after the distributions mentioned above, bonuses at 14% of the par value for common stockholders shall be distributed.

(5)If distributable earnings still remain after (4), additional bonuses shall be distributed proportionally to the percentage of shares held by stockholders of preferred and common shares.

Remuneration for directors, supervisors, and managers

The remuneration for CSC's directors, supervisors, President and Vice President is determined according to the Articles of Incorporation. The traveling expenses for directors and supervisors referred to the payment level of industrial peers. The remuneration for directors and supervisors in 2012 totaled 7,765 thousand dollars, while the remuneration for directors, supervisors and President and Vice President totaled 110,764 thousand dollars. The total amount of the remuneration for CSC's directors, supervisors and executive management (President and Vice President) is correlated to the performance of corporate governance (EPS after tax) and is not associated with external risks.

3.1.4 Responsive plans and execution of International Financial Reporting Standards (IFRS)

CSC is a public company and as requested by the Financial Supervisory Commission, it uses International Financial Reporting Standards (IFRS) as the promoting structure. CSC is a Phase 1 company and shall begin to compile financial statements in accordance with IFRS in 2013.
On November 30, 2009, CSC established an IFRS Interdepartmental Group to take the responsibility of promoting IFRS. The Group convenes a meeting every three months and the execution schedule is reported to the Board of Directors and Financial Supervisory Commission. By the end of 2012, 13 IFRS Interdepartmental Group meetings had been convened.

CSC has followed the requirements of the Financial Supervisory Commission and attached the following disclosures to the 2011 consolidated financial statements：
(1)Important contents and execution of IFRS adoption plans.
(2)Explanation of a major discrepancy that may occur between the accounting policy currently adopted and that for compiling financial statements regulated by IFRS.

Additionally, the following disclosure was attached to the 2012 consolidated interim and annual financial statements (Q1, the first half year, Q3, and annual)：
(1)Important contents and execution of IFRS adoption plans.
(2)Explanation of a major discrepancy that may occur between the accounting policies including the amounts affected.
(3)According to IFRS 1, the accounting policy selected for the first adoption of IFRS; amendment of rules and regulations related to internal audits have been completed gradually to meet the required schedule. There has been no report of a schedule delay.
(For detailed financial statements, please see：http：//www.csc.com.tw/csc/ss/fin.htm)

3.1.5 Current status of invested businesses

As of 2012, CSC had 109 invested businesses and among them, CSC has majority control over 20. In 2012, the newly reinvested businesses of CSC included CSC India, Qingdao CSC Precision Metal, RoyHill in Australia, Eminent Venture Capital, and White Biotech Corp. respectively belonging to electric coil production line, cutting and processing of steel material, upstream iron core material supplier, green energy, and biotech businesses that fit our strategy of positioning CSC in overseas markets, investing in potential growing coal and iron resources and developing green energy and environmentally friendly businesses.
In terms of management performance, due to the downturn of the steel market in 2012, the operations of the reinvested steel businesses did not perform as well as they did in previous years. The annual recognized investment income totaled 3.7 billion dollars.

Recognized Revenues from Re-investment by CSC in the Last Three Year

Unit：NTD million

Year	2010	2011	2012
Investment Income Recognized under the Equity Method	82.48	51.52	23.53
Dividend income	1.83	2.36	2.36
Gain on disposal	-	0.01	11.41
Total recognized revenues from re- investment	84.31	53.89	37.30

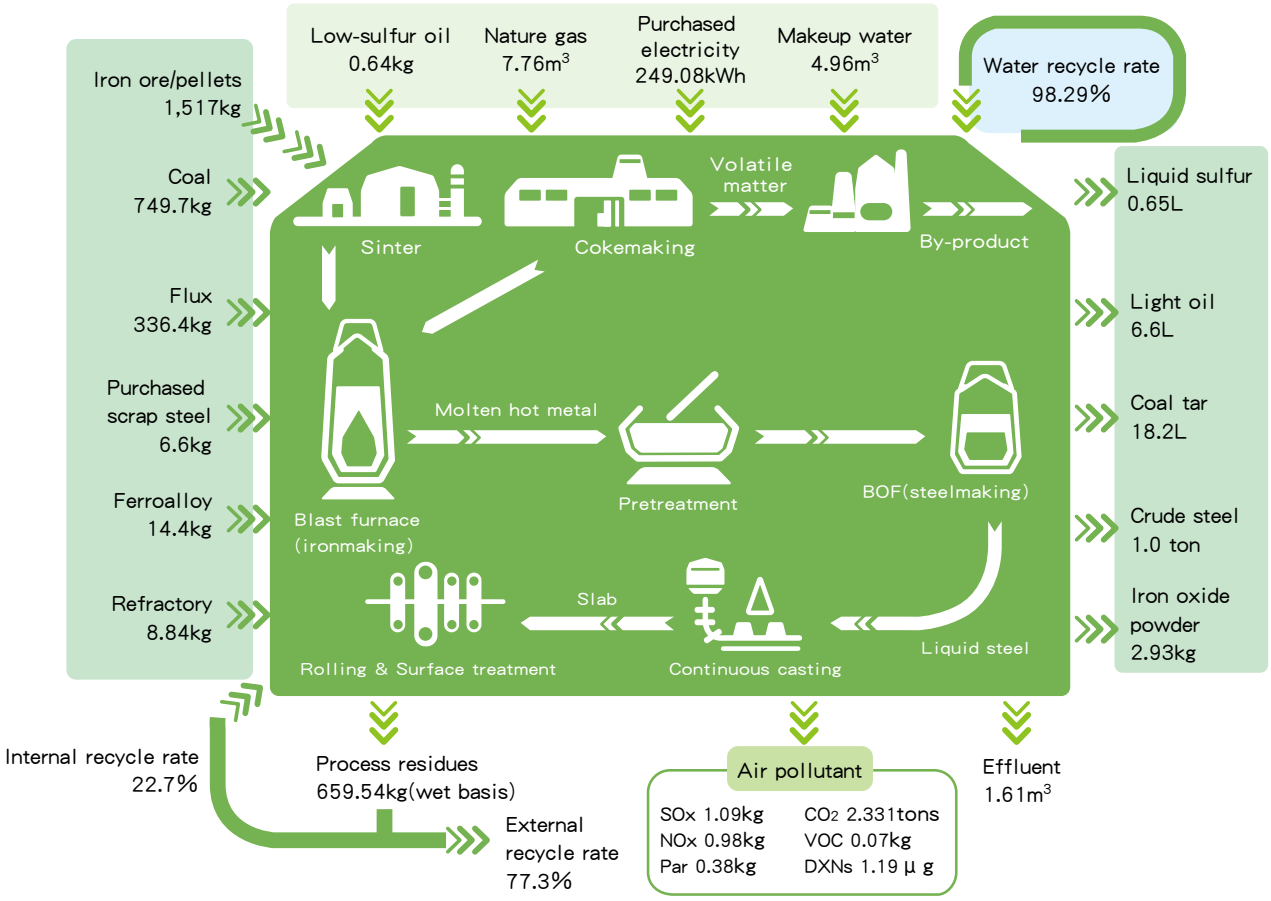
Operating Profits and Losses of Reinvested Businesses Controlled by CSC in 2012

Unit：NTD million

Name of Reinvested Businesses	Paid-in Capital	Operating Income	Operating Profits/ Losses	Non-Operating Profits/ Losses	Profits before Tax
CS Aluminum Corporation	7,413.73	15,914.98	650.23	35.50	685.73
China Steel Express Corporation	4,225.45	15,942.05	3,195.23	116.07	3,311.30
China Steel Global Trading Corporation	1,788.30	3,483.46	255.34	224.20	479.54
GAINS Investment Corporation	5,593.82	1,155.81	378.50	-	378.50
China Steel Security Corporation	207.00	1,161.46	53.66	55.41	109.07
China Prosperity Development Corp.	4,954.42	269.34	144.01	39.21	183.22
InfoChamp	414.71	1,453.20	229.54	1.27	230.82
China Steel Machinery Corporation	1,118.04	7,863.85	542.44	12.67	555.11
China Steel Structure Corporation	2,000.00	15,024.37	440.97	264.40	705.38
China Steel Chemical Corporation	2,369.05	8,256.54	2,080.06	205.42	2,285.49
CHC Resources	2,259.46	5,142.99	739.37	43.27	782.64
China Ecotek Corporation	1,161.37	9,436.88	412.24	325.35	737.59
Himag Magnetic Corporation	120.05	789.41	51.84	0.00	51.85
Chung Hung Steel	14,355.44	42,158.48	(3,386.89)	(86.39)	(3,473.27)
Dragon Steel	86,125.86	64,054.51	(1,955.64)	(861.77)	(2,817.40)
CSC Business Consultation Services	10.00	64.61	6.86	(0.55)	6.31
CSC Steel Sdn. Bhd.	Malaysia Ringgit 220 million	1,126.99	29.64	6.80	36.45
CSVC (USD)	USD 574 million	-	(3.12)	(0.43)	(3.54)
CSPM (RMB)	RMB 297,710,000	138.01	(24.54)	0.02	(24.53)
CSC India (Indian Rupee)	Indian Rupee 2.76 billion	-	(66.90)	36.56	(30.34)

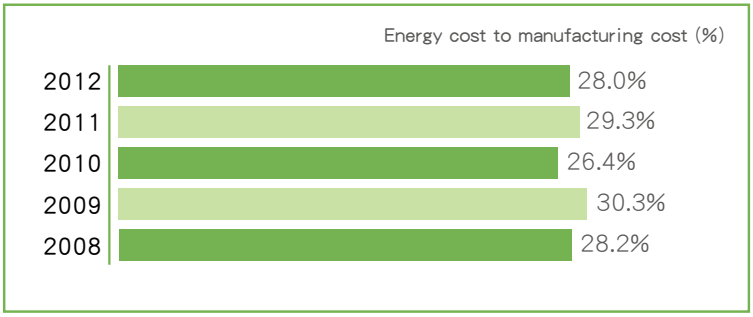
3.1.6 Energy resources and cost input

The input and output of unit crude steel in 2012 are described in the following figure：

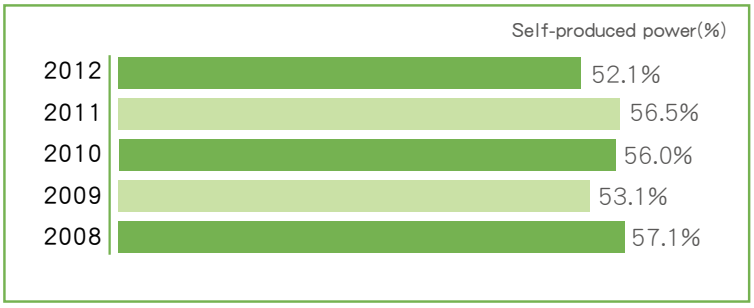


In 2012, CSC produced 9,142,751 tons of semi-finished products and finished goods totaling 8,383,197 tons with the consumption of 6,854,642 tons of coal; 13,869,296 tons of iron ore and pellets; 3,075,966 tons of flux; 60,631 tons of purchased scarp steel; 131,423 tons of ferroalloy; and 80,778 tons of refractory.

In 2012, the unit energy cost of crude steel accounted for 28.03% of the total manufacturing cost of CSC, for a reduction of 3% compared to 2011, due to reductions in energy prices.

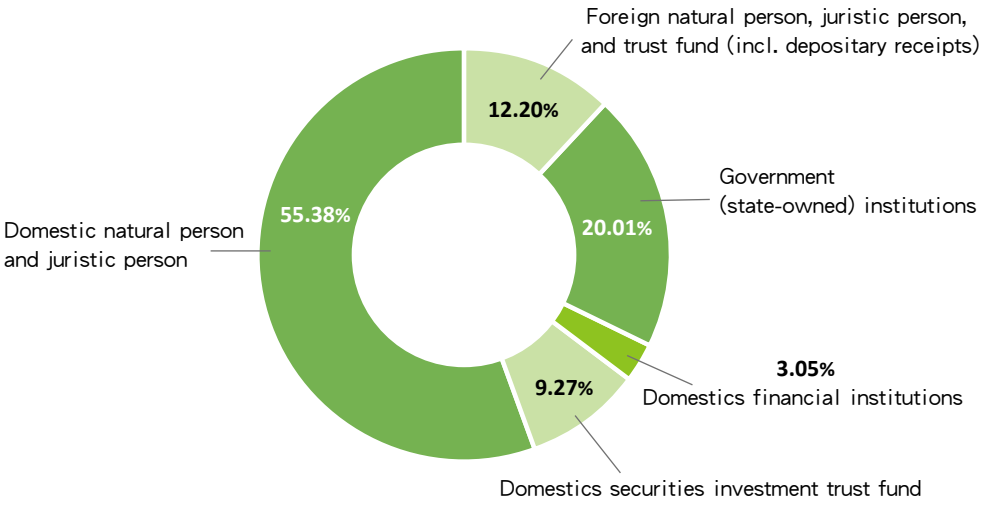


CSC's self-produced power accounted for 52.1% of its total power consumption in 2012, a decrease of 4.4% compared to 2011 due to production adjustments done according to the economic climate that resulted in reduced self-produced fuel gas and a shutdown for reengineering of waste thermal recycling power generation equipment used in the coke dry quenching process.

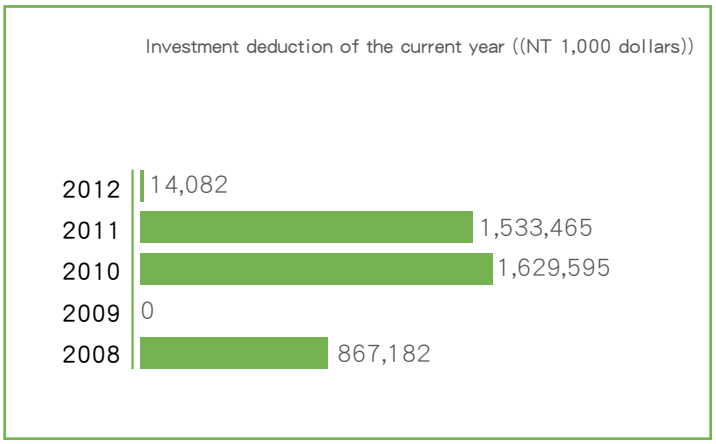


3.1.7 Capital sources and subsidies

CSC's shareholders are structured as follows：



CSC has claimed reduction of its business income taxes against its R&D expenses according to the "Statute for Industrial Innovation" and has not accepted any subsidy from the government. The deduction of investments that CSC obtained over the past three years is shown in the right figure：



3.1.8 Supporting local enterprises

CSC requests that suppliers provide products that are primarily sourced in Taiwan for our investment projects. This includes high value-added downstream production lines, environmental protection facilities, energy-saving equipment and capital equipment renewal. In addition to helping to reduce costs, this is also very helpful for the development of local manufacturers. CSC has not only requested that its suppliers increase the local portions of the hardware equipment, refractories, parts and accessories for the maintenance of facilities, but also engage in many localization activities such as：

(1)**Refractories**：With the joint efforts of CSC and local refractory manufacturers, the percentage of locally-manufactured refractories used by CSC in 2012 increased to 65.60% (in monetary value) and 82.85% (by weight), and directly contributed to lowering operation costs.

(2)**Spare parts and equipment**：CSC has committed to procuring locally-manufactured spare parts, mechanical/electrical equipment and systems for many years. The projects completed in 2012 were classified into 13 categories：spare parts and components, heat exchangers, gear reducers, pneumatic/hydraulic cylinders, pumps, impellers, rollers, wear-resistant parts and electrical parts. A total of 164 work orders were carried out in 2012 for a monetary value of NTD 230.723million. The localization efforts for electrical parts involved 96 work orders worth NTD 207.438 million. CSC's aim is to continue improving the local content rate of spare parts and components as well as systems.

(3)**Domestic production of manufacturing equipment**：In 2012, 57 production line and turn-key engineering projects (including design, procurement, manufacturing, and installation) at steel plants were completed at an amount of 1.979 billion.

3.1.9 Production and sales supply chain

In recent years, after continuous optimization of the supply chain, system flexibility and efficiency have been greatly improved; operations from planning, quotation, order taking, order modification, production plan and scheduling, order follow-ups can be handled directly by the system. Results and effectiveness are described below：

- Integrative supply plan and plant planning enables capacity change in response to order placement, thereby improving order accuracy and delivery rates.
- Flexible price mechanism that provides greater flexibility in the quotation system and quickly responds to market changes.
- Electronic operation of electric steel coil and electronic hot-rolled cash sales, and automatic steel plate LEEWAY facilitates cash orders and delivery efficiency.
- The provision of multiple order taking channels is included in the cash sales auction website of the CSC group. The first construction stage of Dragon Steel LEEWAY was completed.
- Tailored information reporting mechanism is provided for customers to compile their individual contracts, orders, payments, delivery and shipment slips according to their needs. Real-time reporting is also available.
- ERP to ERP communication between CSC and its customers is provided to allow for the interaction of customers' procurement, acceptance, inspection, and reporting operations and CSC's order, production, shipment, and invoice information. At present, 25 customers are connected.

3.1.10 Non-local operation indicators

The headquarters of CSC are located in Linhai Industrial Park, Siaogang District, Kaohsiung City. Most of its production, operation, sales and management facilities are in the headquarters. We have established a flux materials transit yard at Hualien Port to transport flux materials from East Taiwan to CSC; after flux materials are collected in Heren, trains are used to transport them to the transit yard for delivery to CSC. In order to provide service even more quickly to our international customers, we have established offices in Taipei and Osaka, Japan. Our business office in India was established in March 2011. CSC has no other operating bases outside of Kaohsiung City with the exception of the above establishments.

3.1.11 Upgrading of steel-using industries

The goal of this industrial upgrading of steel-using industries is to improve the value of downstream end products and to improve overall competitiveness via technology R&D, collaborative innovation, strategic investment, sales channel construction, and the creation of new CSC branded products. In terms of partnerships with the government sector, four technology development programs were completed in 2012. In 2013, three important R&D projects are in progress and a major steel alliance is proposed that will not only coordinate with governmental policies but also play a role in optimizing the industrial chain, supply chain, and value chain.

CSC promotes the upgrading of steel-using industries by establishing an Engineering Research Center and a Joint Research Laboratory, and a Joint Research Laboratory, and promoting the steel industry research alliance described below：

Engineering Research Center and Joint Research Laboratory

In 2012, CSC's R&D department was focused on the optimization of its industrial, value, and supply chains. In addition to promoting the upgrading of motor, electric car, automobile, fastener, and bearing industries, CSC created the High Value-added Metal Industries Engineering Research Center and carried out 7 technology development programs." Three Joint Research Laboratories for automobile were established as part of cooperation memorandums with car makers such as HAITEC, Chery, Jianghuai.

R&D Alliance of Steel-using Industries

Phase 2 Research Alliance Program of steel-using industries involved completing the establishment of seven research alliances. In total, 32 companies and four academic and R&D institutions participated in 2012 with a R&D expenses input of 643.4 million dollars resulting in the expected direct benefit of 20.96 billion dollars generated.

Industry	Alliance or project name	Manufacturer member	R&D expenditure	Estimated annual benefit
Screw & nut	Core Technology Development for High Value Fastener	Chun Zu, Fong Prean, Jinn Her, Chong Cheng, Ho Fung／MIRDC	70.46 million	1.0 billion
Motor	Development of high value-added technologies for the motor industry	Chun Yuan, Chilo, Len Mung, RECHI, Hanbell, Nuvoton, Cheng Day, TECO／MIRDC, NCKU	201 million	4.0 billion
Auto structure parts	Development of AHSS Application Techniques for Complex Geometry Auto Parts	CMC Motor, Kian-Shen, Wuu Shaing, Welcut, Jui Li／MIRDC, NTU	63.79 million	960 million
	Development of Forming Technology and Equipment System for Hot Stamping	Chyan Feng, Tainan Chin Chang, LCM／MIRDC, NTU, SJU	120 million	3.0 billion
Auto panel and inner parts	Development of Key Technology For High Strength Steel in Automotive AM Industry	William, Gordon, TYG, Jui Li, JYH SHYANG, GOBO／MIRDC, NTU	93.04 million	6.0 billion
Wire	Development of Diamond Wire Saw for wafer slicing	YCMC (leading), CSC, Mach Xtreme, Ferinox, Diamond Innovation	92.68 million	1.0 billion
Steel plate	The pre-study project of Low Alloy Steel sheet Application on High Precision press forming of needle roller bearing parts	NRB (leading), CSC／MIRDC	2.427 million	5.0 billion
Total		32 companies,4 academic & research institutions	643.4 million	20.96 billion

3.1.12 Customer privacy and satisfaction

Customer service

(1)Each quarter, a joint production and sales meeting with downstream steel industrial associations (or professional groups) is convened;

(2)Customer feedback information is acquired via interviews and technology seminars for the reference of improvement or enactment of operating and sales policies;

(3)Through the introduction of electronic production and supply chain systems, comprehensive sales measures for customers are provided;

(4)Consumer satisfaction surveys for both domestic and international businesses are conducted by authorized academic institutions;

(5)Frequent visits to customers by sales personnel are requested and orders are taken according to

production capacities to enhance delivery accuracy;

(6)Marketing resources of CSC, Chung Hung Steel, and Dragon Steel are integrated for mutual support and to provide extensive customer services;

(7)Electronic production and sales operation system is launched and designated personnel are provided to assist customers with resolving their concerns; moreover, order response time has been shortened from two days to six seconds.

Tailor customer services to address different demands such as：

(1)Supply to important direct customers (automotive and home appliances) with discounted prices and negotiate long-term contracts; offer exclusive prices to customers who cooperate with product development and R&D efforts.

(2)Priority supply is provided to customers with identical development direction as CSC such as the use of high-end and high value added products; with international competitive advantages; with future development potential; and participation in R&D alliances, sales cooperation agreements, and investment relationships.

(3)Active search of investment opportunities in downstream steel plants or steel-using industries; cooperative development with customers; supply of customized products; limited procurement for newly developed products under cooperation to customer partners within a certain period of time.

Protection of customer privacy

CSC is dedicated to providing the best products and services to customers and protecting customer information and privacy. Consequently, there were no complaints about infringement of customer privacy or the loss of customer information in 2012.

CSC undertakes the following actions to protect the privacy and information of its customers.

(1)All computers are installed with anti-virus software to avoid the spread of viruses through e-commerce transactions.

(2)All e-commerce data enquiries require a dedicated account and password. Customers, suppliers, carriers or other third parties have absolutely no opportunity to access data that is not in their account.

(3)E-commerce digital certificates, if any, must be updated or an application for extension of the effective date must be made for further use when the certificate expires.

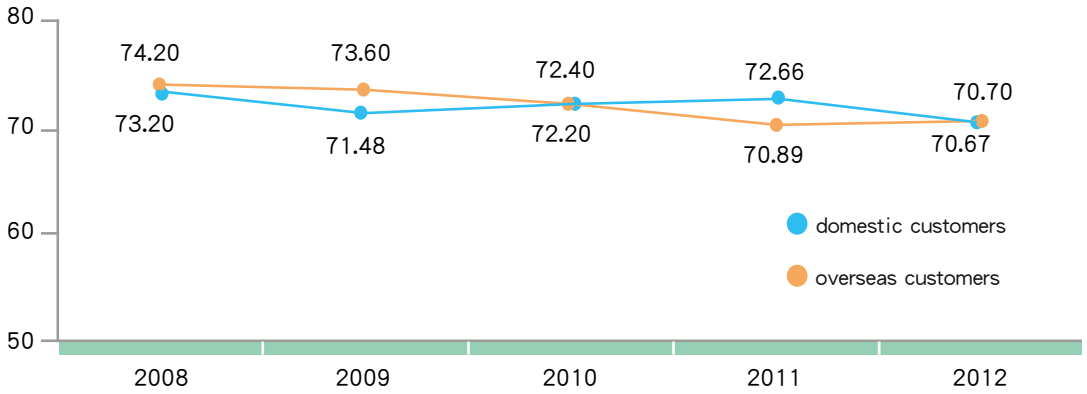
Customer satisfaction

CSC considers customers to be an extension of our production lines and in order to enhance the relationship with our customers, an academic institution is authorized to conduct customer satisfaction surveys on an annual basis. The results of the survey are sent to relevant departments for review and issues related by customers are examined and used as an importance reference for future operation guidance. In 2012, ten major topics： “quantity and payment,” “product price,” “product R&D,” “quality,” “claim management,” “customer services,” “communication,” “delivery schedule,” “transportation,” and “service of e-commerce,” were addressed in the surveys.

The satisfaction of domestic customers was 70.67 points. The top three satisfactory items were：a. service attitudes of sales personnel; b. response speed of sales personnel to customer inquiries; and c.

transparency of transaction accounts. The three least satisfactory items were：a. discrepancy between the prices of CSC products and equivalent international ones; b. reflection of product prices to international market prices; and c. assistance of CSC products to international competiveness of customers.

The satisfaction of overseas customers was 70.70 points. The top three satisfactory items were：a. service attitudes of sales personnel; b. professional knowledge of sales personnel; and c. interaction between sales personnel and customers. The three least satisfactory items of：a. price level of newly developed products; b. discrepancy between the prices of CSC products and equivalent imported ones; and c. discrepancy between the prices of CSC products and equivalent local ones.



3.1.13 Authorized Economic Operator (AEO) Certification

In order to comply with international supply chain security standards, CSC was officially certified as an AEO by the Customs Administration, Ministry of Finance in March 2012.
CSC, in addition to conducting annual audits with external business partners and internal self-audits, actively encourages relevant business partners of its affiliates and those in its supply chain to acquire AEO certification in order to gradually expand single point security control horizontally and vertically throughout its supply chain. It is expected to conduct comprehensive integration to ensure supply chain security in order to fulfill its international corporate responsibilities.

3.1.14 Supplier audits

(1)Conduct environmental guidance and auditing for the downstream BOF slag contractor (CHC Resources Corporation) and desulfurization slag recycling contractor.
(2)Request CSC Group affiliates to apply for ISO-50001 certification. There are four affiliates of the CSC Group that are currently ISO-50001 certified. They are Dragon Steel, CHC Resources, CS Aluminum Corporation, and Chung Hung Steel.

(3)Request CSC Group affiliates to compile a CSR report. In the CSC Group, Dragon Steel, CS Aluminum Corporation, CHC Resources, China Ecotek Corporation, China Steel Chemical Corporation, Chung Hung Steel, China Steel Machinery Corporation, InfoChamp, Himag Magnetic Corporation, China Steel Express Corporation, CSC Steel Sdn. Bhd., and China Steel Strucutre Co., Ltd. have compiled CSRs.

(4)Actively encourage affiliates and relevant business partners in the supply chain to participate in AEO certification program. In the CSC Group, Dragon Steel, CS Aluminum Corporation, China Steel Chemical Corporation, Chung Hung Steel, and China Steel Machinery Corporation were certified as AEOs.

(5)Plan to conduct a human rights survey of raw materials suppliers in the future.

3.1.15 Anti-dumping efforts

(1)CSC in November 2011 submitted a request for three anti-dumping investigation cases to the Ministry of Finance, the Republic of China that involved Baosteel in China, JFE and Nippon Steel Corporation in Japan, POSCO in Korea, and Indian mills. Subject merchandises in three categories were low grade non grain-oriented electrical steel made in Japan, cold-rolled carbon steel products made in Korea and mainland China, and carbon steel plates made in Korea and India. After receiving responses based on good will, CSC voluntarily cancelled the investigation requests against the electrical steel made in Japan and cold-rolled carbon steel products made in Korea and mainland China, but maintained the charges of dumping carbon steel plates by Korea and India. The International Trade Commission, Ministry of Economic Affairs on May 25 rejected CSC's submission and CSC will continue collecting information for administrative relief to protect the rights of downstream and upstream suppliers.

(2)On October 5, 2012, under the request of BlueScope Steel, the Australian government filed anti-dumping investigations against steel mills in Taiwan, Korea, Malaysia, and Japan. Among these mills, CSC was taxed at a rate of 2.6%. In December of the same year, imported hot-rolled coil were taxed at anti-dumping tax rates. Due to the lower tax rate that was imposed rather than expected, a small impact were felt. CSC will continue watching and will evaluate whether products will be sold to Australia in the future.

(3)The Ministry of International Trade and Industry (MITI), Malaysia, imposed anti-dumping tax rates on wire rods imported from Taiwan, mainland China, Indonesia, Korea, and Turkey. CSC was taxed at the rate of 10.98% on annual sales to Malaysia of approximately 23,000 tons, accounting for 6.11% of total sales to Malaysia. CSC will absorb the price variance on its own.

3.2 Energy and environmental management

3.2.1 Climate changes and opportunities

Extreme changes in climate such as the increase of heavy rain, drought, and typhoons have occurred in recent years and seriously affected the daily life of people and corporate operations. Under these circumstances, saving energy, reducing carbon emissions and doing other things to lessen the effects of climate change have become very important issues in many industries. CSC employs the following strategies to reduce the risks brought about by the climate change and to strengthen its competitiveness for the future：

(1)**Adjustment of organizational functions**：The independent Office of Energy and Environmental Affairs and the CSC Group Committee for Energy and Environmental Promotion chaired by CSC's Chairman were established to deal with related issues rapidly and effectively within the CSC Group.

(2)**Water supply safety**：Plans will be made for sea water desalination, municipal wastewater reclamation, improvement of water pipes to ensure a stable water supply during the rainy and dry seasons, and a secondary water source will be added.

(3)**Rainwater collection**：CSC has installed rooftop rainwater collection systems that have collected approximately 295,000 tons of rainwater in 2012.

(4)**Minimization of raw material losses and pollution**：CSC is planning to set up closed bins for anthracite coal and windbreaks for raw material piles to minimize loss and pollution brought about by rain run-off. A pool for storm run-off and a treatment system have been set up to improve the quality of effluent.

(5)**Stabilization of raw material sources**：The disaster-resistance capability of the wharf, flux transportation and raw material piles have been improved. The flux materials are transported from Hualien by rail to ensure the stability of the transportation service.

(6)**Flood prevention**：Floods may bring about equipment failure and downtime. Although we have done quite well against flooding, we have prepared ourselves for more serious torrential and heavy rains.

(7)**Regulatory compliance**：CSC constantly pays close attention to the development of international conventions and regulations on climate change. We communicate with central and local governments intensively and assist governments in the development of policies and regulations geared to international standards. We are also committed to fulfilling our energy saving and carbon reduction obligations and to helping steel-using industries to prepare themselves for further changes in the climate.

(8)**Carbon Management**：Carbon credit allocation and trading are an ongoing global trend. It is better to be engaged in the management of carbon credits as early as possible in order to obtain the best competitive advantage possible for CSC.

(9)**Promotion of a green lifestyle**：CSC employees are encouraged to make adjustments and changes in their daily life by consuming a lighter diet and less energy. The promotion of a low-carbon life shall be achieved through daily green living efforts.

Global warming and extreme climate change have become common threats to people in recent years. Under the circumstances, CSC will certainly make more contributions to cool the Earth. We are committed to taking the following actions in the future for this purpose.

(1)Make medium and long-term GHG reduction roadmaps to make the GHG emission intensity of steel products (CO_2/ton of crude steel) reach the benchmark of the world's leading steel companies.
(2)Develop energy saving and carbon reducing steel products, and conduct LCA in order to expand their external carbon reduction performance.
(3)Be engaged in new green businesses and cooperate with domestic and foreign partners in carbon reduction, carbon capturing and storage efforts and the operation of carbon credit programs. We will integrate these activities with the operation of the Company.
(4)Promote low-carbon lifestyles and low-carbon consumption inside the Company and help develop a low carbon society through consumers' activities. In 2012, environmentally friendly effort by CSC employees is promoted and self-management and control as well as evaluations are conducted. The execution of this effort has been expanded to the whole CSC Group.


IECQ Certificate of Conformity
Hazardous Substance Process Management

3.2.2 Green products

(1)Compliance to hazardous product regulations

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 certificate of hazardous substances are available upon request. CSC also observes the development of RoHS on restriction requirements regarding cadmium (less than 100ppm), mercury, lead, hexavalent chromium, PBB and PBDE (all less than 1000ppm).

(2)Green steel products

CSC has developed many high value-added and eco-friendly green products for automobiles, electromechanical products, bridges and ships.The external carbon reduction potential of green steel products is described in the table below.

Green product	Potential for carbon reduction in life cycle (CO_2e (ton)/ steel (ton))	Life cycle (year)	Potential for carbon reduction / steel (ton) year(CO_2e (ton)/ steel (ton) year)
High strength steel	3.1	10	0.31
Electrical steel (low energy consumption)	300	20	15
Process-saving steel	0.3	1	0.30
Corrosion-resistant steel	3.92	300	0.013

In 2012, the order volume of CSC green steel products was 1.96 million tons, which helped to generate external carbon reduction effectiveness of 3.662 million tons/year.

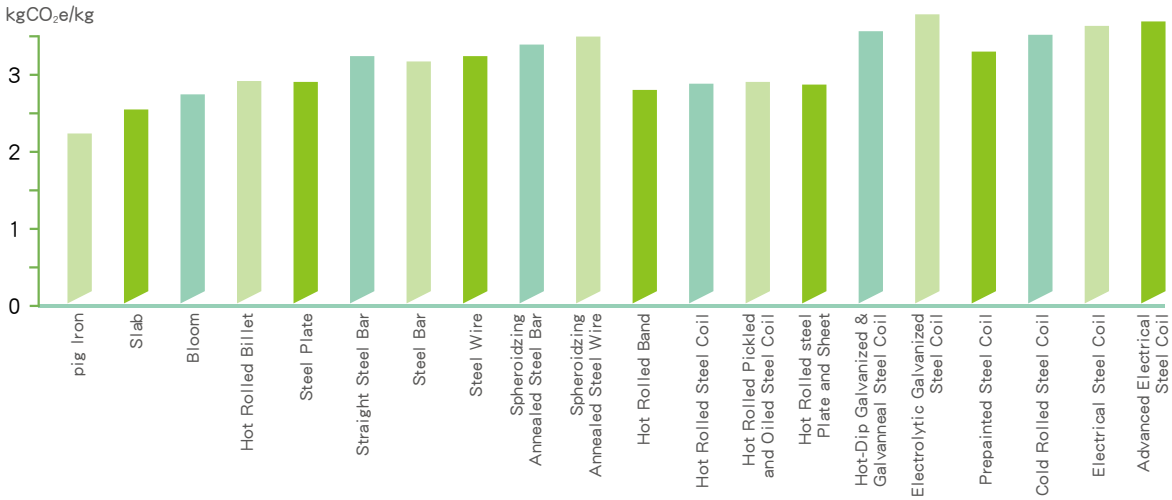
(3)Green supply chain

CSC is the upstream supplier of steel-using industries and is dedicated to the development and supply of more green steel products and by-products to help in establishing an efficient and profitable green steel supply chain. CSC has received more orders for high-class products; the percentage increased to 44.3% in 2012. CSC's green products in the green supply chain are described below：

- Anti-finger printed Chromate-free galvanized steel sheets
- Resulfurized carbon steel
- Hot forging non heat treated steel
- Higher-strength hot-dipped galvanized dual phase steel
- Fire-resistant steel
- Higher-strength building structural steel
- Higher-strength hull structural steel
- High magnetic flux density and low core loss high grade electrical steel
- Granulated blast furnace slag(GBFS)

(4)Carbon footprint and life cycle assessment

In addition to establishing low carbon footprint information for steel products, CSC uses the life cycle concept to assess the external carbon reduction profits of steel products in the field of consumables and downstream machining processes. The carbon footprints have passed the DNV external audits for 20 different steel products made by CSC, making the carbon footprint information of CSC credible and meeting the requirements of downstream customers for CSC's carbon footprint information.



(5)Carbon disclosure

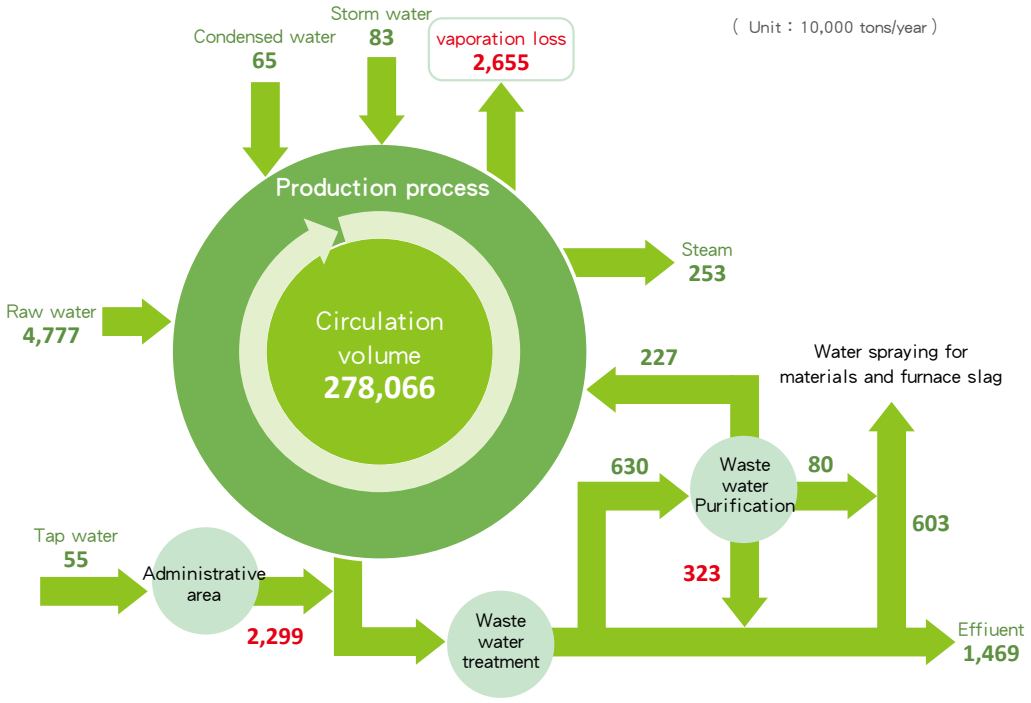
CSC has instituted GHG inventory and reduction programs, and disclosed GHG management information over time. The inventory result was published on the GHG registration platform and disclosed in this report. CSC has also answered the Carbon Disclosure Project's (CDP) questionnaire, makes its GHG emissions public and provides a report on its investment risks and opportunities in terms of climate change.

CSC's efforts in the promotion of carbon disclosure transparency and carbon reduction have resulted in it being named a star Climate Action member by worldsteel.

On November 12, 2012, the CDP report for Asia (excluding Japan) was announced and in Taiwan, 17 well-known public companies were discussed. CSC, among its counterparts in Taiwan, received the highest score indicating the high recognition of CSC for its information disclosure in regard to sustainable development and responses to climate change.

(6)Water footprint

CSC's Water Consumption in 2012



Water footprint certification：

CSC's hot-rolled coil products have earned water footprint certification based on the certification standards of Earthscan's Water Footprint Assessment Manual. CSC also passed Taiwan's SGS auditing process and was certified with a "Water Foot Print Certificate for CSC's First Hot-rolled Steel Products," the first one among Taiwan's steel products.

CSC water footprint summary

Unit (M^3/ton)	Green water	Blue water	Gray water	Total	Percentage
Raw material phase	0.00E+00	1.95E+01	1.16E-07	1.95E+01	72.23%
Manufacturing Phase	0.00E+00	4.44E+00	3.05E+00	7.49E+00	27.77%
Total water footprint				2.70E+01	

3.2.3 Green process

(1)Commitment to environmental impact reduction

In order to effectively control and manage emissions, CSC established a strict environmental loading assessment system for investment projects via the labor division of investment units, R&D Department, Utility Department, and Environmental Protection Department to assess environmental loading based on existing equipment capacities in order to expand or narrow down investment scales and define an energy boundary map to calculate the change of energy use in investment projects and CO_2 emissions in order to assess the overall environmental loading of investment projects. The assessment rate of CSC reached 100% and reduction measures were enacted accordingly to fulfill environmental promises and gradually improve the efficiency of overall environmental performance.

(2)Energy saving and carbon reduction

Due to site limitations, the energy saving and carbon reduction measures of CSC were made according to the best internationally available techniques. We carried out a total of 147 energy saving projects in 2012 and saved 383,754 Gcal as well as reduced 117 thousand tons of CO_2e emissions. Major projects included： efficiency improvement of the blast furnace fuel ratio, air venting adjustment of the air blower in the power plant, etc..

For indirect energy conservation, the main measures adopted in 2012 included：

- **Low energy lighting**：A high efficiency lighting system is continuously improved and replaced. 167 400W sodium lamps were replaced with 150W ceramic metal halide lamps. Annually, 1,502 MWh of energy and about 81.7 tons CO_2e of GHGs were saved.
- **Green transportation**：

  ■In order to alleviate air pollution generated by diesel engine-powered vessels during the unloading of China Steel Express' flux transportation ships, CSC established a task force to assess "vessel power supply with shore electricity." It recommended using shore electricity resulting in an annual reduction of 4,008 tons of CO_2e and 1,535.63 Kls diesel/year were saved. Additionally, 12.4 and 12.1 tons/year of Sox and NOx were reduced respectively.

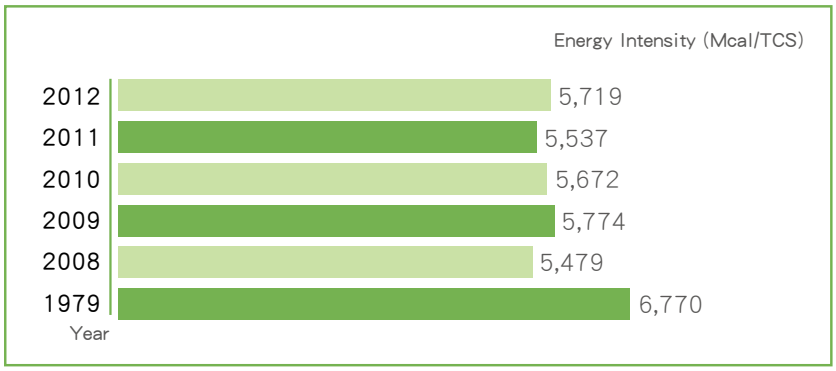
  ■GHGs offset project that changed the transportation of flux in Hualien from roadway to railway. DNV was entrusted for verification. It is expected to reduce CO_2 by 4,615 tons annually.

  ■The scale of a large-scale truck shipment program was increased to meet the priority requirement of utilizing large-scale truck shipments. It is expected that in 2012, about 45,440 tons CO_2e/year was reduced.

  ■Use of returning trucks：Through the uniform operation of CSC and Dragon Steel truck dispatches, CSC trucks that ship to Central and Northern Taiwan can be effectively integrated and ship products from Dragon Steel to customers in Southern Taiwan when they return, which reduced the frequency of trips by empty trucks. It is expected in 2012 about 5,503 empty trips were avoided and 22,287 tons /year CO_2 were saved.
- Installation of a smart grid：Smart meters were installed in CSC's hot-rolling mill to coordinate production with off and semi peak time to reduce its power bills by 0.5% or approximately NTD 25 million/year.
- A RFID system for inspection and delivery has been developed. CSC built the RFID system for five shipment stations, becoming the first steel company in the world that has successfully built a RFID shipment system with an accumulated profit of NTD 420 million, saving 24,000 liter oil consumption and 1,800 tons of CO_2e. In terms of the contribution for academic research, 25 papers on CSC's innovative RFID technology were published in IEEE journals and at the same time, 35 RFID related inventions were patented. At present, about 17 patents were acquired both in Taiwan and internationally.
- Energy saving on reheating furnace：CSC developed a dynamic furnace pressure control that minimizes oxygen concentration and has been successfully applied to hot-rolling line reheating furnaces to automatically control the air-fuel ratio of furnace areas and effectively reduce the fuel consumption, slab scale loss,, steel billet erosion, and NOx emissions. Each year, approximately NTD 32.65 million in savings can be generated.
- Improvements in reheating furnace efficiency has resulted from the heating curve of billets being re-designed, equipment re-engineered, and radiation heat loss reduced to decrease the heating cost of billets and save approximately NTD 8.94 million.
- CSC developed a historical temperature measurement and numerical heat transfer analysis model to create an off-line slab temperature simulation program that successfully identifies tolerance temperatures to prevent cracking caused by high heating rate. This temperature model can reduce heating time and save NTD 1.05 million/year.

(3)Energy intensity

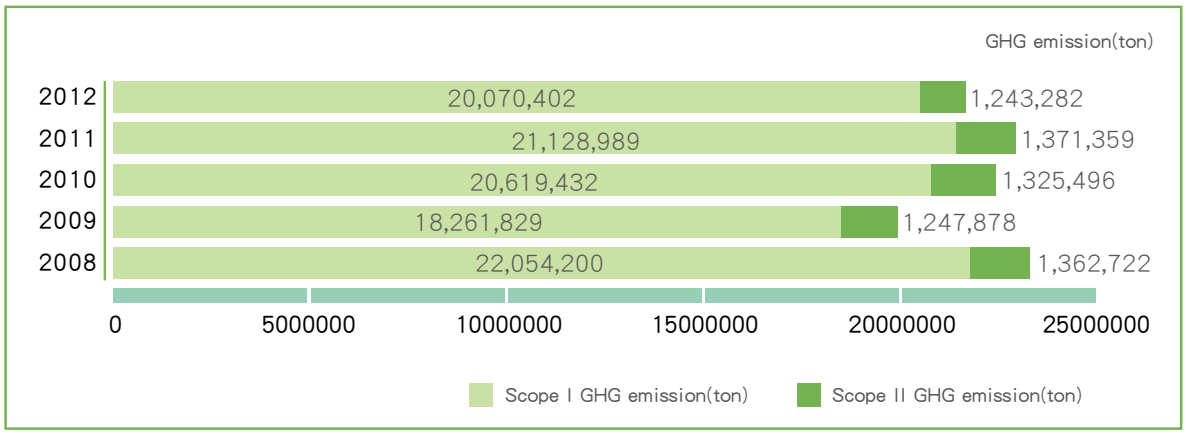
CSC has managed to adopt many BATs for energy saving and carbon reduction projects since its foundation. The energy consumption required during the production of crude steel is about 5,719 Mcal/TCS in 2011. It was 182 Mcal/TCS higher than that of 2012 due to the increase of energy consumption of unit crude steel and shutdown of thermal waste recycling equipment resulting from the adjustment of reduced production volume due to the economic slowdown. The discrepancy between the trend over the last five years and the initial production in 1979 is shown in the table below：

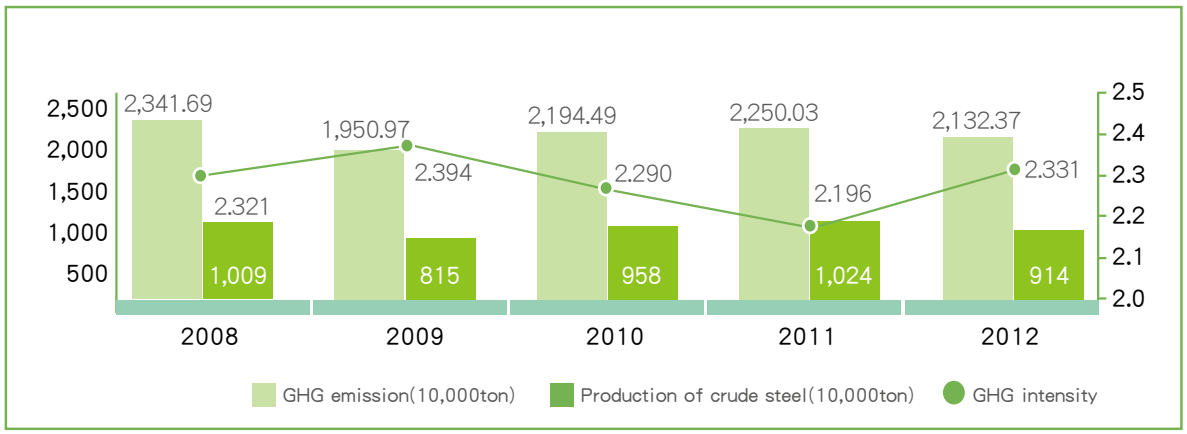


(4)GHG inventory and reduction

GHG inventory

CSC conducts a GHG inventory and internal verification program every year. Until now, CSC complied with the "GHG Inventory and Registration Guideline" of Environmental Protection Administration (EPA), Executive Yuan and completed the GHG inventory between 2000~2012. CSC's report was verified by a certification agency approved by the EPA and received the certificate. CSC also submitted it on the GHG registration platform of the government. According to the GHG inventory of CSC verified by BSI, the total GHG emission and intensity (the GHG emission of a unit product) in 2012 were 21.31 Mton CO_2e and 2.331 ton CO_2e/TCS, respectively. CSC's GHGs emission in 2012 is slightly more than that in 2011 due to the economic slowdown, and reduced production and steel billet volume that created difficulties in reducing emission intensity.



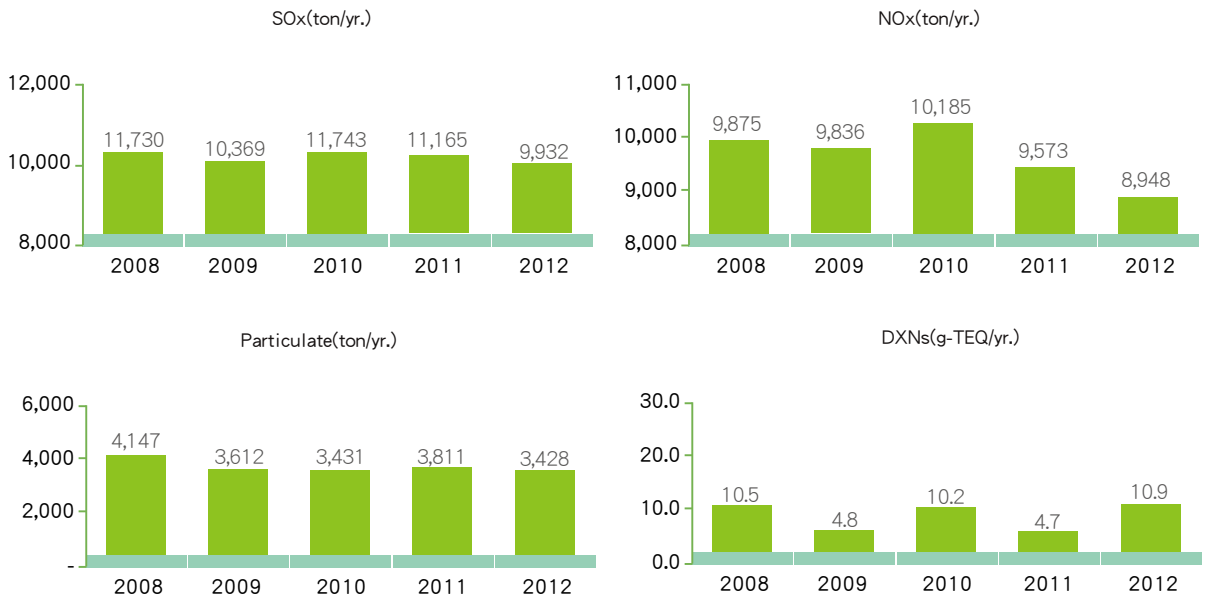


(5)Air pollution control

Environmental monitoring and measuring

CSC established the Environmental Surveillance Center in 1995. In addition to continuous monitoring and regular measuring of internal pollution sources, the center continuously monitored air quality around the factory using five air quality monitoring systems on its borders, and displayed the data on two monitor boards. By 2012, 29 out of the 306 factory stacks were equipped with the continuous monitoring system to analyze the concentration and total emission of NOx, SOx and particulates. The monitoring systems of 25 stacks were linked to the Environmental Protection Bureau, Kaohsiung City Government, and subject to the supervision of the government.

The trends of Emission reduction



Emission intensity

There were 0.375 kg of particulates, 1.086 kg of SOx and 0.979 kg of NOx emitted during the production of one ton of crude steel in 2012, slightly higher than 2011 due to the reduced production volume of crude steel. The performance of emission intensity of the particulates and NOx reached the top level of the international emission standards. Improvements will be made in regard to the emission intensity of SOx.

Measures：

a.Reduction of conventional emissions

Particulates：The sinter plant is constantly trying to improve the efficiency of the electrostatic precipitator. The dust arrestor for material piles was completed in December 2012. It is used to reduce the dissipation of particulates from the material pile. Additionally, the desulfurization equipment of the sinter plant also contributes to the reduction of particulate emissions. With these investment projects, the emission of particulates is expected to be reduced by 724.2 tons/year by 2018.

SOx：Thanks to the desulfurization equipment added to #4 cokemaking plant, sinter plant, and power plant, SOx emissions are expected to be reduced by 5,039.6 tons/year by 2018.

NOx：Thanks to NOx reduction systems for the boilers in the power plant and #2 sinter plant, NOx emissions are expected to be reduced by 1,369.5 tons/year by 2018.

b.Reduction of dioxin：In order to reduce the emissions of dioxin and meet the strict requirements of both central and local governments, an activated carbon injection system has been equipped at CSC's resource recycling and processing plant. The sinter plant introduced a Selective Catalyst Reduction (SCR) system for both NOx and dioxin reduction and improved its electrostatic precipitator. A rotary hearth furnace has been added to treat miscellaneous solid material in order to reduce recycling volume and to meet overall dioxide emission requirements.

c.Reduction of abnormal emissions：In addition to monthly meetings reviewing violation notices and defects identified during internal audits and sharing experiences regarding related improvements, CSC also actively promotes hardware equipment improvement, self-management and environmental observation efforts. Punishment is imposed for human errors. These measures are helpful in reducing abnormal emissions and violation notices.

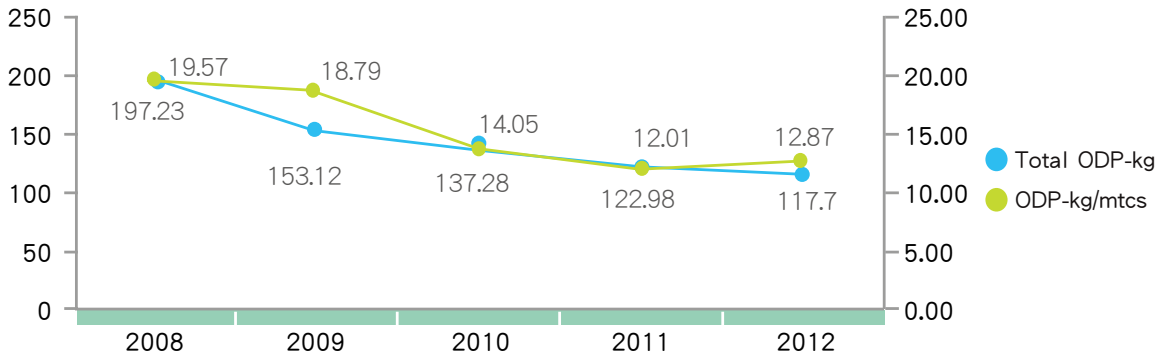
d.Reduction of odors：CSC's odor monitoring equipment was installed on December 20, 2012 and at present the monitoring results show odor values lower than the recommended threshold and concentration limits required.

e.Reduction of $PM_{2.5}$：To reduce the concentration of $PM_{2.5}$ effectively, the EPA has established tightened emission standards for sinter plants in the steel industry. Based on the tightened sintering standards and coal-fired boiler reduction regulations, CSC set up a plan for reducing $PM_{2.5}$ and its precursors (SOx, NOx, VOCs) as shown in the following table.

Pollutant	Item	Reduction potential	Schedule
Native $PM_{2.5}$	Anti-Dust net for ore piles	-1,592 kg/D	Completed in December 2012
	Water and chemical spray	-3,214 kg/D	Completed
	Created anthracite coal shelf	--	Completed in March, 2013
	$PM_{2.5}$ measuring for main process stacks		Completed
	Set-up de-SOx equipment in sinter plant for de-particulate	-200 kg/D	To be completed in December 2017

PM2.5 precursor	SOx	Install de-SOx equipment in sinter plant	-12,939kg/D	To be completed in December 2017
		Set up de-SOx equipment in Coal-fired boiler	-294kg/D	To be completed in December 2015
	NOx	Set up de-NOx equipment in the sinter plant	-2,707kg/D	To be completed in December 2017
		Set up de-NOx equipment in coal-fired boiler	-1,059kg/D	To be completed in December 2013
	VOCs	Cover the pool of water plants	-23.6kg/D	Completed in April 2013

f.Control of ozone depleting substances : The use of ozone-depleting substances dropped from 2003 to 2012, as shown in the figure below :



(6)By-product reutilization performance

By-product output

CSC generated 6.03 million tons (wet basis) of solid by-product in 2012 including : BF slag, BOF slag, de-S slag, dust, sludge, mill scale, spent refractory, civil residues, limestone cake and others, as shown in the following table :

Types	Description	Annual output (10,000 tons)	Percentage (%)
BF slag	Residue of BF after smelting raw materials	263.9	43.8
BOF slag	Residue of BOF after refining steels	113.7	18.9
de-S slag	Residue of hot metal desulfurization process	34.0	5.6
Dust	Particulates collected from de-dusting systems (including fly ashes)	31.5	5.2
Sludge	Solid cakes or mud from wastewater treatment after thickening and dehydrating	37.6	6.2
Mill scale	Rust from steel products or semi-products	30.0	5.0
Spent refractory	Used refractory from high temperature facilities	8.0	1.3
Civil residues	Residue from construction like soil or waste concrete, etc.	66.5	11.0
Limestone cake	Filter cakes from limestone washing and dehydrating processes	3.6	0.6
Other	Iron scrap, fly ash, rubber, waste oil, waste packaging materials, waste cold-rolling oil, waster oil drum, zinc dross, zinc sludge, BOF iron sand, tar sludge, trash, miscellaneous metal, mixed metal scrap, electric cable, etc.	14.1	2.3
Total		603.0	100

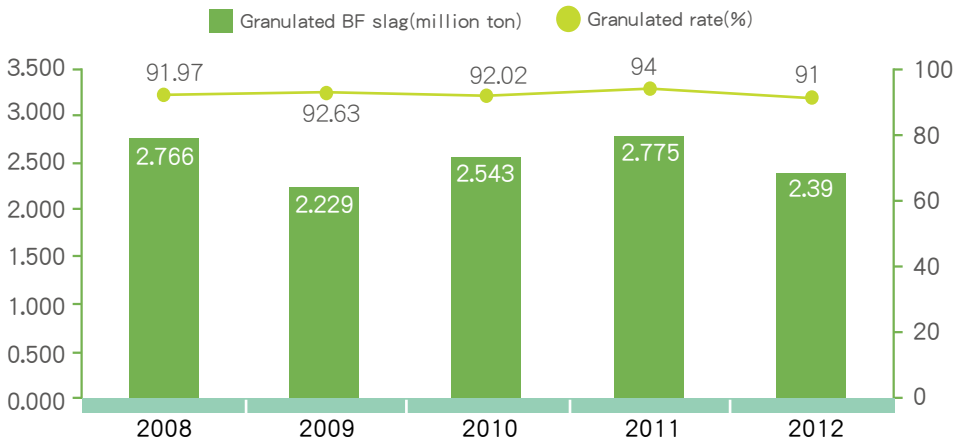
Recycling：

Internal recycling accounted for 22.6% of the total output (1.398 million tons) and 5.75% of total raw material consumption while external recycling accounted for 77.3% of the total output (4.773 million tons). The details are as follows：

Type	Internal recycling (%)	External recycling (%)	Application	Solidification or landfill
BF slag	4.5	95.5	Granulated BF slag for powder production, air-cooled ones used as aggregates	0.0
BOF slag	18.0	82.0	After entrapped metal recovery, part of this was used as raw material in the sinter plant, flux, slag pot base materials, and others for materials of land amendment, temporary roads, asphalt concrete, concrete agent	0.0
de-S slag	0.0	100.0	After metal recovery, the residues were used as materials for land amendment, temporary roads, soil improvement and low strength concrete.	0.0
Dust	97.3	2.7	The majority is recycled for iron making. Fly ash is mixed with sludge for cement making materials; zinc oxide powder generated from the Rotary Hearth Furnace (RHF) was sold to zinc refineries in Japan.	0.0
Sludge	79.6	20.4	High Zn sludge made from Electrolytic Galvanizing Line (EGL) was sold to zinc refineries in Japan. A large part of other types of sludge was internally recycled for iron making. Then, the rest was sold to cement plants.	0.0
Mill scale	100.0	0.0	Recycled for iron making	0.0
Spent refractory	88.1	11.9	After recovering entrapped metal, part of the spent refractory was recycled as steel making flux and a protective base layer for slag pots. The remainder was recycled by suppliers for refractory making.	0.0
Civil residues	0.0	100.0	Used as backfill materials for the South-Star project	0.0
Limestone cake	0.0	100.0	Admixture for construction material	0.0
Others	66.9	33.1	Mostly recycled within CSC; others were either recycled by suppliers or sold or recycled by certified companies	0.0
Total	22.7	77.3		0.0

Granulated BF slag replacing cement：

After drying and grinding, granulated BF slag powder is used to replace cement thereby reducing GHGs emissions and prolonging the use life of buildings. In 2012, CSC produced 2.39 million tons of granulated BF slag; in August 2012, #4 BF was been under maintenance and granulated rate reduced to 91%.



Recycle packing materials :

Packing materials generated from equipment suppliers include : straps, pallets and bulk bags. Straps are recycled as metal scraps, and pallets are sold as low-end materials. Usable bulk bags are reused while unusable bags are sent to the incinerator with fly ash and bottom ash that is recycled in sinter plants. The only packing materials for steel goods out of CSC are scraps and anti-rust paper. Scraps are recycled or sold as scrapped steel after clients unpack them. Usable anti-rust paper is reused but damaged ones are recycled as waste paper.

Straps

Anti-rust paper

Adding value to sludge and dust :

CSC launched the rotary hearth furnace (RHF) process in 2008. It increased the recycling volume of dust and sludge while decreasing the emission of dioxin in sinter plants by converting them into high value-added Direct Reduction Iron (DRI) for BF and ZnO powder(Zn>50%), which are sold to zinc refineries in Japan.

Reuse of BOF slag：

■**Ecological features**：After the small amount of free-CaO and free-MgO in the BOF slag is dissolved in water, the pH value turns to 12.0~12.4, at which value the growth of plants will be retarded; therefore, it can be applied to areas where weeds need to be inhibited such as parking lots. Moreover, minerals such as iron contained in BOF slag are helpful for the reproduction of beneficial algae and the biodiversity of creatures, making BOF slag a good material of marine carbon sequestration.

■**Main applications**：Part of BOF slag was recycled internally for iron making. Externally, it was mainly used as backfill material for sea reclamation in the South-Star project in Kaohsiung. Some was reused as aggregate for asphalt concrete (AC) or engineering materials for land preparation.

■**Self-control and internal audit**：CHC Resources Corporation (CHCRC) is fully responsible for processing and recycling CSC's BOF slag. In addition to following ISO-9001 standards, CHCRC has set up a self-control and continuous improvement mechanism based on a PDCA scheme to ensure that the quality of the BOF slag meets the requirements for being recycled as construction materials. CSC audits the self-control system of CHCRC on an irregular basis to help it achieve continuous improvement goals.

■**Difficulties in recycling**：Taiwan's Soil Pollution Control standard has not followed the international trends in regard to controlling low-toxic Cr^{3+} and high-toxic Cr^{6+} separately (the current national standard is total chromium < 250ppm), causing BOF slag, which only contains a moderate level of Cr^{3+}, to be regarded as a soil pollutant due to the amount of chromium. This has resulted in difficulties recycling it as well as BOF slag. Another problem for BOF slag is its high content of free-CaO and free-MgO. It should be treated specifically for these two ingredients prior to application to avoid expansion that may bring about engineering problems to roads or buildings.

(7)Control of toxic chemicals

Only two out of 15 toxic chemicals that CSC used in 2012 reached "Threshold Regulatable Quantities" limits. Light oil (more than 76% benzene content) is a residue of the coke process. It is produced at 60,000 tons/year and sold to China Steel Chemical Cooperation (CSCC). Chromium trioxide is purchased for coating the surface of steel sheets. The annual amount is listed in the table below (other toxic chemicals are used for R&D in small quantities and they are lower than the Threshold Regulatable Quantities)：

Code	Toxic Chemicals	Utilization	Quantity
052-01	benzene	Manufacture and sale	~60,000 tons/ year
055-01	chromium(VI) trioxide	Purchased for steel sheet coating	~680 tons/year

Before using these toxic chemicals, CSC obtained the required licenses, registration documents and grant documents from the government and reported records concerning the handling of toxic chemical substances and their release quantities to the EPA. For substances reaching "Threshold Regulatable Quantities" limits, toxic disaster prevention and relief drills have been performed internally every year to prevent accidents or leakage in 2012. We also join Kaohsiung City's toxic chemical joint prevention organization and participated in relative courses or activities to strengthen our response ability to toxic disasters.

(8)Soil and Groundwater Pollution Control

To control the quality of soil and groundwater and prevent pollution, CSC dug 16 wells around the factory for regular monitoring and sampling in order to detect any problems as early as possible. During land transactions, stringent surveys of underground environmental conditions are conducted to ensure that no disputes concerning pollution issues occur. Priority tasks in 2012 included：

■Declared annual soil and groundwater pollution control and treatment fees according to the Soil and Ground Water Remediation Act.

■Provided data related to the monitoring record table of the CSC Gas Station's underground tank and the balance sheet for oil material.

■Conducted soil and water investigations of rental lands to companies that were included in CSC's plant registration for soil and underground water pollution measurement.

■Conducted soil and underground water pollution investigations before leasing and purchasing land with the assistance of National Pingtung University of Science and Technology (NPUST) in order to clarify the scope of responsibilities and understand the soil and groundwater situation before the shutdown of plants to ensure compliance with all relevant laws.

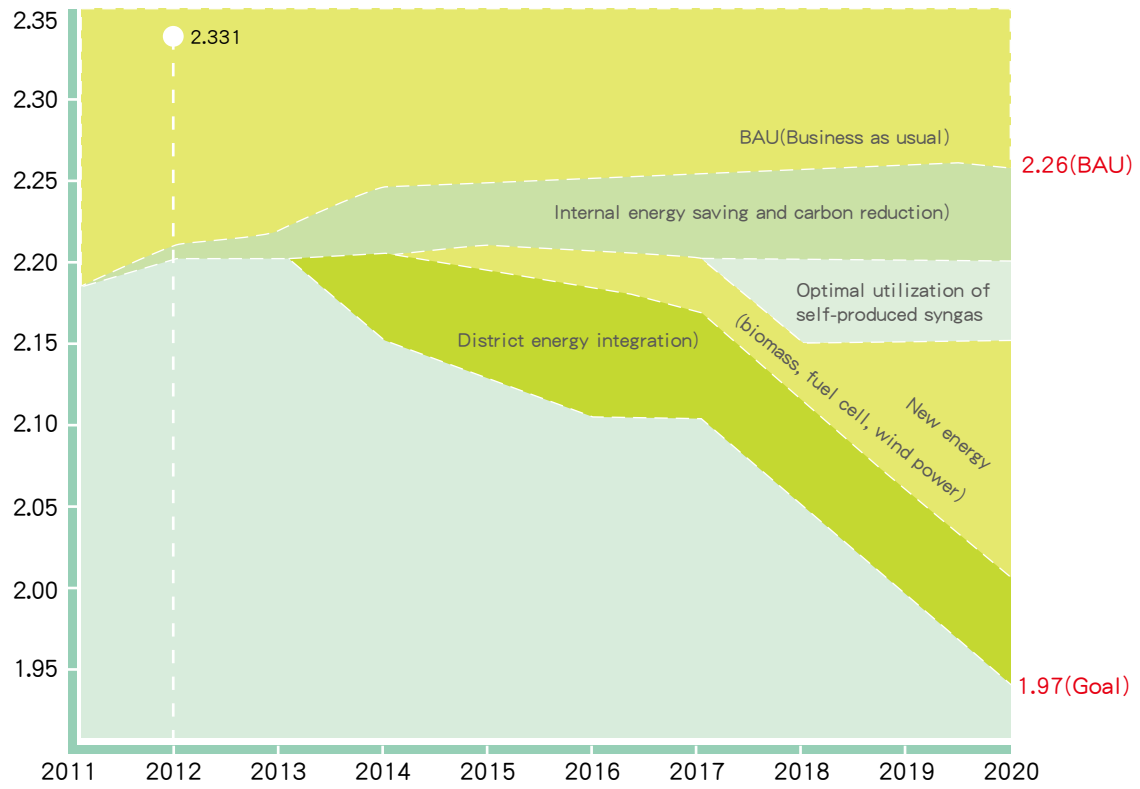
(9)Disposal of hazardous wastes

Except for lead slag from the rolling mill process, most waste chemicals of CSC come from laboratories, and the quantity is very sparse. Lead slag is sold to recycling vendors while other waste chemicals are disposed by certified vendors in Taiwan without being sent to other countries. The disposed waste and their quantities by contractors in the past years are listed below：

Year	Vendor	Item	Weight(ton)	Year	Vendor	Item	Weight(ton)
2008	RSEA Engineering Corporation	Chloric solvent	0.850	2011	Super Max Engineering Enterprise Co., Ltd.	Chloric solvent	0.950
2009	Super Max Engineering Enterprise Co., Ltd.	Chloric solvent	1.106	2011	Thye Ming Industrial Co., Ltd.	Lead slag	13.07
2010	Super Max Engineering Enterprise Co., Ltd.	Chloric solvent	0.859	2012	Super Max Engineering Enterprise Co., Ltd.	Chloric solvent	0.840

(10)GHG Reduction Target and Roadmap：

To clearly illustrate GHG emission trends and potential for reduction, CSC established its baseline GHG emission according to BAU. Herewith, CSC created a target (<1.97 ton CO_2e/ ton of crude steel) to be achieved by 2020 with energy-saving and carbon-reduction measures being taken. If there is any discrepancy between emission intensity and our responsibility, we plan to buy carbon credits to make up for it. Our major measures include： internal energy saving and carbon reduction efforts, optimal utilization of self-produced fuel gas, and application of low-carbon energy and district energy integration. The chart below is the carbon reduction roadmap for CSC：



CSC's mid-term and long-term carbon reduction working plan：

Strategies		Medium-term plan (~2015)	Long-term plan (2016~2020)
Internal energy saving and carbon reduction		● Enhance waste heat recovery and speed up retrofitting of energy equipment ● Implement BATs ● Implement 2015 (the second 5-year) energy saving project	Enhance waste heat recovery and retrofit old energy equipment efforts Implement BATs Continuously implement 2020 energy saving project (the third 5-year)
Optimization of self-produced fuel gas		● Plan and implement optimal utilization program for self-produced fuel gas ● Setup of a 100gpy(gallon per year) demo plant ● Evaluate the LDG to Ethanol project	Build plant to convert LDG to Ethanol if deemed feasible
New energy	Bioenergy	● Establish bio-coal manufacturing technology to be used in coal fire boilers ● Evaluate the feasibility of a biomass combustion cogeneration system ● Evaluate the feasibility of a biomass gasification system ● Establish technology for the manufacturing and application of bio-oil	● Replace anthracite with bio-coal ● Install a biomass combustion cogeneration system if deemed feasible ● Install a biomass gasification system if deemed feasible ● Replace fossil oil and NG with bio-oil

New energy	Fuel cell	• Establish kW pilot plant and encourage technologies for its operation and maintenance • Evaluate feasibility of 150MW fuel cell plant.	• Install a 150MW fuel cell plant if deemed feasible • Replace fossil fuel with bioenergy
	Wind power	• Offshore wind power planning and feasibility study (CSC and 49 other businesses will set up TWTIA with the goal of local wind power supply.)	Install 200MW units • (The government is expected to promote the target of 3000MW by 2030.)
District energy integration		Increase the number of new customers and new cooperative items	Increase the number of new customers and new cooperative items in other industrial parks throughout Taiwan and offshore islands

(11)Water Conservation and Pollution Prevention

Water Conservation Measures：

CSC's raw water is from the Fengshan Reservoir in Kaohsiung City Since 2003, CSC has continuously expanded its relevant production lines and coordinated with the district energy integration program implemented in Linhai Industrial Park, so the steam for sales increased to 2.53 million tons/year. Thanks to its efforts to manage water resources and utilize recycled water over the years, in 2012, CSC's total daily average raw water consumption reached 124,000 tons, a reduction of 27.5% from that of 2003 (daily average consumption of 167,000 tons) and accounting for less than half industrial water supply by the Fengshan Reservoir. The recycling rate of water for manufacturing processes is currently at 98.3%. The 2012 raw water consumption per ton of crude steel rate has decreased by 8.3% compared to that of 2011, at 4.96 tons of water. Water use trends over the last five years are shown in the table below：

	2008	2009	2010	2011	2012
Raw water consumption (10,000 tons)	5,919	5,082	5,200	5,269	4,832
Water recycling rate	97.9%	97.9%	97.9%	98.2%	98.3%
Water recycling amount (10,000 tons)	243,038	234,417	237,632	280,190	278,065
Unit water consumption (m^3 /TCS)	5.45	5.90	5.09	4.84	4.96

Note：The power generators in our power plants cannot be cooled by seawater or river water, which uses approximately 1m^3/TCS.

Water saving cases：

■**Improvement of recycled water quality**：Reutilization engineering of RO concentrated water from the waste water purification plant has been completed. It now improves high SS concentration and odor issues as well as encouraged frontline units to utilize recycled water in order to reduce the consumption of raw water by 5,500 m^3/day.

■**Recycling of waste effluent**：Industrial effluent flows through an ultra-filtration (UF) and a reverse osmosis (RO) membrane to remove most of the suspended solids and ions. Then the water is treated in an ion exchange system to generate 9,000 m^3/day that is further purified to make demineralized water for boilers and 4,500 m^3/day RO water. In 2012, RO water was improved as demineralized

water and in total with demineralized water for boilers; the supply reached 13,500 m^3/day.

■**Rainwater collection** : Rainwater collection facilities that have been placed on the roofs of the plant have a total collection area of 187,000 m^2. The rainwater collected in 2012 amounted to 295,000 tons, thereby lessening the demand for city water.

■**Rational water consumption** : A network management platform has been established to collect statistics on water consumption at CSC, to manage water conservation initiatives and to exchange technologies for the purpose of comprehensive water conservation.

■**Municipal wastewater reclamation** : CSC's goal is to follow the DBO model by using the Fengshan Creek Waste Water Treatment Plant for recycling 45,000-50,000 tons of water per day to provide supplemental cooling water. A small scale pilot test was conducted in December 2012 and the data collected will be used as the design reference. The whole project is expected to be completed in December 2015.

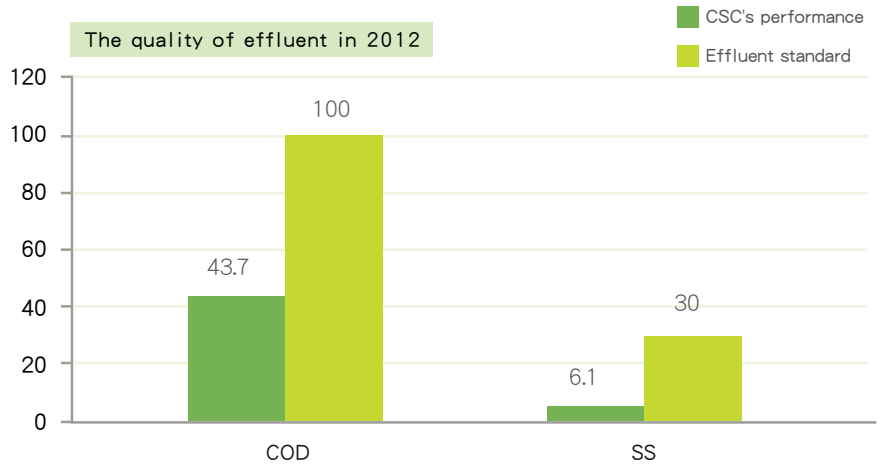
■**Seawater desalination** : CSC currently has been actively promoting the installation of a seawater desalination plant in the FTZ of South Star. The resulting demineralized water can be sent back and used by adjacent plants including CSC and China Petroleum Corporation with an estimated production amount of 50,000 tons/day for boilers or manufacturing processes. A feasibility study is currently under way.

Water Pollution Prevention :

In 2012, ozone equipment was installed at the bio-chemical waste water treatment plant, waste water system to increase its capacity, and bio-film reactors were added to the cold-rolling and bio-chemical waste water treatment plant to improve effluent water quality and reduce discharge amount.

CSC has set up wastewater treatment facilities with 79,600 m^3/d of capacity. Processed wastewater was treated to meet effluent standards and discharged through a 60-meter-wide water channel to the sea. The annual discharge volume in 2012 (excluding waste storm water) was 14,680,000 m^3, 3.4% less than the 15,200,000 m^3 in 2011. COD in 2012 was 43.7mg/L lower than 51.4mg/L in 2011, a reduction of 17.6%. Suspended solids (S.S) in 2012 were 6.1mg/L which is lower than 9.1mg/L in 2011, a reduction of 32.9%. The content of heavy metals was very low, far better than the effluent standard, and even better than measurements made at the upstream of a 60-meter-wide water channel.

CSC in 2012 added a bio-film reactor system to an existing cold-rolling waste water treatment plant and bio-chemical waste water treatment plant to ensure that COD discharged per day meets the required discharge standards.

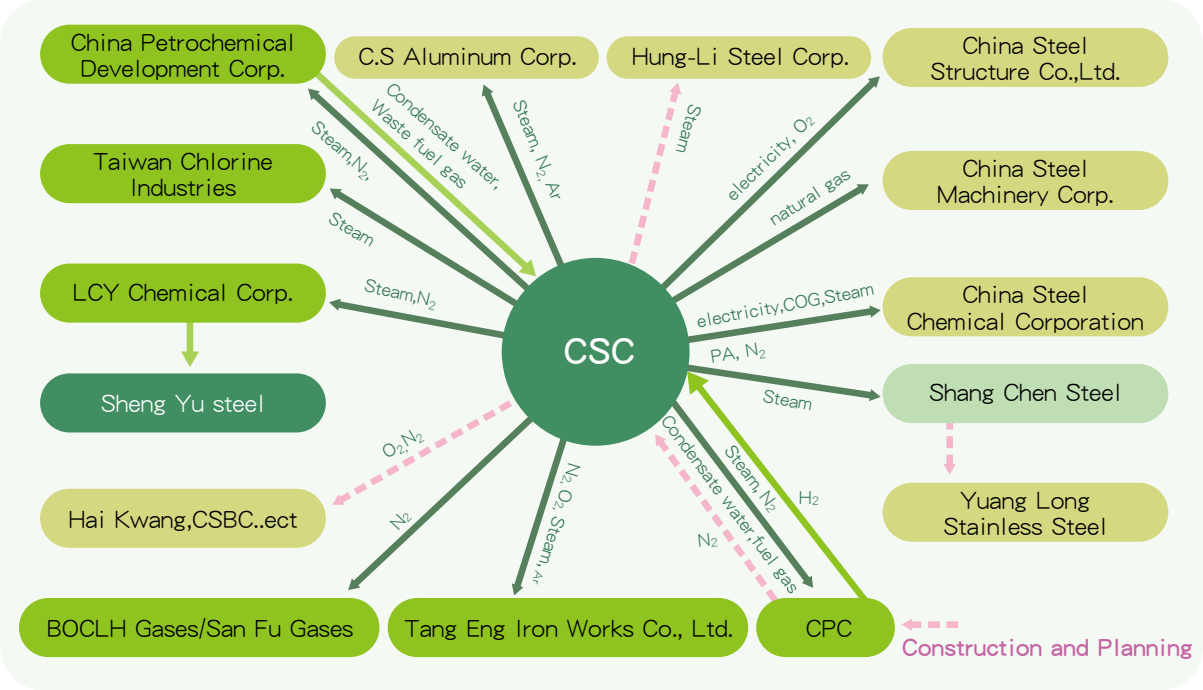


In addition to the treatment of waste water from manufacturing processes in the waste water treatment plants, CSC has also established collection ponds and treatment plants for 40,000 tons of effluent from coal and iron material areas (with the capacities of 36,000 tons/day). Storm water effluent is first treated until it reaches discharge standards and then discharged to the 60-meter-wide water channel before being sent to the sea in order to reduce effluent pollution.

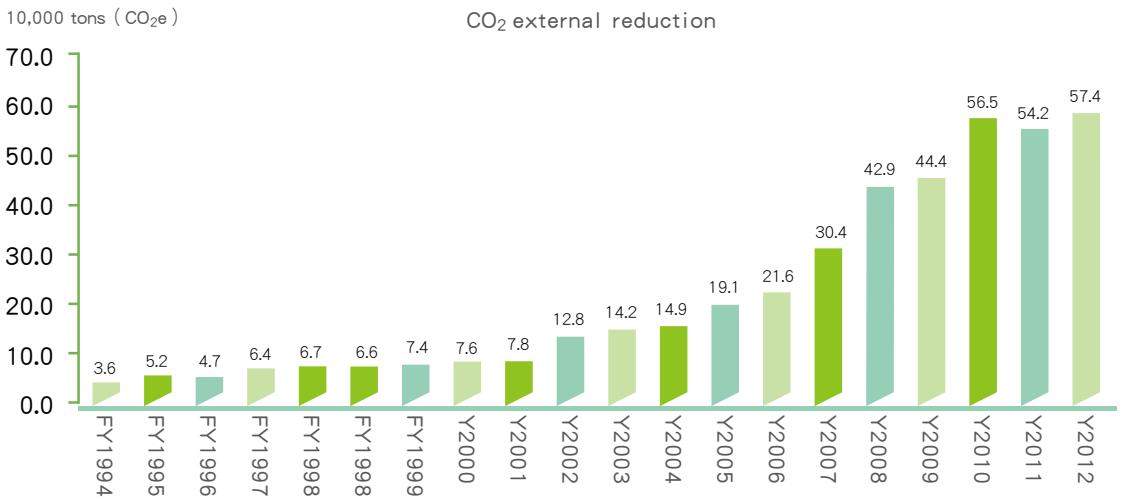
3.2.4 Green partnerships

(1)District energy integration

CSC supplies steam, oxygen and nitrogen generated from its production processes to nearby petrochemical, chemical and downstream industries in Linhai Industrial Park, so that customers can shut down low-efficiency, high-emission facilities without the need to invest in new facilities. This not only meets the requirements for energy savings and carbon reduction, but also lowers costs substantially and creates mutual benefits for all involved.



CSC's energy for sale includes steam and oxygen as well as nitrogen and argon made by oxygen plants. Due to the rising price of steam in 2012, sales of energy rose to NTD3.467 billion, 13.7% more than that of 2011. Steam Steam sales in 2012 saved 192,000 kiloliters of oil equivalent and reduced CO_2 emissions by 574,000 tons. External reduction of CO_2 emissions due to the sale of steam over the years is shown in the bar chart below：



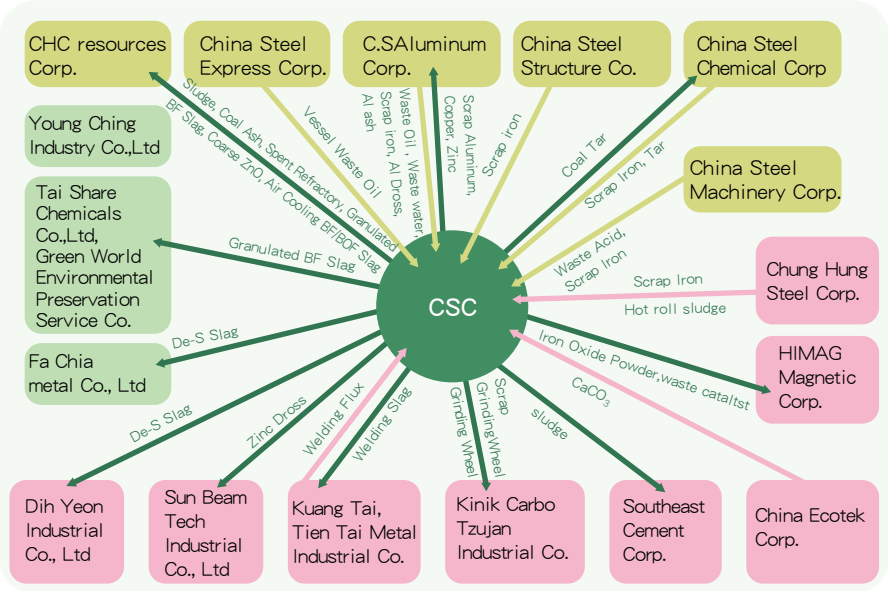
(2)Energy saving services：

CSC Group established the ESCO in 2007 upon the request of the Bureau of Energy. Through vertical integration and horizontal coordination, the team provides services for customers and strives to improve the Company's performance in energy savings. In 2012, the ESCO, together with the Industrial Technology Research Institute, conducted energy audits and offered services to Dragon Steel, Tung Ho Steel, Tang Eng Iron Works, Cheng Shin Tire, the Chia-Hsing plant of Hai Kwang Enterprise Corporation, and Daling Power Plant. In coordination with the energy saving initiative of China Steel Express Corporation, CSC completed installation of shore electricity at material wharfs. Electricity deliveries began on August 20, 2012. We also provided energy saving services to Kinmen Kaoliang Liquor Inc. and Quintain Steel., making a total of 45 proposals. The energy savings potential is estimated to be NTD 12.64 million per year, equal to a reduction of 1,398 tons of CO_2e emissions, a reduction of two tons of SOx and a reduction of two tons of NOx.

(3)Participation in the construction of an Eco-society

In coordination with the EPA and Industrial Development Bureau, CSC and its partners, a total of 19 businesses, jointly develop a CSC-based industrial eco-chain network to treat industrial waste generated inside and outside Linhai Industrial Park. The recycling chain treats mainly industrial waste such as BF slag, BOF slag, sludge, waste oil, zinc slag, waste acid, and rejected refractory.

In the future, CSC will put its full effort into supporting the "zero waste" policy of the EPA and continuously promoting waste recycling strategies. CSC will be more active in promoting the use of BOF recycled at sinters to replace lime, improving the yield rate of liquid slag quality, pilot testing modified slag on railways inside CSC plants, using BOF as an asphalt concrete aggregate, promoting demonstration roads in public construction projects, and enacting construction guidelines to realize the latest in technology developments and applications, reducing environmental loading, and connecting with international trends in sustainable development.



New examples in 2012

Hot rolling mill sludge of Chung Hung Steel：Hot rolling mill sludge is a byproduct generated from manufacturing processes and containing high levels of mill scale after the dehydration of waste water. Because sludge generated by Chung Hung and CSC contains identical properties, CSC, after processing in the coal ash sludge mixing process, can substitute it for iron slag as material for the cement industry in an effort to reach resource reuse goals.

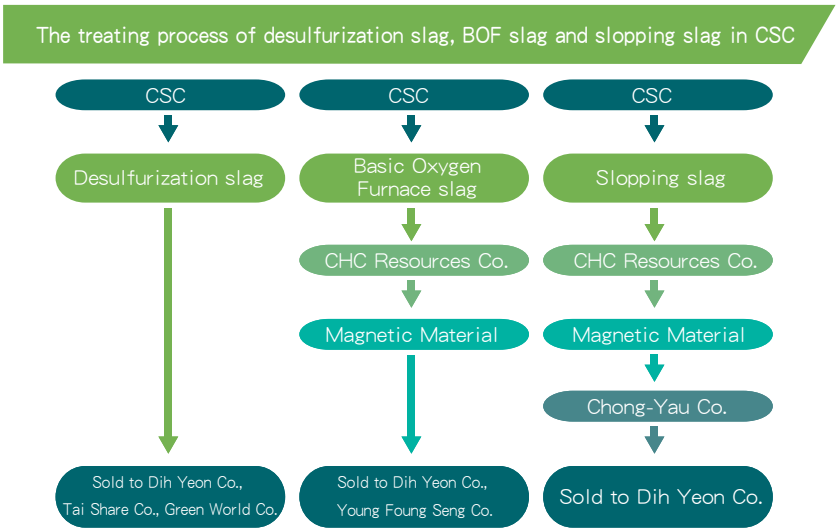
3.2.5 About Dih Yeon Co.

(For detailed information, please refer to：http：//www.csc.com.tw/csc/hr/CSR/Case.htm)

What is desulfurization slag ?

Desulfurization slag is produced from the desulfurization treatment of molten iron. When molten iron generated in a furnace contains high levels of sulfur, it will negatively impact the embrittlement of steel products. Thus, the CaO injection into torpedo car process and iron ladle mixing operation, synthesis reactors such as lime are added for the mixing and desulfurization operation of molten iron to reduce sulfur content to lower than 30 ppm. Slag produced during the treatment is called "desulfurization slag." The operation to seek residuals will separate sulfur from molten iron and then the resulting material is delivered to a desulfurization slag pretreatment plant.

CSC's desulfurization slag／BOF／BF treatment process is described below：



Why did CSC stop supplying material to Dih Yeon Co.?

CSC stopped supplying material to Dih Yeon Co. because it violated the CSC Desulfurization Slag Sales Contract. Since Dih Yeon Co. failed to address CSC's concerns or make improvements on their own, it decided to stop providing Dih Yeon Co. with material.

Counter measures：

(1)Modify the CSC's rule to provide detailed instructions on the proper procedures CSC employees should follow when they encounter influence-peddling events. For example, they are required to report for the review of the vice-general managers of their departments. Reports shall be copied and archived and sent to Internal Audit office for filing purposes and regular reports.

(2)External suggestions that benefit CSC shall be reviewed and those considered as reasonable shall be sent to the relevant internal departments and processed according to relevant rules; otherwise, CSC shall provide an explanation as to why a suggestion is not appropriate or feasible.

3.2.6 Green growth

Along with continuously providing related information and advice to the government, CSC is dedicated to helping low carbon businesses that, based on our experience, will help minimize our CO_2 emissions and create renewable energy technologies in a practical manner.

(1)Development of Organic Rankine Cycle (ORC) recycling technology for middle-low temperature geothermal resources;

(2)Development of biomass： The use of the short fibers of palm fruit for the production of bio-coal project has entered the pilot plant phase; biomass quick cracking technology for oil production is now being utilized for the establishment of a 30kg/h demo system. CSC began the biomass emulsified oil test production by producing oil with waste wood material.

(3)A total of 517.24 kWp was established to establish a photovoltaic system. Between 2011~2012, total

power generation reached 557,882 kWh thereby reducing 341 tons of CO_2e.

(4)In regard to the optimal utilization of self-produced fuel gas, CSC is now discussing cooperation programs to utilize the CO in BOF gas and produce high-value chemicals and cellulosic ethanol through a biological process with domestic and International vendors. The installation of the demo plant is expected to be completed by the end of 2013.

(5)In terms of offshore wind power generation, CSC and relevant industries set up the TWTIA to look for technology transfer opportunities from internationally known wind power businesses to realize the vision of local wind power supply.

(6)Plans for hydrogen energy application technology include plans to build a 1kW Solid Oxide Fuel Cell (SOFC) power generation system by the end of 2013 and by the end of 2015, the feasibility study of a 150MW SOFC power generation is expected to be completed.

3.2.7 Carbon credit management

The huge global efforts in mitigating climate change have made carbon emissions a restraint for business operation. Besides seriously implementing energy saving and GHG reduction measures on a voluntary basis, we are diligently participating in activities that will help to obtain or manage carbon credits in compliance with government regulations. The key areas of progress are delineated below：

(1)Early action program：CSC's past performance in GHG reduction efforts was mostly contained in the early action program. The 2000-2011 project was verified by a third party in September 2011. In September 2012, we applied to the EPA for the early action program. CSC will obtain carbon credits that can be used for carbon offsets for environmental impact assessments after approval.

Early Action Progam Verification Certificate

Carbon Offset Progam Verification Certificate

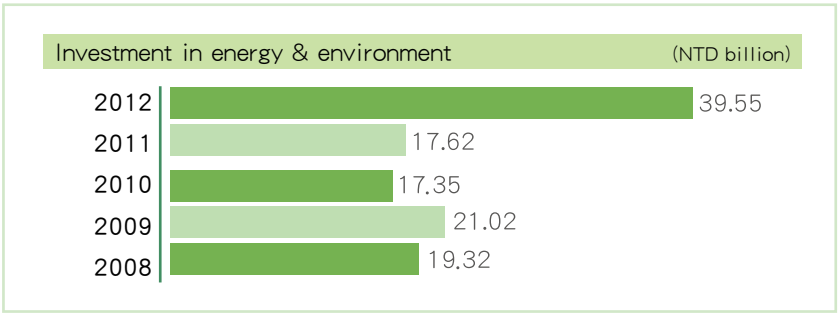
(2)Offset program：During the period from the present day to the day before the implementation of Cap-and-Trade, CSC's performance in carbon reduction efforts is more suitable for application via the offset program. Therefore, we plan to obtain carbon credits from district energy integration projects with our partners by applying offset projects to the EPA to acquire carbon credits.

(3)Future development：When the government devises other carbon credit schemes, we will provide positive advice based on international data to help the government establish cost-effective carbon credit schemes and platforms.

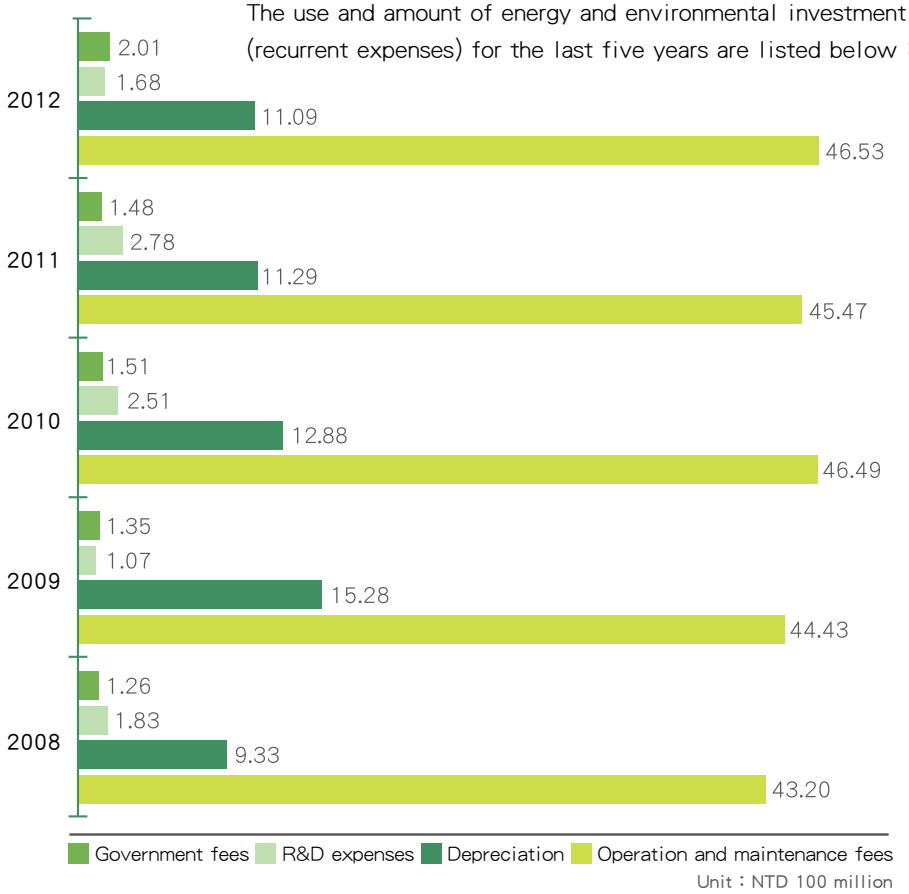
3.2.8 Environmental accounting

Energy and environmental investment

By the end of 2012, CSC's accumulated investment in various environmental facilities totaled NTD50.4 billion. Among them, 67% was spent for air pollution control, 16% for water pollution control, 8% for waste reduction and cleaning, 1% for noise control, 6% for energy saving and GHGs reduction and 2% for others. The energy and environmental investment (capital expenditure) for the last five years is listed below：



The use and amount of energy and environmental investment (recurrent expenses) for the last five years are listed below：



Environmental accounting system

We consider environmental accounting as an information system that can deliver information related to corporate energy and environmentally friendly activities to stakeholders for their judgment and policy-making.

The environmental accounting system of CSC was built according to the principle of not affecting the operation of the existing accounting system, inputting information according to the source, lessening the input load and improving the system to make data collection more precise, automatic and easy.

Our environmental accounting system will follow the EPA's environmental accounting guidelines and be combined with CSC's traditional accounting system using classifications based on CSC's cost centers. We hope that in the future, the environmental cost percentage of each cost center can be calculated and combined into SHE-related cost. The environmental accounting system is scheduled to be officially launched on January 1, 2013.

3.2.9 Participation in international R&D efforts

Participation in International R&D programs is a good way to enhance exchanges with our global partners and prepare for new trends. At present, the international R&D projects that CSC has signed up for are mostly focused on energy saving and CO_2 reduction efforts. They are promoted by worldsteel, and include：

(1)**CO_2 Breakthrough Program**：

This program, sponsored by global steel companies, is devoted to reducing CO_2 emissions from iron-making processes by 30～70%.To develop combustion technology for CO_2 capture, CSC conducted research work in 2012 and achieved the following results：

a.Flue Gas Recirculation (FGR) experiment：The FGR experiment has been completed. With the equipment unchanged and within the load range of the burner, the actual oxygen concentration at the burner's outlet was 34%, and the concentration of CO_2 rose from 14.7% to 61.1%. Since the combustion intensity rose with an increase of oxygen concentration and the combustion temperature decreased during the operation of the FGR, we were seeking the best ratio of FGR and oxygen enrichment for future applications.

b.CO_2 capture：We have built a CO_2 capture pilot factory to capture 100 kg of CO_2 per day in #3 BF. The capture rate was 95% or higher, and energy consumption reached 5.6GJ/ton CO_2e. We were currently seeking methods to decrease energy consumption for CO_2e capture. We plan to build a CO_2 Capture and Storage Site with an annual capacity of 30 tons in 2014.

CO_2e

c.Biological CO_2 fixation：Biological CO_2 fixation and recycling are not only methods to fix CO_2 released by fossil fuels but also a long-term solution to diminish dependency on fossil fuels. CSC set up a cultivating system of 1.2 ton algae-rich water for carbon fixation and bio-oil production. At present, CSC's biological CO_2 fixation capacities and bio-oil production yields have reached 160 tons per hectare per year and 6.9 ton per hectare per year, respectively. CSC will continue to improve algae growing technology and seek the best way to automate the cultivation and harvesting of algae.

(2)WorldAutoSteel R&D Projects：

After the Future Steel Vehicle (FSV) project has been completed, the priority tasks for 2012 are：

a.Promotion and education of ultra-lightweight FSV technologies for electric vehicle body structures：It focuses on the promotion of steel use technology and design concepts by applying FSV research results to demonstrate the technologies using the most environmentally friendly advanced steel materials for the manufacturing of electric and lightweight vehicles body structure.

b.Promotion of the Life Cycle Assessment(LCA) calculation for GHG emissions and its legalization：Existing tail-pipe emission measurements only calculate the use phase emissions of vehicles but exclude emissions generated during production and decommissioning phases. This results in the ignorance of more serious environmental hazards caused by the use of lightweight materials by the automobile industry since they do not consider issues related to material fabrication and handling. WorldAutoSteel in 2012 proposed a very comprehensive LCA calculation interface and communicated it with global car makers and legislators for concept promotion to gradually promote LCA based laws for GHG emissions.

c.Promotion of new research topics：In the new year, R&D projects focused on minimum thickness and the deconstruction analysis of carbon fiber reinforced polymer/plastic(CFRP) car body materials were carried out to analyze car body material minimization and relevant technologies as well as CFRP car body application effectiveness and LCA calculations.

(For more information, please see：
http：//www.worldsteel.org/media-centre/press-releases/2013/Steel-Aluminium-Car-bodies.html)

3.2.10 Eco - life

In response to National Visions of Low Carbon LOHAS Homeland and Promotion of Energy and Water Conservation, CSC, as the first business in Taiwan to voluntarily promote an employee green life program, is realizing its overall energy saving and carbon reduction action, and remaking itself into a low-carbon green business. CSC green life promotion includes five items：LOHAS life, steel forest, green business, increased industrial value, and a sharing and promotion action plan that includes the following：

Item	Promotion
LOHAS life	Promotion of physical fitness and health
	E shopping net in cafeteria
	Promotion of green products
	Use of batch procurement of local food ingredients and produce by cafeteria
	Light diet by consuming white meat every two weeks
	Low carbon food promoted by cafeteria
	Use of stairs for low floors to save energy and strengthen physical strength
	Install and use personal carbon footprint calculator
	Organize seminars for charity activities
Steel forest	Promote landscaping and green measures in areas administered by each unit
	Diversify green ecology in landscaped areas
	Sponsor public facilities and green belts
	Assist government in collecting water quality samples and clean the beach activities
Green business	Building a green renewable energy system
	Re-application of by-products and waste
	Re-utilization of purified and recycled industrial and household waste water
	District energy integration
	Smart electrical grid
	Promote idling stop system to reduce air pollution and emissions
	Use carbon reduced shipment methods
	Use high efficiency lighting devices to save energy
	E-official document approval system
	Use glass cups to replace paper cups during meetings
	Promote e-cloud operating software to save costs
	Reduce copy paper use in offices
	Subsidize the use of public transit systems
Increased industrial value	R&D of green products
	Promote carbon footprint certification for products
	Carbon credit application for innovative process reengineering or investment projects
Sharing and promotion action plan	Garbage sorting by units
	Green procurement
	Train low-carbon green volunteers
	Promote low-carbon education

3.2.11 Green building

CSC Group is one of the suppliers of important structural materials for green buildings. In order to promote the concept and application of green building technologies, CSC sponsors the construction of green buildings in Taiwan such as National Cheng Kung University's Magic School of Green Technologies completed in 2010. It used slag concrete donated by CSC and saved the use of concrete by 30% and reduced emissions of CO_2e by 10%.

In addition, CSC Group's new plants and office buildings were completely built according to green building regulations. China Steel Building and #3 Hot Rolling office are the best examples of the application of green building technologies：

China Steel Building(Group Headquarters)

The design of China Steel Building is a diamond cut shape with the installation of PV panels on the roof that are expected to generate about 10,691 Kwh per year. The basement level has been designed to have a flood detention capacity of 628 tons.

According to the indicators of Green Building Interpretation and Assessment Manual, eight out of nine green building indicators including landscaping, site water conservation, water resources, regular energy saving, CO_2 reduction, waste reduction, waste water recycling, garbage treatment, and indoor environment. It was certified as a "Gold Grade Candidate Green Building Diploma" by the Ministry of the Interior in September 2009.

Hot-Rolling Office Building

The #3 Hot-Rolling office building was designed based on the concepts of "environment, energy saving, waste reduction, and health" and is powered by solar energy. Since it was opened in September 2009, it generated 16,000 kWh; its landscaping around the parking lots, storm water collection, and waste water treatment all met green building requirements. The #3 Hot Rolling office building officially earned the green building label from the Commission of Green Buildings, Ministry of the Interior in January 2012 and was certified as a green building in March 2012.

3.2.12 Legal compliance

Facing the changes of more stringent rules and regulations, CSC is continuously enhancing its self-auditing programs to assist in the building of self-control and management methods and to coordinate with legal requirements and the promotion of the amended relevant operational standards in order to ensure legal compliance with the identification procedure of our environmental management system. Hence, the number of violation notices has significantly decreased indicating the significant improvements derived from CSC's self-control measures.

In 2012, CSC received only one violation notice as shown below：

	2008	2009	2010	2011	2012
Pollution item	Air	Air	Air	Air and water	Air
Issued by	KEPB	KEPB	KEPB	KEPB	KEPB
Number/penalty(NTD)	14 / 1.91 million	9 / 1.10 million	7 / 700,000	4 / 580,000	1 / 100,000

3.3 Devotion to social harmony

In 2012, during the "National Workplace Safety and Health Week" sponsored by the Council of Labor Affairs, Executive Yuan, CSC was awarded with Excellence in "Group A of Public and Private Businesses" and in the same year, CSC was also awarded for its outstanding performance in labor safety and health by worldsteel.

3.3.1 Labor Safety and Health

(1)Change Management

Accidents 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 hazard identification and risk assessment process. Appropriate measures are implemented at CSC according to the result of the assessment to ensure the safety of all manufacturing processes, activities and services.

(2)Education and training

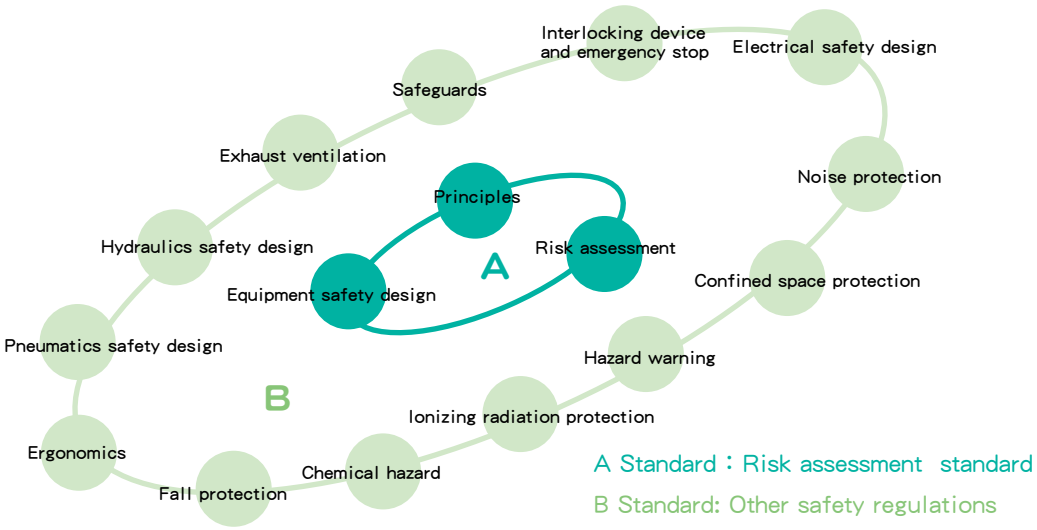
Human error is the root of most occupational accidents. Thus, determining how to train employees and contractors to develop safe working habits that reduce human error is a key goal in our safety and health training efforts. CSC arranges many important accident and disaster drills every year to enhance the response ability of employees to emergencies. Our computer system updates the latest SH (Safety and Health) training information for reference, making the control and checking of SH training more efficient.

The safety courses and the numbers of trainees for 2012：

Workplace safety courses	Number of courses and classes	Number of trainees
On-job training of SH regulations	10 courses, 61 classes	3,421
On-job training of radiation operation	4 classes	335
Retraining courses for contractors	52 classes	1,067
Motion sensing training for safety	297 classes	2,734

(3)Inherent safety

To realize and enhance the goal of inherent safety, CSC has established safety guidelines based on ISO safety standards (for machinery), International Electro-technical Commission (IEC), Europe Norm (EN), Chinese National Standards (CNS) and other relevant national regulations combined with our practical experience. With the hazard identification and risk assessment items as indexes, the guidelines take basic safety design principles, relevant safety conditions and devices into consideration, and are used as a basis for CSC to discuss safety issues with equipment suppliers.



(4)Safety culture

A safety culture is a multi-dimensioned concept that needs to be analyzed and understood from different points of view. Safety culture in CSC is classified into three dimensions： policy, management and personal aspects, which are described below：

■**Policy**：Safety policy statement, organization management, resource supply.

■**Management**：Construct CSC's institutional framework based on responsibility attribution, safety control, licenses and training, rewards and punishment, audit, improvement and response and safety care program.

■**Personal**：To improve personal safety culture by changing workers' safety concepts, providing education and training, and enhancing personal participation, safety and health care and bilateral communication.

(5)Safety observation and inspection

Site managers are required to make frequent inspection tours to identify and correct unsafe behavior and rectify unsafe workplaces and equipment. They are also responsible for observing workers' and contractors' behavior and work environments according to five steps： "decide, stop, observe, act and report," and give employees or contractors encouragement or immediate corrections. If anyone violates a safety procedure or there are unsafe behaviors or conditions, the site manager should immediately communicate this with all involved and correct such error without affecting the ongoing safe operation.

(6)Project structure and plan

CSC vigorously promotes the "Safe Job Procedure (SJP) by Jobsite Operators" program. The activity, combined with zero accident and hazard prediction training, aims to reach a consensus by allowing employees and contractors to discuss and communicate as a team the establishment and amendment of the SJP, rather than being written up by specialists as in the past. The process will improve workers' ability to identify hazards and prevent accidents.

(7)Partnership with contractors

Based on management concept of "cooperation and mutual trust," CSC and contractors have developed a cooperative relationship that promotes co-existence and co-prosperity and fulfilled CSR. CSC and contractors discussed and implemented the relevant supporting measures listed below：

Foster and develop mutual trust	1. Provide contractors with stable outsourcing work 2. Reasonably ensure the priority contracting rights of outstanding audited contractors 3. Promote a fair price contract bidding system 4. Encourage reasonable salaries for contractor employees 5. Realize a holiday system for contractor employees
Consultation and education training	1. Insist on the compliance of contractors to the Labor Standards Act 2. Assist contractor employees in obtaining safety education training 3. Build a communicational platform
Assessment and system implementation	1. Modify "Points Governing Operation, Work, and Environmental Protection Management of Contractors" 2. Add relevant contract rules 3. Audit the working conditions of contractors

CSC improve not only the safety of facilities by way of inherent safety, but also interaction with contractors and working conditions by establishing partnerships. In addition, contractors' professional skills are improved through technical training, such as：

Improve working conditions	High employee turnover and aging are common problems for contractors. We, as a partner, made proposals to address the problem of high employee turnover and working conditions, such as increasing SH management expenses and contract prices to improve working conditions, lower turnover and decrease the possibility of work-related accidents. These measures will help us to establish long-term partnerships with our contractors.
Enhance training	Including general and special operation training ■General training：All contractor employees, including new and re-employed, are required to undertake general training to ensure that they fully understand the safety and health regulations of the worksite. The contractor's employees should undertake three-hour retraining courses certified by the Department of Labor Safety and Health every three years. CSC will organize additional safety and health training if needed and the contractors should assign their workers to participate in the training. ■Special operation training：The contractor's employees engaged in special operations are required to undertake relevant SH training and obtain the required licenses. Those who operate dangerous machines or equipment as designated by the central government are required to pass the required training course and skill tests approved by the central government.

(8)Disaster prevention plan

CSC implements the regulations of Taiwan Occupational Safety and Health Management System (TOSHMS) in a practical manner by setting workplace safety goals and plans and achieving these goals to create a zero-hazard workplace via a PDCA (Plan, Do, Check and Act) loop. On August 6, CSC reached the goal and new milestone of 23 million non-disabling injury working hours.

(9)Safety care

In order to raise the awareness and ability of safety and health among employees and take care of their work and traffic safety, CSC encourages all employees and contractors to motivate themselves by communicating and helping each other with goodwill and equality. Good habits can protect everyone at all times and further improve the general safety culture.

(10)Absence and lost time injury

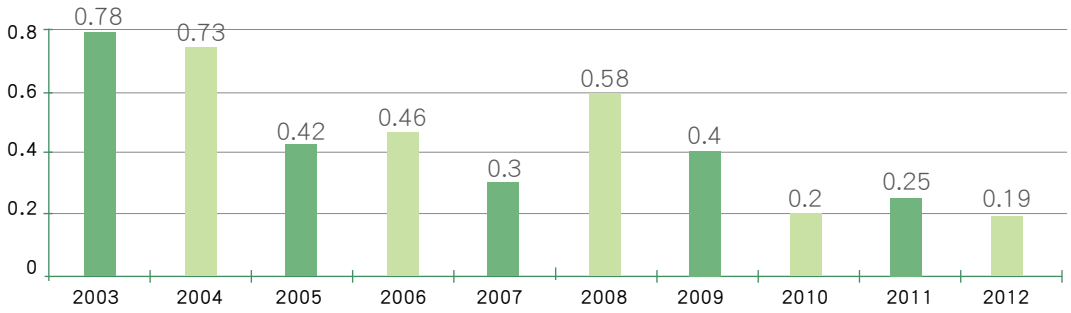
In 2012, the actual total working hours were 20,594,798 equivalents to 2,574,349.75 days. The absence rate is shown below：

Leaves	Job injuries		Sick leaves	
Gender	Female	Male	Female	Male
Days of absence	6	1269.5	337	6173.75
Absence rate (AR)	0.466	98.627	26.181	479.636
Absence rate (AR)	99.093		505.817	
Absence rate (AR)	604.910			

Note：Absence rate (AR) = Total days of absence during report time /total working days during report time x 200,000

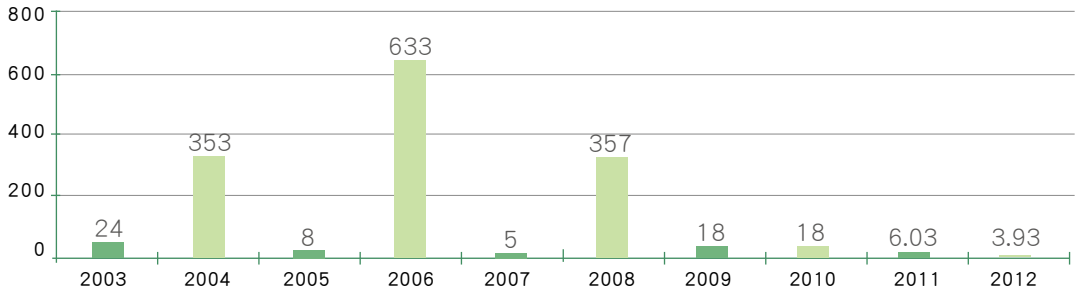
Occupational accidents in CSC for 2012 were calculated as below：
Minor injury：7, lost time injury：4, no occurrence of death accident and occupational diseases, L.T.I.F.R.：0.19, minor traffic accidents：13, catastrophic traffic injury：13.

Disabling frequency rate, F.R



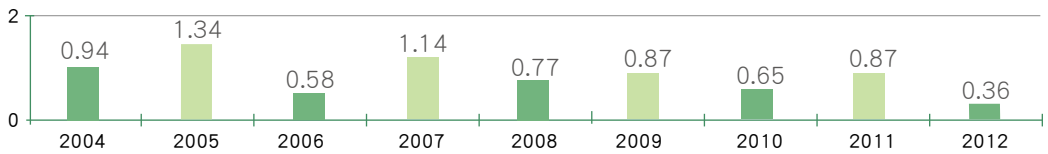
Disabling Frequency Rate (F.R.) is defined as disabling frequency occurring during every one million work hours. The formula to calculate this amount is： time of disabling occurrence x 1,000,000 ÷ total working hours.

Disabling Severity Rate, S.R



Disabling Severity Rate (S.R.) is defined as days lost due to disability for every one million work hours and the calculation formula is： time of disabling occurrence x1,000,000 ÷ total working hours.

Disabling frequency rate (F.R.) of contractors



To gradually reverse the trend in increasing traffic accidents, CSC has continued to provide traffic safety courses and check to improve employees' knowledge of traffic safety rules and encourage CSC employees to take public transportation or shuttle buses. To avoid blind traffic corners at the plants, five traffic safety improvement proposals shall be submitted to reduce accident occurrence.
To minimize the occurrence of accidents, CSC has also conducted responsive measures such as exercises that focused on accidents, risk prediction, and operational risks.

(11)Accident-Prevention Maneuver

To enhance on-site response abilities to prevent occupational injury, property loss and environmental impact, CSC carried out 5 companywide emergency response maneuver in 2012, showm as follows：

■Emergency response plan of coke oven gas (COG) holder leakage in coal chemical process.
■Emergency response plan of ammonia tank leakage in sinter process.
■Emergency response plan of companywide power failure.
■Emergency response plan of LDG leakage in NO.1 BOF plant.
■Emergency response plan of LDG leakage in NO.2 BOF plant.

(12)Inspection of operating environments

According to theregulations, CSC entrusted a certified operating environment institute to conduct periodic inspections of operating environments that have chemical wastes such as CO_2, dust, organic solvents, and specific chemical substances as well as physical factors such as noise pollution and integrated heat indicators based on the requirement of appropriate rules and regulations. Once an abnormality is detected, corrective measures will be conducted to safeguard the health of operators.

(13)Near miss

Whenever a near miss occurs, the related department must file an event report and publish a memorandum to notify other departments on CSC websites, where the miss is relayed as part of educational training. There were 1,287 near misses reported in 2012. These reports were reviewed and used as a reference to find solution to potential hazards at the workplace in order to prevent recurrence.

(14)Physical examination and care

Health check

Employees：CSC has set up a clinic with professional medical staff to perform diagnoses and provide early treatment as the first defense for human health and medical care subsidies for employees. Due to the increase of older workers in CSC, it is an important responsibility for us to emphasize health checks for everyone and provide suggestions by examining agencies to avoid the occurrence of major diseases.
In order to ensure operational safety, employees who participate in high risk operations and have a history of high blood pressure, since October 2012 have been requested to participate in a telemdicine program. In 2012, there were 133 participants. During each shift, heart rates and blood pressure were measured to reduce the occurrence of accidents among employees engaged in high risk operations.
Employees working at special operation sites needed to receive a special health check according

to CSC's safety plans. Check items include exposure to high temperature, noise, lead, dust, organic solvents and certain chemicals; 2,765 employees undertook special checks in 2012.

Contractors：CSC has its own physicians in CSC clinic and also cooperates with regional hospitals in Kaohsiung. Specialists provide weekly services in CSC. CSC's contractors have the same preferential treatment for medical service and medicine as CSC employees.

Healthcare

The clinic in CSC reminds workers of key factors for health improvement based on employees' yearly physical examinations. We also invite professionals to study the data on employees' physical examinations and workplace conditions in order to identify potential dangers and offer related education and training programs. Furthermore, the health management center carried out programs to facilitate workers' health, such as：

■**Health lectures**：We provide quarterly health lectures given by medical professionals to promote the importance of chronic disease prevention. In 2012, two lectures were given on weight loss and the use of elastic bands. The teaching materials were compiled into e-learning tools and attached to the knowledge management system website for employees to view on-line.

■**Health enhancement programs**：Health enhancement programs are based on the theme "Weight Loss 101, Health First" for employees and spouses with BMI＞24 as found as a result of the physical examination. Nutritionists from Chung-Ho Memorial Hospital of Kaohsiung Medical University and fitness coaches were hired to conduct one on one consultation, tailor diets and provide exercise suggestions. Notable achievements were awarded to individuals and units by the President at corporate safety and health committee meetings to educate all managers and labor union representatives and show CSC's support for the promotion of health enhancement programs.

■**Special health care**：Cases with abnormal health conditions will be tracked, and both male and female employees can participate in special healthcare programs.

The above programs benefited the health of employees, reduced the sick leave rate, helped to avoid accidents, and reduced overall health expenses, and enhanced CSC productivity and workplace quality.

(13)Health management plan

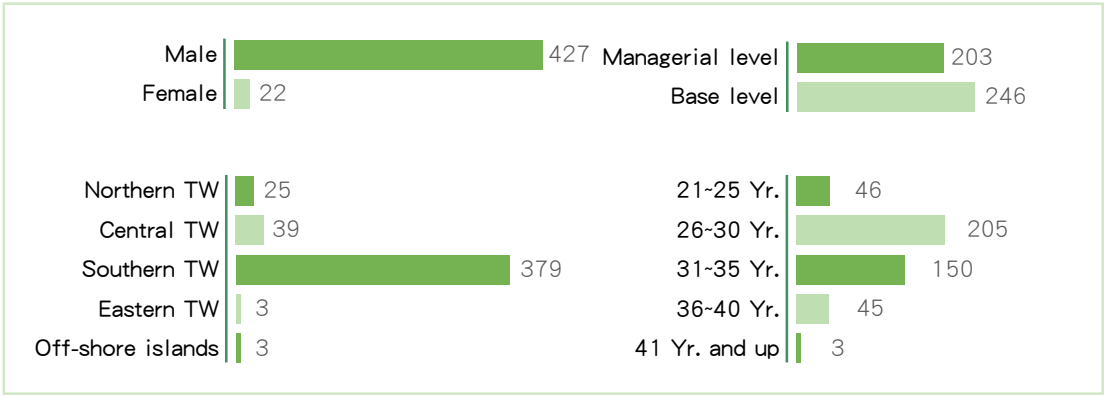
For employees and contractors：These people are the main service recipients of the CSC clinic. The services provided in 2012 included ten health enhancement programs including physical fitness, lectures, long-distance care, bone density check and measurements, and others with the participation of 4,175.

For the community：The CSC Group Education Foundation held lectures on spiritual development and offered education and training, and risk control courses related to severe and contagious diseases in 2012. These programs were open to CSC colleagues, their family members and local communities.

3.3.2 Human right management

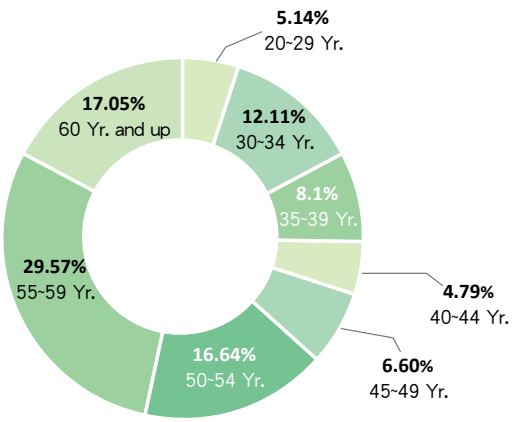
(1)Employment

CSC absolutely abides by the Labor Standard Act and never hires child laborers. Based on the human right to have equal employment opportunities, CSC recruits employees on the basis of their expertise and experience, rather than race, ideology, religion, political stand, household registration place, birthplace, gender, sexual orientation, marital status, appearance, disability or former union membership. Recruitment efforts in 2012 neither violated human rights nor discriminated against anyone; 449 new employees were recruited in 2012. Details about our recruitment efforts are provided below：

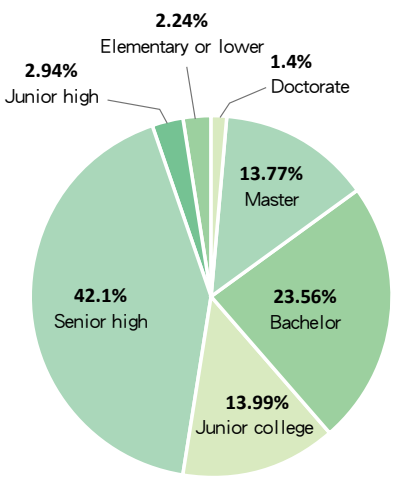


At the end of 2012, CSC had 9,814 employees, including 9,576 males (97.6%) and 238 females (2.4%), who were all native to Taiwan. The average age was 49.75 years old, and the average employee seniority was 24.13 years. Among them, 9,726 employees, 99.1% of total employees, are union members.

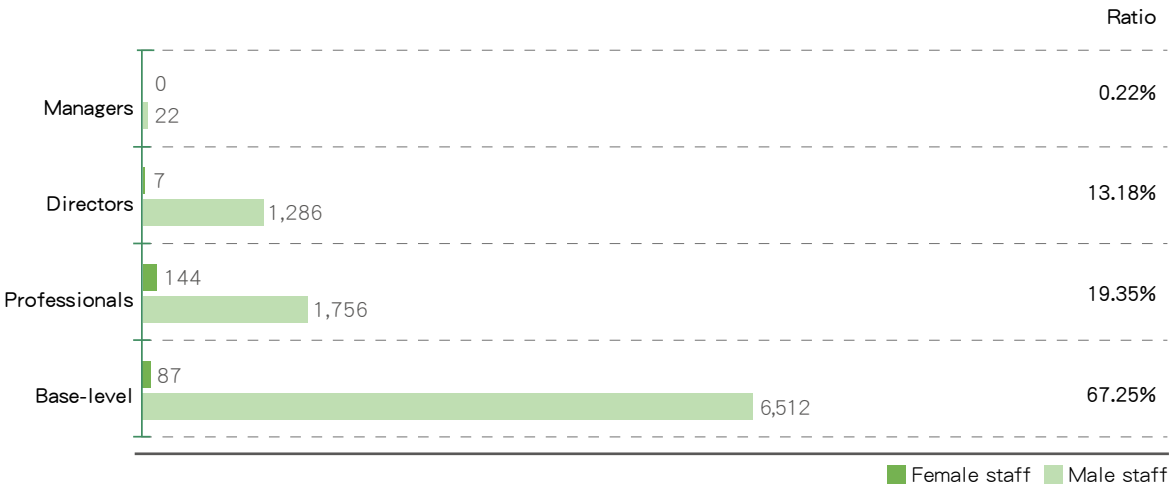
Staff age range



Staff academic backgrounds



Staff position



By the end of December 2012, we had hired 147 physically or mentally disabled people, approximately 1.54% of CSC's total employees, exceeding the mandatory 1% of the "Physically and Mentally Disabled Citizens Protection Act." In December 2007, the "Gender Equality in Employment Law" was modified based on the elimination of gender discrimination and the promotion of substantial equity between genders. CSC creates a friendly workplace and provides child care assistance. Its employee retention rate was 100% in 2011 but since none of CSC's female employees applied for maternity leave in 2011, we were not able to calculate a return rate for 2012. In 2012, one female worker applied for maternity leave (from February 1, 2010, to July 31, 2010) and returned to work to maintain a retention rate of 100%.
CSC has set up a Committee for Sexual Harassment Grievances to provide a sexual harassment-free workplace for employees.

(2)Contractors' right

The workers sent by the contractors to CSC must have insurance mandated by the government, wear uniforms and use safety equipment designated by CSC. Furthermore, the workers also need to comply with CSC's safety and health work rules. A penalty will be imposed for any violation, and the fine will be donated to the fund for supervision, correction and improvement of contractors' safety and health. The working conditions of contractors are monitored and supervised to ensure that contractors comply with national labor laws.

(3)Compensation Management

CSC's compensation system is based on a job responsibility system. The compensation standard is based on market rates, the corporation's financial situation and the organizational structure. There is no difference between genders in terms of salary.
Both female and male employees in the same position and at the same grade level receive the same salary.

compensation ratio for each position	Female	Male	Femal tomale female employee ratio
Managers	1	1.16	1：244
Directors	1	1.61	6：678
Professionals	1	1.20	144：1576
Base-level	1	1.11	87：6512
Note：CSC currently has no senior managerial posts and third-level directors that are female employees.			

The reason for the discrepancy of the salaries paid to above male and female staffs is mainly because of the much higher numbers of male employees than female employees. Additionally, male employees are usually senior to female employees. Thus, the discrepancy of average salaries is high.

The compensation structure is made of：
Compensation includes the basic salary, meal allowance and a specific environment allowance.

■**Basic salary**：It is paid according to the "Non-operating Position Salary Table" and "Operating Position Salary Table" based on staff position.

■**Meal allowance**：NTD1,800 per person per month.

■Specific environment and specific maintenance allowance

◆Specific environment allowance：Staff members in approved operating positions within a specialized work environment are provided with a specific environment allowance that is subject to adjustment or cancellation due to position change.

◆Specific maintenance allowance：Staff members in approved maintenance positions that within a specialized work environment and not promoted to an advanced position are provided with a specific maintenance allowance according to the environmental areas that the staff members are in charge of; for staff promoted to advanced positions, the specific maintenance allowance will be included in base salary. The allowance is subject to adjustment or cancellation due to position change.

■**Year-end bonus**：Employees who remain employed until the end of the year receive their base salary for December as the year-end bonus. Those who have not stayed on-the-job for at least one year due to retirement, death, layoff, job transfer, new entries or reinstatement are provided with year-end bonuses that are calculated according to the actual number of their working days.

■**Operating profit bonus**：We provide a bonus based on the "Regulations of Operating Profit Bonus" to encourage staff to improve working methods, increase productivity, lower costs and raise revenues in order to obtain profits.

■**Salary for new comers**：The salary of new comers is compensated according to the supply-and-demand of the labor market and the salary range of the market. The principle is to make an offer that is better than the basic wages regulated by the Labor Standard Law. In addition, the following factors are also taken into consideration：position, academic background, experience in related job(s), supply and demand in the labor market and payment of current staff at the same position with similar experience. A new comers at CSC receives a base level starting salary of NTD 25,700 and those at the professional level receives NTD34,800. After working for three months, the new comers will have his/her salary adjusted according to past experience and a work performance appraisal. The average salary of a base level employee is approximately NTD27,000 and the professional level average salary is approximately NTD36,000. According to a salary investigation among private businesses in 2012 around Taiwan, the starting salary of senior high, vocational high school, and college graduates is between NTD21,000 and NTD27,000 while the average starting salary of university graduates is between NTD26,000 and NTD38,000. The starting salary of CSC meets these general market standards.

(4)Position change and turnover

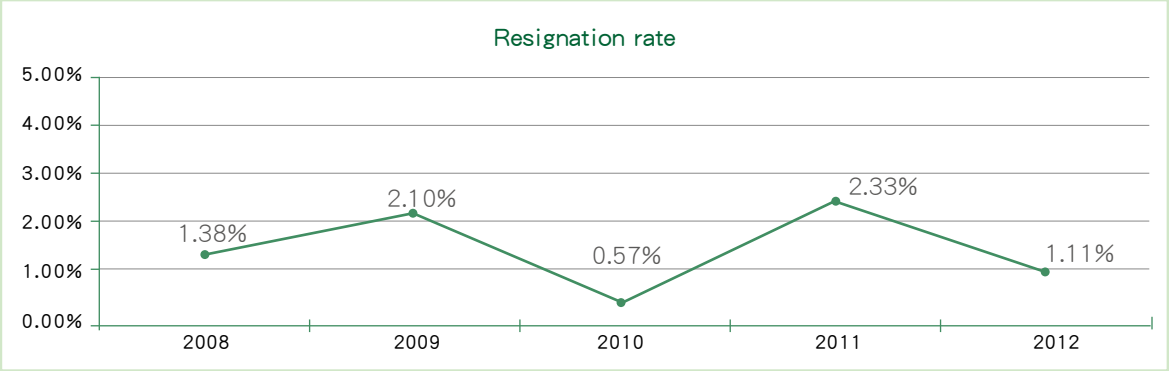
All position changes and turnover in CSC follow the relevant regulations. Formal employees can choose to retire at 65 years old as mandated by the Labor Standard Law or voluntarily retire before the legal mandatory age. The related regulations are shown below：

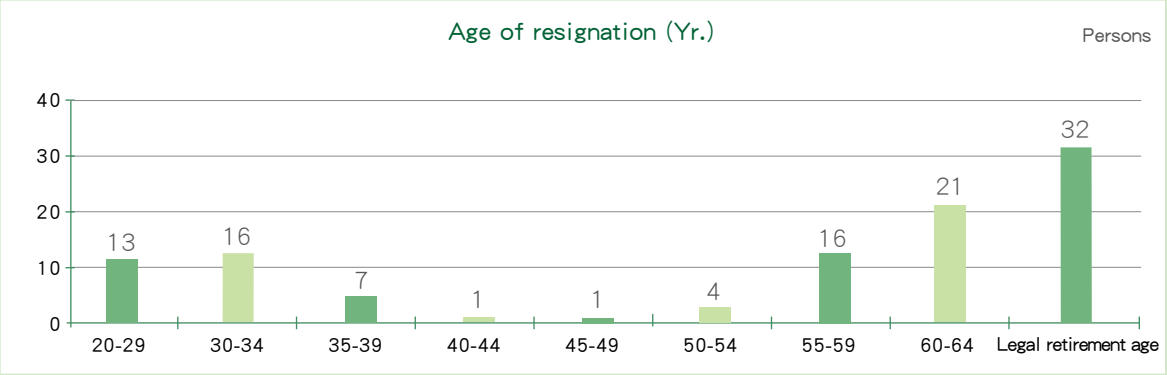
Position change：Before a position change, the employee is notified a few weeks before. After the employee agrees, the notice will be announced later. If the employee has difficulties in performing his/her duty after receiving the notice, he or she is allowed to file an annulment of the labor contract or file an appeal within 24 days after the notice of change becomes effective. If the appeal is dismissed, the employee can file the annulment within seven days after the dismissal. About the aforesaid situations, if the employee fails to file the annulment within the due date, it will be regarded as acceptance of the position change.

Early Retirement of Preferential Treatment：

CSC established the "Guidelines of the Special Project for Early Retirement" in September 2010 to show consideration for employees who are seriously ill or severely wounded and encourage them to retire earlier in order to promote industrial safety, provide opportunities to new recruits, moderately adjust the structure of the employees and age levels, and spur vitality in the organization. The regulation of "Retirement, Consolation, Compensation of Occupational Disaster and Layoff" was amended in December 2011. The rules for those who suffer serious injuries and diseases and are approved with full-pay leave or leave without pay or under treatment or suffer moderate or more serious disabilities due to occupational accidents were amended to be eligible for early retirement of preferential treatment. The amendment has been systemized as the basis of application. Additionally, the relevant rules in the "Special Project for Early Retirement" was amended in December 2012, for staff with "poor physical and psychological health condition(s) and are actually incompetent for work" or "taking specific work positions with required qualifications" to allow for early retirement of preferential treatment before the end of January 2013 to reduce the risk of accidents and improve CSC's human resources structure.

In 2012, CSC's employees who have resigned totaled 109 (excluding the resignation of three base level staff that passed professional exams) with two staff members that were female. There were 79 workers in 2012 who resigned before retirement age. Moreover, there were 23 deaths, four post-project retirements, 13 voluntary retirements, and 37 voluntary resignations, one project layoff, and one dismissal. The average resignation rate over the past three years is 1.34%.





(5)Abnormalities control

Employee assistance program：The care of employees' mental status is part of CSC's safety and health program. If employees or contractors appear absent-minded, behave in a dull or inactive way or show signs of drunkenness, the manager or supervisor are obliged to handle the matter by suspending them from work or help them to receive proper medical treatment in accordance with corporate regulations.

Overtime work control：Concerning employees' health, if the directors ask workers to work overtime, total working time cannot total over 12 hours a day or 46 hours a month, except for special needs, like emergency repair services that have the supervisors' approval. However, the worker should have an opportunity to fully recover afterwards.

(6)Major investments and human rights of suppliers

In 2012, CSC's major investment projects included an electricity system replacement project in the #2 hot-rolling steel strip area of #2 Steel Rolling Plant, an increase in the paid-in capital of CSC Steel Australia Holdings Pty Ltd, a merging with Horng Yih Investment Corporation, Long Yuan Fa Investment Corporation and Goang Yaw Investment Corporation, an equipment updating project for #2 continuous annealing, an increase of paid-in capital in "Formosa Ha Tinh Steel Corporation," the establishment of a cutting and assembly distribution center in Qingdao City, Shandong Province, China, a "Waste Gas Desulfurization Project at #3 Sinter," and the "#1 Furnace at #4 Boiler Upgrading Project." All of CSC's operation activities and investment agreements followed the local rules without incorporating human rights terms; all agreements with suppliers, contractors and other commercial partners comply with local human rights rules without specifically incorporating human right terms. For suppliers with higher human rights risks, CSC plans to conduct human rights surveys in the future. No accusations of human rights violations were filed in 2012.

Human rights assessments for foreign investment projects in 2012 (source：www.maplecroft.com)

Foreign investment project	Human right risk assessment
Increase of paid-in capital in "Formosa Ha Tinh Steel Corporation"	High
Establishment of cutting and assembly distribution center in Chingdou City, Shandong Province, China	Extremely high
Increase of paid-in capital of CSC Steel Australia Holdings Pty Ltd	Low

Human rights assessment of suppliers, 2012 (Source：www.maplecroft.com)

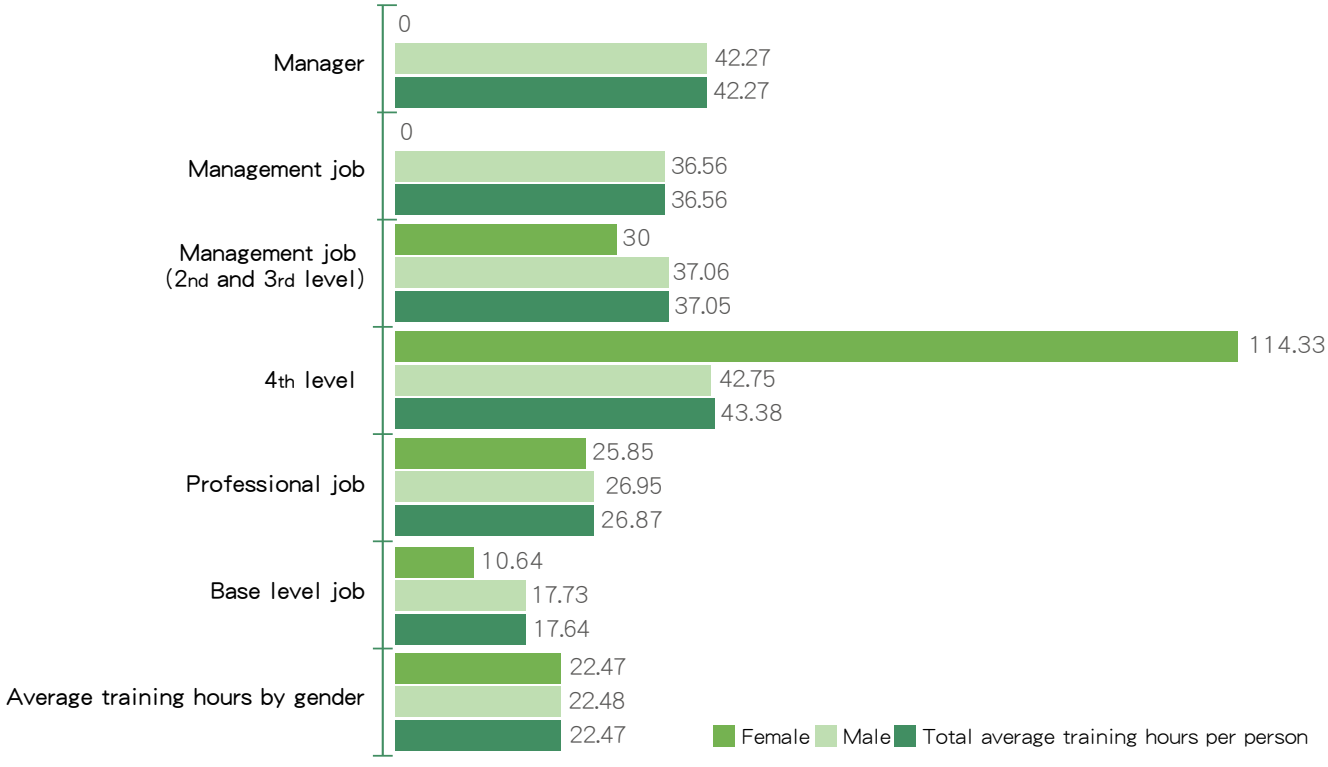
Supply countries	Human rights assessment	Supply countries	Human rights assessment
Japan	Moderate	Canada	Low
Philippines	Extremely high	Indonesia	High
Dubai	High	Russia	Extremely high
P.R.C.	Extremely	North Korea	Extremely high
Vietnam	high	US	Moderate
Thailand	High	Brazil	High
Australia	Low	Bahrain	High

3.3.3 Human resource development

CSC's employees follow HR training procedures based on an employee development path map that addressed the main performance and development items listed below：

(1)Employee training statistical data

After the recruiting process is completed, we start training and educating every new employee in self-interest, workplace safety, the Labor Safety and Health Act and the Labor Standard Act. In the progress of their development, we continue researching corporate and personal needs and gradually develop the required proficiency to carry out training systems in order to update the skills and knowledge needed for career development. During the year-end appraisal, every employee will be evaluated for job performance and current position duties. The average hours of training courses and e-learning opportunities during 2012 were 23.9 and 1.1 hours per employee, respectively. Total training expenses were NTD81,628,973. Training hours per person by position and gender are shown below：



Note：In 2012, there were no female staff members at CSC who held managerial positions and the 1st and 3rd level management jobs.

(2)Training and study for the board of directors and supervisors of re-invested companies

According to the regulation, CSC organizes three-hour advanced training courses for company directors and supervisors each year. Participants include the Chairman, President, Vice Executive GM, and Vice GM of each department as well as directors and supervisors of CSC's reinvestment companies as well as relevant staffs in charge of work duties. In October 2012, a course on "Job Competencies of Independent Directors and Operational Practice of the Auditing Committee" was offered to enhance the understanding of directors and supervisors of CSC's reinvestment companies of the establishment and operation of the Auditing Committee.

(3)Managerial employee training

■Executives：CSC worked with National Taiwan University (NTU) to organize a "Refined Management and Case Study for Executives" for CSC executives that combines the core courses of NTU and cases in business growth and innovation related fields to analyze practices and strategies as well as to inspire CSC executives with logical analysis and managerial skills with international vision. Additionally, this program also included visits to non-steel making industries with the aim of providing the participants with new sources of inspiration and different strategic perspectives.

■Mid-management staff：With Aspire Academy, CSC organized "Learning for Organizational DNA" and invited professors from National Sun Yat-sen University to provide a "Management Case Study" course with the participation of 260 staffs in charge of mid-management operations. A Corporate Culture Learning Camp was also organized to relay the exceptional CSC corporate culture and business spirit as well as to enhance organizational abilities.

Learning for Organizational DNA

■Base management staff：For 4th level managerial staff, CSC organized relevant courses on leadership, communication and negotiation, systematic thinking, and conflict management. Lecturers were provided by CSC executives with the goal of sharing the management and corporate culture of CSC.

■Professional staff：Training opportunities addressing work improvement, problem analysis, and problem resolution skills were given to professional staff (engineers and administrators) in order to improve their work competencies.

■Internal Training Programs： Management Training Program (MTP) for mid-management staff, Assessment Center (AC) and Training Within Industry (TWI) for base management staff were offered.

(4)Training of expatriates

CSC, in recent years, established steel rolling plants in Vietnam and India. In order to facilitate the learning of local languages and understanding of local culture by expatriates, language courses and living and cultural courses for both Vietnam and India were offered. External experts and scholars as well as returned CSC expatriates were also invited to share their experiences.


(5)General education

In order to enhance managerial and professional knowledge and competencies, CSC, in 2012, convened 13 "cultural lectures" for executives of CSC Group. Through the sharing of life experiences and artistic achievements of scholars and experts in different fields, executives enhanced their understanding of art and culture and were inspired by new ways of thinking and examples of creativity. Stan Shih, Acer Group Founder / Chairman of iD SoftCapital Group, was invited to talk about the "Golden Rule and Change Management" at CSC on November 8, 2012.


(6)New comer training

In recent years, CSC has employed more than 1,000 employees; in addition to the new comer orientation program, a mentor system and knowledge management program are also introduced to them via the methods listed below：

- ■Basic training：in addition to new comer basic training, a two and half day training study tour is organized outside CSC to facilitate the new comer's education about the CSC Group. It also includes activities that allow new-entries to interact and build interpersonal relationships with each other.
- ■Sales person training：This course covers the production and sales system, order handling process, product marketing, product application, and production practice. Visits to downstream industries are organized so that they can learn about the real application of CSC steel products.
- ■Professional technological training：Practical professional training programs related to steel production including machinery and machine maintenance are provided.
- ■Steel simulation competition (Steel Vitality Camp)：CSC participated in the 2012 on-line steel production simulation competition organized by Steel University of worldsteel to enhance the understanding of the new hire about the steel making process. In 2012, there were 160 participants (including 115 members and 46 instructors). As announced on the Steel University Website, participants in the competition accounted for 1,148 teams from 37 countries. CSC received the third place award in the final contest.


(7)e-Learning and knowledge sharing：

To prepare for a lot of employees who are going to retire, CSC proactively established a knowledge management system that identifies corporate core abilities in order to systematically proceed with the inventory, storage, transmission and innovation of employees and their records. CSC established its Knowledge Management Committee in 2006. Their responsibilities include：

■Knowledge roadmap and pass-down：They focus on the expertise and experiences needed for practical work.

■Knowledge group：CSC encourages the formation of knowledge groups in a variety of fields. Group discussions can energize the activity of the organization, and help to promote a knowledge sharing culture.

■Successor training and mentor system：This system is designed to maintain corporate core competitiveness, encourage a knowledge sharing culture and inspire individual passion to learn and energize the organization. This system helped CSC win a "human resources innovation award" and a "corporate e-learning award" from the government.

(8)The 6-σ

2012 Annual Meeting of 6-σ

"Advancing product and manufacturing processes with 6-σ to enhance corporate culture" has been listed as one of the corporate development strategies' action plans. By the end of 2012, 222 projects were completed with the accumulated financial effectiveness of 1.2 billion.

(9)Patents：

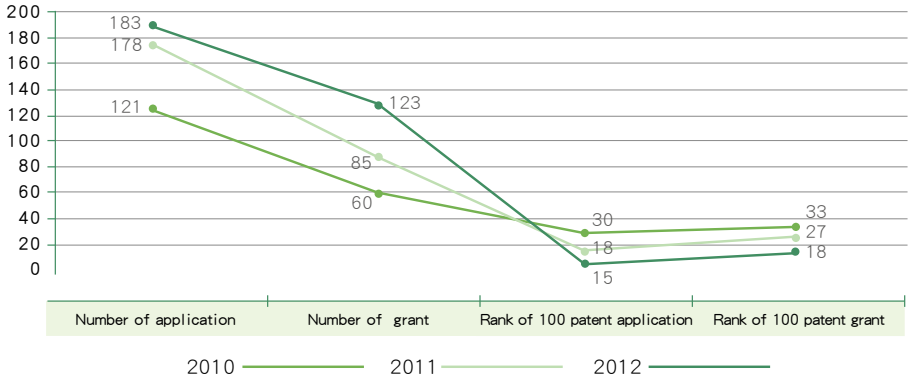
CSC established a Patent Application and Promotion Committee to encourage patent applications that are beneficial for integral arrangement and to enhance competitiveness. We also set up a reward mechanism, and assess the performance of patent applications on a yearly basis. Awards are given accordingly at a R&D award ceremony.

In recent years, CSC has established a comprehensive patent system to encourage the participation of all staff members in patent development; intellectual property right (IPR) educational training programs were conducted to cultivate seed employees in each unit. The last CSC IPR course was organized in 2011. Additionally, in 2012, the IPR team promoted relevant education programs for each unit with tailor-made teaching materials based on the actual operation of each unit. This comprehensive

encouragement system has helped the number of patent applications grow rapidly to protect CSC's intellectual property rights.

There were 183 patent applications in 2012 with 123 certificates received. CSC ranked 15th in patent applications and 18th in issuing certificates for the top 100 Patent Applications. The number of patent applications and grants for the last three years are provided in the table below：

Figure：Patent application and grant trends for the last three years：



(10)Encourage self-development

We adopted a Creative Development Activities (CDA) quality control circle and Employee Suggestion System (ESS) many years ago to encourage basic level colleagues to work actively together to solve working problems and expand their potential. Creative Development Activities have received golden medals in national competitions over the years. CSC's performance for 2012 is described below：

■CDA：593 circles were formed this year with 6,247 participants, accounting for 90% of specialist-level personnel for each unit that promoted the activity. 665 themes were completed and the annual benefits accumulated approximately NTD100 million.

■ESS：Approximately 21,885 suggestions were received and 21,585 (98.6%) of them were adopted, creating more than NTD 120 million in tangible benefits.

(11)On and off the job training

In order to enhance production, R&D, technology, management, and foreign language abilities as well as incorporate them with the strategic demands of being a diversified and internationalized management team, in 2012, about 107 people times were sent to study relevant professional courses at international academic and business institutions and employees with development potential were selected to study in both domestic and international universities and colleges. Five were sent to study in Taiwan and five were sent to other countries.

(12)Contractor training

Contractors' SH and professional performance are closely related to the quality of training they received. We arrange for training courses and examination tests based on the SH and professional skills that contractors need. The training hours for contractors in 2012 totaled 45,661 hours, as shown below：

Item	Training course	persons	hours	Total hours
Safety training	New hire training	7,371	6	44,226
Techniques training	1.Scaffolds	124	3	372
	2.Roofing corrugated sheets	150	1	150
	3.Continuous welding of high voltage cables	74	2.5	185
Techniques exam	1.Arc welding	21	1	21
	2.Fitting works	12	1	12
	3.Constructional steel works	15	1	15
	4.Scaffolds works	124	3	372
	5.Continuous welding of high voltage cables	88	3.5	308

(13)Security training

CSC's security is entrusted to China Steel Security Corporation (CSSC), a subsidiary of CSC; 281 CSSC employees are currently guarding CSC. All of them have received training in regard to security, the Labor Safety and Health Act, the Labor Standard Act and human rights.

(14)CSC's Corporate Culture Committee

CSC established the Corporate Culture Committee in October 2010. Since then it has made the following major achievements：

■Compiled "CSC Leadership" as an internal teaching material for current and future managers so that they could use their managerial leadership training to lead their team in creating more added values for CSC and continuously improve operational performance.

■Entrusted the Business Administration School of NSYSU to provide six "management case study" classes in which 230 managers and 26 managing staff participated, a total of 256 trainees; convened the "CSC Corporate Culture" conference for committee members with a discussion focused on the "shaping, heritage, and transformation of CSC corporate culture."

■Arranged CSC corporate culture courses for CSC and group new hires with the participation of 411 trainees by 2012; arranged a course for managing staff with the participation of 197 staff in management positions.

■Cooperated with Aspire Academy to organize the "Organizational DNA Study" for mid-management staff so that they could learn how to analyze current corporate culture thoroughly and hand down exceptional corporate culture via case studies that focused on strategic business abilities. A total of 257 trainees composed of 226 staff and 31 managers from CSC and CSC Group, respectively. They conducted sharing exercises after the courses.

■In order to create integrity standards, "Points Governing Gifts and Banquet Invitations" are included in lobbying operations. On November 16, 2012, the amendment of "Points Governing Gift and Banquet Invitations and Lobbying" was announced. By December 2012, 70 cases of lobbying were reported, in writing, to independent directors and supervisors.

■Constructed the "CSC Corporate Culture Website." It includes an introduction to the organization, CSC leadership, meeting minutes of President or General Manager with staff, CSC spirit stories, CSC anniversary celebration reports, social group forum, information on the corporate culture of other companies, and an information exchange system. By December 2012, the number of visitors to the website was approximately 10,000.

3.3.4 Labor union

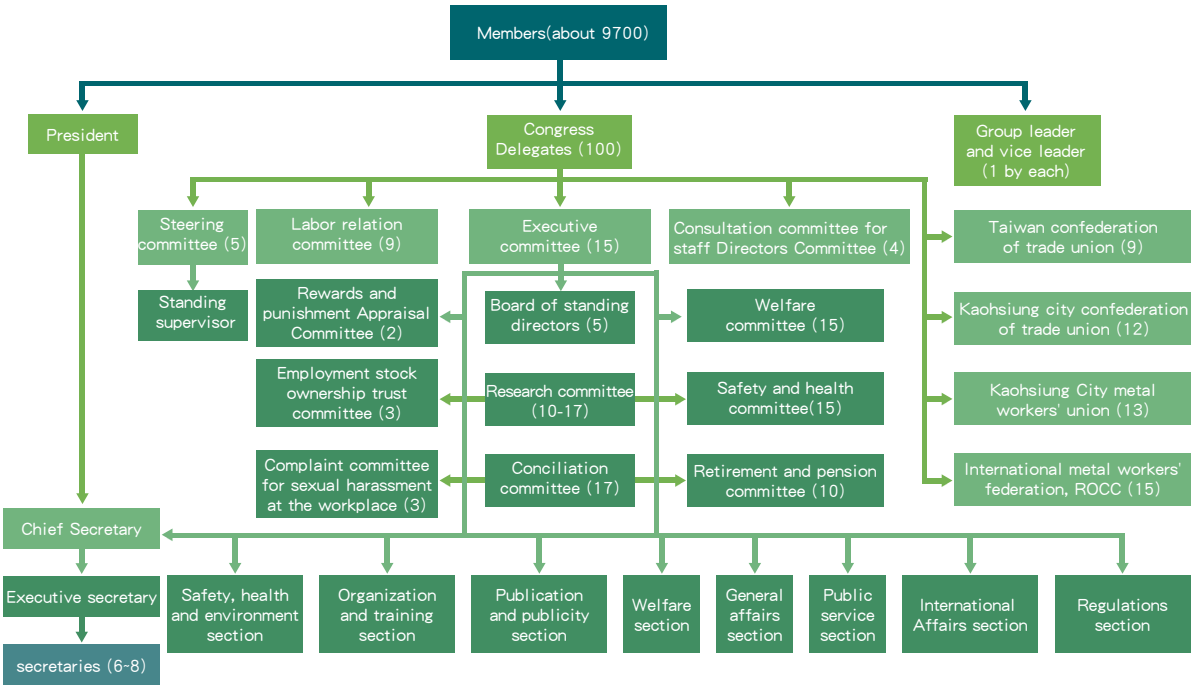
The healthy labor union of an organization can express ideas and suggestions on behalf of its members as it strives to create a decent working environment as well as promote worker rights and development. Also, the labor union is helpful in balancing the corporate operation and expanding the scope of social engagement. The operations of the CSC Labor Union can be summarized as follows：

(1)Members and goals

The CSC Labor Union was established on December 30, 1980, and is comprised of all employees below the top-level manager position. Its purpose is to help the corporation with the development of the business, facilitate industrial cooperation, protect the rights and interests of the members, improve the lives of members, enhance the knowledge of members and assist the government in promoting policies with the perspective of laborers.

(2)Framework and structure

The representative meeting is the highest organization in the labor union. The 100 representatives are elected by 9,700 members from different divisions. Its Board of Directors is the supreme organization during the adjournment of the representative meeting. The 15 seats on the Board of Directors are elected by delegates. The steering board is set to supervise the Board of Directors. There are five seats on the steering board that are also elected by delegates. There is one president who represents the union and deals with daily work. The president of the labor union is directly elected by all members and leads the secretariat with eight different functional groups in dealing with the daily work of the union.



The 3rd Meeting of the 11th Term Representative Meeting

(3)Collective agreement

CSC highly values employer-employee relationships. In order to maintain mutual communication as well as fair regulations and decent working conditions, for the first time, CSC signed a collective agreement with the labor union on February 14, 1997, as a guideline to develop harmonious employer-employee relationships. Accordingly, CSC has reached a milestone in harmonious relationships and labor affairs. Because the contents in the agreement are comprehensive and many articles and ideas have been addressed, other labor unions have taken the agreement as a model when writing their own collective agreements.

(4)Participation in corporate governance

Apart from periodic labor relations committee meetings, a labor director has been appointed to the CSC Board since May 31, 2001. It was the first time that the president of the CSC labor union was elected as a member of the Board of Directors, with the right to join the operation committee and participate in corporate governance. In addition, there are several seats provided to representatives of the labor union in both the Human Resource Committee and the Rewards and Punishment Committee.

(5)Defending labors' rights

The CSC Labor Union has made every endeavor to protect the rights of its members in a reasonable and peaceful way, such as through the Labor Relation Committee, communication meetings with top-level management and collective negotiations. The CSC Labor Union fights for employees' rights through labor negotiations while taking actions of protest or litigation in only a few special cases. In 2012, there had been no major labor disputes.

(6)External exchanges and social welfare

The labor union has not only defended members' rights and improved its service, but also increased its level of contribution to society in recent years. We often communicate and cooperate with domestic and foreign labor unions and seek to realize a harmonious employer-employee relationship for the benefit of employees and to protect their rights. We aid the community by sweeping and cleaning the streets and parks.

3.3.5 Social responsibility expenditures

CSC's major CSR expenses and donations in recent years include：

■Institutes and associations：CSC participates in activities sponsored by institutes and associations in both Taiwan and abroad. We also sponsor seminars and/or workshops every year with institutes and academic associations to improve the competitiveness of CSC and create external communication channels for the corporation and employees.

■CSC Group Education Foundation：CSC donated NTD 7.79 million to the CSC Group Education Foundation in 2012 to implement cultural and educational for employees in steel-related fields.

■Public Affairs Department：Its budget allows for participating in local public services. In 2012, CSC's social responsibility expenditure was approximately NTD48 million dollars for emergency assistance and natural disaster restoration.

3.3.6 LOHAS Homeland

(1)Reduce environmental impact

■Environmental restoration：CSC is located in a non-urban area of the Linhai Industrial Park in Kaohsiung City. It is not in a national park, wild life protection area, important habitats for wild life, national wetland, or conservation area listed in the Conservation Plan for Preserving the Natural Environment of Taiwan's Coastal Area or in areas at altitudes of 1500m or above. Before developing the area, we conducted an environmental impact assessment. CSC honors its commitments, voluntarily safeguards nearby rivers and assists environmental protection agencies in finding abnormal emissions. CSC actively patrols the river to assist environmental protection agencies in identifying illegal pollution sources and enforcing mandatory improvements. On July 18, 2012, CSC coordinated with KCEPB to conduct a water quality identification education workshop and volunteers from CSC and CSC's river patrol teams helped to clean Salt-water Creek.

■Energy saving and carbon reduction：We uphold the idea of continual improvement and meet top international standards in reducing environmental impacts via management by objectives and operation of an environmental management system. For instance, efforts to reduce particulates, NOx and Sox, waste recycling, river protection and dioxin control have shown good performance.

■Green procurement：To comply with the government's green procurement policy, in 2007, CSC started procuring products with green labels. Green procurement expenses in 2012 reached NTD 169 million, much higher than NTD12 million in 2011. CSC won KCEPB's "Outstanding Private and Group Business Award for Green Procurement."

Since beginning its efforts to promote green procurement, we have received the "Outstanding Business Award for Green Procurement" from the EPA every year, fully showing that we have done a good job in fulfilling our corporate social responsibility and showing our determination to promote green procurement and green consumption. The EPA has planned to launch an "energy saving and carbon reduction label" to award actions taken by businesses, private organizations, and communities. In order to demonstrate CSC's energy saving and carbon reduction efforts, CSC participates in the program to highlight its involvement and achievements and to fulfill its social responsibility obligations and meet the image of an ideal green business.

■Adoption of KMRT shuttle bus services：In coordination with the business adoption program promoted by the Kaohsiung City Government, CSC adopted the shuttle bus services of the Red 2 Line and the route from Siaogang Station to Linhai and Linyuan Industrial Park to improve public convenience and promote KMRTs services in order to make Kaohsiung a low carbon city by saving energy and reducing carbon. CSC also donated the funds to build Siaogang's R3 transit station so that riders can enjoy more comfortable bus waiting services. The construction of the R3 transit station began on October 15, 2012 and was completed in March 2013.

■Subsidizing public transportation system：

In order to encourage CSC employees to commute by the KMRT, CSC cooperated with KMRTC to launch the happy business card program through its subsidies. In 2012, 9,333 happy business cards were sold and free shuttle bus services from R3 Siaogang Station to CSC were offered with the rides totaling 77,748 people times. Concrete benefits were seen in regard to saving energy and reducing carbon under the encouragement of the government and CSC.

(2)Eco-city

Eco-cities are a global trend and a major part of key policies being promoted by central and local governments. To promote the concept of an eco-city, work in progress and under discussion includes：

■Donating 8,500 bicycles to make it easier for citizens to take the KMRT in order to increase its passenger load factor (PLF)

■Participating in the task of converting waste into energy and its application to manufacturing processes in order to help Kaohsiung City save energy, reduce carbon and minimize pollutant emissions

■Enhancing the purification and reuse of industrial effluent and sewage wastewater

■Promoting the usage of smart grids in industrial zones

■Expanding the green procurement efforts of the CSC Group and the green consumption habits of employees in order to support the development of green products in Kaohsiung

■Improve and promote carbon footprint calculations in daily life.

Customers are able to learn about carbon reduction and applicable rules to follow. The program is

expected to start with CSC's energy and environmental departments and expand to other departments and CSC employees.

(3)Carbon footprint calculator for daily use (low-carbon recorder)

The promotion of green living among CSC employees aims to allow them to understand carbon emissions generated in daily life through a systematic review and enhance the willingness to save energy and reduce carbon. CSC worked with Fooyin University to develop and install daily use low-carbon recorders to tell individuals about their contribution to GHG reduction and to gain awareness and support of the public for low-carbon products or services that will encourage continuous inputs by businesses in low-carbon manufacturing processes and jointly create a consumer market beneficial to environmentally-friendly products and services. CSC's daily use low-carbon recorder has concluded the initial installation stage and tested 20 devices. The following planning principles were derived as a result：

- Principle 1：Reliability.
- Principle 2：User friendly design system interface.
- Principle 3：Scalability.
- Principle 4：Display of CBA discrepancy in low-carbon consumption.

(4)Go green and vegetation

■CSC has introduced professional skills to achieve comprehensive or multi-layer greenery. Trees, bushes and turf are used to enrich the environment and appearance of the forest. The current size of the green area in CSC is about 44.2 hectares, with a green space ratio of 8.38%. The size is equal to double the size of Taipei's Da-An Forest Park. More than 17,000 trees and 1.48 million bushes (approximately 284 species) have been planted. In addition, we use potted plants, green roofs and green walls to expand the use of green spaces in different layers, and to make it very beautiful. We have entrusted National Ping-Yung University of Science and Technology to assess the benefits of our green work on CO_2 reduction. The total leaf area in CSC is 450,000 square meters and is comprised of bushes and woody lianas. These plants are estimated to absorb 1,872 tons of CO_2 and can reduce 3,314 tons of CO_2 per year, contributing to GHG reduction and global warming resistance.

■Cooperating with Guilin Elementary School in Siaogang District to organize the "Landscaping to Reduce Carbon and Love the Earth" activity at Kaohsiung Metropolitan Park; assisting in planting vegetation around the campuses of Mingyi Elementary School, Fenglin Junior High School, Siaogang Elementary School, and Siaogang Junior High School.

■Adopting the landscaping and landscape maintenance responsibilities for the green belt on Jhongshan 4th Rd.




(5)Better environment and biodiversity

Although CSC is not situated in ecological reserve areas or near such areas, our efforts over the years on green works have created an environment of biodiversity. Research from CSC's bird watching club shows that there are two species of mammals, five species of amphibians, 32 species of insects and 78 species of birds on the campus. The ecology of the Siaogang area has been greatly improved as a result of our efforts.

3.3.7 Welfare measures

In order to provide decent working conditions and satisfy employees' needs, 26 representatives of the Labor Union and Company Management jointly formed the CSC Welfare Committee, and set up the Employee Benefits Section to deal with welfare matters, including： internal recreational activities, credit loans, four-festival bonuses, cash gifts for birthdays, weddings and childbirths, scholarships for children of CSC employees, emergency aid and subsidies, member activities, year-end lottery, dinner party allowance, member welfare subsidy and discount stores. In coordination with the "environmental restaurant" policy launched by the government in an effort to reduce energy consumption and waste production and promote Taiwan's green dining industry, CSC actively participated in the EPA's "2012 Environmental Restaurant" program and was selected as an "environmental restaurant" in Kaohsiung City.

(1)Facilities and clubs

The CSC welfare cooperative store provides employees with several facilities, including：a shopping mall, an employee restaurant, Ming Bang western restaurant, a singles dormitory, a gym, shuttle bus service (22 lines), self-service laundry center and a small library. We have always encouraged the development of clubs, offering a way to relax the body and soul and an opportunity to show how much we care. By the end of 2012, there were 41 active clubs; each one has its own features. Employees and their family can partake in leisure or public welfare activities beside work time to relieve stress and enrich their lives. In 2012, CSC held 406 club activities with 15,360 participants. A summary of the activities of some clubs is as follows：

CSC charity club：In 2000, the club was registered at the Social Affairs Bureau of Kaohsiung City Government in the name of Kaohsiung City's Charity Club. The club helps people in need and repays society by joining in community emergency relief efforts, regular sponsorship of programs, life care, orphanage care, friendly community activities, community service and disaster relief efforts. The club members and their families make monthly donations depending on their personal situations. The club members also visit remote mountain areas to care for indigenous people or children from poor families and help motivate entire families to perform community service.

1.Visit to Living Stone on February 11, 2012
2.Visit to Leren Center for Special Education on May 29, 2012

Bicycle club：The club champions the benefits of riding bicycles instead of motorcycles to make individual contributions to CO_2 reduction.

Chorus：Singing and reading are the main activities of this club. The club also cooperates with outside groups to provide performances.

1.Bike riding activity at the flag rising ceremony on New Year Day
2.CSC Chorus performance at Kaohsiung Cultural Center

Bird watching club：To strengthen the concept of environmental protection, the club holds bird watching activities periodically, irregularly invites professionals to illustrate environmental ideas and records bird species discovered in CSC's campus.

There are many other clubs, like the stone appreciating club, horticulture club, photography club, Chinese music club, Tai Chi club, and so on. We also hold exhibitions, lectures or performances irregularly to provide leisure activities for the employees and local community.
Moreover, some CSC employees have even joined outside clubs, like the Tzu-chi and Taiwan Fund for Children and Families, showing that we are willing to give back to society.

(2)Contractors' benefits

Contractors working in CSC can also enjoy the same benefits the community does and some of the facilities that CSC employees use. The shopping mall, the employee restaurant, the Ming Bang restaurant, the gym and the small library that are offered by the CSC welfare cooperative store are also available to contractors.

3.3.8 Social participation

(1)Contribution to society and being a good neighbor

CSC puts great effort into maintaining industrial safety and a clean environment around the plant area in order to provide a better living environment for local residents; the Company also pays an annual business tax and air pollution fee to the Kaohsiung City Government. Based on our good-neighbor policy, CSC is regularly in charge of the following matters：

- Additional grades are given to local residents according to the "Reward guidelines of Siaogang young residents taking part in CSC's new employee selection."
- Budgets planned for new facilities and educational activities for public schools in the community
- Scholarships for excellent students and student aid funds are provided to students from low-income families in the community.
- Adoption of Kaohsiung Metropolitan Park.
- Irregular invitations to vulnerable groups to participate in activities held by the Company in the hope of attracting more individuals and groups to give their love and care to them.

- Promotion of filial devotion and ethics as well as praising the related performance of students at junior high and elementary schools in the community.
- Providing aid funds to low-income families on holidays, such as Chinese New Year, Dragon Boat Festival and Moon Festival as well as emergency relief funds for people in need
- Participating in local folklore activities or public services such as sports or honoring senior citizens
- Movies are arranged and leisure facilities are provided every Saturday for residents of the community. Neighbors are invited to join in our activities or festivals.

■Helping local public services, such as reconstructing the roads of parking areas and the Activity Center and publishing the Flora Introduction brochure for Siaogang District; inviting institutions, schools, citizen representatives, local district supervisors, local residents and members of the press to visit CSC in order to obtain a better understanding of the steel production process and achievements in environmental protection.

■The CSC Employees Welfare Committee has established a kindergarten in Siaogang Dormitory in order to assist employees' and local residents's children and earned the outstanding prize.

■Holding summer camps for elementary school students to promote healthy leisure activities and promote local community harmony.

■In order to improve local education and build good local relationship, CSC, in 2012, organized the "Steel Tour" of "Steel Spirit and the "Pioneer of Green Energy" teaching activities at the integrated steel making plant for about 2,000 graduates from 13 elementary schools in Siaogang District over a series of four rounds. Entertaining and educational quiz games were arranged to promote the effective environmental and science literacy of students by providing diverse and interesting information regarding steel production and environmental education.



■Emergency assistance：CSC assists with recovery efforts due to disasters in addition to donating goods and materials. In 2009, when Typhoon Morakot seriously damaged southern Taiwan by destroying many roads and bridges in the Liouguei Mountain Area of Kaohsiung City. The living conditions of local residents and the local economy were interrupted. CSC donated funds to the Road Bureau to reconstruct the Sinfa Bridge. The bridge was completed in June 2011. It is hoped that the bridge will provide safe transportation and bring economic prosperity to the mountain area. During the memorial ceremony held for the third anniversary of the Typhoon Morakot Reconstruction Committee of the Kaohsiung City Government on August 7, 2012, the Mayor of Kaohsiung City, Chen Chu, presented an award to CSC for its contributions. On August 8, 2012, CSC also received an Award of Contribution from the Private Sector to the Reconstruction Efforts after Typhoon Morakot by the Executive Yuan.


(2)Assistance for private groups

CSC is a member of many national and international academic associations and research institutions. We act as a sponsor for workshops, seminars and other activities for different private groups, institutions and associations to develop more communication channels for the Company and employees, including：

■Giving assistance in the organization of steel-related technique and environmental protection workshops and conferences on engineering technology for the steel industry. Topics addressed include steel structural design and welding technology, hot and cold-rolled steel welding technology, liquid forming technology, high-performance steel structural steel technology, steel operation management, steel fastener practice and analysis advanced training, and non-directional electrical steel technology, wire rod and hot and cold-rolled product properties and manufacturing technology to assist with the technology upgrading of downstream manufacturers.

■Cooperating with the Material Engineering Departments of NTU, NCKU and NSYSU to give courses on steel-making processes and provide CSC scholarships. CSC also supports NCKU in its efforts to establish the "CSC Metal Laboratory" and cultivate employees for the steel industry.

■Sponsoring campus contests and educational activities; cooperating with IBM to organize a large main frame campus contest and E-WEEK to promote engineering education.




(3)Service for CSC retirees

The CSC Retirees Service Department was launched on January 25, 2011 to serve CSC retirees under the concept of "planning, communication, respect and enthusiasm." The Department is implementing a mutual LOHAS service strategy based on the five major premises： "the elderly are also healthy", "the elderly also have savings", "the elderly also have mates", "the elderly also have friends" and "the elderly also have fun." "Taking care of the aged like family members" is the vision of CSC in the fulfillment of its corporate social responsibility as it provides more services to its retirees. The following activities were implemented in 2012：

■Organizing two rounds of LOHAS seminars and three rounds of retirement farewell parties.

■A CSC retirees stock saving trust committee has been established. Employees who were approaching retirement age were invited along with CSC retirees to participate in the presentation via text messages; 82 people applied for membership before 2012.

■A retired employee pool was created. It provides information on retirees' employee professional competence for the support of overseas engineering services and the provision of techniques and management advice for CSC.

■CSC retirees in the volunteer community assisted CSC with activities for the "Steel Excursion for Environmental Education." By the end of 2012, 85 retirees and their spouses joined the program. They also offered assistance to sixth grade pupils from elementary schools in Kaohsiung Siaogang District" and took the role of voluntary tour guides.

Cleaning Qijin's Beach

Mobile Environmental Education Service

■The "CSC Evergreen Community" was registered on the CSC knowledge community website and linked to the CSC retirement evergreen website, so that CSC retirees could access the evergreen network community from external websites.

■The CSC Retiree Evergreen Web is maintained and updated from time to time (including CSC's news clips, information of medical care, welfare and entertainment, semi-monthly published CSC newsletter, and activity registration). Additionally, retirees are encouraged to update their personal information and apply to join Evergreen social groups. An Information Bulletin Board has also been added to help keep CSC retirees informed in a timely manner.
(http：//gm.csc.com.tw/MIS/PL/PL_Retire_Website/PROGRAM/PLAU00/PLAU00.aspx)

(4)Suggestions for public policies

CSC actively collects and compiles information from advanced countries and after the organization of open forums by inviting participants from government, academia, and research institutes jointly with industrial associations, reasonable suggestions for rules and policies via representative associations (such as the Chinese National Federation of Industries, Taiwan Steel & Iron Industries Association, Kaohsiung Chamber of Industry) are presented. Important suggestions include：

- GHG Reduction Act：CSC collected relevant laws on carbon reduction in EU, Japan, Korea, and the UK and invited domestic experts to a forum with the aim of building consensus to help future amendments by the government in order to ensure fairness and rationality when fulfilling Taiwan's carbon reduction responsibilities, compete fairly, and develop the domestic economy by creating jobs.
- In order to avoid the adoption of an air pollution control act instead of a GHG reduction rule by the EPA that will negatively affect industrial competitiveness, the Chinese National Federation of Industries requested legislators to include a GHG reduction act for ratification and the EPA to promote the Act in order to gain industrial rights and improve Taiwan's export-oriented industrial competitiveness.

- Soil pollution control standards：There is a huge difference between hazardous free Cr^{3+} and hazardous Cr^{6+}. CSC, through the Taiwan Steel & Iron Industries Association, suggested that EPA amend the existing Act about total chromium concentration control of soil by referring to the advanced countries and Hong Kong's soil pollution managements which are based on health risk assessment principles to set separated treatment targets for different usages of land. (set separate standards for trivalent chromium and hexavalent chromium or regulate only hazardous hexavalent chromium) . It can avoid a ban on the recycling of trivalent chromium byproducts and reduce the areas of remediation sites.
- Soil and Groundwater pollution remediation fund： "polluter-pays principle" is widely adopted by countries worldwide and is an important key point in the amendment of soil and groundwater pollution remediation Act in Taiwan. The Act requires amendments in various parts, for example, a failure to comply with the parent law and the failure to realize fair burden sharing. CSC will, via Chinese National Federation Industries, lobby for a fair charge mechanism.
- Environmental Impact Assessment Act：The EPA has enacted comprehensive pollution source prevention and control (treatment) laws; CSC suggests that for permits obtained based on pollution source prevention and control laws, developers only need to submit the contents of change to environmental competent authorities and industry competent authorities for review to respond to quick changing markets, optimize production structure, and improve production efficiency.
- Water pollution prevention and control act：CSC submitted suggestions about runoff wastewater management to the Chinese National Federation of Industries and industrial opinions, after being compiling by the Federation, were brought to the EPA. They included：(1) clearly define rerouting discharge means draining wastewater not only from a non-approved discharge point, treatment units, or from a discharge point not authorized by the sewage management agency into a sewage system, but also not complying with effluent standards. (if water quality meets effluent standards, it does not violate the laws); and (2) the application of runoff wastewater management are applied to sensitive substances piling areas.
- More flexible carbon credit program and additional verification criteria：CSC proposed the establishment of a carbon credit program that is more flexible than the current one and additional verification criteria during evaluation and consultation meetings at the EPA and Chung-Hua Institution for Economic Development, and COP18 including：Taiwan's carbon credit program shall be more flexible than the CDM of the UN; the adoption of a simpler international trend in reduction programs and additional verification methods; and the consideration of direct distribution of a carbon credit program that is different from the offshore investment of CDM and cap usage and requires more flexible verification criteria. Due to the big drop in international carbon prices and the unregulated carbon prices in Taiwan, strict additional requirements and follow-up review procedures will dramatically increase the cost of the reduction program and uncertainty that will further weaken the willingness of energy saving and carbon reduction of domestic industries. The preliminary projects as well as carbon credit program and additional verification criteria in Taiwan adopt different level of rigorousness and this will result in unfair competition in the carbon market.
- Energy tax：Energy tax will have important influence on the operation of Taiwan's steel industry as well as the industrial competiveness. CSC enacted impact assessment report and submitted it to Chinese National Federation of Industries as the basis to negotiate with government cabinet. The key points are： to link with international community to exempt taxes on metallurgical coal and coking coal; lower tax rates than those in Japan and Korea for materials with the exception of above items;

imposing taxes only under economic rebound; and the consideration of social justice and caring for the disadvantaged.

(5)CSC Group Education Foundation

In order to achieve its goals to promote education and employee cultivation in steel related fields to care for ecological conservation, to improve cultural spirit, and to look for sustainable development, the CSC Group Education Foundation based on the theme of "Whole Person Social and Educational Activity" organized educational activities and deals with affairs below :

For citizens : lectures for citizens and spiritual lectures.

For university and graduate students (elite education) : CSC Camp, Specific Introduction to Steel Making Processes, Steel Employee Scholarship, Steel Popular Science activities.

For senior high school students (subject based education) : E-week Popular Science activities and campus lecturers.

For elementary and junior high school students (basic education stage) : Mobile Environmental Education Bus, Ecological Camp for Elementary School Students, the Youth Creative Robot Contest, and Creative Sports Contest.

In 2012, the CSC Group Education Foundation convened 12 lectures for citizens with the participation of 8,500 attendees and 36 services of Mobile Environmental Education Bus for 5,000 users. Additionally, 100 people participated in the application of scholarship program and the course on Specific Introduction to Steel Making Processes and eight were granted with the scholarship. Popular science activities for college students including CSC Camp attracted the participation of 200 people times.

CSC Group Education Foundation conducted important work in 2012 such as :

■2012 CSC Camp

In 2012, the CSC Camp activity "Steel and You" had members dressed like characters from the Harry Potter series and visit companies in downstream industries including John Shyn Shipbuilding and Jinn Her Enterprise Co., Ltd. Members rode on public bikes in Kaohsiung City to tour and plan games around the Love River. This activity attracted the participation of 80 university and graduate students and their understanding and knowledge about the steel industry and Kaohsiung was enhanced as a result.

Steel reflections of CSC Camp members：

Steel has been largely used in people's life since the industrial revolution. You can see it is used in almost everywhere, such as large buildings, automobiles, umbrellas, or even pens. Due to the widely accepted concept of recycling in the 21st century, people believe that resources should be fully utilized and the steel industry is no exception. In the steel industry, we regard steel scrap as a "rice ball" because the steelmaking process is like making rice porridge with iron ore being unhusked rice and pig iron being white rice. Scrap is a rice ball made of husked, clean, and boiled rice. It is much more efficient to make rice porridge from rice balls than unhusked rice.
This concept has been gradually becoming more mainstream. The steel industry should gradually decrease its use of iron ore, and increase the utilization of scrap. Scrap can be remade into "green steel products" to lessen the burden on the environment. This is a practical way to realize "sustainable development" in a society such as this that depends highly on steel.

(He, Department of Materials, National Taiwan University)

Taiwanese artist Ruey-Shiann Shyu is known for creating works with mechanical power elements and is currently living in New York. His solo exhibition, "Journey", was presented at the Tenri Cultural Institute, New York in November 2011. He successfully integrated warmth and sentiment into cold steel, drawing people closer to his works. The exhibition was entitled "Journey", which intended to express the traces left by different kinds of journeys, whether it was a walk to the grocery store next door, a long trip to a distant country, the path of a life cycle, or even the motion of everything in the entire universe.
"I am from Kaohsiung, which has a very developed steel industry because of its port. As a matter of fact, Kaohsiung is called Taiwan's "steel city." Recently, the government has put a lot of effort into integrating industry with art. For example, the Pier 2 Art Center has hosted a series of steel art exhibitions, and received a great response for each one. Our daily life depends heavily on steel products. By combining artistic elements with steel and exploring environmental-friendly uses of steel, one can make cold steel warmer and inviting, helping them start a whole new journey."

(Lin, Mechanical & Electro-Mechanical Engineering Institute,
National Sun Yat-Sen University)

The demand for steel increased with the invention of vehicles during the first industrial revolution thereby promoting the development of the steel industry. At that time, many new steel making processes were created. As a junior in the Materials Department, I found that the internal structure of the material has had a great impact on finished products and is highly related to people's life and the environment. For example, we used various samples provided by CSC to conduct tensile tests, and we found yield strength and elongation both play important roles during the manufacturing process. Great car door panels use steel material with high yield strength and elongation properties, so that damage can be minimized when an accident occurs. Also, a natural disaster-resistant building uses materials with a solid structure such as steel. Steel materials do play an important role in people's life. With its high plastic strain ratio and lower strain hardening exponent, it can be processed into many shapes, and widely applied to electrical engineering, shipbuilding, construction, consumer good, and especially IC products. Demand for it is increasing as technology advances and consumers become ever more dependent on them. In addition, steel also has better impact resistance and fire resistance than that of aluminum and plastic. Therefore, steel is also widely used in the construction and transportation industries.
It is also important to note that steel's recycling rate is up to 90%. That means a lot because environmental awareness is higher than ever at the present time. Steel production and use causes less pollution to our environment, and is listed as a green material. Steel cannot be separated from our life.

(Xu, Department of Materials and Optoelectronic Science,
National Sun Yat-Sen University)

■Steel Scholarship

Reflection：

In fact, I am quite surprised that this award was presented to me because I could barely stand on the stage to receive it. I was nervous and fluttered because there were some details I failed to attend to. However, during the ceremony I had the opportunity to learn about different methods of doing research and making presentations. Furthermore, questions raised by the Committee made me realize the insufficiency and incomprehensiveness in my study from a professional point of view. I have learned a lot in this event, and I want to express my appreciation to CSC for giving us this opportunity to train ourselves and to the CSC Group Education Foundation for their reception and service.

(Cheng, Department of Material Science and Engineering, NTU)

First of all, I want to give my appreciation to the CSC Group Education Foundation for offering such a rare chance to win a scholarship through the interview with CSC Group executives. Although the discussion with the committee over my experiment was very solemn, this experience was still interesting and rewarding for a new graduate student like me. When I was an undergraduate student, I had participated in several CSC midterm and final meetings because I took a seminar class offered by Professor Po-We Kao. When I looked at the teachers and the senior students trying with all their might to explain and discuss with the audience the results of their research, I used to imagine that one day, after I started working for a company, I will also able to stand on the stage, showing the audience my research results and taking other people's critique and advice. This event is like a dream come true for me.

I want to give thanks to the committee their recognition. It is not just recognition, but also something that gives me the power to stick to my goal. I know I need to work harder to learn more and create a better model of thinking in order to address questions. Moreover, apart from academic contributions, practical contributions to society are something I started to think about in my study so this is also a topic that a material science student should also begin to examine. With all the knowledge we have, we must try to find problems and propose feasible solutions that save energy and promote sustainability so that we can fulfill our responsibility to society.

(Wu, Department of Materials and Optoelectronic Science,
National Sun Yat-Sen University)

■Environmental Education Bus

To fulfill its CSR, promote environmental education, and serve school children in remote rural areas, the CSC Group Education Foundation and National Science and Technology Museum (NSTM) jointly provide Environmental Education Bus services. CSC has covered the expenses of the vehicles and their operation and the NSTM designed and prepared portable teaching tools appropriate for mobile education. The Environmental Education Bus program was initially planned in March 2011 and in its initial stage, priority services were provided to schools in remote rural areas. The first trip was to Liouguei Elementary School in Liouguei District, Kaohsiung City.

The portable teaching tools that the environmental education bus can carry include a solar power system, Stirling engine, wind power generator, energy saving lamp, fuel cells, bicycle generator, RO facility and water saving faucets, for eight item types in total. These teaching tools are instructive, interactive and operative. We hope that children can personally touch and use these creative environmental protection tools. We also designed mission games and lucky draw activities to make environmental education more diverse and vivid. In the circuit, the CSC Group Education Foundation donated sets of illustrated books on environmental education to elevate children's environmental awareness and science literacy.

■Environmental Education Camp

The 2012 Shoushan National Natural Park Summer Camp began in July. It had five sessions that attracted the participation of 200 school students. This summer's environmental team worked with the Kaohsiung Natural Observation Association and its outstanding and diverse group of teachers. The goal of this camp is to invite children to go outdoors and encourage their interest in natural observation and caring for environmental conservation. This was the sixth year of the camp with the total participation rate reaching almost 1,200. The Camp was organized in Kaohsiung Park, Metropolitan Park, Weiwu Barracks, and Shoushan Park. This year, in addition to outdoor experiential courses at Shoushan Natural Park and Jinshi Lake, a one day indoor course was also provided to teach children about ecology one day prior to the outdoor courses. In order to help disadvantaged children, this camp reserved seats for the Social Welfare Center in Siaogang and Xiangyang Center in order to provide an opportunity for children to embrace and learn about nature.

During the long summer vacation, the CSC Group Education Foundation organized an environmental camp to raise the awareness of children in regard to how they can care for nature and cherish it. Children understood that Mother Nature is the best mentor because through the "understanding" of ecology, we come to "cherish" our earth. Children also could apply knowledge learned in the classroom via practical observation.

■Since 2008, the CSC Group Education Foundation held various lectures for CSC citizens in spiritual, and on-campus venues. Through charitable lecture activities, cultural, art, and drama literacies of citizens can be enhanced to help with the spiritual growth of citizens so that we all can live in a better future.

Organization of CSC Citizen Lectures

This year 12 lectures were organized with the participation of 3,000 people times.

Cultural and Social Lectures for Senior High School Students Co-organized by CSC and United Daily News Group in Kaohsiung Area

Date	Speaker	Title	Venue
March 2, 2012	Dai Chen-Chi	The Power from Desire	Fengxing Senior High School
May 4, 2012	Lin Yi-Jie	New World · New Limitation	Zuoying Senior High School
May 30, 2012	Shen Rui-Ling	I Dream Therefore I Am- The 12 Driving Forces that Change the World	Ruixiang Senior High School
August 31, 2012	Lang Zu-Yun	Your Dream is not Wild	Chungzheng Senior High School
September 21, 2012	Lin Hsiou-Hsia	Dance Your Life	Nanzi Senior High School

To expand the service scope of on campus lectures at senior high schools, the CSC Group Education Foundation worked with the Cloud Gate Dance Foundation to organize lectures on the stories of the wanderers to benefit more students in Kaohsiung.

Date	Speaker	Title	Venue
October 31, 2012	Wu Hsin-Che (Usi Azer)	Sitar	Guoguang Laboratory High School, NSYSU
December 18, 2012	Li Pei-Ying	"The Power of Simple Existence-the journey of male part's Qing singing"	Kaohsiung Senior High School

The wandering story of Wu Hsin-Che： http：//www.cloudgate.org.tw/wanderer/story03.html
The wandering story of Li Pei-Ying：http：//www.cloudgate.org.tw/wanderer/2010_story05.html

Campus Lecture on the Wanderer-Usi Azer's Wild Music Journey

Spiritual Lecturers Co-organized by CSC and the Teacher Chang Foundation

There were four lecturers co-organized by CSC and the Teacher Chang Foundation on spiritual growth and parental education with the participation of 1,000 citizens.

Date	Speaker	Title	Venue
March 30, 2012	Fang Lan-Sheng	Interpersonal Relationships： The Humorous Heart	Dream Mall
April 20, 2012	Zheng Wu-Chun	Fortune for Your Life： MQ, EQ, and AQ	Dream Mall
May 25, 2012	Chung Si-Chia	Smart Parents and Outstanding Children	Dream Mall
June 29, 2012	Hung Hsin-Yi	Secret Garden of Youth	Dream Mall

■E-WEEK educational activity

Engineers' week (E-WEEK) was an activity focusing on technology education initiated by the US National Society of Professional Engineers (NSPE). In 2012, it was first time that CSC and IBM worked together to bring this activity to southern Taiwan so that students in Siaogang Senior High School, Zuoying Senior High School, and Fengxing Senior High School could participate. The aim was to encourage students in senior high schools to think creatively, to cultivate thinking skills and creativity as engineers. Through practical hands-on experiences and the utilization of limited resources, teams completed their tasks together.

■Invitation to Single-Parent Families to the "Movable Painting of Along the River during the Qingming Festival"

■Offer Introduction to Steel Making Processes courses and the Steel Employee Scholarships： At present, Introduction to Steel Making Processes courses are offered by three universities： NTU, NSYSU, and NCKU. Additionally, National University of Kaohsiung offers steel related courses such as "Surface Treatment and Anti-corrosion Technology" and "Introduction to Steel and Hot Treatment." During this school year, courses were offered in Department of Materials at NTU and NSYSU and were taken by 125 students at two universities. In the future, CSC will set up ERC at Tsing Hua University or Chiao Tung University (currently at National Taiwan University of Science and Technology, NCKU, NSYSU, and NTU) and thus, the course on "Specific Introduction to Steel Making Processes" will be offered at Tsing Hua University as an inter-university elective course that offers students a unique opportunity to expand their industrial vision.

■Sponsoring Industrial Human Resources Training Program：Courses on "Surface Treatment and Anti-corrosion Technology" and "Introduction to Steel and Hot Treatment" under the Industrial Human Resources Training Program are offered on a continuous basis at the Department of Chemical and Materials Engineering, National University of Kaohsiung. Course lecturers include representatives from the Department of New Materials R&D and Steel R&D Department of CSC, downstream businesses, and professors at the Department of Chemical and Materials Engineering, National University of Kaohsiung.

■Sponsoring relevant marketing activities with the KMRT Corporation including music concerts, an art exhibition at the National Taiwan Museum of Fine Arts at Yancheng Station and street dance contest at Central Park Station to encourage the use of public transportation.

■Sponsoring the organization of the KMRT Spring Art Festival to encourage making friends via artistic activities and the use of the KMRT.

■Cooperating with the Center for Creative Learning in Kaohsiung City to promote creative activities among students in universities and the 2012 RCJ national contest and relevant teacher training activities to cultivate innovative energy for the future of Taiwan. Contest items include relief robots, dancing robots, and soccer robots. This was the first time the contest was held in Kaohsiung and it attracted the participation of 300 junior high and elementary school students.

■Cooperating with Kaohsiung City Symphony Orchestra to host the NSO Festival Series of "Centennial Festival" music activities

■Financially sponsoring the Technology R&D Center for Sustainable Environment at NCKU to host the "2012 Jade Mountain Sustainable Environment Forum"

■Publishing a book on the conservation of 18 Arhats Mountain Area. It provides detailed information on the flora and fauna along the west bank of the Laonong River in Liouguei, Kaohsiung. The research team

members for this book consisted of CSC employee Mr. Hsieh Chun-Wan and Professor Yeh Ching-Lung of the Department of Forestry, National Pingtung University of Science and Technology. The book has a great deal of content and is an excellent educational tool that helps to contribute to environmental education.

■Sponsoring the concert of 12 cello players from the Berliner Philharmoniker (including an outdoors broadcast charity) as well as cello concert of Chang Cheng-Jiess "Change, Change, and Change" concert.

■Organizing the "2012 Steel and You" series of activities：Courses are based on the perspective of materials such as iron ore to industry-related topics such as the production of various types of steel products, steel applications throughout history, everyday uses of steel industry products, and a discussion on the value of steel workers and social interaction.

■Future activity plans

- CSC planned to conduct the 6th CSC "Steel and You" educational camp under the theme of "Hollywood Steel" in January 2013. We expected to recruit 60 college and university students to visit steel upstream and downstream businesses to attract students to participate in metal-related industries in the future in an entertaining and educational manner.
- Continue sponsoring CSC campus lecturers： In addition to the cooperative efforts with the United Daily News Group, in the future, CSC will work with the Cloud Gate Dance Foundation to invite the young winners of the Wanderer Program to perform and share in order to encourage students to take adventures.
- CSC plans to promote "Steel and Life" popular science education and book publications to target readers of non-steel related professional materials. This will allow teachers at senior and junior high school, non- steel related major university/college students, and the public to understand more about the steel industry and to enhance the overall image of the CSC Group.
- CSC will continue working with IBM to promote the popular E-WEEK science activity in Kaohsiung.

3.3.9 Regulatory compliance

(1)Regulation identification

According to the OHSAS 18001 and ISO 14001 management systems, organizations must promise to obey SHE-related laws and identify related regulations and other requests. CSC transfers the officially published safety, health and environmental protection regulations to the competent authorities for identification through the Internet to make sure that they are followed and early responses are properly provided. We identified 45 SHE regulations in 2012.

(2)Regulatory compliance

CSC had no violation records except for accidents and fines caused by human error. There had been no violation of safety and health regulations in 2012. The violation records for safety and health regulations over the last five years are shown below：

	2008	2009	2010	2011	2012
Issued by	K.LSIO	K.LSIO	K.LSIO	K.LSIO	NA
Number of case /penalty (NTD)	3/180,000	2/120,000	2/180,000	1/60,000	0


李長榮化工、中國鋼鐵
Agreement Signing
boration of LCY, CSC and
中國鋼鐵

04 Future Goals and Directions

Future goals and directions		Current Achievements	Work to do
Corporate Governance			
2011 Business policy	Active development of upstream materials	Investment in Roy Hill Iron Ore in Australia	Active development of upstream materials
	Active positioning in downstream channels	Investment in CSC India and Qingdao CSC Precision Metal Corp.	Improvement of grades of steel products and expansion of downst ream channels
	Innovative R&D of high value steel materials	Test conducted in coordination with market development of titanium and nickel special alloy steel	Continuous coordination of tests and R&D
	Advancement of manufacturing processes emphasizing carbon and waste reduction	Control and management of NGO production line schedule and quality	Test conducted as scheduled
2012 business policy	Inventory reduction by adjustment of production and sales	2012 order qualification rate, 93.76% and yield rate of sub-quality products, 1.40%	Reach target 2013 order qualification rate, 93.5%, and reduce yield rate of sub-quality products
	Cost reduction through scientific processes	Scientific methods were introduced to reduce costs systematically and continuously through material use, improvement of manufacturing processes, new technology R&D, quality advancement, and management improvement at each department level to cope with the slowdown of the international steel market. In 2012, costs were reduced by NTD6 billion.	2013 target cost savings at NTD4.08billion
	Advanced manufacturing processes via innovation and R&D	In 2012, 26 new products were developed and R&D efforts on high grade and strategic steel products were conducted with orders of high grade steel products reaching 44.3%.	In 2013, the target of 25 items for development has been set based on technology and quality advancements, efficiency improvements, product grade and value improvements, and supplies at reasonable prices.
	Development of channels and customers	Proactive investments in CSC India and Qingdao CSC Precision Metal Corp. to expand channel position, develop customer base, and build stable sales channels	Active development of channels and customers
By 2015, CSC Group revenue is targeted to increase 42% over that of 2010.		The economy in 2012 went down and in 2012, CSC's revenue totaled NTD207.2 billion, a reduction of 13.8% less than that of 2011. Recognized income generated from reinvestment businesses was about NTD3.7 billion.	Continuous increase of CSC Group revenue

Future goals and directions	Current Achievements	Work to do
Enhancement of customer services and strategic cooperation with top international steel makers	In 2012, the satisfaction score of domestic customers towards CSC was 70.67 and for international customers, it was 70.7, respectively lower by 1.99 and 0.19 than those in 2011.	Continuous improvement of customer satisfaction rates
Active participation in various Worldsteel activities to maintain cooperation and fair competition in the international steel industry	Continuous participation in various worldsteel activities	Continuous participation in various worldsteel activities
Energy and environmental management		
Continuous development of high grade, high strength steel products to assist downstream industries and provide steel products that help to reduce carbon footprints	The 2012 orders for high grade, high strength steel products were 44.30%. Electrical steel and hot roll coil passed carbon footprint certification.	Continuous development of high grade, high strength steel products
Continuous introduction of advanced pollution prevention and energy saving facilities to reduce air pollution and CO_2(emission intensity) released during steel products production per ton in order to meet or exceed international standards	Due to the economic downturn, steel production was reduced in 2012 and CO_2 emission intensity was slightly increased over 2011 levels to 2.331ton/tcs.	Continuous introduction of advanced pollution prevention and energy saving facilities
Energy consumption of 2013 is set to be≦5,920 Mcal/tcs. The goal of SOx emission intensity is to be reduced by more than 10%.	2012 energy consumption per ton of crude steel was 5,719 Mcal, an increase of 182 Mcal compared with 2011.	Continuous promotion of energy saving and carbon reduction efforts
In the next five years, dust proof nets on stockpiles and the de-S facility at No.4 sinter are expected to be built while de-SOx and de-NOx facilities for No. 6-8 boilers will be improved to reduce particulate emission to 1,651 kg/day, SOx 5,590 Kg/day and NOx 1,045 kg/day.	In 2012, the particulate emission per ton reduced by 1,076kg/day compared to 2011. The emission of SOx decreased by 3,454 kg/day, and NOx by 1,779 kg/day compared to 2011.	Added installation of dust proof nets on stockpiles and de-S facility at sinters as well as de-SOx and de-NOx facilities for boilers to reduce the emission of traditional air pollutants
Development and application of low-carbon and zero carbon energy resources including biomass, solar power, and fuel cell; support government policies in the R&D of carbon capture and sequestration programs	CSC has established a 517.24 kWp PV system and between 2011~2012, CSC accumulated power generation of 557,882 Kwh and reduced 341,424 kg of CO_2. CSC set up a demonstration system for cubic micro algae cultivation and carbon fixation and developed spiral algae cultivation operating technology. At present, carbon fixation capacity reached 170 tons per hectare. CSC also developed offshore wind power resources.	Development and application of low-carbon energy resources including biomass, solar power, and fuel cell

Future goals and directions	Current Achievements	Work to do
Enhancement of water conservation and water resource reliability： targeting a water consumption rate of 5.0 cubic meters/ton-tcs (including cooling water for power plants); decrease the raw water consumption rate by recycling industrial wastewater and municipal wastewater reclamation.	In 2012, raw water consumption increased from 4.84 to 4.96 tons.	Plan to build a third-class recycling plant in Fengshan River Waste Water Treatment Plant and a desalination plant for the North Star Project area to make demineralized water
Continuous reduction of pollutants in the effluent to lessen the burden on nearby water bodies	The 2012 COD for effluents was 43.7mg/L and S.S was 6.1mg/L. The content of heavy metals was in trace amounts, far below effluent standards.	Continuous reduction of pollutants in the effluent
Improvement in the quality of BOF slag and promote the revision of control standards for Cr^{3+} and Cr^{6+} to allow for reasonable reuse of BOF slag	Work with the Taiwan Steel and Iron Industries Association to request that the EPA loosen regulations according to health risk assessments conducted by other advanced countries to regulate Cr^{6+} instead of the total soil pollution of chromium on non-edible crop farmland.	The BOF slag treated station was completed and began testing in June 2012. It is expected to decrease the expansion and alkalinity of BOF slag.
Assistance to factories in Linhai Industrial Park and CSC Group companies to enhance environmental protection efforts and energy saving performance in order to lessen the burden on the entire supply chain	CSC created an industrial environmental network connecting 19 enterprises to build a resource chain. “District energy integration” was utilized to exchange and increase overall energy efficiency.	Continuous improvement of the environmental protection efficiency of factories in Linhai Industrial Park and in the CSC Group companies
Engagement in social harmony		
With its focus on emphasizing workplace safety and environmental protection, CSC has been a good neighbor to local communities. We build a better living environment and coordinate and participate in relevant activities that are helping remake Kaohsiung into a low carbon city to enhance image.	Coordinating with the evaluation efforts of low-carbon city activities in Kaohsiung; donated of 8,500 public bikes to KMRT Corporation.	Continuously work to improve the workplace safety performance and enhance CSC's image; donated funds to build the R3 transit station in Siaogang
Fairly treat employees and contractors and promote the maintenance of good interaction and collaboration with CSC's labor union	In 2012, there had been no labor dispute.	Continue to treat employees and contractors fairly and with respect

Future goals and directions	Current Achievements	Work to do
Assist central and local governments in enacting energy, environmental protection and adaptation policies, regulations and mechanisms that meet or exceed international standards, are suitable for Taiwan, and efficiently respond to climate change	Via its memberships in various associations, CSC strives for the rationalization of central and local regulations including energy saving and carbon reduction, ground water, energy tax, air pollution prevention and control laws, and waste disposal laws and offers suggestions to promote a low-carbon economy, carbon credit policy, and development of industries in southern Taiwan.	Continue assistance to central and local governments in regard to enacting energy, environmental protection and adaptation policies, regulations and mechanisms
Actively participate in the activities of domestic and international associations and consortiums to fortify professional resources and enhance their credibility in negotiating with the government	Participation in the sustainable development activities of the BCSD and TCSF and submit completed CDP questionnaire	Submit completed DJSI and CDP questionnaires and actively participate in activities of domestic and international associations and consortiums
Care for the disadvantaged, indigenous people, and promote Taiwan's diverse cultural heritage and continue supporting the mobile library's activities	Continue cooperating with NSTM to provide the CSC Environmental Education Bus program to remote rural elementary schools.	Purchase a second CSC Environmental Education Bus; continue supporting mobile library activities
Continue supporting events for art and cultural groups in order to enrich the cultural atmosphere of Kaohsiung	Continue providing financial support to events for art and cultural groups	Continue providing financial support to events for art and cultural groups
Continue working with social charities including emergency relief and disaster restoration groups	Continue working with social charities	Continue working with social charities
Continue sponsoring the CSC Camp and Steel Tour and providing CSC Scholarships to encourage students to learn more about steel making processes	Continue sponsoring the CSC Group Education Foundation, CSC Camp and Steel Tour and providing CSC Scholarships to encourage students to learn more about steel making processes and hopefully inspire them to eventually work in the steel industry	Continue to promote efforts to encourage students to learn about steel making processes and inspire an interest in the industry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05 Appendix

Appendix I：Global Reporting Initiative (GRI) Indicator Comparison Table

Status：◎：Fully disclosed，△：Not applicable

GRI Indicators		Related CSC CSR Report Section	page	Explanatory Notes
1	Strategy and Analysis			
1.1	Statement from the most senior decision maker of the organization about the relevance of sustainability to the organization and its strategy.	message from top management	4	
1.2	Description of key impacts, risks, and opportunities.	2.2.6,2.2.7	35,38	
2	Organizational Profile			
2.1	Name of the organization.	About CSC	6	
2.2	Primary brands, products, and/or services.	1.6	22	
2.3	Operational structure of the organization	2.1	28	
2.4	Location of organization's headquarters.	About CSC	6	
2.5	Number of countries where the organization	About CSC	6	
2.6	Nature of ownership and legal form.	About CSC	6	
2.7	Markets served	1.6	22	
2.8	Scale of the reporting organization	1.6	22	
2.9	Significant changes during the reporting period	2.1.7	31	No significant change
2.10	Awards received in the reporting period	1.5.2	20	
3	Report Parameters			
3.1	Reporting period	1.5.2	20	
3.2	Date of most recent previous report	1.2.2	15	
3.3	Reporting cycle			annual
3.4	Contact point for questions regarding the report or its contents.	Contact Information		Bottom
3.5	Process for defining report content	1.5	20	
3.6	Boundary of the report	1.5.2	20	
3.7	State any specific limitations on the scope or	1.5.2	20	
3.8	boundary of the report	Appendix VII	152	
3.9	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and or between organizations.	1.5.2	20	
3.10	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report.	1.5.2	20	
3.11	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement	1.5.2	20	
3.12	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	Appendix I	138	
3.13	Table identifying the location of the Standard Disclosures in the report.	1.5.3	21	
4	Policy and current practice with regard to seeking external assurance for the report.			
4.1	Governance structure of the organization.	2.1	28	
4.2	Indicate whether the Chair of the highest governance body is also an executive officer	2.1.5	30	

4.3	For organizations that have a unitary board structure, state the number and gender of members of the highest governance body that are independent and/or non-executive members.	2.1.1	28
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	1.3, 2.2.3	16,32
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives, and the organization's performance.	2.1.5	30
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	2.2.2	32
4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees.	2.1	28
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	message from top management	4
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	message from top management	4
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	2.1.3	29
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	2.2.6	35
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	message from top management, 3.2.9	4,87
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations	1.6.5	25
4.14	List of stakeholder groups engaged by the organization.	1.3	16
4.15	Basis for identification and selection of stakeholders with whom to engage.	1.3	16
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	1.3	16
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	1.3	16

Economic Performance Indicators

GRI Indicators		status	Related CSC CSR Report Section	page	Explanatory Notes
DMA	Disclosures on Management Approach	◎	2.2	32	
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	◎	3.1.3	51	
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	◎	3.2.1	64	
EC3	Coverage of the organization's defined benefit plan obligations.	◎	3.3.7	116	
EC4	Significant financial assistance received from government.	◎	3.1.5	54	

EC5	Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation.	◎	3.3.2	98	
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	◎	3.1.6	56	
EC7	Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation.	◎	3.3.2	98	
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, inkind, or pro bono engagement.	◎	3.3.6	114	
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.	◎	2.2.7	38	

Environmental Performance Indicators

DMA	Disclosures on Management Approach	◎	2.4	44	
EN1	Materials used by weight or volume.	◎	2.4	44	
EN2	Percentage of materials used that are recycled input materials.	◎	1.6.4	23	
EN3	Direct energy consumption by primary energy source.	◎	3.1.6, 3.2.3(6)	56,67	
EN4	Indirect energy consumption by primary source.	◎	1.6.4	23	
EN5	Energy saved due to conservation and efficiency improvements.	◎	1.6.4	23	
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	◎	3.2.3(2)	68	
EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	◎	3.2.3(2)	68	
EN8	Total water withdrawal by source.	◎	3.2.3(2)	68	
EN9	Water sources significantly affected by withdrawal of water.	◎	3.2.3(11)	79	
EN10	Percentage and total volume of water recycled and reused.	◎	3.2.3(11)	79	
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	◎	3.2.3(11)	79	Not located in protected areas and areas of high biodiversity value outside protected areas
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	◎	3.3.6	114	Not located in protected areas and areas of high biodiversity value outside protected areas
EN13	Habitats protected or restored.	◎	3.3.6	114	Not located in protected areas and areas of high biodiversity value outside protected areas
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.	◎	3.3.6	114	Not located in protected areas and areas of high biodiversity value outside protected areas

EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	◎	3.3.6	114	Not located in protected areas and areas of high biodiversity value outside protected areas
EN16	Total direct and indirect greenhouse gas emissions by weight.	◎	3.3.6	114	
EN17	Other relevant indirect greenhouse gas emissions by weight.	◎	3.2.3(4)	70	
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	◎	3.2.3(4)	70	
EN19	Emissions of ozone-depleting substances by weight.	◎	3.2.3(2), 3.2.3(4)	68,70	
EN20	NO, SO, and other significant air emissions by type and weight.	◎	3.2.3(5)	71	
EN21	Total water discharge by quality and destination.	◎	3.2.3(5)	71	
EN22	Total weight of waste by type and disposal method.	◎	3.2.3(11)	79	
EN23	Total number and volume of significant spills.	◎	3.2.3(7), 3.2.3(9)	76,77	No significant spill
EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention, and percentage of transported waste shipped internationally.	◎	3.2.3(7)	76	
EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.	◎	3.2.3(9)	77	
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	◎	3.2.3(9)	77	
EN27	Percentage of products sold and their packaging materials that are reclaimed by category.	◎	3.2.4	81	
EN28	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.	◎	3.2.3(6)	73	
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	◎	3.2.12	60	
EN30	Total environmental protection expenditures and investments by type.	◎	3.2.3(2)	68	

Labor Practices and Decent Work Performance Indicators

DMA	Disclosures on Management Approach	◎	2.3	40	
LA1	Total workforce by employment type, employment contract, and region, broken down by gender.	◎	3.3.7	116	
LA2	Total number and rate of new employee hires and employee turnover by age group, gender, and region.	◎	3.3.2(1)	98	
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation.	◎	3.3.7	116	
LA4	Percentage of employees covered by collective bargaining agreements.	◎	3.3.2(1)	98	
LA5	Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements.	◎	3.3.2(4)	101	

LA6	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.	◎	2.3.5	42	
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender.	◎	3.3.1(10)	94	
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	◎	3.3.1(12),3.3.1(13)	96,96	
LA9	Health and safety topics covered in formal agreements with trade unions.	◎	3.3.4	109	
LA10	Percentage of employees covered by collective bargaining agreements.	◎	3.3.3	103	
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	◎	3.3.3	103	
LA12	Percentage of employees receiving regular performance and career development reviews, by gender.	◎	3.3.3	103	
LA13	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity.	◎	3.3.2	98	
LA14	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation.	◎	3.3.2(3)	99	
LA15	LA15 Return to work and retention rates after parental leave, by gender.	◎	3.3.2(1)	98	

Human Rights Performance Indicators

DMA	Disclosures on Management Approach	◎	2.3	40	
HR1	Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening.	◎	3.3.2(6)	102	Percentage is zero
HR2	Percentage of significant suppliers, contractors, and other business partners that have undergone human rights screening, and actions taken.	◎	3.3.2(6)	102	
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	◎	3.3.3	103	
HR4	Total number of incidents of discrimination and corrective actions taken.	◎	3.3.2(1)	98	No incidents of discrimination
HR5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights.	◎	3.3.4(5)	110	
HR6	Operations and significant suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor.	◎	3.3.2(1)	98	No child labor
HR7	Operations and significant 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.	◎	3.3.2(6)	102	

HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.	◎	3.3.3	103	
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken.	◎	3.3.2(1)	98	No violations involving rights of indigenous people or actions taken
HR10	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments.	◎	3.3.2(1)	98	No violations involving rights of indigenous people or actions taken
HR11	Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms.	◎	3.3.2(1)	98	No violations of human rights

Society Performance Indicators

DMA	Disclosures on Management Approach	◎	2.5	46	
SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs.	◎	3.3.5, 3.3.6	111 ,114	
SO2	Percentage and total number of business units analyzed for risks related to corruption.	◎	2.3.3	40	
SO3	Percentage of employees trained in organization's anti-corruption policies and	◎	2.3.3	40	
SO4	procedures.	◎	2.3.3	40	
SO5	Actions taken in response to incidents of corruption.	◎	2.3.2, 3.3.8(4)	40,119	
SO6	Public policy positions and participation in public policy development and lobbying.	◎	2.3.2	40	
SO7	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	◎	2.2.2(2), 3.1.13	32,62	
SO8	Total number of legal actions for anticompetitive behavior, anti-trust, and monopoly practices and their outcomes.	◎	3.3.9	129	
SO9	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations.	◎	1.6.4, 3.2.3(2)	23,68	
SO10	Operations with significant potential or actual negative impacts on local communities.	◎	1.6.4, 3.2.3(2)	23,68	

Product Responsibility Performance Indicators

DMA	Disclosures on Management Approach	◎	2.2.5	34	
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	◎	3.2.2	65	
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.	◎	3.2.2	65	No non-compliance with regulations
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	◎	3.2.2	65	
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.	◎	3.2.2	65	No non-compliance with regulations

PR5	Practices related to customer satisfaction, including results of surveys measuring	◎	3.1.10	59	
PR6	customer satisfaction.	◎	3.2.2	65	
PR7	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	◎	3.2.2	65	No non-compliance with laws, standards, and voluntary codes
PR8	Total number of incidents of compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.	◎	3.1.10	59	No non-compliance with regulations
PR9	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	◎	3.1.10	59	No complaints regarding breaches of customer privacy and losses of customer data

Mining and Metals Sector Supplement

MM1	Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated.	◎	3.3.6	114	Not located in protected areas and 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.	◎	3.3.6	114	Not located in protected areas and areas of high biodiversity value outside protected areas
MM3	Total amounts of overburden, rock, tailings, and sludges and their associated risks.	△			
MM4	Number of strikes and lock-outs exceeding one week's duration, by country.	◎	3.3.4(5)	114	Zero times
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.	△			
MM6	Number and description of significant disputes relating to land use, customary rights of local communities and Indigenous Peoples.	◎	3.3.9	129	Zero dispute
MM7	The extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communities and Indigenous Peoples, and the outcomes.	△			
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.	◎			Zero ASM
MM9	Sites where resettlements took place, the number of households resettled in each, and how their livelihoods were affected in the process.	◎			No resettlement took place
MM10	Number and percentage of operations with closure plans.	◎			No closure plan
MM11	Programs and progress relating to materials stewardship.	◎	1.6.4	23	

Appendix II： ISO-26000 Comparison table

Core Subject and Issues		Related CSR Report Section	Page
Organizational governance	Decision-making processes and structures	2.1 Management	28
Human rights	Due diligence	2.3 Employment Management	40
	Human rights risk situations	2.3 Employment Management	40
	Avoidance of complicity	2.3 Employment Management	40
	Resolving grievances	2.3 Employment Management	40
	Discrimination and vulnerable groups	2.3 Employment Management	40
	Civil and political rights	2.3 Employment Management	40
	Economic, social and cultural rights	2.3 Employment Management	40
	Fundamental principles and rights at work	2.3 Employment Management	40
Labor practices	Employment and employment relationships	3.3.2 Human right management	98
	Conditions of work and social protection	3.3.2 Human right management	98
	Social dialogue	3.3.2 Human right management	98
	Health and safety at work	3.3.1 Labor Safety and Health	92
	Human development and training in the workplace	3.3.3 Human resource development	103
The environment	Prevention of pollution	3.2.3 Green process	68
	Sustainable resource use	3.2.2 Green products	65
	Climate change mitigation and adaptation	3.2.1Climate changes and opportunities	64
	Protection of the environment, biodiversity and restoration of natural habitats	3.2.3 Green process	68
Fair operating practices	Anti-corruption	2.2.3 Employee participation 2.2.4 Information disclosure	32,33
	Responsible political involvement	2.3.2 Participation in public affairs	40
	Fair competition	2.2.2 Decent Operation	32
	Promoting social responsibility in the value chain	3.1.12 Supplier audits	60
	Respect for property rights	3.3.3 Participation in international R&D efforts	103
Consumer issues	Fair marketing, factual and unbiased information and fair contractual practices	3.1.10 Customer privacy and satisfaction	59
	Protecting consumers' Health and safety	3.2.2 Green products	65
	Sustainable consumption	3.2.2 Green products	65
	Consumer service, support, and complaint and dispute resolution	3.1.10 Customer privacy and satisfaction	59
	Consumer data protection and privacy	3.1.10 Customer privacy and satisfaction	59
	Access to essential services	3.1.10 Customer privacy and satisfaction	59
	Education and awareness	3.1.12 Supplier audits	59

Community involvement and development	Community involvement	3.3.8 Social participation	116
	Education and culture	3.3.8 Social participation	116
	Employment creation and skills development	3.3.8 Social participation	116
	Technology development and access	3.3.8 Social participation	116

Appendix III : UN Global Compact Principles Comparison table

Category	10 Principles	Related CSR Report Section	Page
Human Rights	Businesses should support and respect the protection of internationally proclaimed human rights	1.1 CSC CSR policies	14
	Make sure that they are not complicit in human rights abuses	1.1 CSC CSR policies	14
Labor	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining	3.3.4 Labor union	109
	The elimination of all forms of forced and compulsory labor	3.3.4 Labor union	109
	The effective abolition of child labor	3.3.2 Human right management	98
	The elimination of discrimination in respect of employment and occupation	3.3.2 Human right management	98
Environment	Businesses should support a precautionary approach to environmental challenges	3.2.3 Green process	68
	Undertake initiatives to promote greater environmental responsibility	3.2.3 Green process	68
	Encourage the development and diffusion of environmentally friendly technologies	3.2.6 Green growth	84
Anti-Corruption	Businesses should work against corruption in all its forms, including extortion and bribery	2.2.3 Employee participation 2.2.4 Information disclosure	32 33

Appendix IV： Awards

1.Corporate Governance

Year	Item	Awards
2012	1	"Golden Award" for the Manufacturing Industry by TISE and "2012 Best Report Award," "Best CSR Web Information Disclosure Award," "Climate Change Information Disclosure Award of Excellence"
	2	worldsteel's Safe and Health Excellence Achievement Award
	3	2012 Award for International Trade, Ministry of Economic Affairs
	4	The UK BSI's CSR Excellence Model Award
	5	Contribution of Private Businesses Award for Reconstruction Efforts after Typhoon Morakot, Executive Yuan
	6	Outstanding Award at National Workplace Safety and Health Week, Council of Labor Affairs
	7	Outstanding Business Award, CIE
	8	Award for CSC's Contributions to Reconstruction after Typhoon Morakot at the 3rd Anniversary Memorial Activity organized by the Typhoon Morakot Reconstruction Committee, Kaohsiung City
2011	1	First prize in the metal industry in benchmarking corporate reputation survey of CommonWealth Magazine in 2011
	2	"Silver prize of the Mfg. Group" and "Excellence Prize of the Climate Change Response Group" granted by Taiwan Institute for Sustainable Energy (TAISE) for CSC 2010 Corporate Social Responsible Report
	3	Certificate of acknowledgement granted by the Disaster Recovery Committee, Executive Yuan, for CSC's donation of the Sinfa Bridge
	4	Third prize of the dragon boat contest, Kaohsiung City
	5	14th Excellent Photoelectric Product Award, National Science Council
	6	Fourth place in the "Happy Enterprise" survey of 1111 Employment Agency
	7	Gold medal of the Yearly Contribution and National Invention Award, Intellectual Property Office
	8	CSR Excellent Disclosure Award of Public Companies, Taiwan Securities Exchange
2010	1	First prize of metal industry in benchmarking corporate reputation survey of CommonWealth Magazine in 2010
	2	Ninth prize of "Top Ten Excellent Exporters/Importers in 2009"
2009	1	CommonWealth Magazine's "2009 Corporate Citizen Award"
	2	"Industrial Innovation Achievement Award for Excellence in Science and Technology", presented at the 17th session by the Ministry of Economic Affairs
	3	VW Group's Best Supplier Award
	4	"Certification of Taiwan Corporate Governance Association (TCGA), 3 years in a row, Assessment of the Listed Companies' Governance, the fourth session
	5	17th session Industrial Technology Advancement Award for Excellence
	6	Fourth prize of "Top Ten Excellent Exporters/Importers in 2008"

2.ESH and energy

Year	Item	Awards
2012	1	2012 Award of Excellence in Water Conservation of Industrial Group, Ministry of Economic Affairs
	2	"Award of Excellence" in Energy Saving Performance in "Energy Saving Performance Recognition Activity," Ministry of Economic Affairs
	3	Outstanding Businesses in Voluntary GHG Emission Reduction, Industrial Development Bureau, Ministry of Economic Affairs
	4	2011 "Outstanding Unit of Green Procurement Private Businesses and Groups" by EPB, Kaohsiung City Government
	5	2012 "Award of Excellence of Energy Saving and Carbon Reduction Label Program," EPA, Executive Yuan
	6	"2012 Award of Excellence in VOCs Pollution Control and Management" by EPB, Kaohsiung City Government
2011	1	"Outstanding Award" of Performance Group A in the "Excellent Energy Saving Praise Activity", Ministry of Economic Affairs
	2	Praised as the "Excellent Green Procurement Units", Environmental Protection Administration
	3	Praised as the "Excellent Private Group and Green Procurement Unit in 2010" by Environmental Protection Bureau of Kaohsiung City Government
	4	Excellence prize of the "Enterprise Energy Saving Performance Ranking Award" granted by Environmental Protection Bureau of Kaohsiung City Government
	5	Praised by the Labor Affairs Bureau of Kaohsiung City Government as the unit of excellent health performance
	6	Praised by the Ministry of Transportation and Communications for the flux material railway transportation project in Hualien
	7	BSI (British Standard Institute) Green Environmental Contribution Award
	8	Praised by the Industrial Development Bureau, MOEA, an the excellent voluntary GHG reduction company
2010	1	Designated by Ministry of Economic Affairs as "The Only Expert Enterprise on Water Saving"
	2	President Ma inspects CSC Energy Dispatch Center and highly praises CSC for its regional resources integration achievement
	3	Bureau of Energy, "Award of Business Representatives for Energy Conservation Services Group", by Ministry of Economic Affairs
	4	Bureau of Energy, Ministry of Economic Affairs, selects the power plant of CSC as especially superior clean power plant in 2010
	5	Ministry of Economic Affairs "Benchmarking Enterprise with Integrating Resources" in 2010
	6	"Award of Outstanding unit on Water-Saving of Industrial Group, 2010" by Ministry of Economic Affairs
	7	The Premium Award of competition of "National Workplace Safety and Health Week" by Council of Labor Affairs
2009	1	CSC's Rolling Mill Department, "Award of Outstanding Unit on Water-Saving of Industrial Group and Individuals Who Care of Water", by Ministry of Economic Affairs
	2	During the World Games held in Kaohsiung, CSC suspends some processes to improve local air quality
	3	Excellent Construction Site： The Development Projects of CSC's 3rd Cold-Rolling Mill
	4	Kaohsiung City issued the Award of "Blue Chip Jobsite of Fire Management"
	5	EPA issued "Outstanding Business Award of Green Procurement, 2008"

Appendix V：Assurance

INDEPENDENT ASSURANCE OPINION STATEMENT

2012 China Steel Corporation Social Responsibility 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 assurance of this report.

This independent assurance opinion statement has been prepared for CSC only for the purposes of assuring its statements relating to its corporate social responsibility (CSR), 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.

This independent assurance opinion statement is prepared on the basis of review by the British Standards Institution of information presented to it by CSC. The review does not extend beyond such information and is solely based on it. In performing such review, the British Standards Institution has assumed that all such information is complete and accurate.

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 and focuses on systems and activities during the 2011 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 2012 CSC Corporate Social Responsibility Report Review provides a fair view of the CSC CSR programmes and performances during 2012. We believe that the 2012 economic, social and environment performance indicators are fairly represented. The CSR performance indicators disclosed in the report demonstrate CSC's efforts recognized by its stakeholders.

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 compliance with the GRI guidelines 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.
- 12 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 and the GRI G3.1 guidelines is set out below:

Inclusivity

This report has reflected a fact that CSC is seeking the engagement of its stakeholders continuously. The participation of stakeholders has been initiated in developing and achieving an accountable and strategic response to sustainability. The reporting systems are being developed to deliver the required information. 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, however, the future report should be further enhanced by the following areas:

— Encouraging update sustainable development trend about steel sector continuously and integrated with corporate core strategy to ensure sustainable development performance.

Materiality

CSC publishes sustainability information that enables 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:

— Revisit the materiality assessment, since issues change over time and to strengthen the breadth and depth of original issues according to market and development of the company.

Responsiveness

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

— Demonstrate CSC's leadership in its professional territory position as to inspire other stakeholders.
— Encouraging to 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 compliance within GRI G3.1 Guidelines and the classification to align with application level A+. Based on our review, we confirm that social responsibility and sustainable development indicators with reference to the GRI Core Index are reported, partially reported or omitted. In our professional opinion the self declaration covers the CSC's social responsibility and sustainability issues. As in this third year report, extended indicators are fairly disclosed than it requests in the application level A+ of GRI G3.1 guideline.

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 CEO 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 industrial 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:

Managing Director BSI Taiwan
20 May, 2013

bsi.

AA1000
Licensed Assurance Provider
000-4

Appendix VI : worldsteel Sustainable Development Charter

worldsteel ASSOCIATION

worldsteel.org

2012 SIGNATORIES TO THE SUSTAINABLE DEVELOPMENT CHARTER OF THE WORLD STEEL INDUSTRY

We operate our business efficiently and in a financially sustainable way, to supply steel products and solutions that satisfy customers' needs and provide value to stakeholders.

We strive to optimise the eco-efficiency of products throughout their life cycle. We promote the recovery, reuse and recycling of steel.

We foster the well-being of employees and provide a safe and healthy working environment.

We promote values and initiatives that show respect for the people and communities associated with our business.

We conduct our business with high ethical standards in our dealings with employees, customers, suppliers and the community.

We engage our stakeholders and independent third parties in constructive dialogue to help fulfil our sustainable development commitments.

We build and share our knowledge of sustainability through open and active communications. We help others in the supply chain to implement sustainable practices.

Giovanni Arvedi, **Acciaieria Arvedi S.p.A.**
Gianpietro Benedetti, **Acciaierie Bertoli Safau S.p.A.**
Takahiro Fujioka, **Aichi Steel Corporation**
Xiaogang Zhang, **Anshan Iron & Steel Group Corporation**
Lakshmi N. Mittal, **ArcelorMittal**
Carolin Kramer, **Badische Stahlwerke GmbH**
Lejiang Xu, **Baosteel Group Corporation**
Norbert Bergs, **Benteler Tube Management GmbH**
Paul O'Malley, **BlueScope Steel Limited**
Francesc Rubiralta, **CELSA Group**
Jo-Chi Tsou, **China Steel Corporation**
Giuseppe Marzorati, **Cogne Acciai Speciali S.p.A.**
Joseph Alvarado, **Commercial Metals Company (CMC)**
Ivan Flores, **Compania Siderurgica Huachipato S.A. (CAP ACERO)**
Tadashi Shimao, **Daido Steel Co., Ltd.**
Raul Gutierrez, **DEACERO, S.A. de C.V.**
Karl Haase, **Deutsche Edelstahlwerke GmbH (DEW)**
Karlheinz Blessing, **Dillinger Hüttenwerke AG**
Soo-Il Lee, **Dongbu Steel Co. Ltd.**
Sae-Joo Chang, **Dongkuk Steel Mill Co., Ltd.**
Antonio Gozzi, **Duferco S.A.**
Mukesh Bhandari, **Electrotherm India Ltd.**
Serif Coskun Ulusoy, **Eregli Iron and Steel Works, Co.**
Prashant Ruia, **Essar Steel Ltd.**
Alexander Frolov, **Evraz Group**
George Matta, **EZZ Steel**
Jürgen R. Grossmann, **Georgsmarienhütte Holding GmbH**
André Bier, Gerdau Johannpeter, **Gerdau S.A.**
George Skindilias, **Halyvourgiki Inc.**
Rolf Höfken, **Hüttenwerke Krupp Mannesmann GmbH (HKM)**
Seung-Ha Park, **HYUNDAI Steel Company**
Hajime Bada, **JFE Holdings**
Vikrant Gujral, **Jindal Steel and Power Limited (JSPL)**
Sajjan Jindal, **JSW Steel Limited**
Hiroshi Sato, **Kobe Steel, Ltd.**
Igor Syry, **Metinvest Holding LLC**
Vivek Kamra, **NatSteel Holdings Pte Ltd.**
Shoji Muneoka, **Nippon Steel Corporation**
Kazuta Sugimori, **Nippon Yakin Kogyo Co., Ltd.**
Daniel R. DiMicco, **Nucor Corporation**
Geoff Plummer, **OneSteel Limited**
Mika Seitovirta, **Outokumpu Oyj**
Tom Erixon, **Ovako AB**
Joon-Yang Chung, **POSCO**
Ali Bin Hassan Al Muraikhi, **Qatar Steel Company (Q.S.C.)**
A.P. Choudhary, **Rashtriya Ispat Nigam Ltd. (VIZAG Steel)**
Sakari Tamminen, **Rautaruukki Oyj**
Fabio Riva, **RIVA FIRE S.p.A.**
Klaus Harste, **Saarstahl AG**
Hassan Al-Ghannam Al-Buainain, **SABIC-Saudi Basic Industries Corporation (HADEED)**
Win Viriyaprapaikit, **Sahaviriya Steel Industries Public Company Limited (SSI)**
Alexey Mordashov, **Severstal**
Tibor Simonka, **SIJ Slovenian Steel Group**
Martin Lindqvist, **SSAB AB**
Chandra Shekhar Verma, **Steel Authority of India Ltd. (SAIL)**
Hiroshi Tomono, **Sumitomo Metal Industries, Ltd.**
Karl-Ulrich Köhler, **Tata Steel Europe**
Hemant Nerurkar, **Tata Steel Limited**
Paolo Rocca, **Techint Group**
Daniel Novegil, **Ternium**
Heinrich Hiesinger, **ThyssenKrupp AG**
Jan Czudek, **TŘINECKÉ ŽELEZÁRNY, a.s.**
John P. Surma, **United States Steel Corporation**
Wilson Nélio Brumer, **USIMINAS – Usinas Siderúrgicas de Minas Gerais S/A**
Philippe Crouzet, **Vallourec**
Wolfgang Eder, **voestalpine AG**

CHINA STEEL CORPORATION

BALANCE SHEETS
DECEMBER 31, 2012 AND 2011
(In Thousands of New Taiwan Dollars, Except Par Value)

ASSETS	2012 Amount	%	2011 Amount	%
CURRENT ASSETS				
Cash (Note 4)	$ 1,733,583	1	$ 683,607	-
Available-for-sale financial assets - current (Notes 2, 6 and 28)	1,645,451	-	2,207,870	1
Hedging derivative assets - current (Notes 2, 7 and 28)	33,120	-	22,630	-
Notes receivable	476,696	-	866,772	-
Notes receivable - related parties (Note 29)	519,453	-	468,399	-
Accounts receivable (Notes 2, 3 and 8)	2,712,325	1	2,764,299	1
Accounts receivable - related parties (Notes 2, 3 and 29)	830,895	-	553,216	-
Other receivables (Notes 11 and 25)	879,092	-	1,162,430	-
Other financial assets - current (Notes 2, 13 and 28)	2,721,077	1	2,399,287	1
Inventories (Notes 2 and 9)	47,510,017	11	67,340,540	16
Deferred income tax assets - current (Notes 2 and 25)	857,148	-	1,379,334	-
Restricted assets - current (Notes 4 and 30)	5,669,636	1	5,678,750	1
Others	1,986,003	1	1,712,543	1
Total current assets	67,574,496	16	87,239,677	21
INVESTMENTS				
Available-for-sale financial assets - noncurrent (Notes 2, 6 and 28)	3,259,169	-	3,260,406	1
Hedging derivative assets - noncurrent (Notes 2, 7 and 28)	4,042	-	89,387	-
Financial assets carried at cost - noncurrent (Notes 2,10 and 28)	8,068,823	2	7,421,220	2
Bond investments with no active market - noncurrent (Notes 2, 11 and 28)	3,364,000	1	3,906,000	1
Investments accounted for by the equity method (Notes 2, 12 and 28)	148,970,411	35	127,252,843	30
Other financial assets - noncurrent (Notes 2, 13 and 28)	33,943	-	2,119,688	-
Total investments	163,700,388	38	144,049,544	34
PROPERTY, PLANT AND EQUIPMENT (Notes 2, 7, 13, 14, 29 and 30)				
Land	9,364,677	2	11,024,276	2
Land improvements	4,222,124	1	4,223,646	1
Buildings	53,040,845	12	44,939,092	11
Machinery and equipment	310,518,644	73	278,296,503	66
Transportation equipment	1,880,782	1	1,804,682	-
Other equipment	5,273,280	1	5,118,133	1
Spare parts	7,326,242	2	6,918,272	2
Total cost	391,626,594	92	352,324,604	83
Revaluation increment	48,664,692	11	48,885,858	12
Cost and revaluation increment	440,291,286	103	401,210,462	95
Less: Accumulated depreciation	274,041,941	64	260,114,511	62
	166,249,345	39	141,095,951	33
Construction in progress and prepayments for equipment	23,256,873	5	46,045,195	11
Net property, plant and equipment	189,506,218	44	187,141,146	44
INTANGIBLE ASSETS (Note 2)	141,888	-	184,081	-
OTHER ASSETS				
Assets leased to others, net (Notes 2 and 15)	4,743,179	1	3,063,360	1
Refundable deposits (Note 28)	144,807	-	223,215	-
Deferred income tax assets - noncurrent (Notes 2 and 25)	1,420,555	1	-	-
Restricted assets - noncurrent (Notes 4 and 30)	34,242	-	33,817	-
Total other assets	6,342,783	2	3,320,392	1
TOTAL	$ 427,265,773	100	$ 421,934,840	100

LIABILITIES AND STOCKHOLDERS' EQUITY	2012 Amount	%	2011 Amount	%
CURRENT LIABILITIES				
Short-term loans and overdraft (Notes 16 and 30)	$ 8,868,560	2	$ 6,467,626	1
Commercial paper payable (Note 17)	13,294,434	3	3,595,877	1
Hedging derivative liabilities - current (Notes 2, 7 and 28)	11,752	-	7,620	-
Accounts payable	3,516,165	1	4,665,602	1
Accounts payable - related parties (Note 29)	496,968	-	851,314	-
Income tax payable (Notes 2 and 25)	1,368,313	-	2,520,677	1
Accrued expenses (Notes 18 and 22)	6,505,403	1	8,306,109	2
Other payables (Notes 2 and 29)	8,552,322	2	4,976,046	1
Bonds payable - current portion (Notes 19 and 28)	11,297,543	3	11,295,086	3
Long-term debt - current portion (Notes 20, 28 and 30)	7,940,886	2	3,682,227	1
Others	2,596,340	1	3,086,241	1
Total current liabilities	64,448,686	15	49,454,425	12
LONG-TERM LIABILITIES				
Hedging derivative liabilities - noncurrent (Notes 2, 7 and 28)	451	-	421	-
Bonds payable (Notes 19 and 28)	46,657,982	11	37,969,340	9
Long-term debt (Notes 20, 28 and 30)	15,180,409	4	21,284,765	5
Long-term notes payable (Notes 21 and 28)	10,494,163	2	11,989,008	3
Total long-term liabilities	72,333,005	17	71,243,534	17
RESERVE FOR LAND VALUE INCREMENT TAX (Note 14)	10,011,916	2	10,011,916	2
OTHER LIABILITIES				
Accrued pension cost (Note 22)	69,313	-	51,491	-
Deferred income tax liabilities - noncurrent (Notes 2 and 25)	-	-	446,254	-
Deferred credits - gain from affiliates (Note 23)	2,050,786	1	2,140,211	1
Total other liabilities	2,120,099	1	2,637,956	1
Total liabilities	148,913,706	35	133,347,831	32
CAPITAL STOCK - NT$10 par value, authorized 17,000,000 thousand shares (Note 24)				
Common shares - issued 15,272,477 thousand shares and 15,046,209 thousand shares as of December 31, 2012 and 2011, respectively	152,724,765	36	150,462,093	36
Preferred shares - issued 38,268 thousand shares	382,680	-	382,680	-
Total capital stock	153,107,445	36	150,844,773	36
CAPITAL SURPLUS (Notes 2 and 24)	36,673,528	8	36,247,705	8
RETAINED EARNINGS (Notes 2 and 24)	68,356,193	16	80,051,881	19
OTHER EQUITY				
Unrealized revaluation increment (Note 24)	26,750,124	6	26,757,590	6
Unrealized gain on financial instruments (Notes 7, 13 and 24)	2,458,247	1	3,020,919	1
Cumulative translation adjustments (Notes 2 and 24)	(393,229)	-	17,192	-
Net loss not recognized as pension cost	(184,893)	-	(230,590)	-
Treasury stock - 309,816 thousand shares and 295,065 thousand shares as of December 31, 2012 and 2011, respectively (Notes 2 and 24)	(8,415,348)	(2)	(8,122,461)	(2)
Total other equity	20,214,901	5	21,442,650	5
Total stockholders' equity	278,352,067	65	288,587,009	68
TOTAL	$ 427,265,773	100	$ 421,934,840	100

The accompanying notes are an integral part of the financial statements.

CHINA STEEL CORPORATION

STATEMENTS OF INCOME
YEARS ENDED DECEMBER 31, 2012 AND 2011
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2012		2011	
	Amount	%	Amount	%
OPERATING REVENUES (Notes 2 and 29)				
Sales	$ 201,072,107	97	$ 234,417,553	98
Other operating revenues	6,120,998	3	5,958,466	2
Total operating revenues	207,193,105	100	240,376,019	100
OPERATING COSTS (Notes 2, 9, 26 and 29)				
Cost of goods sold	194,223,145	94	215,021,873	89
Other operating costs	4,006,120	2	3,760,102	2
Total operating costs	198,229,265	96	218,781,975	91
GROSS PROFIT	8,963,840	4	21,594,044	9
REALIZED (UNREALIZED) GAIN FROM AFFILIATES, NET	(36,337)	-	61,894	-
REALIZED GROSS PROFIT	8,927,503	4	21,655,938	9
OPERATING EXPENSES (Notes 26 and 29)				
Research and development	1,378,211	1	1,437,899	1
Selling	2,412,224	1	2,414,478	1
General and administrative	2,447,494	1	3,204,580	1
Total operating expenses	6,237,929	3	7,056,957	3
OPERATING INCOME	2,689,574	1	14,598,981	6
NONOPERATING INCOME AND GAINS				
Interest income (Note 28)	109,872	-	121,480	-
Investment income recognized under equity method, net (Notes 2 and 12)	2,353,103	1	5,151,451	2
Gain on sale of investments (Notes 2 and 6)	1,140,690	1	1,101	-
Exchange gain (Note 2)	329,097	-	403,480	-
Valuation gain on financial assets (Notes 2 and 5)	-	-	2,828	-
Others (Notes 2, 11 and 29)	1,341,516	1	1,194,643	1
Total nonoperating income and gains	5,274,278	3	6,874,983	3
NONOPERATING EXPENSES AND LOSSES				
Interest expense (Notes 14 and 28)	1,358,092	1	769,406	1
Others (Notes 2, 26 and 29)	475,189	-	419,865	-

(Continued)

CHINA STEEL CORPORATION

STATEMENTS OF INCOME
YEARS ENDED DECEMBER 31, 2012 AND 2011
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2012		2011	
	Amount	%	Amount	%
Total nonoperating expenses and losses	$ 1,833,281	1	$ 1,189,271	1
INCOME BEFORE INCOME TAX	6,130,571	3	20,284,693	8
INCOME TAX (Notes 2 and 25)	319,081	-	791,014	-
NET INCOME	$ 5,811,490	3	$ 19,493,679	8

	2012		2011	
	Before Income Tax	After Income Tax	Before Income Tax	After Income Tax
EARNINGS PER SHARE (Note 27)				
Basic	$ 0.41	$ 0.38	$ 1.40	$ 1.34
Diluted	$ 0.40	$ 0.38	$ 1.39	$ 1.33

Pro forma information (after income tax) assuming the Corporation's shares held by its subsidiaries were accounted for as investments instead of treasury stocks is as follows:

	2012	2011
Net income	$ 6,123,244	$ 20,153,180
Basic earnings per share based on weighted-average number of outstanding common shares aggregating 15,272,477 thousand shares and 14,782,477 thousand shares for the years ended December 31, 2012 and 2011, respectively	$0.40	$1.36
Diluted earnings per share based on weighted-average number of outstanding common shares aggregating 15,311,456 thousand shares and 14,911,740 thousand shares for the years ended December 31, 2012 and 2011, respectively	$0.40	$1.35

The accompanying notes are an integral part of the financial statements. (Concluded)

CHINA STEEL CORPORATION

STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
YEARS ENDED DECEMBER 31, 2012 AND 2011
(In Thousands of New Taiwan Dollars, Except Dividends Per Share)

	Issued			Retained Earnings				Other Equity					Total Stockholders' Equity
	Common Shares	Preferred Shares	Capital Surplus	Legal Reserve	Special Reserve	Unappropriated Earnings	Total	Unrealized Revaluation Increment	Unrealized Gain on Financial Instruments	Cumulative Translation Adjustments	Net Loss not Recognized as Pension Cost	Treasury Stock	
BALANCE, JANUARY 1, 2011	$ 135,279,009	$ 382,680	$ 20,072,476	$ 49,070,526	$ 7,615,701	$ 37,651,735	$ 94,337,962	$ 21,873,940	$ 2,374,377	$ (101,443)	$ (117,015)	$ (8,151,621)	$ 265,950,365
Appropriation of 2010 earnings (Note 24)													
Legal reserve	-	-	-	3,758,683	-	(3,758,683)	-	-	-	-	-	-	-
Cash dividends to preferred stockholders - NT $1.99 per share	-	-	-	-	-	(76,153)	(76,153)	-	-	-	-	-	(76,153)
Cash dividends to common stockholders - NT $1.99 per share	-	-	-	-	-	(26,920,523)	(26,920,523)	-	-	-	-	-	(26,920,523)
Stock dividends to preferred stockholders - NT$0.5 per share	19,134	-	-	-	-	(19,134)	(19,134)	-	-	-	-	-	-
Stock dividends to common stockholders - NT$0.5 per share	6,763,950	-	-	-	-	(6,763,950)	(6,763,950)	-	-	-	-	-	-
Issuance of common stock for cash (Note 24)	8,400,000	-	15,338,755	-	-	-	-	-	-	-	-	-	23,738,755
Compensation cost of share-based payment	-	-	98,826	-	-	-	-	-	-	-	-	-	98,826
Net income in 2011	-	-	-	-	-	19,493,679	19,493,679	-	-	-	-	-	19,493,679
Change in unrealized gain on available-for-sale financial assets	-	-	-	-	-	-	-	-	141,223	-	-	-	141,223
Change in unrealized revaluation increment (Note 14)	-	-	-	-	-	-	-	4,739,111	-	-	-	-	4,739,111
Adjustment from changes in equity recognized under equity method	-	-	78,147	-	-	-	-	144,539	251,529	-	(113,575)	83	360,723
Foreign exchange gain on translation of foreign-currency financial statements	-	-	-	-	-	-	-	-	-	180,788	-	-	180,788
Foreign exchange loss on hedge of a net investment in a foreign operation	-	-	-	-	-	-	-	-	-	(62,153)	-	-	(62,153)
Change in unrealized gain on financial instruments for cash flow hedging	-	-	-	-	-	-	-	-	253,790	-	-	-	253,790
Disposal of the Corporation's shares held by subsidiaries (Note 24)	-	-	106,638	-	-	-	-	-	-	-	-	404,810	511,448
Cash dividends paid by the Corporation to its subsidiaries	-	-	552,863	-	-	-	-	-	-	-	-	-	552,863
Purchase of the Corporation's shares by subsidiaries	-	-	-	-	-	-	-	-	-	-	-	(375,733)	(375,733)
BALANCE, DECEMBER 31, 2011	150,462,093	382,680	36,247,705	52,829,209	7,615,701	19,606,971	80,051,881	26,757,590	3,020,919	17,192	(230,590)	(8,122,461)	288,587,009
Appropriation of 2011 earnings (Note 24)													
Legal reserve	-	-	-	1,949,368	-	(1,949,368)	-	-	-	-	-	-	-
Cash dividends to preferred stockholders - NT$1.25 per share	-	-	-	-	-	(47,835)	(47,835)	-	-	-	-	-	(47,835)
Cash dividends to common stockholders - NT$1.01 per share	-	-	-	-	-	(15,196,671)	(15,196,671)	-	-	-	-	-	(15,196,671)
Stock dividends to preferred stockholders -NT$0.15 per share	5,740	-	-	-	-	(5,740)	(5,740)	-	-	-	-	-	-
Stock dividends to common stockholders - NT$0.15 per share	2,256,932	-	-	-	-	(2,256,932)	(2,256,932)	-	-	-	-	-	-
Net income in 2012	-	-	-	-	-	5,811,490	5,811,490	-	-	-	-	-	5,811,490
Change in unrealized gain on available-for-sale financial assets	-	-	-	-	-	-	-	-	(292,373)	-	-	-	(292,373)
Change in unrealized revaluation increment (Note 14)	-	-	-	-	-	-	-	(3,699)	-	-	-	-	(3,699)
Adjustment from changes in equity recognized under equity method	-	-	114,069	-	-	-	-	(3,767)	6,430	-	45,697	(7,462)	154,967
Foreign exchange loss on translation of foreign-currency financial statements	-	-	-	-	-	-	-	-	-	(688,584)	-	-	(688,584)
Foreign exchange gain on hedge of a net investment in a foreign operation	-	-	-	-	-	-	-	-	-	278,163	-	-	278,163
Change in unrealized gain on financial instruments for cash flow hedging	-	-	-	-	-	-	-	-	(276,729)	-	-	-	(276,729)
Disposal of the Corporation's shares held by subsidiaries (Note 24)	-	-	3,200	-	-	-	-	-	-	-	-	18,493	21,693
Cash dividends paid by the Corporation to its subsidiaries	-	-	308,554	-	-	-	-	-	-	-	-	-	308,554
Purchase of the Corporation's shares by subsidiaries	-	-	-	-	-	-	-	-	-	-	-	(303,918)	(303,918)
BALANCE, DECEMBER 31, 2012	$ 152,724,765	$ 382,680	$ 36,673,528	$ 54,778,577	$ 7,615,701	$ 5,961,915	$ 68,356,193	$ 26,750,124	$ 2,458,247	$ (393,229)	$ (184,893)	$ (8,415,348)	$ 278,352,067

The accompanying notes are an integral part of the financial statements.

CHINA STEEL CORPORATION

STATEMENTS OF CASH FLOWS
YEARS ENDED DECEMBER 31, 2012 AND 2011
(In Thousands of New Taiwan Dollars)

	2012	2011
CASH FLOWS FROM OPERATING ACTIVITIES		
Net income	$ 5,811,490	$ 19,493,679
Adjustments to reconcile net income to net cash provided by operating activities		
Depreciation	17,708,945	16,064,667
Amortization	42,193	42,364
Pension cost	17,822	51,491
Deferred income tax	(1,287,186)	(913,703)
Provision for loss on inventories	1,880,058	3,060,921
Gain on sale of investments	(1,140,690)	(1,101)
Investment income recognized under equity method, net	(2,353,103)	(5,151,451)
Unrealized (realized) gain from affiliates, net	36,337	(61,894)
Cash dividends received from equity method investees	5,120,219	5,582,492
Valuation gain on financial assets	-	(2,828)
Compensation cost of share-based payment	-	98,826
Loss on purchase commitments	362,891	15,478
Others	(228,350)	(119,705)
Net changes in operating assets and liabilities		
Notes receivable	390,076	(160,697)
Notes receivable - related parties	(51,054)	68,809
Accounts receivable	51,974	(866,891)
Accounts receivable - related parties	(277,679)	36,315
Other receivables	215,058	124,373
Inventories	18,288,165	(23,289,268)
Other current assets	(273,460)	(215,013)
Notes payable - related parties	-	(23,163)
Accounts payable	(1,149,437)	34,802
Accounts payable - related parties	(354,346)	(458,350)
Income tax payable	(1,084,084)	(2,478,813)
Accrued expenses	(1,800,706)	(2,426,521)
Other payables	1,433,349	2,223,410
Other current liabilities	(580,381)	(576,170)
Net cash provided by operating activities	40,778,101	10,152,059
CASH FLOWS FROM INVESTING ACTIVITIES		
Acquisition of financial assets designated as at fair value through profit or loss	-	(8,000,000)
Proceeds from disposal of financial assets designated as at fair value through profit or loss	-	8,002,828
Proceeds from disposal of available-for-sale financial assets	1,292,350	-
Acquisition of financial assets carried at cost	(811,558)	(4,085,903)
Proceeds from disposal of financial assets carried at cost	52,500	1,101
Proceeds from the capital reduction on financial assets carried at cost	10,176	14,911
Acquisition of investments accounted for by the equity method	(25,012,997)	(3,324,396)
Acquisition of property, plant and equipment	(20,094,040)	(17,189,295)
Proceeds from disposal of property, plant and equipment	-	1,267
Proceeds from disposal of assets leased to others	-	5,000

(Continued)

CHINA STEEL CORPORATION

STATEMENTS OF CASH FLOWS
YEARS ENDED DECEMBER 31, 2012 AND 2011
(In Thousands of New Taiwan Dollars)

	2012	2011
Decrease (increase) in other financial assets	$ 1,509,563	$ (2,476,273)
Decrease (increase) in refundable deposits	78,408	(106,697)
Decrease (increase) in restricted assets	8,689	(1,031,100)
Net cash used in investing activities	(42,966,909)	(28,188,557)
CASH FLOWS FROM FINANCING ACTIVITIES		
Increase in short-term loans and overdraft	2,485,755	5,125,862
Increase (decrease) in commercial paper payable	9,698,557	(103,762)
Issuance of bonds payable	20,000,000	19,700,000
Repayments of bonds payable	(11,300,000)	(13,700,000)
Proceeds from long-term debt	1,757,611	1,279,567
Repayments of long-term debt	(2,666,667)	-
Increase (decrease) in long-term notes payable	(1,500,000)	7,500,000
Cash dividends	(15,236,472)	(26,990,933)
Issuance of common stock for cash	-	23,738,755
Net cash provided by financing activities	3,238,784	16,549,489
NET INCREASE (DECREASE) IN CASH	1,049,976	(1,487,009)
CASH, BEGINNING OF YEAR	683,607	2,170,616
CASH, END OF YEAR	$ 1,733,583	$ 683,607
SUPPLEMENTAL CASH FLOW INFORMATION		
Interest paid	$ 1,546,515	$ 1,439,066
Capitalized interest	(283,655)	(644,909)
Interest paid (excluding capitalized interest)	$ 1,262,860	$ 794,157
Income tax paid	$ 2,690,351	$ 4,183,530
INVESTING AND FINANCING ACTIVITIES AFFECTING BOTH CASH AND NON-CASH ITEMS		
Cash paid for acquisition of property, plant and equipment		
Acquisition of property, plant and equipment	$ 21,866,042	$ 16,081,479
Decrease (increase) in payable for equipment purchased	(1,772,002)	1,107,816
	$ 20,094,040	$ 17,189,295
Cash dividends paid to stockholders		
Total cash dividends payable to stockholders	$ 15,244,506	$ 26,996,676
Increase in dividends payable	(8,034)	(5,743)
	$ 15,236,472	$ 26,990,933
NON-CASH FINANCING ACTIVITIES		
Current portion of long-term liabilities	$ 19,238,429	$ 14,977,313

2012

CORPORATION
SUSTAINABILITY REPORT

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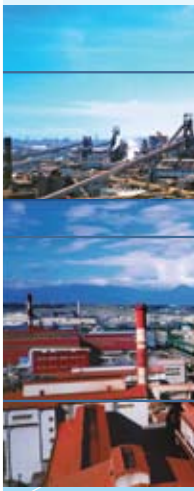

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