

CARBON
NEUTRAL

2023



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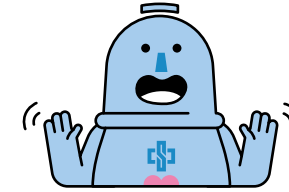
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0.1 About This Report

Starting with the 2002 Environmental Report, China Steel Corporation (CSC) has widened the scope of non-financial reporting to all aspects of corporate social responsibility (CSR) and sustainability. This year, the report is named the Sustainability Report due to the current regulations. Since 2010, CSC has been publishing annual Sustainability Reports in accordance with the Global Reporting Initiative (GRI) guidance, as an important channel to disclose non-financial related information and improve sustainability performance. In 2012, the CSC sustainability website was launched for more accessible, transparent, timely, complete, and interactive reporting. Sustainability Reports and the sustainability website are important communication channels for the continual improvement of sustainable operations.



**For any comments or questions regarding this report,
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Q CSC Sustainability Website QR code

Standards

The 2023 CSC Sustainability Report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards 2021 and “Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports” by TWSE Listed Companies. It also refers to the OECD Guidelines for Multinational Enterprises, the UN Global Compact (UNGC), the UN Sustainable Development Goals (SDGs), ISO 26000 Guidance on Social Responsibility, Sustainability Accounting Standards Board (SASB), and non-financial disclosure of the steel industry.

Reporting Period

This report is issued once annually and the current issue of this report covers CSC's operational systems and practices from January 1, 2023 to December 31, 2023, with a special focus on CSC's management approach and performances on material topics. The reporting period of this report is consistent with the financial report.

⬆ Previous issue Published in June 2023

▶ Current issue Published in June 2024

Sustainability Reporting Group

Includes Human Resources Dept., General Affairs Dept., Public Affairs Dept., Purchasing Dept., Marketing Dept., Transportation Dept., Marketing Administration Dept., Finance Dept., Accounting Dept., Information System Dept., Secretariat Dept., Industrial Engineering Dept., Corporate Strategy Dept., Legal Dept., Iron & Steel Research & Development Dept., Metallurgical Dept., Intellectual Property & Testing Technology Dept., Green Energy & System Integration Research & Development Dept., Engineering Management Dept., Steelmaking Dept., Utilities Dept., Plant Engineering & Maintenance Dept., Electrical & Control Dept., Production Planning Dept., Industrial Safety & Hygiene Dept., Environmental Protection Dept., Internal Audit Office, CSC Group Education Foundation and etc.

Reporting Scope

The reporting boundary encompasses financial disclosures consistent with the scope of consolidated financial statements, with other disclosures covering CSC entities, including the Head Office, Stone Quarry Processing Yard, Osaka office, Taipei Liaison Office, and China Steel Building. It does not include subsidiaries compared to CSC's consolidated financial statements (consolidated financial statements: https://www.csc.com.tw/csc_e/ss/fin/pdf/fin_report112_Q4.pdf, pages 16-19). The environmental data presented in this report is primarily based on the Head Office, while for other entities, please refer to the relevant chapter annotations.

Report on Management Methods and Quality

Data and information presented in this report were supplied by CSC departments with the approval of respective Directors. The initial draft, compiled by the Environmental Protection Dept., was reviewed by the sustainability reporting group. It was confirmed through a rigorous administrative procedure before being finalized and was published after the resolution of the Board of Directors. This report was assured by BSI, in adherence to AA1000 Assurance Standard v.3 as conducted in accordance with Type 1 moderate level of assurance while part of the data complies with Type 2 high level of assurance (Please see the Appendix 1 GRI Standards Index) as well as the GRI Standards. It has been discussed and exchanged with the General Manager of Environmental Protection Department and certain members of the Sustainability Reporting Group to explain the direction of the Company's sustainable development and the presentation of the achievements. Financial information was extracted from financial reports audited by CPA, and the chapters on “3.2 Green Process” and “4.4 Occupational Safety and Health” were based on related international management systems ISO 50001 Energy Management System, ISO 14001 Environmental Management System, and CNS 45001/ISO 45001 Occupational Health and Safety Management System, etc.) and externally reviewed.

0.2 About CSC

0.2.1 Chronicle

CSC was founded on December 3, 1971. Over the past half-century, CSC has overcome many tough challenges. After going through four phases of expansion along with Dragon Steel Corporation's stage II construction, CSC built a magnificent steel plant from scratch, providing the foundation for Taiwan's industrial development and acting as an important promoter of Taiwan's economic miracle.

1970s

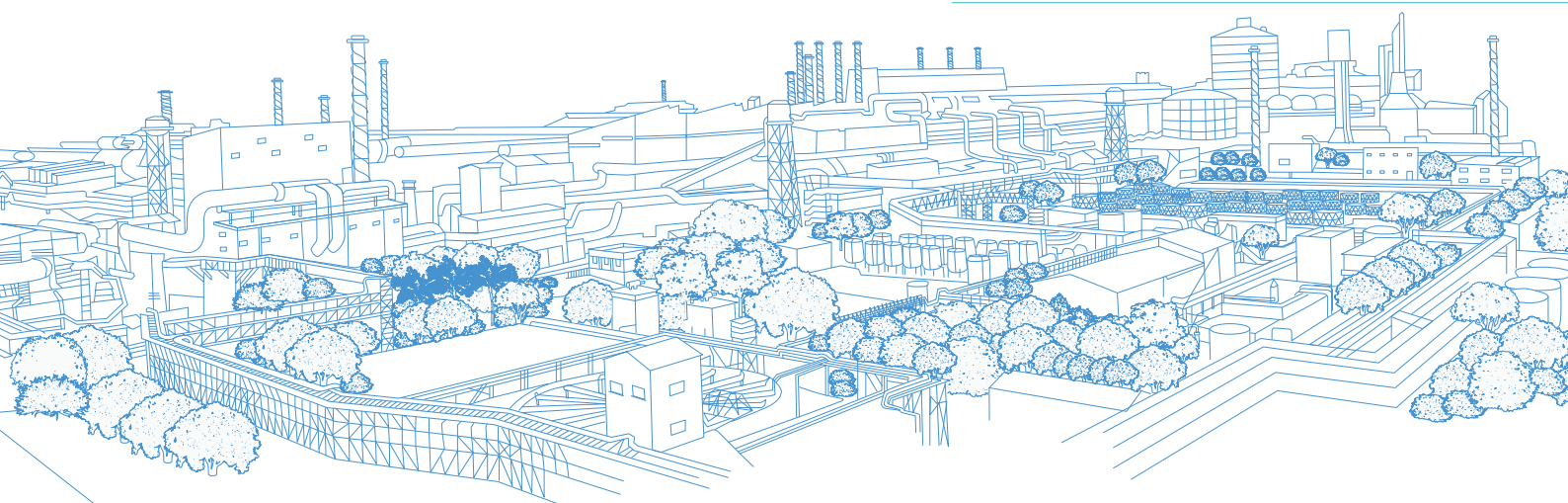
1980s

1990s

2000s

2010s

2020s



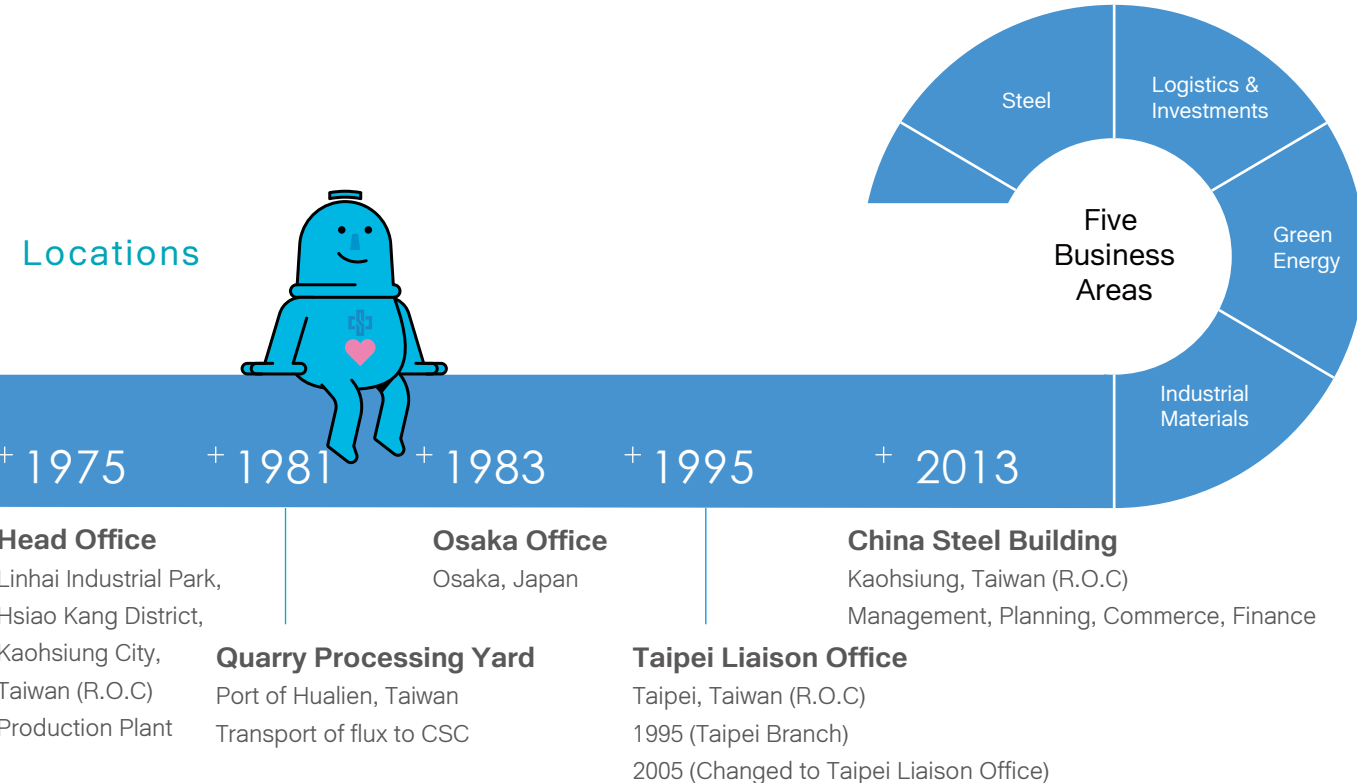
1971	12/03	China Steel Corporation is officially registered, with head office located in Taipei.
1972	09/16	Kaohsiung Plant Site Office is established.
1974	09/01	Phase I construction commences.
	12/26	CSC stock is listed on Taiwan Stock Exchange Corporation.
1975	09/15	Head office relocates to Kaohsiung. Plant Site Office closes.
1977	07/01	CSC becomes a state enterprise.
	12/16	Phase I is completed, with a capacity of 1.5 Mt (in terms of crude steel) per year.
1978	07/01	Phase II construction commences.
1982	06/30	Phase II is completed. Capacity reaches 3.25 Mt per year.
1984	07/01	Phase III construction commences.
1988	04/30	Phase III is completed. Capacity reaches 5.652 Mt per year.
1993	07/15	Phase IV construction commences.
1995	04/12	CSC is privatized.
1997	05/31	Phase IV is completed. Capacity reaches 8.054 Mt per year.
1998	06/02	CSC Group's corporate identity system is formally introduced to the public.
2006	04/15	Annual production capacity is officially raised to 9.86 Mt owing to success in equipment renovations and improvements carried out over the years.
	11/22	Groundbreaking for the China Steel Building takes place.
2008	10/06	Dragon Steel Corporation (DSC) becomes a wholly owned subsidiary of CSC.
2010	06/30	DSC's stage II phase 1 expansion project is completed. CSC Group's capacity reaches 13.36 Mt per year.
2013	03/05	DSC's stage II phase 2 expansion project is completed. CSC Group's capacity reaches 15.86 Mt per year.
	10/22	China Steel Building is inaugurated.
2017	12/20	The Board of Directors approves the initiation of the revamp of the coke ovens (phases I and II).
2018	12/31	CSC Group's operating revenue in 2018 sets the record of exceeding 400 billion TWD for the first time.
2020	01/16	CSC positions itself as a steel mill that produces premium products with high value and devotes itself to the development of the green energy industry as the operational and developmental cores in enhancing its competitiveness for the next 50 years.
	02/21	CSC sets a new milestone in its pricing system by offering monthly and quarterly pricing simultaneously for the first time.
	07/01	To promote the utilization of BOF Slag, CSC and TIPC jointly submit the Environmental Impact Difference Analysis Report for utilizing BOF Slag as an alternative land reclamation material in Taipei Port, approved by the Environmental Impact Assessment and Review Committee of Taiwan EPA.
	11/11	The first truck of BOF aggregate is successfully utilized as land reclamation material in Taipei Port, which marks a new milestone in BOF aggregate application.
2021	02/26	CSC commits to taking action on environmental protection and climate change by setting up a Task Force on Energy Saving & Carbon Reduction and Carbon Neutrality .
2023	01/01	CSC declares the company's new vision of "We aspire to be a sustainable growth enterprise that distinguishes itself through a firm commitment to smart innovation, green energy, carbon reduction, and value co-creation." Based on the new vision, CSC launches its first 10-year operation and development strategy toward its promising prospects.
	12/22	CSC acquires 500 metric tons of carbon credits in the inaugural transaction following the Taiwan Carbon Solution Exchange unveiling, marking a new milestone in CSC's history of steel product carbon neutrality.
	12/23	CSC undertakes the Kaohsiung Light Rail Phase II project and completes the final segment (C24-C32) with quality and one year ahead of schedule. As the project passes the final inspection and obtains the operating permit, the rail loop is complete, supporting a low-carbon city and enhancing the development of a livable Kaohsiung.

0.2.2 Business and Scale

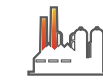
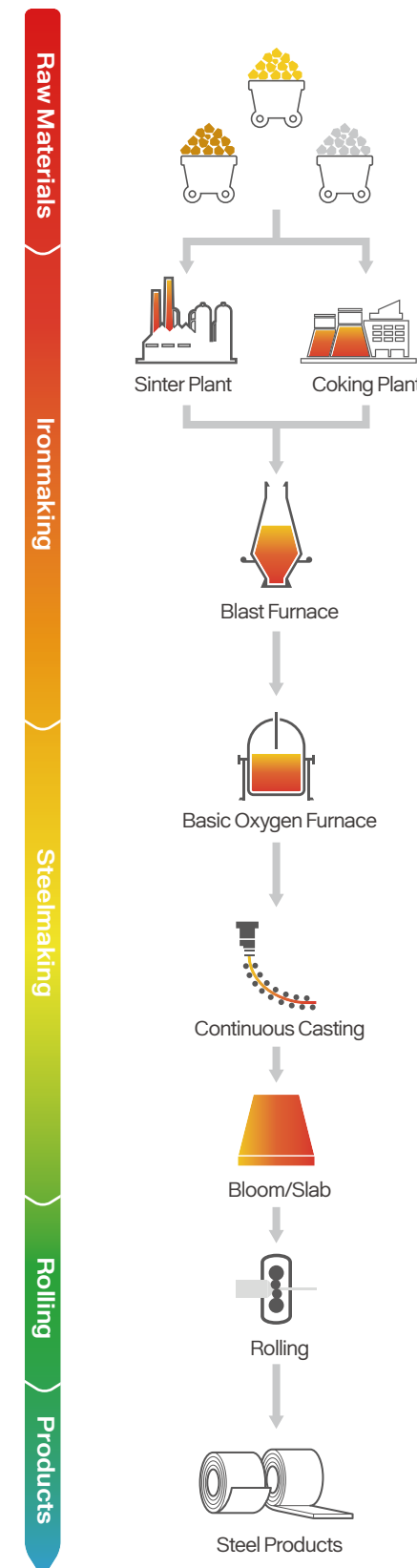
CSC is a world-class steel corporation with an annual production capacity (in terms of crude steel) around 10 million tonnes. According to the report published by World Steel Association (worldsteel), the crude steel production of CSC was ranked 26th among all worldsteel members in 2021, and 31st in 2022. Moreover, CSC's competitiveness was ranked 14th from 15th in 2022, based on 23 criteria such as pricing and cost-saving abilities, among 35 steel corporations by World Steel Dynamics (WSD) in December 2023.

The major products of CSC are steel plates, bars and rods, hot-rolled and cold-rolled coils, electrogalvanized coils, electrical steel coils, and hot-dip galvanized steel coils, and so on. In 2023, 52.4% of products were sold domestically and 47.6% were sold overseas. The main products accounted for more than 50% of the domestic market and CSC is currently the largest steel company in Taiwan. The main export targets are Southeast Asia, Europe, and Japan.

In order to enhance its operational synergy, CSC has diversified its businesses into five business areas: Steel, Engineering, Industrial Materials, Logistics & Investments, and Green Energy. The core of the value chain is CSC itself, including employees and partners. Upstream includes raw material suppliers such as ore suppliers, and downstream includes customers and local communities.



Production Work Flow



Sintering

Iron ore, flux, and coke breeze are mixed, granulated, and then charged into the sintering machine, where coke breeze is ignited. The hot sinter clumps go through crushing, cooling, and screening processed. They are then sent to Blast Furnace as the main material for ironmaking.



Coking

Coking coals are mixed, crushed, and then charged into the coke oven, Carbonization in oven produces hot coke and crude coke oven gas.



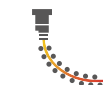
Blast Furnace

Iron ores, cokes, and fluxes are charged into BF from the top to react with the hot air flow introduced from tuyeres. Molten hot metal and slag are produced.



Basic Oxygen Furnace

Hot metal is sent to a pretreatment station for de-S/de-P and then sent to BOF for oxygen blowing. According to the characteristics of steel and the quality demand of each order, it is sent for secondary refining for composition adjustment and then sent for continuous casting.



Continuous Casting

A ladle filled with liquid steel is transferred to turret from upstream plant by crane, charged into a tundish, and distributed into molds. It then cools down, solidifies, and comes to complete solidification through secondary cooling. It is then straightened and, according to each order, cut into blooms (with a square cross section) or slabs (with a rectangular cross section). The semi-finished products are conditioned if necessary and then sent for rolling.



Rolling

Semi-finished products are inspected and grinded/scarfed to remove surface defects. They are then rolled into bars, wire rods, plates, coils, and sheets.

0.3 Sustainability Performance

0.3.1 Sustainability Performance Overview

※ To improve the data quality of this report, some historical data has been recompiled with an asterisk (*) to indicate adjustments made to the calculation methods or data sources.

Aspect	Item		2019	2020	2021	2022	2023	Unit
Economic Aspect	1. Operating Revenues	Standalone	2,072.98	1,838.42	2,597.82	2,506.01	1,971.49	
		Consolidated	3,662.41	3,147.83	4,683.28	4,495.67	3,633.26	100 million TWD
	2. Net Profit	Standalone	88.10	8.86	620.53	177.84	16.82	
		Consolidated	103.31	22.58	689.06	179.95	35.31	100 million TWD
	3. EPS	Standalone	0.57	0.05	4.02	1.15	0.11	
		Consolidated	0.57	0.05	4.02	1.15	0.11	TWD
	4. Liabilities to Assets Ratio	Standalone	35	34	30	33	35	
		Consolidated	50	49	44	48	50	%
	5. Long-term Capital to Fixed Assets Ratio	Standalone	272	261	287	277	261	
		Consolidated	132	130	142	140	136	%
	6. Return on Assets	Standalone	2	0.4	13	4	0.6	
		Consolidated	2	0.6	11	3	0.9	%
	7. Return on Equity	Standalone	3	0.3	19	5	0.5	
		Consolidated	3	0.7	19	5	1	%
	8. Income Tax Expenses	Standalone	12.26	1.21	89.98	25.83	4.26	
		Consolidated	24.71	5.10	155.08	52.64	10.59	100 million TWD
	9. R&D Expense	Standalone	19.01	18.81	23.96	21.48	20.33	
		Consolidated	21.66	19.48	24.35	21.55	21.32	100 million TWD
	10. R&D Expense Ratio	Standalone	0.94	1.03	1.09	0.89	1.03	
		Consolidated	0.61	0.62	0.63	0.50	0.59	%
	11. Production		949.1990	823.9938	969.0860	843.7811	776.5234	10,000 tCS
	12. Productivity*		927.86	827.22	989.47	872.76	807.11	tCS/person-year

Aspect	Item	2019	2020	2021	2022	2023	Unit
Environmental Aspect	1. Investment on Energy and Environment	31.8	53.5	28.9	39.1	80.4	100 million TWD
	2. Self-generated Electricity	55.5	49.0	49.7	43.7	46.95	%
	3. Energy Intensity	5,383	5,549	5,315	5,485	5,504	Mcal/tCS
		22.54	23.23	22.25	22.96	23.04	GJ/tCS
	4. GHG Intensity*	2.269	2.374	2.301	2.326*	2.326	tCO ₂ e/tCS
	5. GHG Emissions - Scope 1	20,351,815	18,318,428	20,939,573	18,248,901	16,809,455	tCO ₂ e
	6. GHG Emissions - Scope 2*	1,181,783	1,243,430	1,357,456	1,373,673*	1,249,102	tCO ₂ e
	7. NOx Emissions	6,464	5,822	6,593	5,603	5,209	Tonnes
	8. SOx Emissions	6,233	4,943	5,579	4,257	4,163	Tonnes
	9. VOCs Emissions	518	483	409	356	306	Tonnes
	10. Particulate Emissions	2,315	2,188	2,164	1,921	1,776	Tonnes
	11. Water Intensity	4.53	5.06	4.32	4.86	5.04	t/tCS
	12. New Water Intensity	3.57	3.58	2.65	2.31	2.16	t/tCS
	Note: The data of new water intensity is collected after reclaimed water introduced in 2018						
Social Aspect	13. Processing Water Recycling Rate	98.4	98.4	98.4	98.5	98.5	%
	14. Production Process Water Recirculation	2,795,892	2,809,637	2,849,595	2,821,318	2,802,252	Million liters
	1. Number of Employees	10,230	9,961	9,794	9,668	9,621	Person
	2. Number of Female Employees	341	341	342	344	359	Person
	3. Training Hours	357,525	350,632	211,045	258,431	265,609	Hour
	4. Training Expense	93.8	59.3	48.8	49.2	46.2	Million TWD
	5. Salaries and Welfare	18,101.06	14,595.32	26,586.02	18,797.96	14,917.68	Million TWD
	6. Disabled Hires	147	124	111	89	79	Person
	7. Disabled Hires	1.44	1.24	1.14	0.92	0.82	%
	8. Disability Frequency	0.18	0.14	0.14	0.05	0.10	Incident(include death)/million working hours
	9. Labor aspect: Any breach of the regulation that causes fines or administrative sanctions	No	No	No	No	No	-
	10. Social Expense	102	70.03	129.34	139.3	82.74	Million TWD
	11. CSC volunteer hours*	16,390	16,727	16,108	15,194	12,955	Hour

0.3.2 Awards and Recognitions

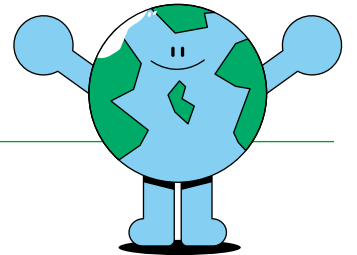
Sustainability Aspect

- Recognized as 2024 Sustainability Champion by the World Steel Association.
- Selected as a member of the "S&P Global Sustainability Yearbook 2024."
- Leadership level (A-) for CDP Climate Change.
- Management level (B) for CDP Water.
- Won 1 gold, 2 silver and 1 bronze in the "2023 Asia Pacific and Taiwan Sustainability Action Award."
- Received a total of nine awards in the 2023 Taiwan Corporate Sustainability Awards (TCSA), including the "Top 100 Sustainable Companies Award," as well as individual sustainability performance awards, including the "Corporate Sustainability Report Platinum Award," the "Climate Leadership Award," the "Sustainable Water Management Leadership Award," the "Circular Economy Leadership Award," the "Sustainable Supply Chain Leadership Award," the "Workplace Wellbeing Leadership Award," "Growth through Innovation Leadership Award," and the "Talent Development Leadership Award."
- "Sustainability Report Bronze Award" in the 2023 Global Corporate Sustainability Awards (GCSA).
- Selected as one of the top 50 large companies in the "2023 Sustainable Citizen Awards" by Common Wealth Magazine.
- Honored with the "2023 Outstanding Corporate Group in Sustainability Resilience Award" by the British Standards Institution (BSI).
- The winner of "the Strategic Excellence Award for the ESG Corporate Sustainability in the Technology, Electronics, and Industrial category of 2023-DailyView Best Reviewed Online Awards by the Big Data Co., Ltd."



Environment Aspect

- Honored as one of the best performers in all industrial voluntary GHG reductions in 2023 the Industrial Development Bureau (IDB), Ministry of Economic Affairs (MOEA).
- The Kaohsiung Chamber of Industry awarded the Company with the "Special Contribution Award" for proposing the "short-term carbon reduction, mid- to long-term low carbon and eventually zero carbon path planning" to achieve carbon neutrality by 2050.
- "2022 Outstanding Private Enterprise Green Procurement Unit" from KSEPB.
- "2022 Outstanding Private Enterprise Green Procurement Unit" from Ministry of Environment.
- CSC won the Gold Medal Award in the Ministry of Environment's "2022 Let's Go Green Net-Zero Green Living Competition."
- "2023 Water Environment Patrol Team Evaluation - Corporate Contribution Award" from KSEPB.
- CSC's Civil Engineering Department handled the "Expansion Miscellaneous Procurement and Overall Installation Engineering of Power Plant TG-9/10," and was recognized by the Environmental Protection Bureau of Kaohsiung City Government as an excellent construction site owner in the "Excellent Construction Sites in 2023." China Ecotek Corp. was recognized as an excellent contractor.
- Won the Gold Award in the Ministry of Environment's "The Best Company of Resources Cycle in 2023."



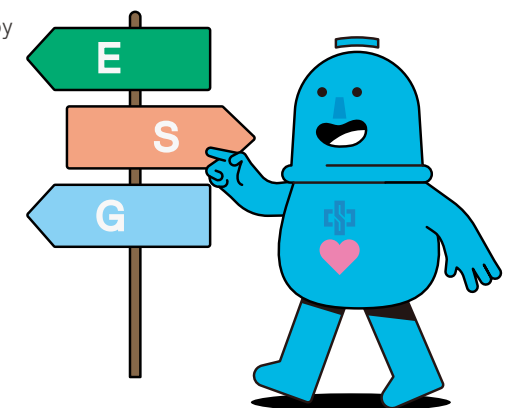
Economic Aspect

- The galvanized steel products SGCC RC40 (scrap ratio of 40% or above) and SECC RC20 (scrap ratio of 20% or above) obtained UL 2809 certification in March and August 2023, respectively.
- Selected as a constituent stock of the "Corporate Governance 100 Index" in 2023.
- Selected as a constituent stock of the "High Compensation 100 Index" in 2023.
- Selected as a constituent stock of the "FTSE4Good Emerging Index" in 2023.
- Top 20% listed companies in "Corporate Governance Evaluation" by TWSE, and top 5% for the seventh time in 2023.
- "Authorized Economic Operator (AEO)" by Customs Administration, Ministry of Finance.
- "2023 Golden Vessel Award - Bulk and Sundry Cargo Terminal Operation" of the Taiwan International Ports Corporation (TIPC).
- "2022 Certification of Excellent Exporters / Importers" of the Bureau of Foreign Trade, Ministry of Economic Affairs (MOEA).
- "2023 International Trades Award- Contributions to Expansion in Emerging Markets", Ministry of Economic Affairs (MOEA).
- Top 8 of "TIPO's 2023 Statistical Rankings for Domestic Patent Applications and Grants", 10 years in a row being in top 10, and as the top in traditional industries.
- Granted the Taiwan Intellectual Property Management System (TIPS) certificate.



Society Aspect

- Ranked 2nd in "the most desirable company for office workers to enter - traditional industry" by the job searching website yes123.
- "Gold Award - Manufacturing Industry" in the "2023 Happy Enterprise Poll" of 1111 Job Bank.



1

Sustainable Operation

- 1.1 Message from Top Management
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- 1.5 Material Topics



1.1 Message from Top Management

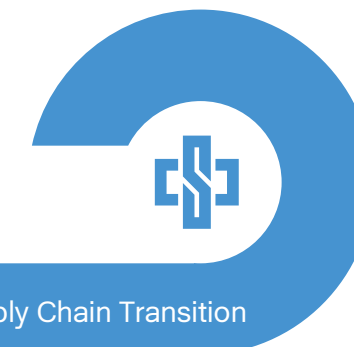


Chairman Chao-Tung Wong



President Shyi-Chin Wang

Facing challenges such as drastic changes in the industry environment, competition in the global steel market, and ESG sustainable development issues, CSC continues to improve and optimize its production processes, product combination, business model, green energy and carbon reduction, investment portfolio, and corporate governance. CSC is striving to become a steel mill that provides premium products and services with high value and develop the green energy industry, dedicating its efforts to the three major transition tasks of "digital transition", "low-carbon transition" and "supply chain transition," in hopes of developing into a professional, specialized, powerful, and smart steel mill that produces premium products.



[Digital Transition](#)
[Low-carbon Transition](#)
[Supply Chain Transition](#)

Digital Transition

The Task Force on Digital Transformation was established in 2023 to plan an integrated steelmaking process towards the goal of comprehensive smart manufacturing. It reduces production costs and improves production efficiency through the introduction of AI, and accelerates the development of the Company's smart ERP system and related technologies. It develops smart systems for three major aspects: operations, production, and equipment utilizing AIoT (Artificial Intelligence of Things) technology, and establishes the Company's smart development blueprint. The three major aspects are further divided into 11 items, including equipment maintenance and monitoring, smart factory, business administration, and customer services, in hopes of achieving digital optimization and establishing a smart steel mill. A total of 110 digital transition projects were completed in 2023, with annual benefits reaching 900 million TWD. Digital transition drives the development of CSC's production and operation to shift from quantitative changes to qualitative changes, and improves CSC's operating efficiency and resilience.

Low-carbon Transition

With the advent of the low-carbon era, various countries or regional economies will implement carbon tariffs to limit carbon emissions in the near future, such as the EU Carbon Border Adjustment Mechanism (CBAM) and the US Clean Competition Act (CCA). Taiwan has also passed the Climate Change Response Act, announcing the target to achieve net-zero emissions by 2050, and will incorporate carbon pricing and review mechanisms into regulations. CSC actively responds to climate change and carbon reduction issues, formulates a carbon reduction pathway to 2050, and sets short, medium and long-term carbon reduction targets: Using 2018 as the baseline year, the short-term target is to reduce emissions by 7% in 2025, the mid-term target is to reduce emissions by 25% in 2030, and the long-term target is to achieve carbon neutral in 2050. Specific actions were formulated for each phase on this basis, in order to achieve our commitment of "carbon reduction in the short-term, first low carbon then zero carbon in the mid-term to long-term." CSC voluntarily implemented a GHG reduction plan in 2004, and has completed a total of 2,114 carbon reduction plans as of 2023, with a cumulative carbon reduction of 3.229 million tonnes per year.

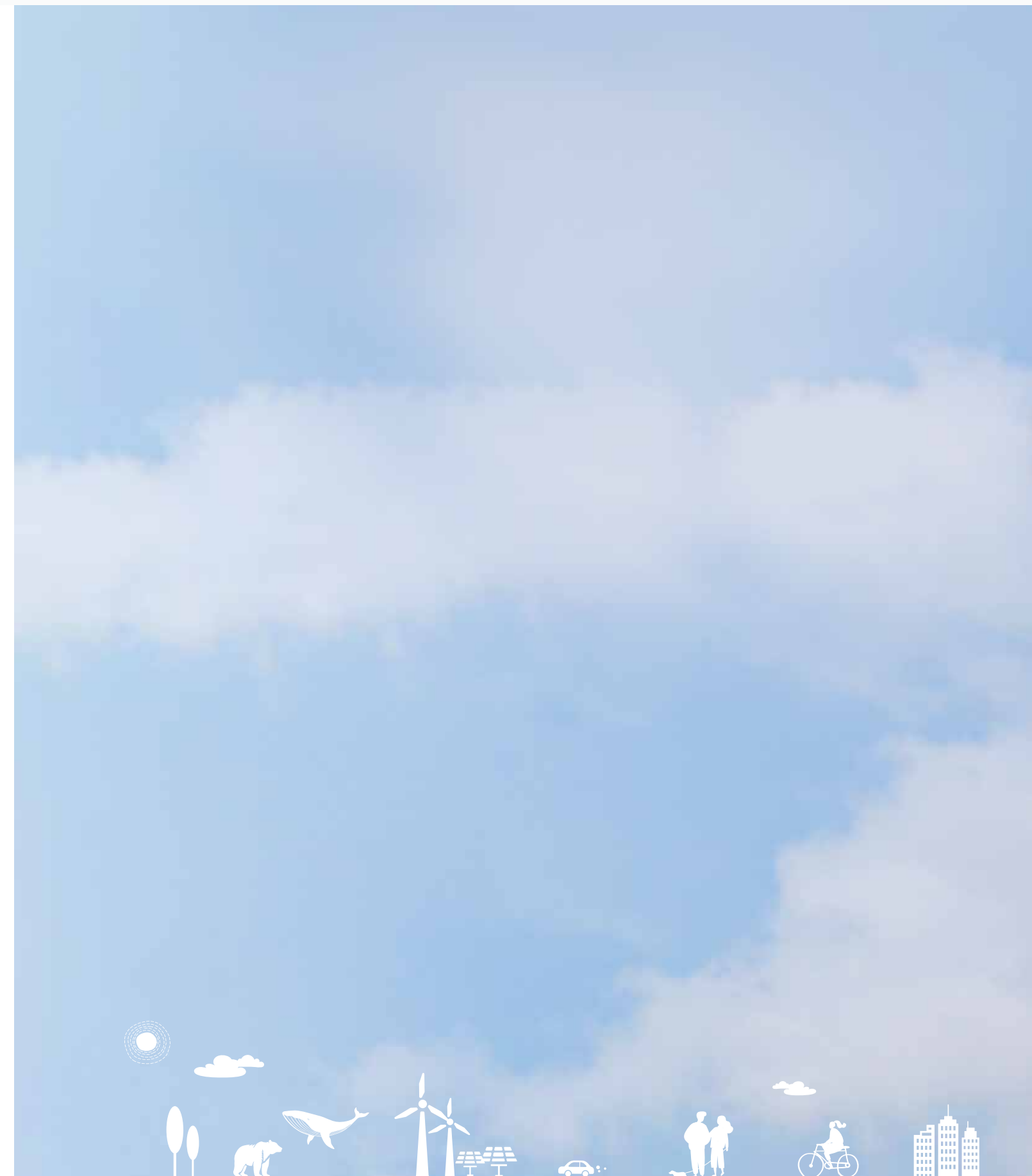
Supply Chain Transition

The EU announced the trial implementation of CBAM in October 2023 and will officially implement it in 2026. In response to domestic and foreign carbon tariffs, CSC checked the carbon emissions based on the European Combined Nomenclature (CN code) corresponding to the Company's products, and provided it to downstream customers and declarers importing into the EU. In addition, based on the concept of "CSC can only become better if customers are good and downstream customers are good," the "Carbon Management Advisory Corps" was established in 2023 to share information on domestic and overseas carbon management trends with customers, and to lead customers to complete a carbon inventory diagnosis, identifying carbon emission hot spots in customer processes, and then providing customized carbon reduction plans through energy-saving diagnosis. In 2023, the team identified carbon reduction potential of 4,443 tonnes/year and electricity saving potential of 8.68 million kWh/year.

To enhance the green and low-carbon competitiveness of the overall steel industry, the Company refers to the "PAS 2060 Carbon Neutrality Standard" to produce carbon-neutral steel products, and then the customers follow the same carbon-neutral declaration model to produce carbon-neutral steel products. In 2023, wire rod coils and hot-rolled coils were selected as the targets for carbon neutral declaration, and we worked with downstream customers to produce carbon-neutral fastener products and carbon-neutral steel products for home appliances. While driving the steel industry chain to jointly reduce carbon emissions, CSC participated in the first batch of carbon credit transactions after Taiwan Carbon Solution Exchange (TCX) was established, and obtained 500 tonnes of carbon credits, achieving a new milestone in the carbon neutral of steel products. This is the best example of joint transition of a product value chain.

CSC cares about the development needs of the city where it is located. Green rail construction is an important indicator for optimizing public transportation. As a local enterprise in Kaohsiung, the CSC Group's track engineering team has worked hard to complete Kaohsiung's circular light rail, and has contributed to the development of Kaohsiung into a low-carbon city and suitable place to live.

Looking towards the future, CSC's goal is to create greater value for steel together with downstream customers, rather to produce more steel. CSC will supply low-carbon steel products, combine related technical service resources with the carbon management guidance model to accelerate the upgrade of the domestic steel industry, assist the response to international carbon tariff challenges, and realize the vision of "We aspire to be a sustainable growth enterprise that distinguishes itself through a firm commitment to smart innovation, green energy, carbon reduction, and value co-creation."



1.2 Operation Philosophy



We aspire to be a sustainable growth enterprise that distinguishes itself through a firm commitment to smart innovation, green energy, carbon reduction, and value co-creation.



CSC's new vision is "We aspire to be a sustainable growth enterprise that distinguishes itself through a firm commitment to smart innovation, green energy, carbon reduction, and value co-creation." With the four values "teamwork, entrepreneurial approach, down-to-earthiness and pursuit of innovation" as the foundation of its corporate culture, CSC actively implements its operation concept of "promotion of social well-being, result orientation, implementation of teamwork, and emphasis on employees' self-realization."

Operation Philosophy

We firmly believe in reciprocity, and will fulfill the role of a responsible corporate citizen. We aim at establishing the value of our existence as an asset to the society and the nation.

Promotion of social well-being

Implementation of teamwork

Cooperation, coordination, and teamwork are emphasized internally to reach CSC's corporate objectives. Externally, CSC cooperates with the downstream customers to promote mutual benefits and to help develop the domestic steel industry.

Efficiency is stressed to upgrade operation results and attain CSC's corporate objectives.

Result orientation

Emphasis on employees' self-realization

CSC regards its employees as a valuable asset to the company, and assists them to develop intellectually to fulfill their potential. Creativity and aggressiveness are encouraged. CSC employees are loyal to the company because their professional dignity and deserved rights are valued.

1.3 Sustainability Directives

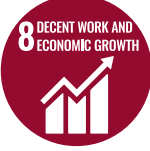
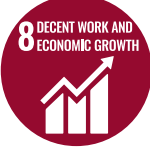
CSC's performance in environment, social, and governance aligns with the 9 principles outlined in the new Sustainability Charter of the World Steel Association, which includes "climate action," "the circular economy," "environmental care," "safety and health," "our people," "local communities," "responsible value chain," "ethics & transparent operations," and "innovation and prosperity." This demonstrates our unwavering commitment to sustainable development. CSC joined as a signing member and is recognized as a leading enterprise in sustainable development within the steel industry worldwide.

Based on the operation philosophy, CSC devised the "CSC Sustainable Development Best Practice Principles", and delineated the "CSC Sustainable Development Policy". CSC is dedicated to achieving goals of sustainable development through increasing contribution to Taiwan's economy, improving quality of life among employees, communities, and society, and enhancing competitive advantage based on sustainable development as a corporate citizen.

+ For more details [CSC's Sustainable Development Practice Principles] https://www.csc.com.tw/csc_e/cg/pdf/11211CSR.pdf

	Strengthen competitiveness and create profit for shareholders to ensure corporate sustainability	Shareholders
	Integrate customer needs and enhance service competence to achieve co-prosperity	Customers
    	Take care of employee welfare and create quality environment to facilitate workforce development	Employees and Contractors
  	Optimize supply chain system and improve communication to share sustainable practices	Suppliers
  	Join professional organizations and provide a solid technology foundation for promoting industry upgrading	Academic researchers
 	Support government policies and engage in construction to improve comprehensive effectiveness	Government agencies
    	Be devoted to social harmony and promote public welfare to benefit local communities	Non-governmental organizations (NGOs) or Sustainability associations, Communities, or Local groups
    	Enhance safety and environmental protection measures to eliminate workplace injuries and improve pollution-reduction performances	Employees and Contractors
    	Persist in saving energy, reducing carbon emissions, and adopting renewable resources to build a low-carbon society	Customers, Suppliers and Academic researchers



SDGs	UN SDGs Targets	Performances and Highlights	Track Metrics (2023)	Chapter
	3.d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks	To provide employee health management, occupational disease prevention, health promotion, and other labor health protection matters	4,590 people participated in health service activities 33,944 visits to employee clinic 7,432 employee health examinations and 3,722 special health examinations - Provided 500 times of consultation services	4.4 Occupational Safety and Health
	4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education	Creating a parent-friendly environment	399 people enrolled in CSC Kindergarten 1,359,000 TWD in childbirth cash gifts	4.2 Happy Workplace
	4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship	Provide diverse talent cultivation channels	18,192 participants in professional training 4,215 participants in management training and workshops 170 e-Learning materials	4.1 Recruitment and Retention
	5.1 End all forms of discrimination against all women and girls everywhere	Eliminate discrimination to ensure equal employment opportunity	Employees are remunerated based on their duty, current market wage standards, the company financial status, and organizational structure. Pay is determined without gender-based differences, and the basic salary paid to women and men of the same position and seniority is the same	4.2 Happy Workplace 4.3 Employee Rights
	6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	Develop diverse water sources and effectively perform water resources management	- Reclaimed water usage accounts for 54.5% of overall water usage - The recycling rate of processed water reached 98.5%	3.2 Green Process
	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix	Investment in the renewable energy business	Total installed capacity of the CSC Group's solar rooftop PV system was 97.9 MW	3.5 Green Development
	7.3 By 2030, double the global rate of improvement in energy efficiency	Enhance energy usage efficiency and continue to make improvements	358 energy conservation projects saving 3.263 million GJ	3.2 Green Process
	8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors	Enhance product competitiveness through innovation	Completed 30 new product development projects	7.2 Product Quality and Innovation
	8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment	Implement occupational safety and health management and provide a safe working environment	660 safety and health inspections of subcontractors - The review and improvement rate of false alarms reached 100%	4.4 Occupational Safety and Health 7.4 Supply Chain Management
	9.2 Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry' s share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries	Establish an inter-industry energy and resource sharing and recycling network to improve the business conditions and enhance the competitiveness of industries	A total of 27 companies has joined the CSC-centered Industrial Ecology Network	3.3 Circular Economy
	11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	Improve air quality through various air pollution reduction projects	- Reduce particulates by 121.0 tonnes - Reduce SOx by 803.6 tonnes - Reduce NOx by 11.5 tonnes Note: Accumulated pollutants reduction per year (since 2020)	3.2 Green Process



SDGs	UN SDGs Targets	Performances and Highlights	Track Metrics (2023)	Chapter
	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse	Recycle and reuse waste based on the concept of product life cycle	Percentage of CSC waste recycled: 94.9%	3.3 Circular Economy
	12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle	Publish an annual sustainability report and update information in a timely manner through the ESG website	CSC has published a sustainability report annually since 2007, and the report has been verified by a third party since 2010	0.1 About This Report
	12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature	CSC Group Education Foundation actively promotes various sustainability education activities	Organized activities in steel science education, environmental sustainability, as well as humanities and arts training for 12,300 participants.	5.3 The CSC Group Education Foundation
	13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	Set short, medium and long-term carbon reduction targets and identify climate-related risks and opportunities in accordance with the framework recommended by the TCFD	- CSC set the base year as 2018, with a total greenhouse gas emission of 22,100,460 tonnes CO₂e. In 2023, the total emissions were 18,058,557 tonnes CO₂e, representing a reduction of approximately 18.3% compared to the base year. - Completed 223 carbon reduction action plans in 2023, achieving carbon reduction of 358,000 tonnes of CO₂e/year	2 Climate change Adaption and Mitigation
	15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems	Conduct biodiversity risk assessments and adopt mitigation measures to avoid, reduce, regenerate, restore and transform	- The Water Environment Patrol Team carried out 312 activities - A total of 145 families and 414 species of animals and plants were recorded in the factory area	3.4 Biodiversity
	16.6 Develop effective, accountable and transparent institutions at all levels	Continue the fine tradition of ethical corporate management by passing on the corporate culture, and strictly prevent corruption through organizational regulations and various control mechanisms, such as establishing the "Ethical Corporate Management Best Practice Principles for CSC", and having new employees and current colleagues sign the "Letter of Declaration and Undertaking with regard to Employees' Code of Conduct"	There was 0 employees in service being punished after investigation for corruption, bribery, and fraud cases in 2023.	6.1 Strategies and Targets
	17.16 Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries.	- Actively participate in domestic and international activities of industry and academic associations, and serve as a core member of the World Steel Association - Enhance domestic steel core technical capabilities and assist the technology R&D of the domestic steel industry	- Participated in 122 domestic and international conferences - A total of 10 technical seminars were held in 2023, in which 435 manufacturers and 1,838 industry and academic representatives participated with an average satisfaction rate of 97%	Appendix 5: Domestic and International Organizations

CSC Sustainability Targets



○ Achieved

△ Failed

Economic growth, environmental protection, and social positive force constitute CSC’s callings to sustainable development. In order to continuously enhance sustainable operation and management at the company, fulfill its commitment to sustainable development, and meet the expectations of its stakeholders, CSC has formulated its environmental, social, and governance (hereinafter referred to as ESG) targets for short, mid and long-term targets, aimed at contributing to environmental, social, and governance/economic aspects with concrete actions.

Stakeholders' opinions are collected through various channels each year, and ESG targets of CSC are adjusted in coordination with operation and development strategies in a timely manner.

Aspect	Issue	Targets in 2023	CSC’s Achievements	Short-term (2024)	Mid-term (2025~2029)	Long-term (2030~)
G Governance/ Economy	Operational Finance	Sales of Advanced Premium Steel reaches 7.4%. ○	○ Achieved	Sales of Advanced Premium Steel reaches 9.5%.	Target in 2025: Sales of Advanced Premium Steel reaches 11.3%.	Target in 2030: Sales of Advanced Premium Steel reaches 20.3%.
	Company Governance	- Promote the adoption of ESG targets among subsidiaries in performance evaluations, with publicly listed subsidiaries required to reference SASB and TCFD in setting their ESG targets. ○ - Number of suppliers adopting the Supplier Code of Conduct ≥2,550. ○	○ Achieved	- Promote in setting information security targets among subsidiaries. - Link ESG annual targets with the managers’ performance evaluation and compensation.	Targets in 2025: - Promote publicly listed subsidiaries to sign the TCFD initiative. - Publicly listed subsidiaries rank in the Top 20% in the Corporate Governance Evaluation. - Number of suppliers adopting the Supplier Code of Conduct ≥3,700.	Targets in 2030: - At least one publicly listed subsidiary of the CSC Group is selected as a constituent of a domestic or overseas ESG or sustainability fund or index by 2030. - Number of suppliers adopting the Supplier Code of Conduct ≥4,500.
	Information Security	- Zero major information security incident. ○ 100% implementation of the e-mail sandbox security mechanism. △	△ Failed Reason for failure : Adapting to technological changes, actively seek for better solutions.	- Zero major information security incident. 100% implementation of the DNS defense mechanism.	Targets in 2025: - Zero major information security incident. 100% implementation of the Web Application Firewall (WAF). - Implementation of source code security detection mechanism, and incorporate the mechanism into development, operation, and maintenance processes. - The log of information security equipment is 100% centralized.	Targets in 2030: - Zero major information security incident. - Establish independent information security and maintenance platform with the cloud solution.
S Society	Talent Development	Holding at least 3 promotion and training activities for the application of the corporate culture code of conduct. ○	○ Achieved	- The completion rate of the first year management training for new supervisors is 90%. - The core skills training for new mechanical and electrical maintenance personnel is 88%.	Targets in 2025: - The completion rate of the first year management training for new supervisors is 92%. - The core skills training for new mechanical and electrical maintenance personnel is 90%.	Targets in 2030: - The completion rate of the first year management training for new supervisors is 95%. - The core skills training for new mechanical and electrical maintenance personnel is 92%.

○ Achieved

△ Failed

Aspect	Issue	Targets in 2023	CSC's Achievements	Short-term (2024)	Mid-term (2025~2029)	Long-term (2030~)
S Society	Employee Care	- Arrange psychological adaptation seminars. ○ - Singles networking events are held with a total of 204 participants each year. ○ - Hold two Evergreen LOHAS seminars for the elderly every year, with the number of participants reaching 160 a year. △	△ Failed Reason for failure : Cost reduction	- Arrange psychological adaptation seminars. - Singles networking events are held with a total of 204 participants each year. - Hold two Evergreen LOHAS seminars for the elderly every year, with the number of participants reaching 160 a year.	Targets in 2025: - Contract-based counselors to provide professional on-site service for employees of CSC and its affiliates, and expand the provision to family members. - Singles networking events are held with a total of 244 participants each year. - Hold two Evergreen LOHAS seminars for the elderly every year, with the number of participants reaching 170 a year.	Targets in 2030: - Contract-based counselors to provide professional on-site service for employees of CSC and its affiliates, and expand the provision to contractor. - Singles networking events are held with a total of 284 participants each year. - Hold two Evergreen LOHAS seminars for the elderly every year, with the number of participants reaching 180 a year.
	Occupational Safety	- Zero major occupational accidents. ○ - Employee Disabling Injury Frequency Rate (FR) control value ≤ 0.18. ○ - Contractor Disabling Injury Frequency Rate (FR) control value ≤ 0.30. ○	○ Achieved	- Zero major occupational accidents. - Employee Disabling Injury Frequency Rate (FR) control value ≤ 0.18. - Contractor Disabling Injury Frequency Rate (FR) control value ≤ 0.30.	Targets in 2025: - Zero major occupational accidents. - Employee Disabling Injury Frequency Rate (FR) control value ≤ 0.16. - Contractor Disabling Injury Frequency Rate (FR) control value ≤ 0.26.	Targets in 2030: - Zero major occupational accidents. - Employee Disabling Injury Frequency Rate (FR) control value ≤ 0.14. - Contractor Disabling Injury Frequency Rate (FR) control value ≤ 0.22.
E Environment	GHG Management (Scope 1+ 2)	Reduce carbon emissions by 5% or cumulative reduction of 1.105 million tonnes CO₂e. ○ Note: Based year 2018.	○ Achieved	Reduce carbon emissions by 6% or cumulative reduction of 1.326 million tonnes CO₂e. Note: Based year 2018.	Target in 2025: Reduce carbon emissions by 7% or cumulative reduction of 1.547 million tonnes CO₂e. Note: Based year 2018.	Target in 2030: Reduce carbon emissions by 25% or cumulative reduction of 5.525 million tonnes CO₂e. Note: Based year 2018.
	Air pollution	- Reduce 136.9 tonnes of Particulates. △ - Reduce 803.6 tonnes of SO_x. ○ - Reduce 11.5 tonnes of NO_x. ○ Note: Accumulated pollutants reduction per year (since 2020).	△ Failed Reason for failure : Fail the particulates reduction target as related projects are still in progress.	- Reduce 136.9 tonnes of Particulates. - Reduce 803.6 tonnes of SO_x. - Reduce 11.5 tonnes of NO_x. Note: Accumulated pollutants reduction per year (since 2020).	Targets in 2025: - Reduce 157.4 tonnes of Particulates. - Reduce 803.6 tonnes of SO_x. - Reduce 11.5 tonnes of NO_x. Note: Accumulated pollutants reduction per year (since 2020).	Targets in 2030: - Reduce 177.9 tonnes of Particulates. - Reduce 957.6 tonnes of SO_x. - Reduce 67.5 tonnes of NO_x. Note: Accumulated pollutants reduction per year (since 2020).
	Water Resource	Continue to reduce new water consumption by 46.9% in conjunction with the introduction of Fengshan River and reclaimed water from Linhai Reclaimed Water Plant. ○ Note: Based on a water consumption of 130,000 cubic meters per day in 2017 when reclaimed water was yet to be introduced.	○ Achieved	Plan the introduction of (alternative sources of) reclaimed water from Hefa industrial parks, and reduce new water consumption by 54.4%. Note: Based on a water consumption of 130,000 cubic meters per day in 2017 when reclaimed water was yet to be introduced.	Target in 2027: Plan to increase the wastewater recycling rate, with the expectation of reducing new water consumption by 58.4%. Note: Based on a water consumption of 130,000 cubic meters per day in 2017 when reclaimed water was yet to be introduced.	Target in 2030: Moving toward diversified water sources and continuously evaluating the recycle and reuse of the wastewater, with the expectation of reducing new water consumption by 60.4%. Note: Based on a water consumption of 130,000 cubic meters per day in 2017 when reclaimed water was yet to be introduced.
	Energy Management	2015-2023 annual average power saving rate > 1%. ○	○ Achieved	2015-2024 annual average power saving rate> 1%.	Target in 2025: 2015-2025 annual average power saving rate > 1.05%.	Target in 2030: 2015-2030annual average power saving rate > 1.10%.
	Circular Economy and Coproduction between Steel and Petrochemical Plants	Develop carbon monoxide production technology for coproduction between steel and petrochemical plants with carbon monoxide concentration > 98.5%. ○	○ Achieved	Develop power saving technology for coproduction between steel and petrochemical plants with power saving reach 10%.	Target in 2029: Establish a demonstration production line involving coproduction between steel and petrochemical plants that reduces carbon emissions by 240,000 tonnes per year.	Target in 2040: Promote the commercial application of co-production between steel and petrochemical plants to reduce carbon emissions by 2.9 million tonnes.

+ For more details [Completed CSC Sustainability Targets information] https://www.csc.com.tw/csc_e/esg/ov/ov3.html

1.4 Stakeholder Engagement

CSC values the rights and opinions of its stakeholders and sets proper communication channels to promptly understand and address stakeholder expectations and demands. To appropriately respond to the relevant concerned issues of stakeholders, each department of the company divides the work to take responsibility for stakeholder communication. CSC’s “Corporate Governance and Sustainability Committee” reported the results of annual stakeholder engagement to the Board of Directors in August 2023. CSC directly communicates with its stakeholders via a variety of channels, such as labor-management meetings, investor conferences, collaborative work safety meeting, production and sales meetings, and visiting each other, in order to collect suggestions and consider incorporating them into relevant goals. Questionnaire surveys are conducted anonymously to protect stakeholders' privacy and reflect their expectations of CSC in the most realistic manner.

Stakeholder Identification

Referencing the experiences of its departments, major stakeholders are identified according to their attributes, such as dependency, responsibility, influence, diverse perspectives, and tension, as stipulated in the AA1000 Stakeholder Engagement Standard (AA1000SES). The major stakeholders identified by Sustainability Reporting Group include: employees, contractors, customers, government, shareholders, suppliers, researchers, and society (including local communities, journalists, NGOs/NPOs).

CSC Stakeholder Group or personal which influences CSC or is affected by CSC.

Communication Channels and Effectiveness

+ For more details [Completed CSC stakeholder communications] https://www.csc.com.tw/csc_e/esg/ov/sus.html

Stakeholders

Employees

- Meaning for CSC	Employees are an important asset of the company and a partner for growth. Besides working together to create a safe work environment and ensure the employee's human rights, CSC also enhances the employee's skills through career development, education, training, and cultivate talent capital to strengthen the company's competitiveness
- Communication Channels	- Board representation by Labor Union of CSC; collective bargaining, Labor-management meeting (monthly) - Departmental communication meeting (participated by union representatives) - Safety and Health Committee meeting (every 2 months) - Seminar between the managerial departments, directors and supervisors of the union, and the Employee Stock Ownership Trust (ESOT) Committee (every 6 months)
- Issues of Concern	Reasonable employee salary development and talent retention tools
- CSC Response	- In response to market salary trends, the Company reviews its operating conditions and plans annual employee salary adjustments. Employee salaries have been raised for 10 consecutive years (an average of 3.1%) so far, and the average employee salary increase in 2023 was 3.5% - In order to increase the appeal for recruiting and retaining talents, CSC continues to optimize the ESOT by adding the "allocation rate of 30% scheme" and "delivering the incentive bonus to ESOT" in 2024, in hopes of increasing employees' sense of participation and engagement in the Company and stabilize equity

Stakeholders

Contractors

Contractors represent an indispensable part in CSC’s supply chain, and are considered as comrades who thrive with CSC. Therefore, CSC's management and care towards contractors are on the same level as its employees, and CSC collaborates with contractors to improve their working conditions
- Contractor job safety meeting, Contractor environment, safety and health meeting, Contractor Safety and Health Committee meeting (monthly) - Joint-work negotiation meeting, outsourcing management meeting (annually) and Contractor training (irregular)
Provide long-term and stable job sources, reasonable salary levels, friendly working environment, and prevent and reduce work safety accidents
- Provide contractor personnel with labor safety training and basic skills certification, and use on-site inspection data to guide contractor personnel to develop a good labor safety culture - Promote inherently safe design to reduce equipment risks and reduce the occurrence of labor safety hazards

Stakeholders

Customers

- Meaning for CSC
 - Sales to the customers are the main source of revenue for CSC, and “Pursuing customer satisfaction, implementing high quality service and protecting customer rights” is CSC’s highest principle when we reply to the customers’ requests
 - CSC also exerts its overall strength to lead downstream customers in expanding product applications, promoting close communication between customers, and maintaining integrity of the industry

- Communication Channels
 - Production-Sales Communication meetings (quarterly)
 - Customer Satisfaction and Focus Group Analysis and Improvement (annually)
 - Steel Product Seminars, R&D Alliances, Steel-related Professional Training, Technical Seminars, High-level Business Management Seminars, Market Research and Customers Visits (irregular)

- Issues of Concern
 - Macro-economic policies and steel price trends, customer services and how the EU CBAM regulation and Taiwan Carbon Fee will effect customers

- CSC Response
 - Due to the rapid changes of global steel market and fierce competition, customers need to quickly respond to the market situation. In response to this problem, the Company actively held communication meetings to listen to customers' voices, and subsequently launched the monthly pricing system and the improvement measure of N+1 monthly pricing to assist downstream manufacturers
 - Explains concerned issues to customers through various communication channels without any distortions and explores possible solutions
 - CSC has established product carbon emission inventory and product classification capabilities in accordance with EU CBAM regulations and continues to compile GHG inventory and implement carbon reduction projects to reduce carbon emissions. CSC also assists customers in compiling their inventory and carrying out carbon reduction work, jointly enhancing their competitiveness to face the impact of carbon pricing

Stakeholders

Government

- CSC operates in accordance with the policies and regulations stipulated by the governmental authorities, adheres to the environmental protection concept of circular economy, and fulfills corporate social responsibilities

- Actively visit the competent authority and elected representatives to communicate reasonable regulations and policies
- Through research discussions, forums, public hearings, training courses, and informal exchanges regarding a variety of policies and regulations (irregular)
- Participate in symposiums, seminars, and assessments held by competent authorities (irregular)

- Carbon fee collection policies and rates for the steel industry in various countries
- Pay attention to the progress of legislation and amendments related to climate change, occupational safety and health, and corporate governance regulations

- CSC collects and researches international carbon fee regulations and policies, actively participates in relevant meetings of various government departments, shares and communicates with competent authorities. CSC provides suggestions on aligning with international standards while maintaining industrial competitiveness during the policy formulation process
- CSC will continue to strengthen contract management, establish an effective risk assessment and hazard notification mechanism, implement regulatory requirements and relevant safety regulations of the Company, and prevent occupational accidents
- CSC and affiliated enterprises compile their GHG inventory and plan the verification schedule according to the guidance of the Financial Supervisory Commission's "Sustainable Development Guidemap for TWSE- and TPEX-Listed Companies", and regularly reports the implementation status to the Board of Directors
- CSC revised its Sustainable Development Best Practice Principles with reference to GRI 2-23 to 2-25 to clearly state its commitment to respect human rights and to track remedial measures and improvements when human rights are violated, so as to protect labor rights

Stakeholders

Suppliers

- Suppliers are an integral part of CSC's normal operations. They must comply with CSC's requirements and abide by relevant codes of conduct

- Participate in workshops (averages 20 per month)
- Communication meetings, pricing meetings (quarterly)
- Communication meetings for collaborative works of storage and transportation (monthly)
- Traffic safety and occupational safety and health training, and joint operation negotiation meetings(annually)
- Section affairs meeting (monthly)

- Provide reasonable profit margins and a source of work for long-term and stable growth
- Comply with EHS regulations and provide a good working environment
- Occupational safety hazard identification and risk assessment and prevention

- Regularly review contract prices with reference to market conditions and raw material fluctuations, and work with manufacturers to develop localized equipment and spare parts, enhancing local manufacturing capabilities and assisting industry upgrades
- Promote important regulations of CSC and the government, minimize waiting berth time, and regularly tidy up the environment
- Conduct traffic, occupational safety and health training and advocacy for relevant business contractors (cleaning, gardening, disinfection and laundering work clothes). Inspect the current situation of the fire alarm control panels in the Hsiao Kang factory area and gradually complete the improvement

Stakeholders

Shareholders

- Shareholders provide the capital necessary for the long-term development of the company, which is an important foundation for CSC to move towards sustainable operation, and look after the company’s strategy for sustainable growth and future development. CSC should develop steadily and make profits for shareholders

- Toll-free shareholder service hotline (0800-746-006) and email (f1000@mail.csc.com.tw)
- Visits from shareholders by appointment, conference calls, video conferences, reception of domestic and foreign institutional shareholders and participation in domestic and international investor conferences held by brokers (irregular)
- Publish digital and hard copy of annual report (annually)
- CSC holds shareholders meeting in the second quarter annually and the resolutions are voted per item of the agenda. E-ballots is adopted with full shareholder participation in the voting process. The results are announced on Market Observation Post System (MOPS) and corporate website.

- Climate change response, business and financial performance, occupational safety and health, supply chain management

- Receive domestic and international institutional shareholders and held conference calls for more than 127 times
- Participated in 4 domestic and foreign investor conferences
- CSC engaged in exchanges with domestic and foreign investors via video conferences or emails for 13 times in 2023 due to their concern about the disclosure of actions in response to climate change and risk assessments. Related information was reported to the Board of Directors

Stakeholders

Society*

* (including local communities, journalists, NGOs/NPOs)

Stakeholders

Researchers

- Meaning for CSC	Through communications with communities and local groups, journalists, non-governmental organizations and NGOs/NPOs, CSC understands the society' s expectations about its corporate social responsibility. By paying attention to the local community and a sense of responsibility, CSC dedicates itself to social participation in diverse manners	CSC is devoted to being a steel mill that provides high quality products and services. Collaboration with academics is an indispensable external resource. This helps CSC to enhance its social image as a premium steelworks
- Communication Channels	- Visits and negotiations were conducted by the Public Affairs Department,CSC Group Education Foundation, Labor Union of CSC, and employee clubs (irregular) - Press releases and spokesperson interviews (irregular) - Participated in seminars and meetings held by the professional association, academic institutes, and unions (regular and irregular)	- Progress review of Engineering Research Center and Industry and Academia Alliance (bimonthly) - Progress review of Joint Research Laboratory (interim report of outsource project) and research consultant (semiannually) - Proposal and final reports of ERC, JRL, and outsourced project (annually) - Keynote speeches (occasionally)
- Issues of Concern	- CSC's sustainable development actions and carbon neutral plans and responses - Caring for the disadvantaged in local district	(a)Improving the manufacturing capabilities of the fastener industry chain, (b)Electrical steel sheet for electrical vehicle motors, (c)Low-carbon blast furnace ironmaking technology (d)Carbon capture and re-utilisation
- CSC Response	- CSC co-organized the "Green Supply Chain International Workshop" organized by the ICLEI Kaohsiung Capacity Center (KCC), and led students on a visit to see circular economy and green product cases - Invited by the Taiwan Association for Net Zero Emission to attend the "2023 Sixth Global Corporate Sustainability Forum (GCSF) - The Second Forum on Carbon Credit, Carbon Tariffs, and Carbon Trading" to share the impact of carbon fees and carbon border taxes on the steel industry - Attended the "Communication Meeting between the Ministry of Economic Affairs and Environmental Protection Groups" in May and December 2023 to share CSC's short, medium and long-term environmental protection improvement measures - In October 2023, CSC was invited by the Chinese Institute of Engineers to participate in the "29th Modern Engineering and Technology Seminar" to discuss circular economy issues - Provided gifts of money during the Chinese New Year, Dragon Boat Festival, and Mid-Autumn Festival to assist low-income households in Hsiao Kang District in 2023, which benefited 1,984 individuals - Provided tuition assistance to assist children of low-income households in Hsiao Kang District in 2023, which benefited 504 individuals.	- Assisting the fastener industry in developing high-value products, establishing design analysis for metal forming technology, introducing R&D resources and strengthening industry connections - CSC's technical team has overcome the technical bottleneck for developing thin gauge top-grade electrical steels. The ES has been adopted by many well-known international automobile manufacturers and motor manufacturers. Furthermore, fast-curing self-bonding coating C3S1 has also been successfully developed to continuously enhance CSC' s competitiveness and dominance in EV motor supply chain - Development of next generation low-carbon ironmaking technologies suitable for Taiwan, including: (1) charging iron-bearing materials charging, (2) injecting hydrogen-rich gas, (3) refining top gas by removing CO₂, though which CO₂ emissions can be reduced further - In combination with waste heat recovery technology, the energy consumption for the flue gas carbon capture can be decreased. The captured CO₂ can be used as the bottom blowing gas for the basic oxygen furnace to remove nitrogen in the hot metal. This enhances competitiveness of the domestic steel industry in terms of CO₂ emissions reduction

1.5 Material Topics

CSC has annually established material topic analysis procedures in compliance with the GRI Universal Standards 2021 and AA1000SES. Through the collection and research of World Steel Association's Sustainability Charter and the international sustainability index (Dow Jones Sustainability indices, DJSI), we examined topics that are highly correlated with the steel industry, examined the external impact of each topic, and integrated it into the questionnaire. We then invited external experts to provide opinions. Subsequently, adopting the dual materiality principle outlined in the European Union's Corporate Sustainability Reporting Directive (CSRD), the significance of external impacts is evaluated through stakeholder questionnaire survey, and the financial impact of sustainability issues on CSC's operations is analyzed by the senior executives, identifying issues with significant impacts on CSC's operations and on external economic, environmental, and societal stakeholders. After confirmation by members of the Corporate Governance and Sustainability Committee, the identified issues are submitted to senior management for review and then to the Corporate Governance and Sustainability Committee for approval. For material topics with high impact, CSC discloses its management approach and performance in its sustainability report and on its official website under corresponding topics of the GRI Standards. We ensure that the contents of the report comply with the principles of stakeholder inclusiveness, materiality, and completeness, and reflect on the position and sustainability influence of CSC in the value chain. This is used as an important basis for examining and continuously improving our sustainability management and performance.

Process of Materiality Analysis

Understand
Organizational
context

2023 Sustainability
Topics List

Identify
Impacts

external experts in
2023

Evaluate the
Significance of
Impacts

2023 surveys were
collected from
senior executives and
stakeholders

Decide the
Material Topics

material topics in 2023

23 topics



Sustainability topics from three aspects are listed according to CSC' s vision and sustainable development policy by referencing international standards such as the updated GRI Universal Standards, SDGs, and topics of concern to the international steel industry, as well as important industry trends, and with consideration to stakeholder feedback.

2 Invited

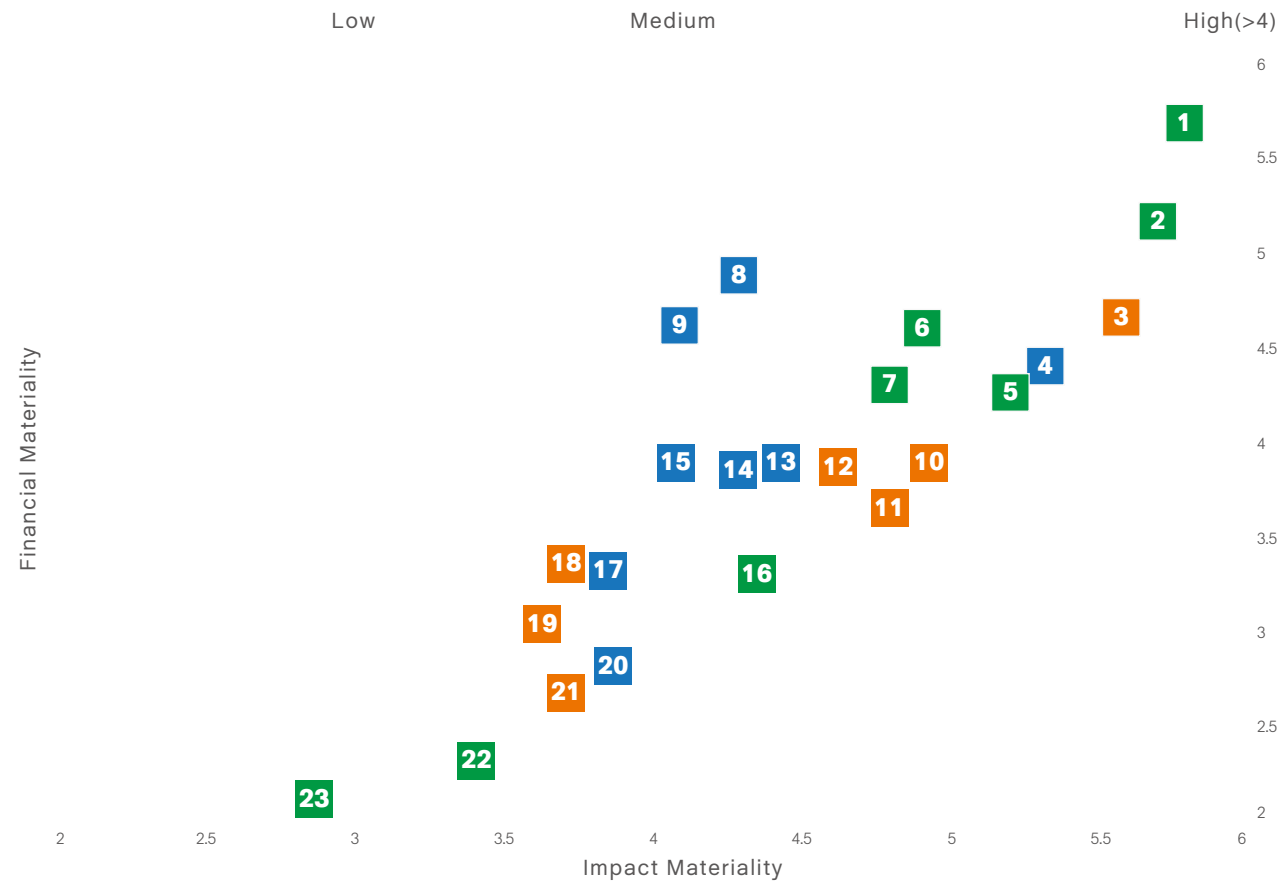
Identify the properties and implications of the impacts associated with each issue, integrate impact contents into the questionnaire, and invite external experts to provide recommendations for adjusting the contents of questionnaires.

547 responses
were collected

Invite stakeholders to respond to the impact materiality questionnaire survey, and the senior executives analyze the financial impact of sustainability issues on CSC's operations, and then evaluate the severity and likelihood of impact for each topic, and determine the significance of impact according to the results of questionnaires collected.

9 material topics

Consolidate and create the impact and financial materiality matrix, with issues scoring 4 or above in both impact and financial significance considered as Material topics. The Material topics are examined by the Corporate Governance and Sustainability Committee team members, reviewed by senior management, and submitted for approval by the Corporate Governance and Sustainability Committee.



Material Topics and Impact Response

A total of 9 material topics were identified through the materiality analysis in 2023, and results were examined. Compared with 2022, 2 topics were added, including Information/ Cyber Security and Operational Finance; 5 topics were excluded, including Quality Control and Hazardous Substance Management of Products, Green Product/ Green Business Development, Circular Economy, Greenhouse Gas Emissions (merged into Climate Change) and Waste. CSC's internal departments identify actual and potential impacts of material topics on the economy, environment, and people (including human rights) and develop impact prevention, mitigation, and remediation to effectively respond to stakeholders. The management of these topics stems from CSC Values and Operation Philosophy and is incorporated into the Sustainable Development Policy and risk management strategies. According to the respective attributes of each topic, the economic topics are managed by annual business directives and targets; the environmental topics and the social topic on Occupational Safety and Health are included in the EHS Policy; the other social topics consist of the social participation concepts. The material topics are corresponding to GRI Standards can refer to Appendix GRI Standards Index in this report.

2023 Material Topics

- | | | |
|--|--|--|
| 1 Climate Change | 4 Operational Finance | 7 Water |
| 2 Energy Efficiency | 5 Air Quality | 8 Information/Cyber Security |
| 3 Occupational Safety and Health | 6 Raw Material | 9 Research Innovation |
| 10 Employee Remuneration and Welfare | 15 Customer Service | 20 Product Quality and Hazardous Substance Management |
| 11 Labor Rights | 16 Circular Economy/Waste | 21 Corporate Social Responsibility and Welfare |
| 12 Talent Recruitment and Retention | 17 Value Chain | 22 Environmentally Friendly Products and Businesses |
| 13 Corporate Governance and Regulatory Compliance | 18 Diversity and Inclusiveness | 23 Biodiversity |
| 14 Significant Risk Events | 19 Freedom of Association and Collective Bargaining | |

Supplementary Explanation for Report Arrangement

Sustainability topics for non-material topics are mainly disclosed on the ESG websites of CSC. If there is a high relevance to the company's operation, the summary is explained in this report. Following websites are provided to stakeholders who care about all kinds of topics about CSC.

Sustainability Topics	CSC ESG official websites
Tax policy	https://www.csc.com.tw/csc_e/esg/cg/cg5_1.html
Customer Services	https://www.csc.com.tw/csc_e/esg/soc/soc4.html
Biodiversity	https://www.csc.com.tw/csc_e/esg/env/env4.html
Human Rights	https://www.csc.com.tw/csc_e/esg/soc/soc2_ibh.html
Recruitment	https://www.csc.com.tw/csc_e/esg/soc/soc2_ge.html
Talent Retention	https://www.csc.com.tw/csc_e/esg/soc/soc1_hd.html

Impact Aspect				Impact Management Measures	Chapter
● Actual Positive ◎ Potential Positive					
■ Actual Negative □ Actual Negative					
Material Topics	Economy	Environment	People (Human Right)		
G Operational Finance	■		□	In addition to expanding activities to reduce costs and increase profits, the Company is also actively developing dual cores (become a steel mill that produces advanced premium products with high value and develop the green energy industry) and three transitions (digital transition, low-carbon transition, and supply chain transition) to improve its business, in order to reduce the impact of changes in the external environment on its business and financial performance, while also aiming to stabilize operational performance to alleviate potential negative impacts on stakeholders such as employees and shareholders.	6.3
G Information/ Cyber Security	□			The Company established an "Information Security Committee" with an Executive Secretary Task Force and an Information Security Technology and Monitoring Task Force. The committee convenes quarterly meetings to coordinate the formulation, implementation, risk management, and compliance assessment of information security-related policies, and to review and make decisions on information security and information protection guidelines and policies, as well as the effectiveness of the implementation of information security management measures.	7.3
G Research Innovation	◎ ●	●		CSC develops new products according to market demand, enhancing the carbon reduction competitiveness of the domestic steel industry through the development of low-carbon ironmaking technology, increase in production with higher scraps ratio, and new (e.g. hydrogen) ironmaking technologies.	7.2.1
E Raw Material	●	◎		The Company has been developing new material sources in response to the higher risk of delay or suspension of material supply, and has been actively working to stabilize economic development. We are also promoting the sustainable use of raw materials through increased use of scraps in processes.	3.2.1
E Energy Efficiency	◎	●	◎	The utilization and management of energy-related activities will have positive economic impacts. However, if energy is not effectively used or improperly treated and discharged, it may have negative impacts on the environment and society. Therefore, CSC continues to improve energy performance with the ISO 50001 energy management system PDCA spirit, enhance energy efficiency (such as upgrading reheating furnaces to regenerative furnaces, installing CDQ1/2 dry quenching waste heat recovery systems), and promote District Energy Integration and development of green energy to reduce environmental impacts.	3.2.2
E Air Quality	□	●		In coordination with the Executive Yuan's Air Pollution Control Action Plan, the Company will invest 35.508 billion TWD in 4 air pollution improvement projects in 2023-2026, which will reduce and prevent impact on the environment by reducing par. by 57.7 tonnes/year, SOx by 154 tonnes/year, NOx by 56 tonnes/year, and VOCs by 73 tonnes/year.	3.2.3
E Water	●	●	◎	The steelmaking process uses a considerable amount of water resources, and reducing production due to water rationing will impact economic output value. If wastewater treatment facilities malfunction, it may affect the quality of effluent water. Hence, CSC continues to strengthen equipment management to reduce the impact on the environment, and effectively lowers its tap water consumption using reclaimed water for industry.	3.2.4
E Climate Change	□	■		Global average temperatures continue to rise, accompanied by an increase in the frequency and severity of extreme weather events such as typhoons and floods. Given the high greenhouse gas emission intensity characteristic of the steel industry, CSC has planned a carbon reduction path and transformation strategies with the target of achieving carbon neutral by 2050. To this end, CSC is enhancing its energy-saving and carbon reduction measures, improving process energy efficiency, strengthening strategic cooperation with industry peers and academic research institutions, and reinforcing its own adaptation strategies to achieve substantial carbon reduction and mitigate the impacts of climate change.	2.1
S Occupational Safety and Health	●	□	●	CSC places a high priority on safety and health, strictly complying with legal regulations and requiring affiliated contractors and employers to do the same. CSC has established relevant indicators internally, and if the indicators are not met, it requires an analysis of the reasons and proposes improvement measures. CSC also sets safety and health performance standards for its contractors and requires those with poor performance to provide improvement reports and track the effectiveness of their improvements through a rolling review process.	4.4

2

Climate Change Adaptation and Mitigation

- 2.1 Respond to Climate Change
- 2.2 Climate-related Risks and Opportunities
- 2.3 Actions on Climate Change Adaptation



Material Topic

2.1 Respond to Climate Change



- 2023 Highlights

- CSC participated in the Carbon Disclosure Project (CDP) Climate Change Questionnaire in 2023 and was given A- (Leadership level) in the “Climate Change” module, which was higher than B- for the steel industry overall, as well as an average of C from the Asian region and globally.
- CSC participated in the Industrial Development Bureau’s Selection of Top-performing Manufacturers in Greenhouse Gas Voluntary Reduction in 2023, and was awarded for 11 consecutive year.

Policy or Commitment

CSC sets short-, medium-, and long-term carbon reduction targets with the long-term target of achieving carbon neutral by 2050, also preliminarily formulated a number of strategies and mapped its pathway to be carbon neutral. Facing risks and opportunities on the path of low-Carbon transition, CSC discloses climate-related information based on the TCFD framework, so that stakeholders can fully understand CSC's efforts in the formulation of risk controls and responses against climate change.

Climate Governance Hierarchy

As the highest governance body, the Board of Directors directly oversee the structure of climate governance. The Corporate Governance and Sustainability Committee consists of the Sustainable Environment Development Team and the Risk Management Team, with vice presidents of each department as the conveners, and oversees climate-related issues faced by CSC. Each team periodically reports its progress to the Corporate Governance and Sustainability Committee regarding its implementation results.

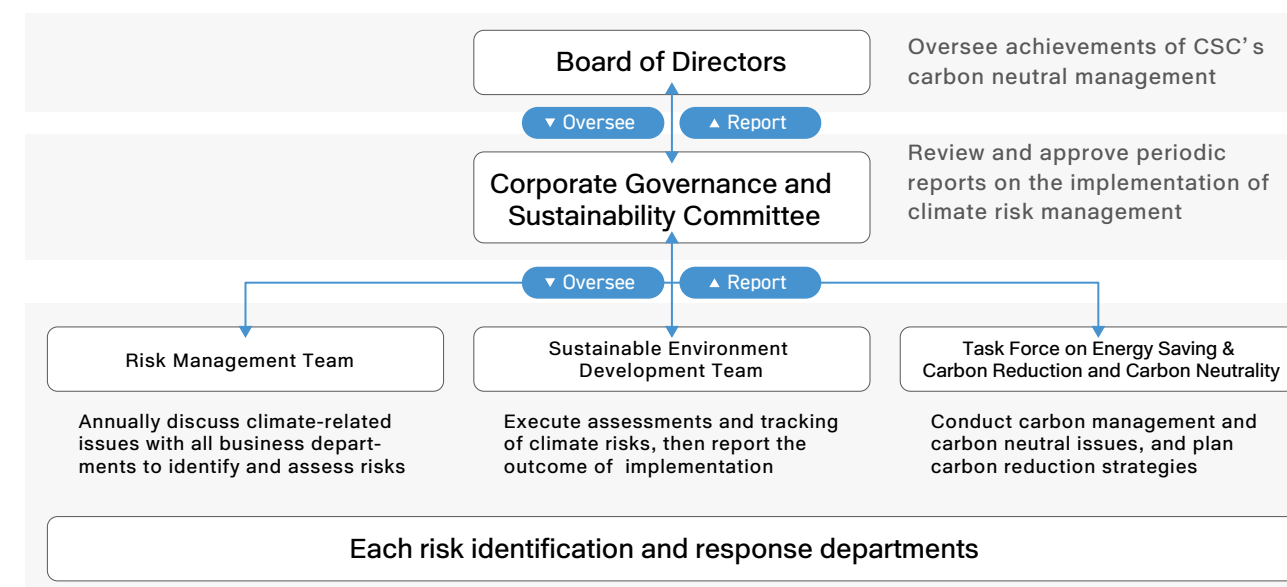
In response to Net-zero emissions related issues, CSC has established the Task Force on Energy Saving & Carbon Reduction and Carbon Neutrality. The Chairman of the Board is in charge of the task force with regards to the company-wide carbon reduction response policy and short, medium and long-term carbon reduction strategies. The task force convenes quarterly and reports regularly to the Board of Directors.

The "Sustainable Environment Development Team" reviews and discusses climate-related issues with each responsible unit annually, while it also collects data on climate-related risks and reports them to the Corporate Governance and Sustainability Committee semi-annually.

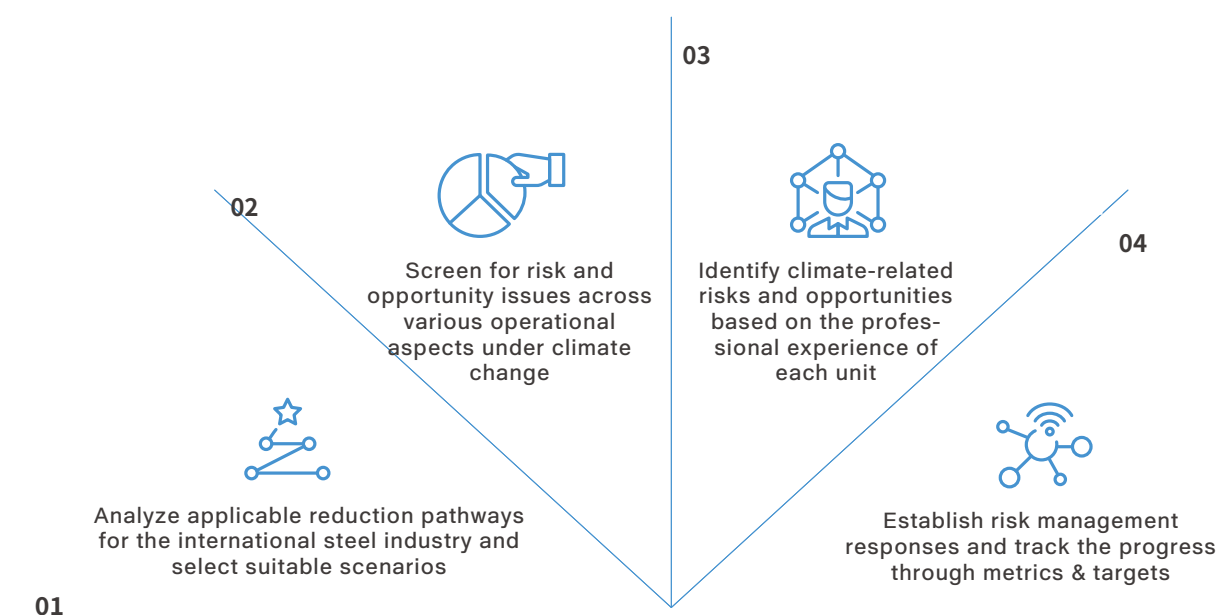
The “Risk Management Team” integrates the major climate risks reported by each responsible unit into the Company's overall risk management process. Semi-annually, the team

would report the results of risk management to the Corporate Governance and Sustainability Committee, and integrate the outcomes into a risk management business report, which is then presented to the Board of Directors.

Climate Governance Hierarchy



Climate Risk Management



+ * Implementation results: Chronicle of the Task Force on Energy Saving & Carbon Reduction and Carbon Neutrality
https://www.csc.com.tw/csc_e/esg/env/env1.html

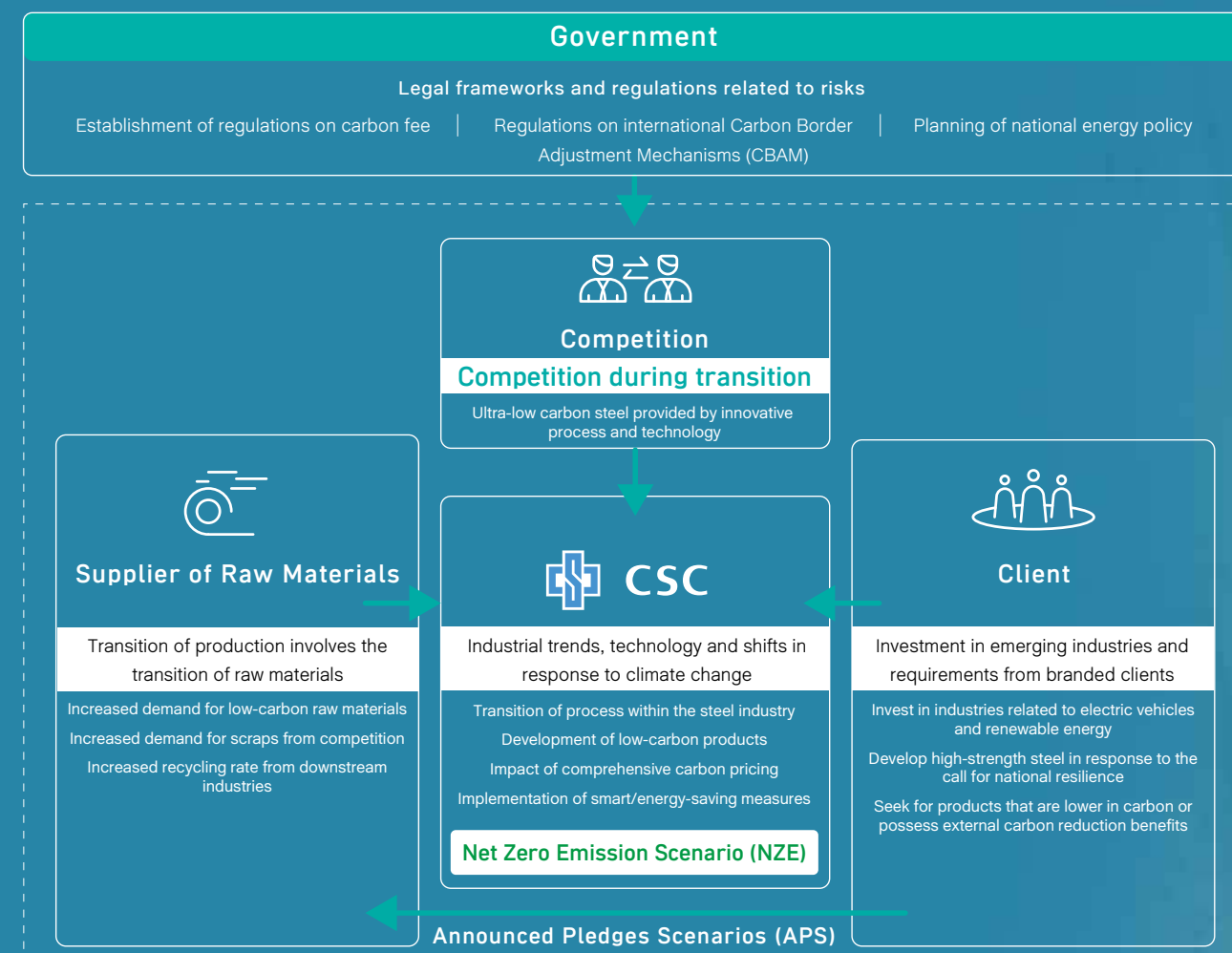
2.2 Climate-related Risks and Opportunities

I Assessment of Climate Change Risks and Opportunities

CSC identifies the risks and opportunities brought by climate change to all business units, thereby CSC is able to effectively respond to a wide range of issues arising from climate change. We also integrated climate-related risks into the company's overall risk management framework, please refer to the "Risk Management" for more details. The process for analyzing transition and physical risks of CSC is described below:

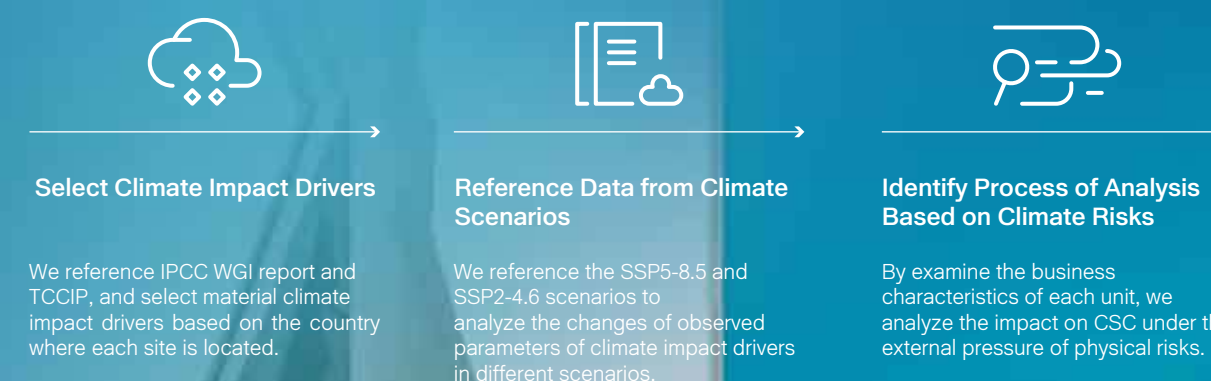
I Transition Risk Scenario Analysis

CSC referenced the research report proposed by the International Energy Agency (IEA) to discuss our transition plan based on the evolving technological pathways within the global steel industry and potential external market changes. We examine the parameters of the Net Zero Emissions (NZE) and Announced Pledges Scenarios (APS) separately. Continuing our previous framework for transition risk scenario analysis, CSC approaches from the perspectives of various stakeholders, taking into account the actions these stakeholders might take in different scenarios. This approach aims to proactively address potential risks or seize emerging market opportunities. A detailed framework for transition risk scenario analysis by CSC is depicted in the figure below:



I Physical Risk Scenario Analysis:

CSC conducts scenario analysis of future occurrences of more frequent physical risks in the value chain, utilizing scenarios outlined by the Intergovernmental Panel on Climate Change (IPCC), specifically the high emissions scenario (SSP5-8.5) and the intermediate emissions scenario (SSP2-4.5). Leveraging the climate impact driver framework employed by IPCC Working Group I, CSC identifies physical risks that the value chain may encounter. Based on climate scenario data and information on hazard risk, combined with assessment results from various locations, these values are consolidated into a climate risk matrix. CSC's analysis process of physical risks is as follows:

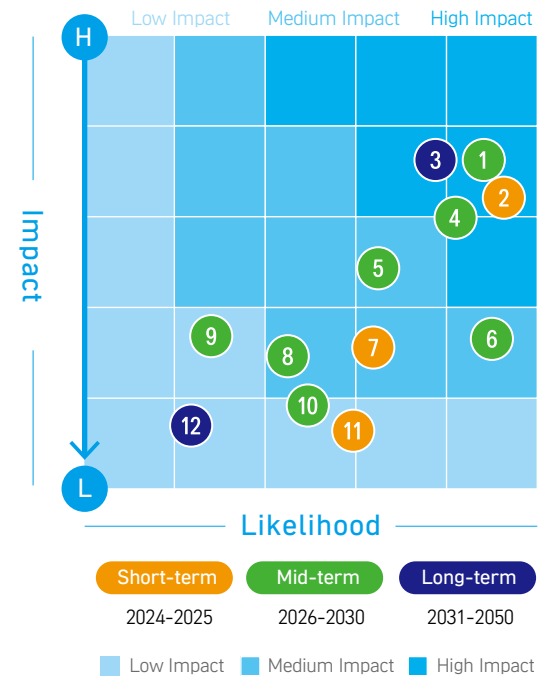


I Climate-related Risks and Opportunities Matrix

Based on the TCFD scenario analysis framework, CSC has summarized 7 transition risks, 5 physical risks, and 6 opportunity issues. Assessed by each risk identification unit, the results are based on factors such as the time of occurrence, likelihood of occurrence, and degree of impact, which are then mapped into the climate-related risks and opportunities matrix; issues that surpassed the materiality threshold would be managed by CSC.

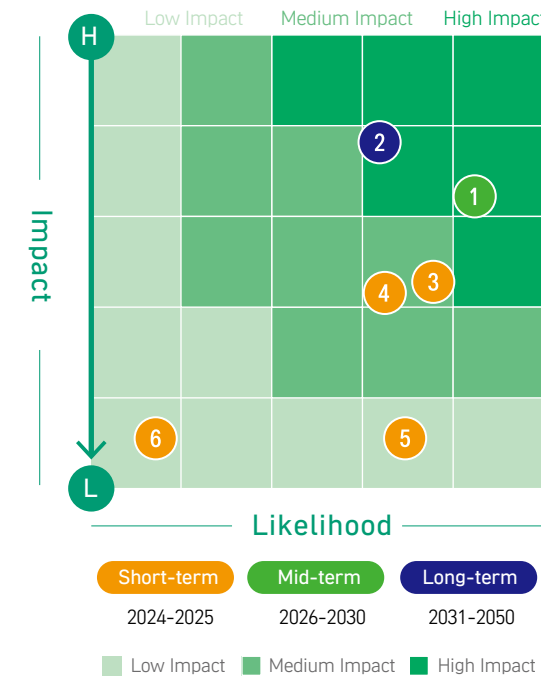


Climate-related risk matrix



Order of Priority	Category	Risk Factor
1	Market	Transition of raw materials
2	Policy & Regulation	Implementation of carbon fee mechanism
3	Policy & Regulation	Planning of low-carbon energy policy
4	Technology	R&D of carbon neutral technology of the steel industry
5	Market	Changes in steel demand from downstream customers
6	Policy & Regulation	Implementation of the Carbon Border Adjustment Mechanism (CBAM)
7	Acute	Extreme weather events, such as typhoons and floods (Raw materials)
8	Acute	Extreme weather events, such as typhoons and floods (Operations)
9	Chronic	Water shortages caused by changing climate patterns
10	Reputation	Investors/Financial institutions' willingness to invest in and provide loans to CSC
11	Acute	Extreme heat/dry wildfire events (Raw materials)
12	Chronic	Rising sea levels causes the flooding of low-lying areas

Climate-related opportunities matrix



Order of Priority	Category	Opportunity Factor
1	Market	Entry to renewable energy/automotive related supply chains
2	Products and Services	Provision of high-strength steel to enhance climate resilience
3	Resource Efficiency	Reduction of crude steel energy consumption through smart manufacturing energy saving
4	Products and Services	Provision of low-carbon steel products to downstream industries
5	Market	Compliance with requirements of financial institutions to obtain low interest rates
6	Energy Sources	Expansion of energy storage-related facilities

Mitigate Risks During Low-carbon Transition and Seize Corresponding Opportunities

Transition Risks	Scenario	Scenario Analysis	Impact on CSC Operations	CSC's Responses	Metrics and Targets
Transition of raw materials		In the low-carbon emission scenario, scraps and reduced iron may become critical sources of raw materials. Furthermore, the demand of high-quality iron ore is expected to increase, causing the prices of raw materials to fluctuate	+ The increase of demand from the industry would stimulate the prices of emerging new raw materials, leading to the rise of operating costs	+ Continues to expand sources of alternative materials + Prepares for new raw materials and resources	+ Continues to develop new raw materials or materials in line with CSC's carbon neutral roadmap
Implementation of carbon fee mechanism	Temperature rises 1.7°C (IEA APS)	Considering that domestic carbon fees are still unclear, CSC has considered carbon pricing, international carbon tax and carbon trades to assess the impact	+ Products need to bear the cost of carbon emissions, resulting in the increase of operating costs	+ Conducts research on international carbon pricing mechanisms to advocate for alignment with international, reasonable carbon fee systems, thereby mitigating the impact of carbon pricing systems + Continues the development of emerging steelmaking technologies to reduce CSC's carbon emissions and the carbon cost of its product + Improves efficiency of processes and power plants through smart scheduling and the implementation of best available technologies	Carbon emission targets of CSC + Reduce carbon emissions by 7% in 2025 + Reduce carbon emissions by 25% in 2030 + Achieve carbon neutral in 2050
Planning of low-carbon energy policy	Temperature rises 1.4°C (IEA NZE, in line with the Paris Agreement)	In the low-carbon emission scenario, the demand for renewable energy may continue to grow in response to the long-term development of net-zero technologies in the steel industry	+ If CSC continued to reduce purchased electricity through low-carbon energy, operational costs would increase	+ Invests in solar photovoltaic energy to meet short to medium-term internal renewable energy demand as much as possible + Long-term assessment of low-carbon energy demand is conducted; investment and procurement are planned accordingly	
R&D of carbon neutral technology of the steel industry		In the low-carbon emission scenario, the steel industry may continue to invest in the research and application of low-carbon steelmaking technologies	+ Investment in the R&D of new steelmaking technologies would lead to the increase of R&D cost	+ Actively engages in industry-academia collaboration projects and focus on emerging low-carbon steelmaking technologies, including: replacing a portion of iron ores with reduced iron, replacing coal injection with hydrogen injection, as well as implementing carbon capture and other applications	

The baseline year is 2018

* Each scenario considers the maximum rise of temperature with 50% confidence level in 2100

Opportunity	Scenario	Scenario Analysis	Impact on CSC Operations	CSC’ s Responses	Metrics and Targets
Entry to renewable energy/ automotive related supply chains	Temperature rises 1.7°C (IEA APS)	The installed capacity of global wind power generation is expected to increase by 220%, and electric vehicles are projected to constitute 40% of the automobile market in 2030	+ The renewable energy and electric vehicle markets are flourishing, and if CSC developed products that are aligned with market trends, the revenue may increase	+ Continues to promote the entry of high quality ES for electric vehicles into major manufacturers, develops corresponding technical thresholds, and actively conducts product-related tests and verifications + Assists domestic vehicle manufacturers in accelerating the application of ES for electric vehicle motors, and enhances their competitiveness in the domestic market of electric vehicles + Participates in the construction of domestic renewable energy projects and provides wind power steel plates needed for underwater foundations and wind turbine towers, assisting in achieving the localization of domestic wind power facilities	+ Sales ratio of premium steel ≧ 50.3% in 2025 + Sales ratio of premium steel ≧ 52.0% in 2030
		In order to adapt to recurring climate hazards, governments worldwide would continue to strengthen the resilience of public infrastructure	+ Strengthens public infrastructure and national resilience projects in line with policies, leading to the increase of steel demand + Provides high-strength structural steel to meet the demand of collaborated projects with governments, thereby increases the opportunities of CSC’ s products being applied in governmental infrastructure projects in the future		

* Each scenario considers the maximum rise of temperature with 50% confidence level in 2100

Climate Change Adaptation Strategies

Physical Risks	Scenario ^{Note I}	Scenario Analysis	Impact on CSC Operations	CSC’s Responses	Metrics and Targets
Extreme weather events such as typhoons and floods (Raw materials)	Temperature rises 2.7°C (SSP 2-4.5)	IPCC AR6 ^{Note II} pointed out that the frequency and intensity of extreme weather events will increase at the place of origin for some raw materials (e.g. Australia)	+ Issues regarding the supply of raw materials caused by extreme weather events may result in interrupted supply chains or production	+ Weather monitoring and continuous supply chain management are conducted regularly based on the concept of business continuity, in order to immediately respond to any potential risks; evaluates the climate of the origins of raw material and conducts material preparation and scheduling beforehand + Considering the transportation risks of the supply chain, locations that are less likely to be impacted by the weather are selected as the transfer point during transportation of raw materials	+ Maintain raw materials supply capacity and stability to ensure the balance between transportation and cost in the supply chain
	Temperature rises 4.4°C (SSP5-8.5)	According to the Taiwan Climate Change Projection Information and Adaptation Knowledge Platform (TCCIP), from medium-to long-term period, it is projected that the maximum consecutive days without rainfall in the watershed area of CSC's main industrial water sources will increase by 19.5% to 27.1%	+ Extreme weather increases the risk of water shortage, therefore affects production processes of factories	+ Continues to increase the percentage of process water being recycled, strives to diversify water sources, and increases the percentage of reclaimed water used + Assesses the feasibility of seawater desalination to further mitigate risks of water shortage	+ In 2027, CSC plans to increase the recovery rate of the wastewater purification plant, and reduce new water consumption by 58.4% + In 2030, progress towards the goal of diversifying water sources by continuously evaluating the recycling and the reuse of wastewater within the factory, with the expectation of reducing new water consumption by 60.4%

Note I : Each scenario considers the rise of temperature in the middle of the 21st century.

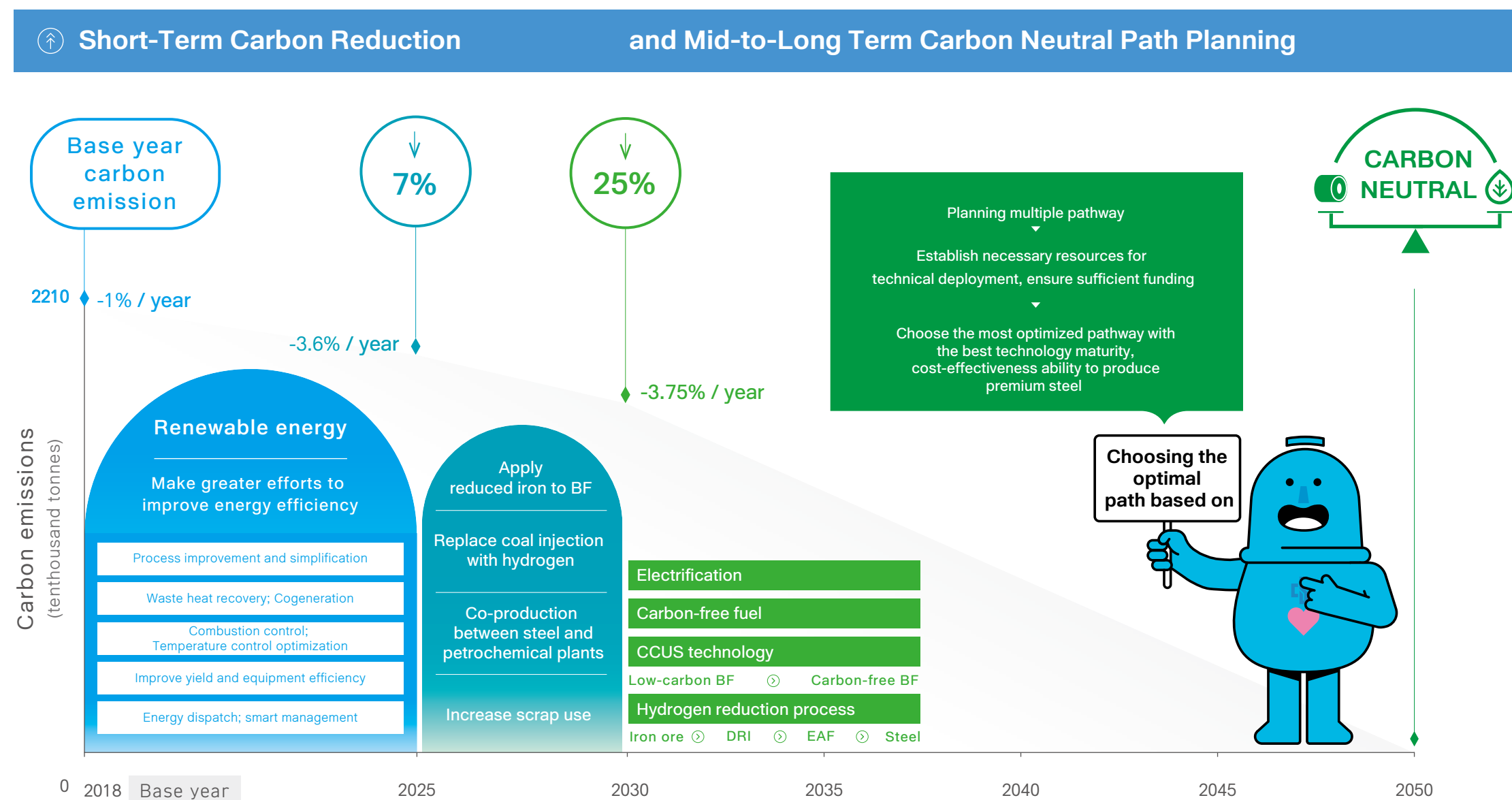
Note II: The Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC)

2.3 Actions on Climate Change Adaptation

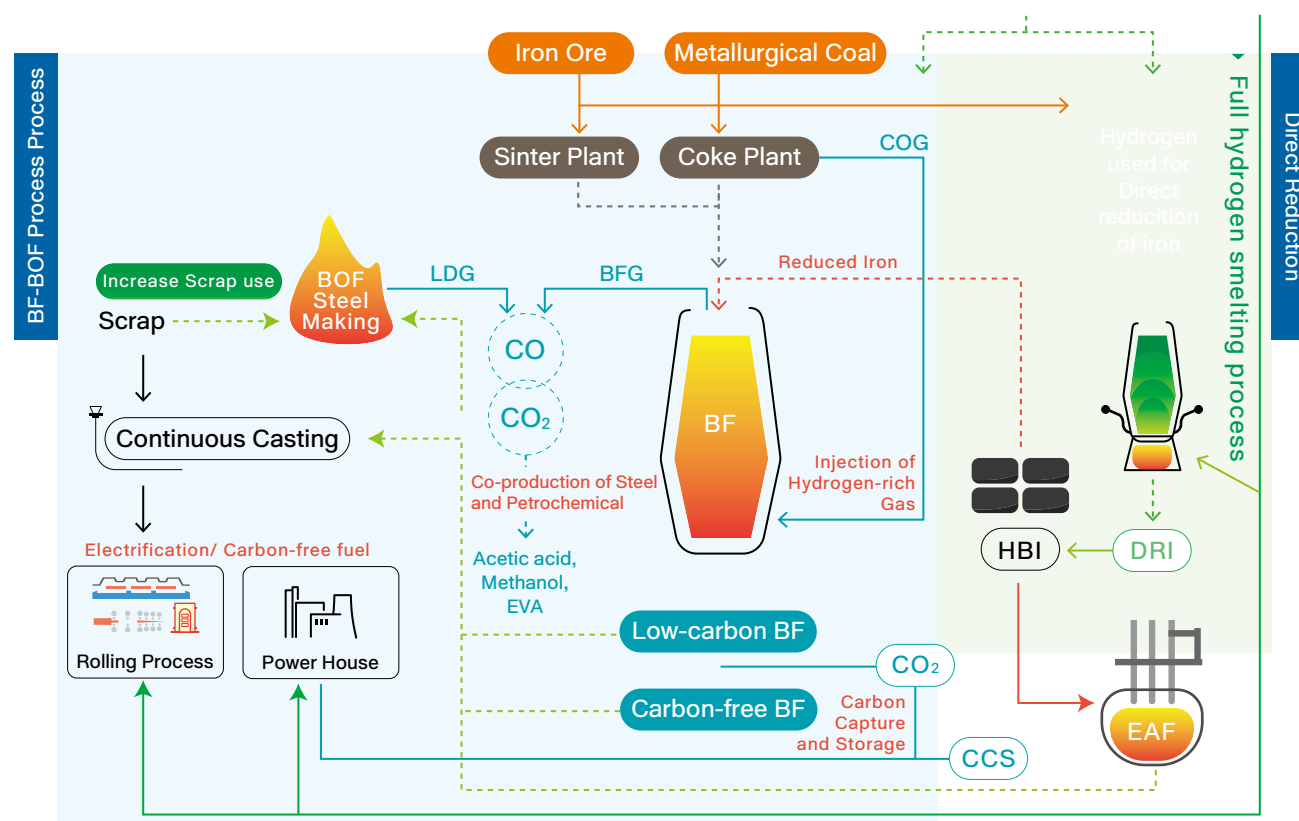
Low-carbon Transition Plan

CSC has set short-term, mid-term, and long-term carbon reduction targets. With the long-term target of achieving carbon neutral by 2050, CSC has preliminarily formulated a number of strategies and mapped its pathway towards carbon neutral. In the short-term, we mainly plan to increase the use of renewable energy and step up efforts to improve energy efficiency. We completed 221 carbon reduction action plans in 2022 and reduced carbon emissions by 2.8% compared to the base year of 2018 or 626,000 tonnes/year. We completed 223 carbon reduction action plans in 2023 and reduced carbon emissions by 1.6% compared to the base year of 2018 or 358,000 tonnes/year.

As for the mid-term and long-term pathway towards carbon neutral, we will reach the target of reducing carbon emissions in 2030 by 25% compared to 2018 (scope 1 and 2) by "applying reduced iron to BF, "replacing coal injection with hydrogen," "co-production between steel and petrochemical plants," and "increasing scrap use." There are 4 pathways towards carbon neutral after 2030, namely electrification, carbon-free fuels, CCUS, and hydrogen reduction process, with carbon reduction tasks in 10 aspects. CSC will achieve its carbon neutral target by 2050, demonstrating its commitment to environmental protection and sustainable development.



Innovative Green Process: Mid-to-Long Term Two-Stage Carbon Neutral Path Planning



Considering the lack of mature technology and green resources and the need for equipment upgrading, CSC will face three major challenges : technology, resources, and capital.

Action Plan 1: Pathway to Carbon Neutrality and Carbon Reduction Strategy Planning

CSC has also drawn up a two-stage pathway to ensure that it can achieve carbon neutral. However, similar to other steel producers across the globe, CSC currently encounters a number of problems in some of its strategies, such as a lack of mature technology and hydrogen resources and the need for equipment revamp, and will eventually face challenges in three areas-technology, resources, and capitals. Therefore, CSC will actively engage in R&D operations while reviewing and adjusting the progress of each strategy on a rolling basis.

CSC's Management Strategy for the Pathway to Carbon Neutral – Internal Carbon Pricing

We currently plan to use external prices as the basis for CSC's internal carbon pricing. External prices include domestic carbon tax and overseas carbon tariffs. Besides calculating carbon emission related costs and conducting sensitivity analysis, we will also be able to effectively evaluate the benefits of carbon reduction related capital expenditures or R&D expenses.

In response to stakeholders' expectations, the internal carbon price will be able to effectively control the company's overall carbon emissions, and drive the development of production processes and technologies with lower carbon emissions, or readjustment of internal operations and production processes.

CSC's GHG Reduction Results

The Environmental Protection Dept. consolidates the GHG reduction projects implemented in the previous year and verification by second-party from IDB; the verification results are registered and recorded on the Bureau's voluntary reduction platform. When engaging with MOENV regarding the national GHG Cap system, the records can be used as evidence that shows CSC's efforts before new policies enter, easing the pressure from GHG reduction. Since 2005, CSC has been cooperating with IDB and as of 2023 a total of 1,544 reduction projects were implemented and the cumulative reduction reached 1.612 million tCO₂e/year. CSC has been awarded by IDB over the years and was honored as one of the best performers in all industrial voluntary GHG reductions in 2023.



Honored as one of the best performers in all industrial voluntary GHG reductions in 2023 by Industrial development bureau (IDB), Ministry of Economic Affairs (MOEA)

Participated in the Kaohsiung City Government's Greenhouse Gas Reduction Project Across Departments

In recent years, CSC has continued to cooperate with Environmental Protection Bureau Kaohsiung City Government in handling the "Greenhouse Gas Reduction Project Across Departments", assisting rural area and underprivileged groups to replace energy-saving equipments. The number of projects, the amount of subsidy, and benefit of carbon reduction in the past 5 years are as follows:

Year	2019	2020	2021	2022	2023	Total
- Number of Projects	7	5	7	6	6	31
- Amount of Subsidies (TWD)	503,509	625,900	692,684	788,459	544,040	3,154,592
- Carbon Reduction (kg)	16,895	16,331	6,767	145,251	2,663	187,907

∞ Action Plan 2: Product Carbon Emission Inventory

In order to improve its own carbon management and respond to the EU's carbon border adjustment mechanism, CSC not only compiled the carbon footprint inventory of 23 major product categories, and also passed external verification by BSI, but established the "Product Carbon Emission Intensity Actuarial System" under the structure and data of the existing system framework. CSC is able to calculate the carbon emission of each process, each product, each steel coil, and each purchase order based on the process path of each product, raw materials and fuel input, product output, and the corresponding carbon emission factor. In addition, since CBAM declarations are according to CN code, CSC follows the CBAM guidelines when calculating the weighted average of each product according to their weight using the system described above. The process overview, average composition, and carbon emissions of product categories that need to be reported for each CN code are then calculated.

At the same time, in response to the new carbon tariffs and trend of net-zero emissions, CSC continues to compile its GHG inventory and carry out verification, identify emission hot spots, and actively implement carbon reduction projects to reduce carbon emissions. CSC assist customers in compiling their inventory and carrying out carbon reduction work, and actively developing high-performance green steel products that can help users reduce carbon emissions, including high-strength steel for automotives, high-energy-efficiency electrical sheets, and process-saving steels. CSC is located at the most upstream of the industry chain and will take the lead in the low-carbonization of steel. By providing low-carbon steel to customers, customers can continue to produce low-carbon end products and jointly improve the low-carbon competitiveness of the overall industry chain.

∞ Action Plan 3: Carbon Credits Management and GHG Inventory

CSC has formulated the "Carbon Trading and Management Regulations" in accordance with MOENV's rules and regulations as well as international practices, with the relevant operations incorporated into ISO 14001 Environmental Management Systems. Meanwhile, applications for GHG offset credits are submitted by the Environmental Protection Department at CSC to the competent authority. As of the end of 2023, CSC has 4.5021 million tonnes of CO₂e in GHG offset credit balance.

Greenhouse Gas Inventory (Scope 1~3)

Every year, CSC entrusts a third-party agency certificated by the MOENV to verify CSC's annual GHGs emission inventory, and obtains statement documents. GHG information of 2023 (I) is shown below.

GHG Emissions	2021 ^(III)	2022	2023
(Unit: tCO ₂ e)			
- Direct GHG Emissions (Scope 1)	20,939,573	18,248,901	16,809,455
- Indirect GHG Emissions from Imported Energy (Scope 2)	1,357,456	1,373,673 ^(II)	1,249,102
- Total Emission ^(I)	22,297,029	19,622,574	18,058,557
- Other Indirect Emissions (Scope 3)	12,055,837	11,216,225	11,317,609

GHG Emissions Intensity	2021	2022	2023
(Unit: tCO ₂ e/Million TWD in revenue)			
- Direct GHG Emissions (Scope 1)	80.60	72.82	85.26
- Indirect GHG Emissions from Imported Energy (Scope 2)	5.23	5.48	6.34
- Other Indirect Emissions (Scope 3)	46.41	44.76	57.41

Note I: The boundary of CSC's GHG emissions refers to the Operation Control Approach, including critical operating sites such as Head Office and China Steel Building. The emissions are calculated using Emission Factors Methodology, and the GHG considered include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and nitrogen trifluoride. After the completion of CSC China Steel Building in October 2013, we adjusted our GHG inventory boundary in accordance with ISO 14064-1 and reset our base year to 2014. The GHG emissions of 2014 was 20,629,824 tCO₂e, based on the GWP value from the IPCC's Fourth Assessment Report. The source of the coefficient includes the emission coefficient management table announced by the MOENV, the World Steel Association coefficient, and the estimated emission coefficient of the carbon content measured by the plant.

Note II: The data of scope 2 is recalculated based on the electricity emission factor of 2022.

Note III: Since 2021, CSC has conducted its GHG inventory in accordance with ISO 14064-1:2018. CSC's GHG report is verified by third party verification agency, DNV, with a reasonable level of assurance.

Note IV: The scope of the disclosed GHG information is CSC's individual company.

+ For more details [The Scope 3 Emission] https://www.csc.com.tw/csc_e/esg/env/env1.html

∞ Action Plan 4: Participate in domestic and international climate initiatives

CSC actively responds to climate-related initiatives both domestically and internationally. Apart from continuously participating in international initiatives such as CA100+ and the Carbon Disclosure Project (CDP), CSC also engage in the "Taiwan Alliance for Net Zero Emission," 's "Industry Net Zero Alliance" by Kaohsiung City Government and "1.5°C Climate Action Declaration" by the Chinese National Association of Industry and Commerce. These initiatives demonstrate CSC's commitment to supporting domestic climate initiatives with action.

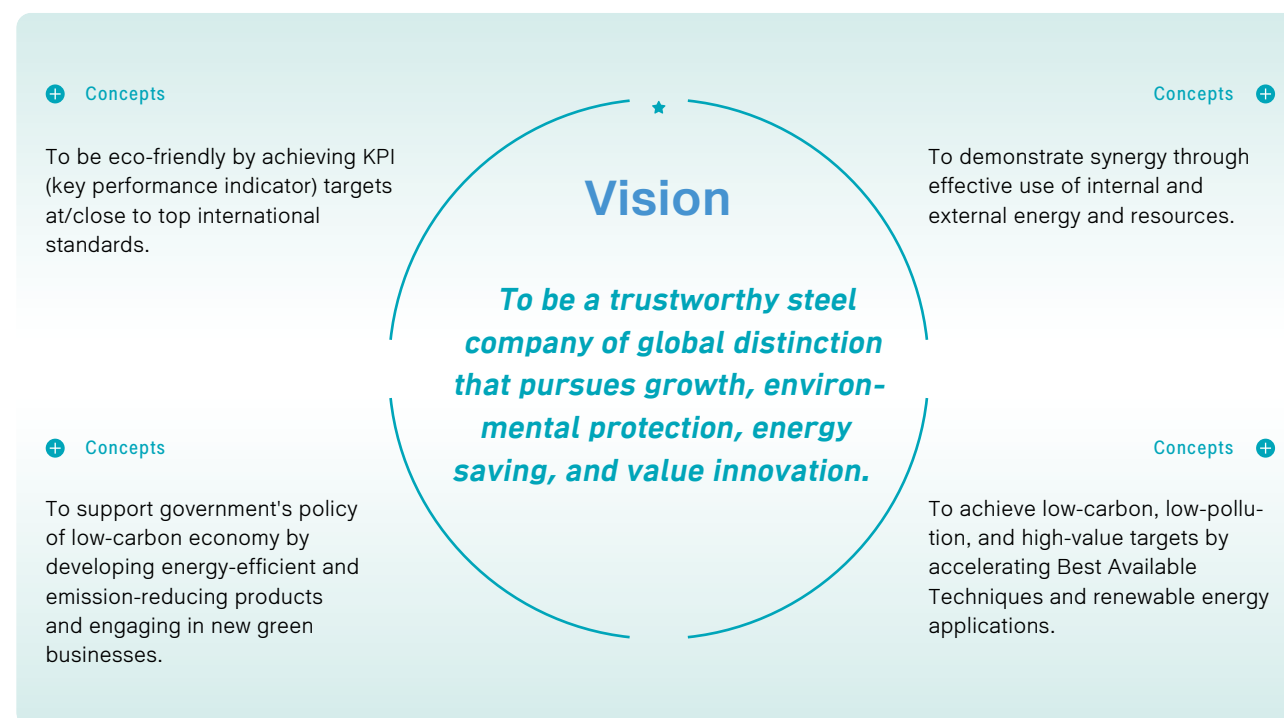
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Environmental Protection

- 3.1 Environmental Concepts and Management
- 3.2 Green Process
- 3.3 Circular Economy
- 3.4 Biodiversity
- 3.5 Green Development



3.1 Environmental Concepts and Management



Environmental, Health and Safety (EHS) Management System

In 1997, CSC obtained ISO 14001-Environmental Management System (EMS) verification and received the approval of ISO 14001: 2015 verification in 2018. This system was integrated with ISO 45001 Occupational Safety and Health Management System into the EHS Management System. CSC also established an EHS Management Committee chaired by the executive vice president, and is responsible for making decisions related to EHS management. The assistant vice president of the Production Division serves as the EHS management representative and is responsible for supervising and coordinating EHS management work of related units. EHS policies are approved by the Chairman of the Board before implementation and subject to annual external audit.

	ISO 14001	ISO 50001	CNS 45001/ISO 45001
• Name of System	Environmental Management System	Energy Management System	Occupational Health and Safety Management System
• Coverage of employees	- 100%	- 100%	- 100% ^{Note}

Note: The workplaces covered by the system are the main areas where contractors perform their work. Hence, the system includes 100% of contractor personnel.

EHS Management Committee

The EHS Management Committee holds two meetings every year, convening the first-level units of the production division and first-level supervisors from relative units to discuss EHS relevant management issues, and review tracked projects. The relative units include the Iron and Steel R&D Dept., Metallurgical Dept., Intellectual Property & Testing Technology Dept., New Materials R&D Dept., Green Energy and System Integration R&D Dept., Transportation Dept., General Affairs Dept., Smelting Engineering Dept., Rolling & Utilities Engineering Dept., and Civil Engineering Dept., By tracking and examining discussion and resolutions during each meeting, the goal of continuous improvement can be met.

EHS Policy

Care for Life	Risk Management	Training and Communication	Legal Compliance	Improvement
Respect life, practice environmental protection, safety, and health management to prevent occupational injury and illness and promote employee health.	Assess risks and environmental aspects. Reinforce risk control and pollution prevention.	Educate employees with EHS concepts, establish a self-motivation culture, encourage the involvement of employee and contractors, and strengthen communication with stakeholders building a harmonious relationship with communities.	Reinforce the identification and execution of legal requirements and strengthen correction and prevention actions, fully fulfill corporate social responsibility.	Promote zero accident, energy conservation, and emission reduction; improve EHS performance and pursue sustainable operations.

Environmental Loading Reduction and Commitment

CSC has established a stringent environmental load assessment system aimed at effectively controlling the environmental load of investment projects. Based on this system, the environmental load of investment projects is assessed through division of labor among various units at the company, where these projects are either scaled up or scaled down based on the environmental load arising from the production capacity of existing equipment. At the same time, an energy boundary map is defined to calculate energy changes in investment projects and thus estimate CO₂ emissions from these projects, so that the environmental load of investment projects can be assessed in a comprehensive manner. The review of 5 project-based environmental load analysis, including the 23rd hot stove replacement, was completed in 2023.

Environmental Accounting

By the end of 2023, CSC has invested 91.2 billion TWD in various environmental protection facilities. Amongst them, air pollution control accounted for 67%, water pollution control accounted for 14%, and energy saving and GHGs accounted for 10%, waste pollution control accounted for 7%, noise control accounted for 1%, and others accounted for 1%.

Energy and Environmental Investments

Items (100 million TWD)		2021	2022	2023
Capital Expenditure	- Energy and Environmental Investments	28.9	39.1	80.4
	- Government Charges and Fees	2.5	2.2	1.9
Recurrent Expenses	- R&D	1.1	2.2	2.4
	- Depreciation	13.1	12.5	11.5
	- Operation and Maintenance	31.2	32.6	54.5

Environmental Appeal

If there is any concern about an environmental pollution incident suspected to be connected to CSC, a complaint can be filed with the company through the available grievance channels by calling the environmental complaint hotline (0800-746-008) during normal working hours or the following number (07-802-1111 Ext: 2110) during non-working hours (i.e., Saturdays, Sundays, and public holidays). CSC will report and process the complaint according to its administrative system after learning about the complaint. At the same time, the unit involved in the complaint will also be asked to conduct inspections and investigations into the pollution incident and report their findings to managers at the relevant units and all divisions in accordance with the “Administrative Rules for Environmental, Safety and Health Communication, Participation, and Consultation Management.” If the pollution incident is found to have been caused by CSC, the complaint shall be processed in accordance with the “Administrative Rules for Environmental, Safety, and Health Incident Investigation, Non-compliance, and Corrective and Preventive Measures.”

Legal Compliance

CSC did not receive any fines for violation of environmental protection in 2023. CSC not only requires on-site units to reinforce operation control and maintenance management, but also steps up monitoring and surveillance by adding surveillance cameras in areas prone to environmental anomalies. On top of that, the Company also assigns dedicated personnel to conduct inspections on equipment at its plants from time to time and implements “self-management and control” at on-site units in a bid to reduce the number of violation notices received by the Company.

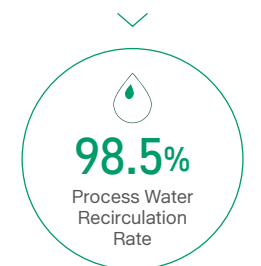
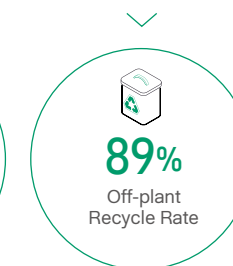
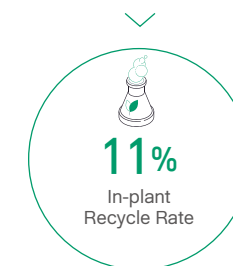
Year	2021	2022	2023
- Target	≦ 5 counts/year		
- Pollution	Air pollution	-	-
- Issuer	KSEPB	-	-
- Counts / Fine (TWD)	¹ Note /1.35 million	0/0	0/0

Note: On September 4, 2021, a secondary baghouse of steelmaking process was out of order, which resulted in the dust emission during hot metal pouring could not be collected.

3.2 Green Process



Iron Ore	1570.14	Kg
LS Oil	0.0173	GJ
Steel Scrap	116.77	Kg
NG	1.4371	GJ
Coal	680.40	Kg
Purchased Electricity	1.1859	GJ
Flux	302.87	Kg
Makeup Water (New Water & Reclaimed Water)	39,118,270	m³
Ferroalloy	14.65	Kg
Refractory	10.68	Kg



+ Liquid Sulfur	0.65	Kg
+ Water Discharge	14,527,475	m³
+ Iron Oxide Powder	2.35	Kg
+ GHG	2,326	tonnes
+ Coal Tar	18.94	Kg
+ Light Oil	6.49	Kg
+ By-products	572.93	Kg
+ Air Pollutants		
SOx	0.536	Kg
Par.	0.229	Kg
NOx	0.671	Kg
VOCs	0.039	Kg

Note : Water consumption per unit CS=(Makeup water-The equal volume of water of steam sold)/Volume of CS

Material Topic

3.2.1 Raw Materials Management



- 2023 Highlights

- In 2023, a total of four new material sources, including coal, iron, and flux, were developed. Additionally, a total of two brands from previously developed Australian metallurgical coal and Indonesian semi-soft coking coal have been concluded as long-term contracts in 2023.
- A total of 906,757 tonnes of scrap (including past inventory) were recycled, with 100% being reused in the existing steelmaking process.

- Target	Short-term targets (2024)	Mid-term targets (2025-2029)	Long-term targets(2030)
	→ The number of suppliers accepting the Supplier Code of Conduct ≥ 2,550	→ The number of suppliers accepting the Supplier Code of Conduct ≥ 3,700	→ The number of suppliers accepting the Supplier Code of Conduct ≥ 4,500

| Policy or Commitment

CSC is the largest upstream steel production plant in Taiwan. The main products are steel plates, steel bars, wire rods, electromagnetic steel coils, galvanized steel coils and others. The main raw materials used are coal, iron ore and flux; the majority of the raw materials are imported. In recent years, the raw materials market has changed from a buyer's market to a seller's market; therefore, the management of raw materials is one of the important determining factors for the steel plant to produce and make profit.

Besides, adjusting raw material stock according to domestic and international situations during weekly meetings on material purchase, transportation, and storage, CSC should also actively develop new materials and new sources. CSC also actively develops new sources for raw materials and recycles steel scrap in order to reduce costs, diversify sources, and avoid material shortages and monopoly by suppliers.

∞ Action Plan

| Development of new material sources

CSC actively seeks new supply sources that satisfy the CSC's quality requirement. By closely tracking and reviewing the progress to diversify the risk, 4 new sources for coal, iron ore and flux were developed in 2023.

CSC also requires that the suppliers should comply with the relevant ESG clauses in procurement contracts signed with coal and iron ore suppliers. Furthermore, the CSC Supplier Code of Conduct was established in accordance with international regulations and standards, including code of ethics, labor and human rights, health and safety, environmental standards, and management system. Special clauses are added to contracts where necessary, in hopes that suppliers can adopt the same code of conduct. As of the end of December 2023, the total number of suppliers accepting the "Supplier Code of Conduct" amounted to 3,548. In 2023, the proportion of newly added suppliers accepting the "Supplier Code of Conduct" reached 100%. Please refer to Ch 7.4 Supply Chain Management and Appendix 2 Sustainability Accounting Standards Board (SASB) Steel Industry Indicators for more information on purchasing requirements.

| Steel Scrap Recycling

Scraps recycled by CSC are divided into two categories, scraps and residual liquid steel, in which scraps include crude steel with non-conforming quality, the head and tail cut when crude steel is produced, coils with non-conforming quality, head and tail cut from plates, and scraps. Residual liquid steel includes basic oxygen furnace, ladle, and dispenser residual liquid steel. The strategy used to increase scrap use by the Steelmaking Department is thermal balance and mass balance in furnace, torpedo car low weight production model, and adding a cover.

In response to resources recycling, CSC has already added steel scrap into the raw material mixing process and steelmaking process. The usage amount of steel scrap will adjusted based on the quality requirements of the steel products, the blast furnace condition and the annual maintenance conditions. Steel scrap is mainly for self-production and self-use at CSC, and the excess will be sold to subsidiaries to achieve the principle of the circular economy.

| Implementation Results

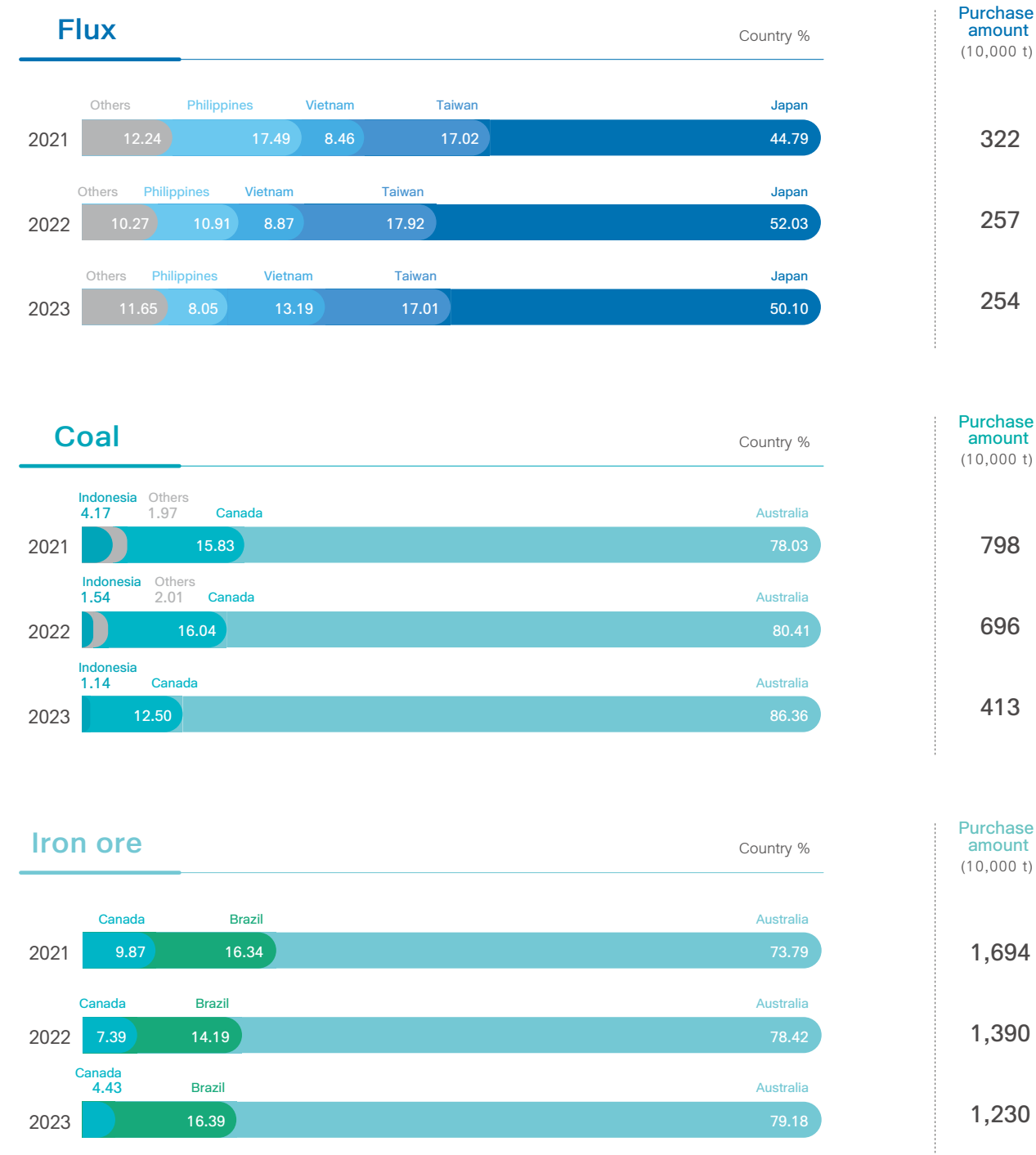
CSC is an integrated steel production plant. In the manufacturing process, more than 90% of raw materials are flux, coal and iron ore, and a small portion of steel scrap which accounted for 4.37% of materials used in 2023. The procurement of raw materials primarily focuses on non-renewable resources such as stone, coal, and iron ore. Any surplus waste steel produced internally is sold to Dragon Steel Corporation, thus adhering to the principles of a circular economy.

Category	Raw materials	2022 Usage		2023 Usage
		Unit: 10,000 tonnes		
Non-recyclable	Coal	604.9		528.4
	Iron Ore	1,333.4		1,219.3
	Flux	253.3		235.2
Recyclable	Steel Scrap	94.0		90.7

Note: Raw material management was listed as a significant topic since 2022, so the recording of usage data starts from the year 2022.

A total of 2.54 million tonnes (Mt) of the flux, 4.13 Mt of coal and 12.30 Mt of iron ore were purchased in 2023. Among them, about 83% of the flux was imported from abroad. Serpentine and limestone from Hualien area accounted for about 17%. Coal and iron also need to be purchased from abroad.

Use of Raw Material and Percentage of Purchasing by Country from 2021 to 2023



Material Topic

3.2.2 Energy



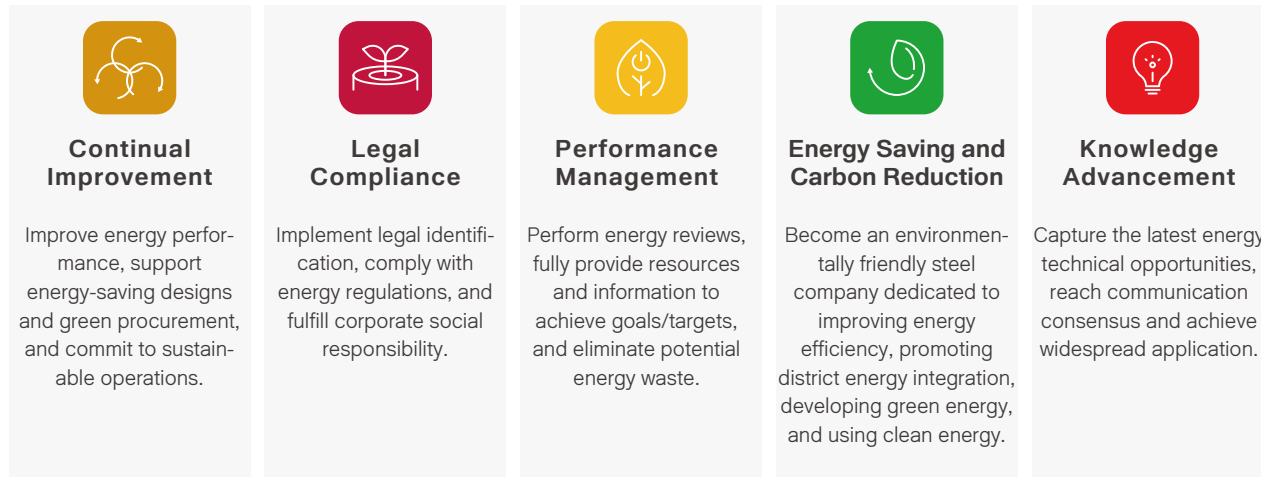
2023 Highlights

- According to regulatory requirements, energy users are required to save at least 1% of electricity on average between 2015 and 2024. CSC has currently saved up to 1.95% of electricity on average from 2015 to 2023, which is higher than required by law.
- In line with the government's green energy policy, CSC installed a total of 529 kW of solar power generation systems for self-use. In 2023, 58,554 kWh was generated for self-use in the plants, and CSC obtained 25 renewable energy certificates. Furthermore, CSC initiated renewable-energy direct supply and wheeling in 2023, resulted in 28,809,461 kWh of green energy and 28,793 renewable energy certificates.
- With the continuous promotion of District Energy Integration in Linhai Industrial Park, CSC sold 1.325 million tonnes of steam produced from district energy integration in 2023, which can reduce approximately 318,000 tonnes of CO₂e in greenhouse gas emissions.
- In 2023, CSC's energy target was set at 22.76 GJ/tCS (5,436 MCal/tCS). However, due to the actual production volume of crude steel being lower than the production volume planned in the operating budget, the actual energy consumption was 23.04 GJ/tCS (5,504 MCal/tCS), falling short of the target.
- The fourth Energy Saving Action Plan (2021 to 2025) has a target of saving 2.64 million GJ. From 2021 to 2023, CSC has saved up to 5.436 million GJ of energy, which accounted for 206% of the aforesaid target, thereby achieving its target for the year. The amount of energy saved was equivalent to a reduction of 542,700 tonnes of CO₂e in carbon emissions.

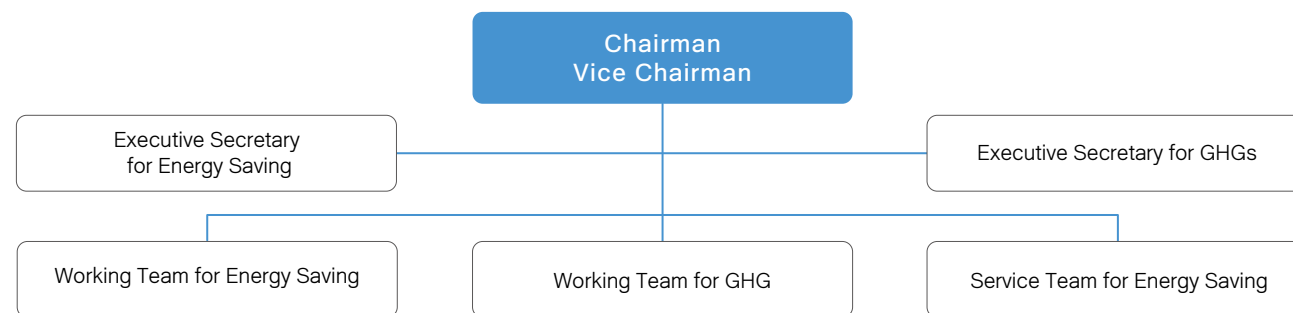
Policy or Commitment

CSC mainly implements energy management through the Energy Conservation Committee and control of the energy management system (ISO 50001) to achieve the goals of energy conservation, carbon reduction and continual improvement. The Committee was formed and chaired by VP of Production Division. The Committee has three teams be responsible for energy saving and emission reduction in CSC's plants. The Committee also regularly holds meetings to review the achievement of current targets, share information on energy conservation projects, communicate relevant important topics, bring up appeals or consultations, propose interim motions, and publicize the records of the meeting. The energy policies are approved by the Chairman of the Board and updated when necessary. The latest version of the Energy Policy is committed to continual improvement, compliance with regulations, performance management, energy conservation, carbon reduction, and knowledge advancement.

Energy Policy



The Energy Conservation Committee



In order to improve energy efficiency and achieve continuous improvement, CSC sets the energy intensity target (Mcal/tCS) according to the annual production plan and energy saving goals every year, as the energy performance indicator. The energy intensity target for 2024 is $\leq 5,475$ Mcal/tCS (22.92 GJ/tCS).

Energy Intensity Target

Item	Unit	2021	2022	2023	2024
- Energy Intensity Target	(Mcal/tCS)	$\leq 5,390$	$\leq 5,522$	$\leq 5,436^{\text{Note}}$	$\leq 5,475$
- Energy Intensity Target	(GJ/tCS)	≤ 22.57	≤ 23.12	≤ 22.76	≤ 22.92
- Actual Energy Intensity	(Mcal/tCS)	5,315	5,485	5,504	-
- Actual Energy Intensity	(GJ/tCS)	22.25	22.96	23.04	-
- Accomplishment		Yes	Yes	No ^{Note}	-

Note: The target of Energy Intensity is set based on production capacity and equipment maintenance that year. In 2023, CSC's energy target was set at 22.76 GJ/tCS (5,436 Mcal/tCS). However, due to the actual production volume of crude steel being lower than the production volume planned in the operating budget, the actual energy consumption was 23.04 GJ/tCS (5,504 Mcal/tCS), falling short of the target.

Action Plan

CSC received the certificate of ISO 50001 from BSI on December 1st 2011. CSC is the first steel company to implement ISO 50001 in Taiwan, and obtained ISO 50001:2018 certification in 2019. CSC continues to pass verifications by third party institutions each year, and achieves the purpose of energy conservation, carbon reduction, and continuous improvement goals through the control by management system and the implementation of the Energy Conservation Committee.

Five-year Energy Saving Action Plan and Targets

In order to achieve energy conservation and carbon reduction and respond to mandatory Greenhouse Gas (GHG) reductions in advance, CSC started the “Five-year Energy Saving Action Plan” in 2005, and has successively promoted three phases and every phase has reached the targets of the action plan. 908 energy-saving projects were completed in 2021-2023, contributing to 206% of the “Energy Saving Action Plan-Phase IV” target, which is equivalent to a reduction in carbon emissions of 542,000 tonnes CO₂e^{Note}. At the same time, CSC adheres to the government's energy saving targets and regulations “The average annual power-saving rate of energy user shall reach 1% or more from 2015 to 2024” . Currently, CSC has achieved a power-saving rate of 1.95% from 2015 to 2023.

Note: The calculation coefficients are partially quoted from the CO₂emission factors of the GHG inventory in the previous year, and the rest are calculated based on CSC's energy equipment efficiency coefficient in 2014 x previous year's electricity emission coefficient from the Bureau of Energy.

Phase	I	II	III	IV
	Energy Saving	Energy Saving	Energy Saving	Energy Saving
	Action Plan	Action Plan	Action Plan ^{Note}	Action Plan
- Schedule	2005 - 2010	2011 - 2015	2016 - 2020	2021 - 2025
- Energy-saving Target (GJ)	8,666,676	9,043,488	3,784,624	2,637,684
- Number of Projects	372	658	662	908
- Performances (GJ)	8,930,444	12,623,202	6,253,473	5,435,942
- Achieving Rate	103%	139%	165%	206%

Note: Due to the diminishing energy-saving potential, the targets of Phase III and IV Energy Saving Action Plans are less than previous years. The number of projects, energy-saving performances and achieving rate are calculated until 2023.

On-plant Energy Saving

Set up Utilities Dispatching Center (UDC)

CSC established the UDC since factory completed and put into production. The UDC centrally monitors all energy sources, such as gas, electricity, steam, O₂, N₂, Ar, H₂, plant air, compressed air, etc., and also production plans. Then with the assistant of the integrated-Energy Management System (iEMS), UDC can execute dynamic dispatching in order to keep energy balancing in CSC and to minimize by-product gas emissions. UDC also manages the electricity load in CSC to avoid violating the contract with Taiwan Power Corp. (Taipower), and actively participates in the Taipower Demand Bidding Program. Furthermore, it compares the power generation cost of different fuels with Taipower tariff to adjust the self-generation amount to minimize the usage of high-priced fuels, such as low-sulfur oil and natural gas.

• Best Available Techniques (BAT)

In order to improve energy-saving performance, CSC has intensively contacted with steel-making companies in Japan, South Korea and China in recent years. We had collected BAT for energy-saving from other companies and completed the “Best Available Technical Manual for Energy Saving and Emission Reduction of Steel Plants” in July 2011.

• Guidelines of Energy Conservation

Energy-saving begins with design. CSC adds the “Guidelines of Energy Conservation” section to CSC Design Standard and indicates energy efficiency requirements of air conditioning, lighting, shifting mechanisms, water supply systems, etc. New plants should follow the design standard to choose equipment that is high efficiency, energy saving with long-term benefits. To promote energy conservation design standards, energy conservation examples are periodically shared during energy and environment meetings of the Energy Conservation Committee and CSC Group, in hopes of further improving energy conservation results.

+ For more details [Key Achievements in External Energy Conservation] https://www.csc.com.tw/csc_e/esg/env/env2.html

+ For more details [District Energy Integration] please refer to Ch 3.3.3

| Utilization of Renewable Energy

Since 2011, CSC has started to install solar power generation systems adhering to governmental policies. By the end of 2023, the total installed capacity has reached 62.0 MW (including self-installed and locations provided). CSC has installed a total of 529 kW of its own solar power generation systems, generated a total of 58,554 kWh of self-owned green electricity in 2023, and obtained 25 renewable energy certificates. Furthermore, CSC initiated renewable-energy direct supply and wheeling in 2023, resulted in 28.81 GWh of green energy and 28,793 renewable energy certificates.

| Implementation Results

- Energy Consumption

The coking coal in the steelmaking process transforms into by-product gases which can be used as fuel in steelmaking and in cogeneration power plants to generate steam and power. Oil and natural gas can also be used in power plants while the excess power demand is met by purchased electricity from Taipower.

Category ⁽ⁱ⁾	Item	2021 Usage	2022 Usage	2023 Usage
		(GJ)	(GJ) ⁽ⁱⁱ⁾	(GJ)
Primary Energy(A)	Coal ⁽ⁱⁱⁱ⁾	219,340,668	191,854,995	172,104,025
	NG	5,107,395	9,556,139	11,159,359
	Diesel Oil	111,916	104,779	94,302
	Gasoline	5,368	4,997	4,776
	Low-sulfur Oil	79,477	373,631	134,060
	Other	38,954	39,822	27,193
Secondary Energy (B)	Purchased Electricity (Excluding renewable energy)	9,600,438	9,991,953	9,104,411
Self-Produced secondary energy for sell (C)	Steam for sell	4,721,717	4,400,078	3,939,561
	Coke breeze for sell	6,193,093	6,551,030	3,064,259
	Coke Oven Gas (COG) for sell	10,985	-	5,122
	Light Oil	2,616,393	2,315,266	2,239,344
	Tar	6,151,724	5,882,005	5,361,089
Non-renewable Energy	(A)+(B)-(C)	214,590,304	192,777,937	178,018,751
Renewable Energy	Solar Energy	81	89	103,944
				(purchased 103,733 + self-generated 211)

Note I: Primary Energy consumption and Secondary Energy consumption were verified by DNV in CSC’ s annual GHG inventory. Energy consumption for each type of energy source each year is determined by calculating the product of annual consumption and average heating value in CSC’ s annual test each year.

Note II: Consumptions of natural gas, low-sulfur oil, and purchased electricity were higher in 2023 and 2022 than in 2021 due chiefly to the cessation of coal combustion in boilers at CSC’s power houses in August 2021, which eventually led to higher consumption of purchased electricity within the company and increased use of natural gas and low-sulfur oil at the company’s power houses.

Note III: Coal in 2021 includes metallurgical coal and steam coal; coal in 2022 and 2023 only includes metallurgical coal.

| Performance of Energy Saving and Carbon Reduction

In 2023, CSC completed a total of 358 energy saving projects, which saved a total of 3.264 million GJ, reduced carbon emissions by 368,000 tonnes CO₂e, and saved energy cost by 1810 million TWD, main projects include Power plant "revamping the turbine blowers" and so on.

Energy Saving Category	2021		2022		2023	
	Items	Energy Saved (GJ)	Items	Energy Saved (GJ)	Items	Energy Saved (GJ)
Electricity	106	223,820	169	486,750	151	734,192
Fuel Gas	8	172,350	17	664,063	25	258,237
Industrial Gas	7	47,292	2	3,865	7	19,508
Steam	5	108,472	6	107,150	11	250,005
Water Systems	170	13,190	25	2,162	139	24,833
Others	23	285,941	15	52,853	25	1,976,739
Total	319	851,065	234	1,316,843	358	3,263,514

Material Topic

3.2.3 Air Pollutants



2023 Highlights

- Achieved 2023 emission intensity targets.

Emission Intensity (kg/tCS)	Target value	Actual Value	Accomplishment
Sulfur Oxides (SOx)	0.530	0.536	No
Nitrogen Oxides (NOx)	0.690	0.671	Yes
Particulates (Par.)	0.370	0.229	Yes

The sulfur oxide emissions of the entire plant in 2023 is lower than 2022. However, the crude steel production in 2023 fell by 12.8% compared to the original estimated capacity, thus falling short of the target.

- In line with Kaohsiung City Government's policy for fall and winter, CSC proactively scheduled load curtailment for major manufacturing processes and annual maintenance of production equipment from September 2023 to March 2024, which can reduce 56.2 tonnes of Particulates (Par.), 105.51 tonnes of Sulfur Oxides (SOx), 165.53 tonnes of Nitrogen Oxides (NOx), and 5.25 tonnes of Volatile Organic Compounds (VOCs).
- In 2023, the actual reduction in the sale of particulate pollutants was 17.079 tonnes, providing Taipower with emission offset demand for new investment projects in the Kaohsiung-Pingtung air pollution control zone.
- Starting from 2023, CSC proactively participated in the Kaohsiung City Environmental Protection Bureau's enterprise adoption program for air quality purification zones, selecting the nearby Fuxing Elementary School to adopt a green space of 390 square meters on the campus.

Policy or Commitment



Air Pollution Management

- Strengthen to manage the air pollution control regulations, meet the requirements of various laws and regulations, and reduce the occurrence of air pollution anomalies.
- Cooperate with the government's air quality improvement policy, plan the response measures for air quality during fall and winter as well as the medium and long-term air pollution improvement plan.

In accordance with the ISO 14001 environmental management system, CSC aims to promote air pollution reduction, introduce the most advanced and feasible control technology, carry out continuous annual review, promote reduction programs, and reduce air pollution emissions and air pollution fees in order to achieve lower pollution, green energy and sustainability.

In terms of air pollution regulations management, the job is to ensure the normal operation of environmental monitoring equipment (CEMS, CCTV, AAQMS), complete the testing and reporting of particulates (Par.), sulfur oxides (SOx), nitrogen oxides (NOx), volatile organic compounds (VOCs), dioxins (DXNs), etc., and apply for the permit of the establishment, changes, operation, and extension of pollution source in accordance with the law. Continue to strengthen in-plant inspections and review of pollution prevention efforts, and coordinate with the Executive Yuan's "Air Pollution Prevention Action Plan" and the MOENV's Air Pollution Control Act to plan improvement measures.

Action Plan

Air Pollution Improvement Plan

In order to actively improve air quality, CSC expanded its investment of 44.709 billion TWD and planned an air pollution improvement plan for 2020-2026. In addition, CSC cooperates with the "Air Pollution Control Action Plan" promoted by the Executive Yuan, and participates in the quarterly state business air pollution control meeting.

		Projected Reduction Results (Unit: tonnes/year)			
Year of Completion	Improvement Project	Par.	SOx	NOx	VOCs
2020	#2 slab reheating furnace revamping for No.1 hot strip mill	-	3.6	11.5	-
	#2 dedusting system revamping for BOF plant I	100	-	-	-
2021	Flue-gas desulfurization equipment to #1 sinter	5.3	800	-	-
	1st phase of enclosed coal storage construction	14.9	-	-	-
2024	2nd phase of enclosed coal storage construction	16.7	-	-	-
2025	1st phase of coke oven and coke dry quenching construction	20.5	-	-	36.5
2026	2nd phase of coke oven and coke dry quenching construction	20.5	-	-	36.5
	Overhaul of Power Plant I (BTG-9/10)	-	154.0	56.0	-
Total		177.9	957.6	67.5	73.0

Actively cooperate with emission reduction policies

CSC not only obeys the regulatory emission standard for all processes, but also sets emission target (emission intensity) based on air pollution control plans for next year and includes it in the environmental management system for tracking and inspection. CSC has complied with the policy of the Kaohsiung City Government for emission reduction in fall and winter, arranged the production reduction to reduce emission, and reduced Par. emission by 56.2 tonnes, SOx emission by 105.51 tonnes, NOx emission by 165.53 tonnes, and VOCs by 5.25 tonnes from September 2023 to March 2024.

Countermeasures for Various Regulated Items

Regulated items	Countermeasures
- SOx	CSC has finished a number of air pollution improvement projects, such as FGD of #6~8 boiler and #1~4 sinter, #1 reheating furnace revamping for plate mill, and using low-sulfur content raw materials (anthracite and environmental coal etc.) to reduce SOx emission dramatically.
- NOx	CSC has finished a number of air pollution improvement projects, such as De-NOx equipment of #6~8 boiler and #1~4 sinter, and low-NOx burners to reduce NOx emission dramatically.
- Par.	- CSC has set up air pollution control equipment, such as bag filters and electrostatic precipitators, and budgeting annually to maintain the efficiency of control equipment. In order to reduce fugitive particulates emissions of raw material yards, a 20-meter high dust screen and automatic sprinkler equipment have been installed around the raw material yards and a chemical stabilizer spray is used. - CSC has completed the construction of an automatic enclosed building at its sinter plant, the revamp of #2 Dust Collector at BOF plant I, the installation of desulfurization equipment at #1 sinter, and 1st phase construction of a new enclosed building at the coking coal storage yard, which can substantially reduce particulates emissions.
- Dioxin	Activated carbon injection equipment was added to the rotary hearth furnace and by-product treatment plants, while dual function De-NOx and De-DXNS selective catalyst was added to the sinter plants to reduce Dioxin emissions.
- PM _{2.5}	Bag filters, electrostatic precipitators, wet scrubbers, and dust screens, and water and chemical stabilizers spraying equipment were installed to reduce PM_{2.5} emissions. De-SOx, De-NOx equipment are planned for sinter and power plants, and low-VOCs coatings are used in rolling mill department III to reduce PM_{2.5} precursor (SOx, NOx, VOCs) emissions.
- Ozone Depleting Substances	To control ozone depleting substances, CSC integrates air condition improves equipment maintenance, develops high efficiency models, uses eco-friendly coolants, and reuses recycled coolants.

| Environmental Monitoring and Testing

CSC Environmental Monitoring Center oversees 6 air quality monitoring stations and has 2 digital boards that display real-time air quality data for citizens. For stationary emission sources, 32 continuous emission monitoring systems (CEMS) serve to monitor traditional pollutants emission intensity and quantity, and 31 of them are connected to KSEPB for government supervision. The current average monthly effective monitoring rate of each instrument can reach 95% and above, which complies with regulatory standards.

If an abnormality is found, you can directly reach CSC by phone (business hours: +886-7-8021111 # 6572; outside business hours or during holiday: +886-7-8021111 #2110.)

| Implementation Results

Through various air pollution improvement measures, CSC uses continuous automatic monitoring systems (CEMS) to report air pollution emissions every quarter in accordance with the relevant provisions of the Air Pollution Control Act.

Emissions	2021	2022	2023	EIA Commitment Limit
- SOx (tonnes/year)	5,579	4,257	4,163	34.9 tonnes/day
- NOx (tonnes/year)	6,593	5,603	5,209	34.6 tonnes/day
- Par. (tonnes/year)	2,164	1,921	1,776	19.5 tonnes/day
- VOCs (tonnes/year)	409	356	306	-
- Dioxin (g-TEQ/year)	2.12	3.50	3.11	-
- Ozone Depletion Potential Values ^(I)	- Total (tonnes, CFC-11 equivalent) 6.03 X 10 ⁻²	8.07 X 10 ⁻²	7.03 X 10 ⁻²	-

Note I: The refrigerants used by Sinosteel, which are subject to the Montreal Protocol, include R-124 (2-chloro-1,1,1,2-tetrafluoroethane) and R-22 (chlorodifluoromethane) The Ozone Depletion Potential (ODP) has been calculated based on this principle since 2015. The coefficients are referenced from the Annex of the Montreal Protocol

Note II: Figures for SOx, NOx, par., and VOCs include the head office and flux processing plant.

| Adoption of Air Quality Purification Zone

The Environmental Protection Bureau of Kaohsiung City Government implemented the Air Quality Purification Zone Adoption Project to improve the issue with dust from exposed areas, and improve environment and air quality. To create the trend of greening and making the environment more aesthetic for sustainability, CSC has actively participated in the Air Quality Purification Zone corporate adoption activity of the Environmental Protection Bureau of Kaohsiung City Government since 2023, and adopted 390 square meters of campus green space in the nearby Fuxing Elementary School, creating a better campus environment for students by effectively improving the air quality on campus.

+ For more details [Air Pollution] https://www.csc.com.tw/csc_e/esg/env/env5.html

Material Topic

3.2.4 Water



2023 Highlights

- Participated in the CDP water project and obtained the management level (B).
- The recycling rate of processed water reached 98.5%.
- CSC introduced the urban sewage reclaimed water project which recovered 22,339 million liters of reclaimed water from Fengshan Creek and Linhai Industrial Park in 2023.
- Compared to the introduction of reclaimed water, the intensity of new water is reduced by 56.03%.
- Effluent monitoring data are superior to effluent standards.

Policy or Commitment

CSC is located in Kaohsiung City. If CSC only relies on a single source of tap water, a cut or restriction in water supply will cause huge losses to the company and have a severe impact on production and even its equipment. Hence, CSC began keeping a beady eye on water issues many years ago. The company commissioned the Tainan Hydraulics Laboratory at NCKU to study its water use planning and strategy in 2011 and confirmed the water use strategy of diversifying its water resources in 2012. In an ongoing effort to move on from its reliance on a single source of tap water, CSC is currently working hard towards the development of new water resources aimed at mitigating the risk of water cuts or water rationing. Considering CSC's advantage arising from the fact that it is located in two areas under the urban sewage treatment and reclamation projects initiated by the Water Resources Agency, reclaimed water derived from urban sewage has been selected as the second source of water for the company's steel mills. CSC established a Utilities Department under the Production Division to effectively carry out water resource management. The department is responsible for handling water resource related affairs. Risk assessment of water resources and the formulation and implementation of strategies to respond to such risks are mainly supervised by the vice president of the production department, and are included in the company's risk management procedures and reported to the Board of Directors every six months.

Management Approach

While proactively developing a diverse range of water sources, CSC has not only built its own industrial-scale reverse osmosis (RO) water purification plant to recycle industrial wastewater produced at its plants, but also become the first in Taiwan to use reclaimed water in large quantities in 2018 in line with the government's Fengshan Creek Reclaimed Water Policy as the Company uses 40.5 million liters of reclaimed water every day, accounting 33% of its overall water consumption. On December 9, 2021, CSC began receiving 20 million liters of reclaimed water each day from Linhai Reclaimed Water Plant, thus reaching a new milestone in the company's development of water resources as reclaimed water now constitutes up to 50% of its overall water consumption. CSC's water supply diversification policy can

not only boost water supply stability at the company, but also increases the water company's flexibility to supply water for household use. On top of that, CSC has also planned ahead with the seawater desalination solution as it is now studying the feasibility of low-cost desalinated seawater as a water source on an ongoing basis.

Year		2021	2022	2023	2024
Water Intensity ^(I) (t/tCS)	Target value	4.60	4.60	4.90	4.90
	Actual Value	4.32	4.86 ^(III)	5.04 ^(IV)	-
New Water Intensity(t/tCS)	Target value	3.50	2.50	2.50	2.10
	Actual Value	2.65 ^(II)	2.31	2.16	-

Note I: Calculation of water intensity = (new water + reclaimed water-sold steam) ÷ annual output of crude steel. Calculation of new water intensity = (new water-sold steam) ÷ annual output of crude steel.

Note II: In 2020, the efficiency of waste water purifiers in the plants decreased, and the urban reclaimed water cannot stably provide water due to the impact of oil pollution upstream, and to respond to the COVID-19, the #2 blast furnace renovation project was implemented earlier starting from July to December 2020. The water intensity was thus increased.

Note III: In October 2021, the reclaimed water from Linhai Industrial Park was introduced.

Note IV: Due to poor market conditions from the second half of 2022 to 2023, adjustments to production volume led to the increase of water consumption per unit crude steel.

Diverse water sources - urban sewage recycling

Fengshan Creek Reclaimed Water Demonstration Project

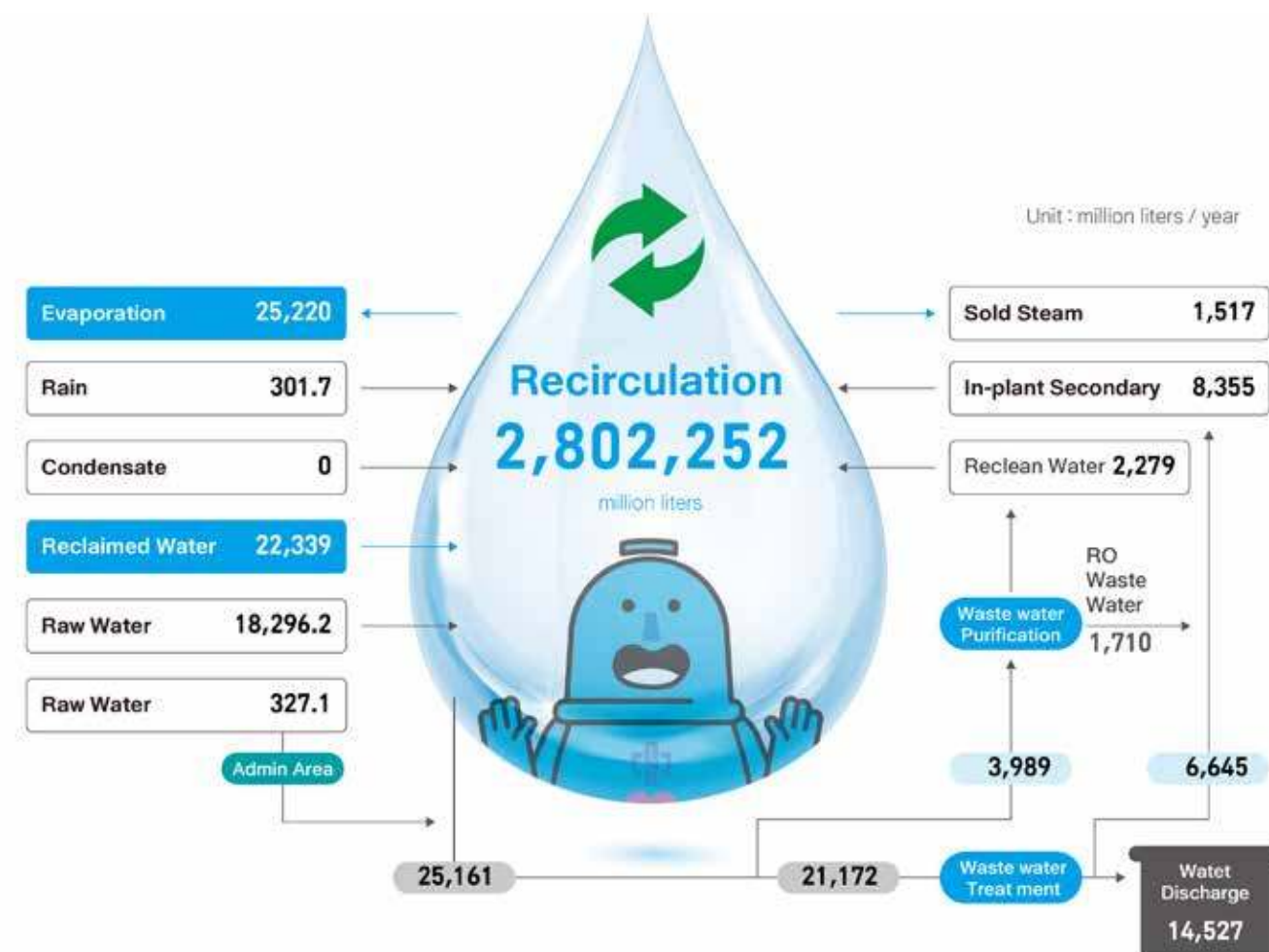
Since August 2018, CSC has been importing approximately 22 million liters of recycled water from the Fengshan River recycling plant daily. With the completion of the capacity expansion of the recycling plant in September 2019, CSC now imports approximately 40.5 million liters of recycled water each day, significantly reducing water usage impact. In 2023, CSC used approximately 15,005 million liters of Fengshan River recycled water. From 2018 to 2023, a total of approximately 68,675 million liters of Fengshan River recycled water were used.

Linhai Reclaimed Water Demonstration Project

Linhai Reclaimed Water Plant has successfully been installed and tested by Kaohsiung City Water Resources Bureau and the Coastal Water Service Concession Company from September 28 to October 29, 2021. The Water Plant also underwent an operation trial from November 1 to December 8, 2021 and officially began supplying reclaimed water on December 9, 2021. In 2023, CSC used approximately 7,334 hundred million liters of reclaimed water. From 2021 to 2023, a total of approximately 16,150 million liters of reclaimed water were used.

The main source of reclaimed water is Kaohsiung City's domestic sewage, which is deaminated with nitrogen, and treated with UF and RO. In 2023, CSC collected approximately 15,005 million liters of reclaimed water from Fengshan Creek and and 7,334 million liters of reclaimed water from Linhai Industrial Park. In 2023, the average daily new water consumption of CSC has decreased by about 51.2 million liters, and the new water consumption per unit of steel slabs is 2.16 tonnes/tCS, which is dramatically lower than the last year value of 2.31 tonnes/tCS.

Note : The reclaimed water and tap water mentioned above are both fresh water.



+ For more details [Water Conservation Projects] https://www.csc.com.tw/csc_e/esg/env/env3.html

Year	2021	2022	2023
Unit : Million liters			
- Production Process Water Recirculation	2,849,595	2,821,318	2,802,252
- Processing Water Recycling Rate ^(I)	98.4%	98.5%	98.5%
- New Water Withdrawal	27,842	21,562	18,623
- Urban Reclaimed Water ^(II) Usage	16,205	21,514	22,339
- Water Discharge	14,202	16,234	14,527
- Water Consumption ^(III)	29,845	26,842	26,435

Note I: Processing water recycling rate = production process water recirculation ÷ total water use in process x100%, total water use in process do not include admin area raw water.

Total water use in process = production process water recirculation + (raw water (new water) use + urban reclaimed water usage - admin area raw water).

Note II: CSC has 4 original water pools with a total water storage capacity of 177 million liters, which has been maintained at a high water level throughout the year. The Fengshan Creek Reclaimed Water was implemented in 2018, and the supply of reclaimed water reached 41 million liters per day. During the Taiwan Water Corporation's water outage, the flexibility of the water supply in the plant can be improved to reduce the risk of water limitation/stoppage.

Note III: Water Consumption=Total Water Withdrawal-Water Discharge, the Total Water Withdrawal=New Water Withdrawal+ Urban Reclaimed WaterUsage.

Water Pollution Prevention

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

Aside from installing a wastewater treatment facility with a total capacity of 147 million liters per day, CSC has also built a runoff wastewater retention pond with a total capacity of 42 million liters for runoff wastewater from the raw material storage yard and a treatment plant capable of processing 36 million liters per day to ensure the quality of treated wastewater meets the effluent standards before discharging them to the sea via Yanshuigang River, and thus effectively minimizing wastewater pollution.

In 2023, the total discharge was 14,527 million liters, the average Chemical Oxygen Demand (COD) and Suspended Solids (SS) were 33.2 mg/L and 6.3 mg/L respectively, which are superior to statutory effluent standards. MOENV announced "Industrial Effluent Standard Draft" in June 2013, which includes the coking industry in industries with high ammonia nitrogen. In response to the new requirements of this regulation, the plan is to start from two aspects: upstream process reduction and downstream wastewater treatment. The reconstruction of the COD removal basin and two nitrification basins were completed in 2015 and 2016, and the reconstruction of the denitrification basin was completed in February 2017. The improvement project completed the functional test in September 2017 and the ammonia concentration in the discharge water was 9.1 mg/L. In 2023, the average concentration of ammonia nitrogen in the discharge water is 2.8 mg/L, which is superior to the statutory standard (ammonia nitrogen <20 mg/L).

Year	2021	2022	2023	Statutory Standards
- COD mg/L	44.2	44.2	33.2	<100 mg/L
- SS mg/L	5.3	7.3	6.3	<30 mg/L
- Ammonia mg/L	6.8	5.5	2.8	<20 mg/L

3.3 Circular Economy

3.3.1 Waste and Byproduct Management

CSC's waste management goals are divided into three stages: short, medium and long-term, aiming to recycle 90%, 92% and 94% or more of waste, respectively. The percentage of waste recycled and reused reached 94.9% in 2023. In the future, CSC will continue to pay attention to the government's circular economy and environmental policies, as well as amendments to waste-related regulations, and conduct timely reviews and adjust targets to meet regulatory requirements.

CSC conducts internal audits each year in accordance with the Waste Disposal Act and related regulations promulgated by MOENV. The qualifications of cleaning companies are assessed before commissioning waste disposal to them. After signing a contract with a cleaning company, the joint industrial waste clearance and disposal report is submitted in triplicate to MOENV's Industrial Waste Reporting and Management System. In order to recycle and reuse all available resources, CSC legally applies for the relevant permits to receive waste from companies under CSC Group for recycling and reuse in accordance with the Waste Disposal Act and other recycling-related regulations. With an eye on ensuring the quality of sources of waste, supporting subsidiary companies in waste management and providing professional guidance, CSC inspects and investigates the sources of industrial waste at companies under CSC Group for the purpose of enhancing its management system.

∞ Action Plan

Resource Recycling and Reuse

Aside from developing and producing low-carbon steel, CSC has also engaged in a substantial amount of research on whether the raw materials used in manufacturing processes or waste generated from manufacturing processes can be recycled and reused effectively. In recent years, the cases of CSC in resource recycling are described below:

- Recovery of waste pickling acid

Cold rolled steel coils are one of CSC's main products. The various oxide layers, rust, and other impurities on the surfaces of hot rolled steel coils need to be completely removed by an acid pickling process prior to the cold rolling process. However, the pickling liquid contains acidic rinse water, waste acid, dissolved metal salts of iron, iron chloride, and various alloy elements, which may potentially lead to environmental concerns due to improper handling. In order to adhere to the government's circular economy policy and to comply with national environmental regulations, CSC has established an acid regeneration plant (ARP) to purify and recycle the waste acid following the examples of advanced countries, such as Japan, European countries, and the United States. The products from the ARP are mainly regenerated hydrochloric acid (HCl) and iron oxide powder (Fe₂O₃). The regenerated hydrochloric acid is reintroduced into the pickling process, while iron oxide powder serves as an industrial raw material for soft and hard ferrite used in various electronic and electrical applications, including inductor

components, transformers, motors, and so on. This successful example of resource reutilization can be considered as a good model of circular economy.

- Recycling of sludge

More than 98% of industrial water used in CSC is re-cooled, filtered, dispersed, and coagulated to produce "sludge." Sludge has great economic value because it contains various types of raw materials such as rust, iron ore, coke, and fluxes. Therefore, CSC recycles and reuses sludge upon dehydration to reduce the use of natural minerals, as well as sells the remaining iron-containing sludge to cement plants after processing and mixing them, thereby reducing the need for cement plants to purchase import iron slags from abroad. In 2023, CSC sold 44,000 tonnes of sludge-coal fly ash mixture in total.

- Recycling of used refractory materials

In order to protect high-temperature equipment in steel smelting and rolling processes (such as blast furnaces, basic oxygen furnaces, hot stoves, and reheating furnaces), CSC regularly replaces refractory materials in such equipment during the production process. Since refractory materials are mainly composed of aluminum, silicon, carbon, and magnesium, and meet the requirements of additional materials to be added to the smelting process, CSC sorts and processes used refractory materials based on their characteristics before recycling them into excipients for steelmaking and ironmaking at its plants. Used refractory materials are also recycled by suppliers or used as raw materials for cement outside CSC plants. In 2023, CSC recycled about 88,000 tonnes of used refractory materials, of which 79% were recycled within its plants and 21% were used outside its plants, thereby minimizing the impact of these materials on the environment.

By-product Recycling Management

By-products from CSC productions include coal tar, light oil, BF slag, desulfurization slag, sludge-coal fly ash mixture, mill scale, liquid sulfur, and burnt lime. On the basis of the off-site recycling network built in the past, except for Granulated BF slag which is sold to domestic businesses, all others are recycled and processed by affiliate companies and then provided to chemical, construction, civil engineering, electrical, commodity, and other industries. The resources can be effectively reused, and the industrial ecosystem both inside and outside of the Kaohsiung Linhai Industrial Park is expanded. While improving the recycling rate, it also reduces the environmental burden caused by long-distance transport, thereby achieving carbon reduction.

Implementation Results

- CSC has demonstrated outstanding performance in waste reduction as well as in-plant and off-site recycling. After years of hard work and close cooperation with the academia and other industries, CSC has reached the "zero-solidification landfill" milestone for the first time in July 2001.
- With the implementation of the aforesaid management policies, CSC disposed of 517,164.16 tonnes of waste generated in total and produced 66.6 kg of waste per metric ton of crude steel in 2023. The resource utilization rate of waste reached 94.9%, with 95.5% of waste being internally reused,

reducing the burden on the environment. The company entrusted external vendors to carry out waste resource utilization operations. The recycled products produced by these vendors were also used in CSC's processes. The main source of hazardous industrial waste was chromium-containing sludges produced from the steel rolling process. Chromium-containing sludge were recycled and reused in manufacturing processes at CSC plants. Furthermore, legally registered disposal companies in Taiwan are commissioned to use lead-containing sludge to produce lead ingots and lead alloy, which are sold to domestic manufacturers of lead products, properly reusing recycled resources.

- In 2023, CSC produced 4.449 million tonnes of by-products from manufacturing processes (wet basis).

Statistics of CSC waste

Unit: tonnes				
Item	Type of Waste	2021	2022	2023
General Industrial Waste	Waste refractory	45,118.68	70,460.53	88,073.39
	Sludge	235,566.42	236,562.38	192,726.15
	Fly ash	264,037.83	227,849.00	215,988.05
	Other	23,157.85	24,876.47	20,343.07
Total of General Industrial Waste		567,880.8	559,748.4	517,130.7
Hazardous Industrial Waste	Lead dross	0	14.69	0
	Chromic sludge	46.30	43.65	33.5
Total of Hazardous Industrial Waste		46.30	58.3	33.5
Total Waste		567,927.08	559,806.72	517,164.16

Note : Lead dross is the lead bath slag in the steel strip surface treatment process, which is only produced during equipment maintenance about every 3 years.

Statistics of CSC recycled waste and byproduct

Unit: tonnes					
Item		2021	2022	2023	
Recycled General Industrial Waste	Onsite	462,602.13	519,439.41	468,358.86	
	Offsite	76,341.82	10,892.89	22,248.01	
Recycled Hazardous Industrial Waste	Onsite	46.30	43.65	33.5	
	Offsite	0	14.69	0	
Total Recycled Industrial Waste (A)		538,990.25	530,390.64	490,640.37	
Total Recycled Byproduct (B)		5,146,700.58	4,847,326.42	4,953,363.05	
Total Recycled material (A)+(B)		5,685,690.83	5,377,717.06	5,444,003.42	
Waste diversion rate from landfill		94.9%	94.7%	94.9%	
Percentage of Waste Recycled Onsite		85.8%	97.9%	95.5%	
Percentage of Waste Recycled Offsite		14.2%	2.1%	4.5%	

Note: Waste diversion rate from landfill = Recycled Waste / Total Waste

Statistics of waste directly disposed by CSC

Unit: tonnes		2021		2022		2023	
General Industrial Waste		Onsite	Offsite	Onsite	Offsite	Onsite	Offsite
Incineration (with energy recovery)		27,711.1	1,225.7	28,310.4	1,105.7	26,221.9	301.9
Total of waste directly disposed		28,936.8		29,416.1		26,523.8	

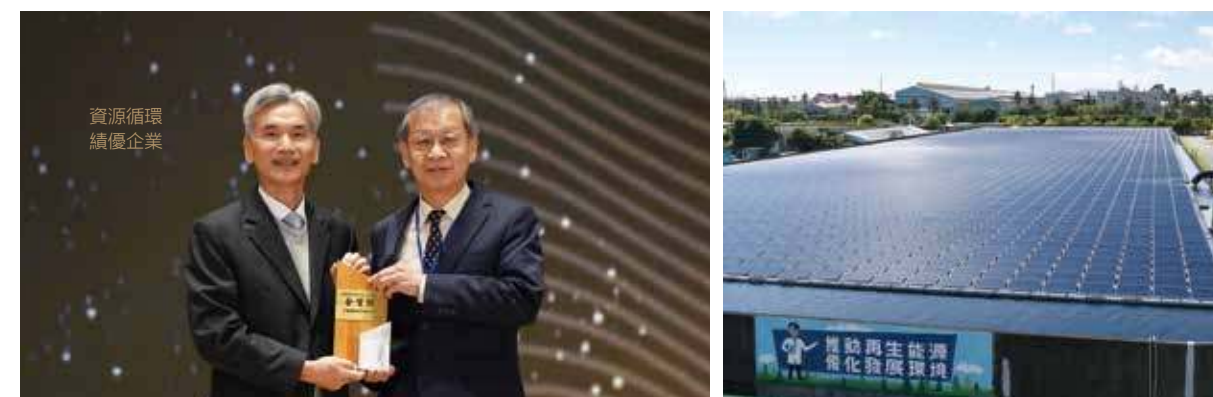
Note: The direct disposal of general industrial waste is all incineration (with energy recovery), incineration (without energy recovery), landfill and other disposal operations.

+ For more details [Circular Economy] https://www.csc.com.tw/csc_e/esg/env/env7.html



Highlight case

CSC won the Gold Award in the Ministry of Environment "The Best Company of Resources Recycle"

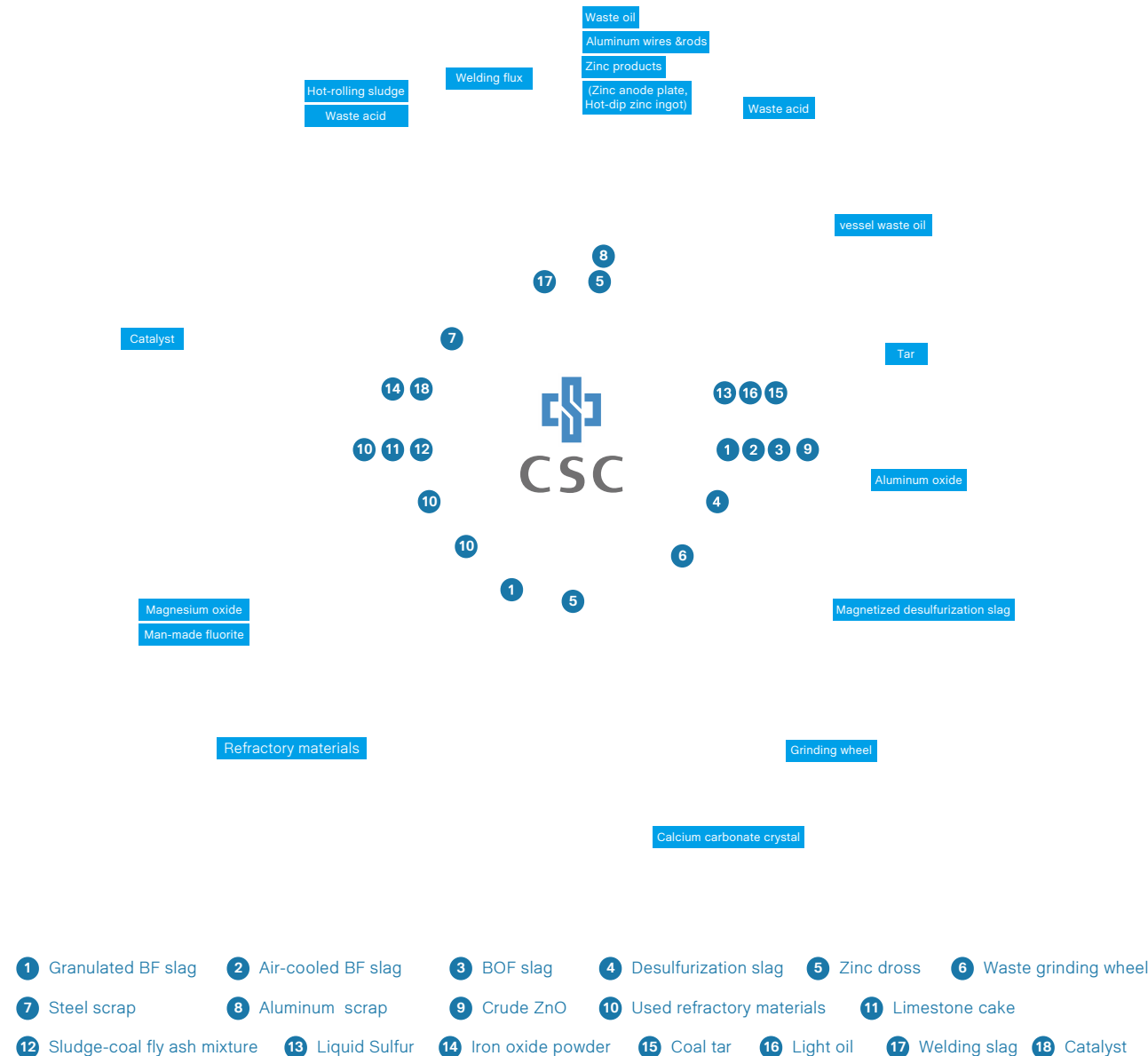


Before CSC plans a production process, it will conduct a feasibility study on the process, applications of by-products, waste recycling design, and potential impact on the natural environment, which are included in evaluations, and also complete risk identification. In order to reduce the environmental burden caused by operations, the Company is committed to developing various resource application technologies based on the concept of steel life cycle. For example, in the recycling and reuse of process waste, all waste acid is recycled and reused in the plant, reducing the cost of purchasing hydrochloric acid. At the same time, CSC integrates recycling links inside and outside Linhai Industrial Park to include available resources into production planning. This not only helps properly utilize industrial by-products and wastes within the plant, reducing the risk of outsourcing treatment, but also reduces production costs and achieves circular economy.

3.3.2 Industrial Ecology Network

● Output from CSC ■ Input to CSC

In 2023, the industrial ecology network centered around CSC contained 27 companies, and the majority of them was in the traditional industry. The recycling network included water quenched BF slag, air-cooled BF slag, desulfurization slag, BOF slag, sludge-coal fly ash mixture, coal tar, waste acid, used refractory materials, etc. CSC will continue promoting the “Industrial Resource Integration Plan” in accordance with the government policy and expand the waste recycling operations in collaboration with the manufacturers of Linhai Industrial Park so as to construct a resource sharing and recycling network among industries in the industrial park, improve the operating conditions and competitiveness, and keep in line with the global trend of sustainable development.



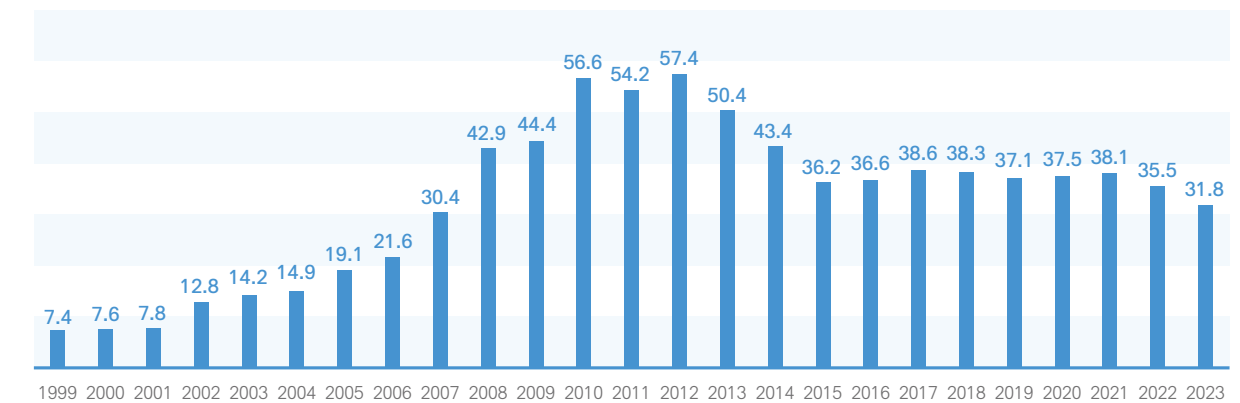
3.3.3 District Energy Integration and Coproduction between Steel and Petrochemical Plants

CSC is located in Kaohsiung LinHai Industrial Park, surrounded by a number of petrochemical and steel plants. CSC has long utilized steam produced from combined heat and power (CHP) and waste heat recovery as well as industrial gases produced from oxygen plants to share excess energy with neighboring plants. With the complementary uses of steam, oxygen, nitrogen, argon, plant air, coke oven gas, etc., energy and resources in the district is efficiently integrated. Users can turn off existing facilities with lower efficiency and higher GHG emissions or terminate new investments with lower efficiency and at same time achieve the objectives of improving energy utilization efficiency, reducing resource consumption, and lowering pollutant and GHG emissions to effectively mitigate environmental impact and improve environmental quality.

At present, a total of 14 manufacturers, including CSC, have joined the District Energy Integration. The energy that CSC sells includes steam and oxygen, nitrogen and argon produced by the Oxygen Plant. Among them, steam is the main item. The amount of steam sold in 2023 was 1.325 million tonnes, saving 3.94 million GJ (equivalent to 102,000 kL of low-sulphur oil.) In terms of reducing GHG emissions and improving air pollution, it reduced 318,000 tCO₂e of GHG, 968 tonnes of SO_x, 672 tonnes of NO_x, and 96 tonnes of particles^{Note}, creating a multi-wins situation for CSC, customers, and the environment.

External GHG Reduction from Steam Sales

Unit : 10,000 tonnes CO₂e



Note: I. GJ = 1 billion joules

Note: II. With an estimated efficiency of 94% for the newly installed boilers, 1 kL fuel oil can produce 13 tonnes of steam. Thus, the 1.325 million tonnes of steam sold in 2023 is equivalent to the use of 102,000 kL of low-sulfur oil.

Note: III. The calculations of environmental benefits are as follows:

> Energy saving: The heat value of low-sulfur oil conversion is cited from the average detected heat value of CSC in 2023, which was 9,440 Mcal/kL

> Air pollutant reduction: The calculation and coefficients were in line with the calculation of emission amount for the air pollution control fee of stationary sources by MOENV.

> GHG emission reduction: The reduction only covered CO₂ emission before 2018, with the factors cited from the IPCC 2006 National Greenhouse Gas Inventory Guide-CO₂ emission coefficient of fuel oil. From 2019, N₂O and CH₄ were also involved in the calculation coverage, using the factors cited from the GHG emission coefficient list (version 6.0.4) announced by MOENV.

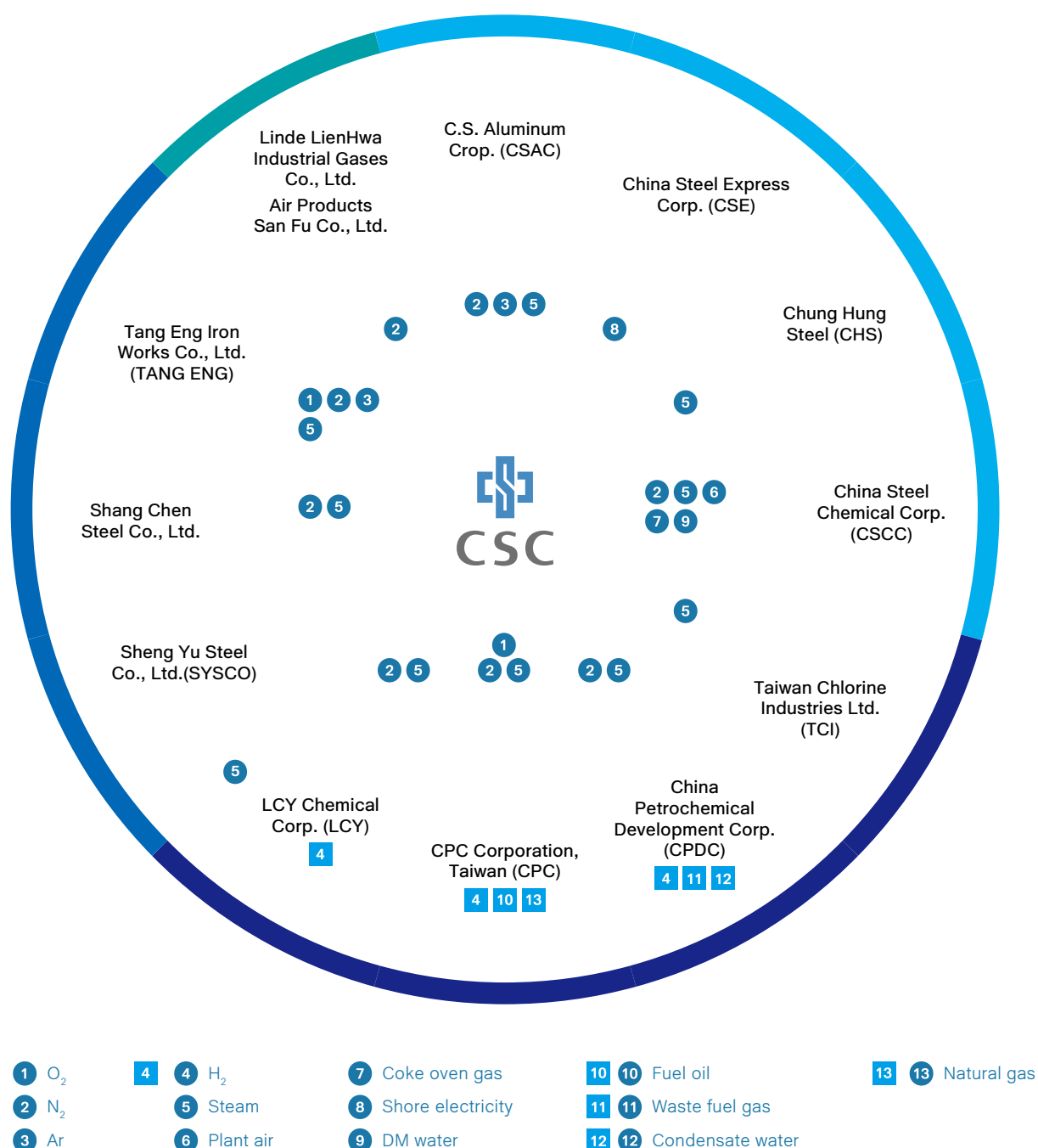
● Output from CSC ■ Input to CSC

CSC Group

Petrochemical Industry

Steel Industry

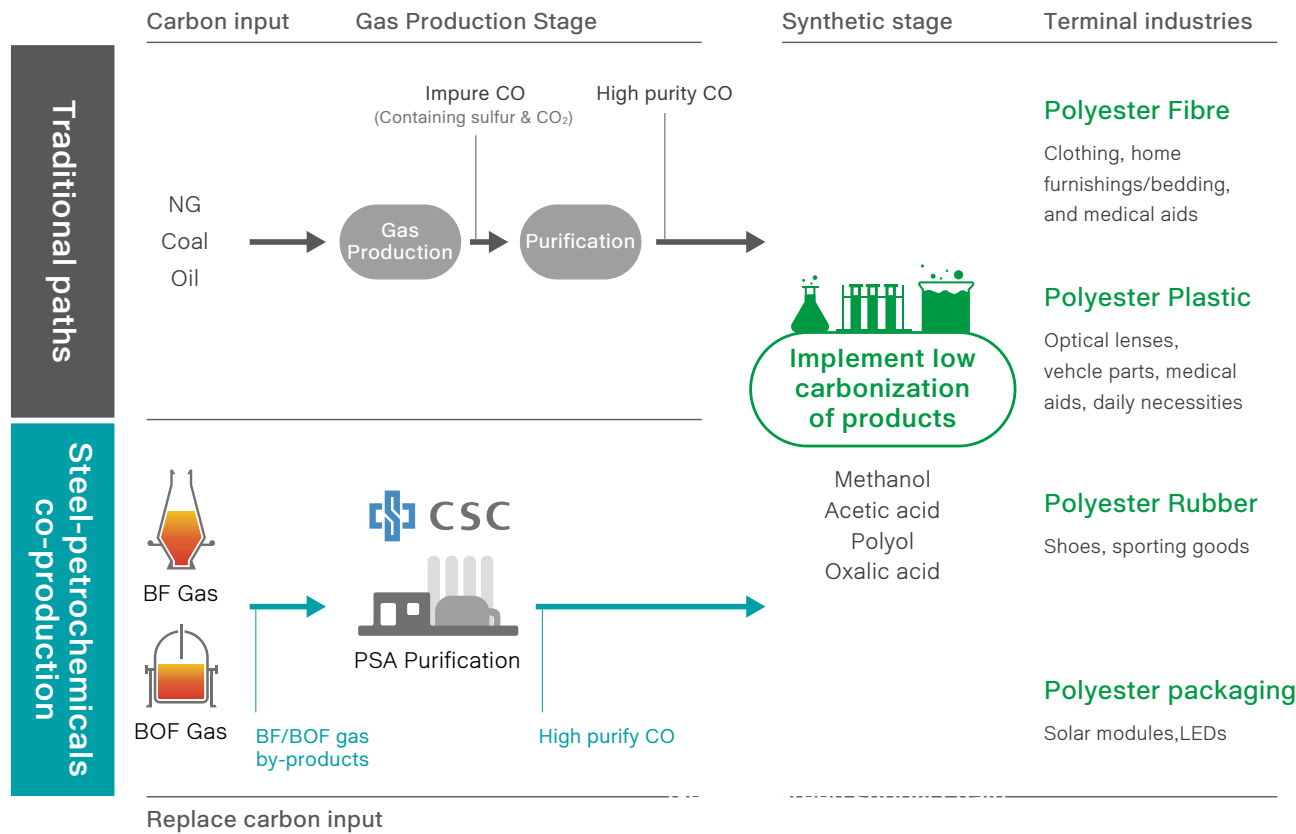
Industrial Gas Industry



The Three Stages of Carbon Reduction in “Coproduction between Steel and Petrochemical Plants”

The “Coproduction between Steel and Petrochemical Plants” initiative launched by CSC and the petrochemical industry is divided into three stages. In Stage 1 - “Establishing laboratory and pilot plant technology,” carbon capture from by-product gases and high-value utilization technologies are developed in collaboration with the Industrial Technology Research Institute (ITRI) and funded by the National Forward-looking Program, with site validation to be conducted as well. In Stage 2 - “Building a demonstration production line for coproduction between steel and petrochemical plants,” the first demonstration production line for coproduction between steel and petrochemical plants in Taiwan will be built, with the facility projected to reduce 240,000 tonnes in carbon emissions each year. Moreover, Stage 3 involves extending the initiative to “commercial use,” where it is projected to reduce 2.9 million tonnes in carbon emissions each year, equivalent to the CO₂ uptake of 7,455 Da’ an Forest Parks^{Note}, thereby helping the petrochemical industry form a low-carbon chemical industry chain.

In September 2022, the pilot plant for co-production of steel and petrochemical plants was completed, and CSC formally began field verification of carbon capture from by-product gas and high-value utilization technologies together with the Industrial Technology Research Institute. CSC uses pressure swing adsorption technology to capture CO in the by-product gas of the metallurgical process, completed verification of 1,000-hour continuous production of the pilot plant for co-production between steel and petrochemical plants in 2023. The quality and production capacity of CO product gas are both stable. Using the ITRI's catalytic conversion technology, methanol is produced from CO with a methanol selectivity of 99.9%, verifying the technical feasibility of synthetic chemicals. The quality of CO product gas can meet the raw material needs of downstream petrochemical companies. CSC also developed energy-saving operation technology for carbon capture from by-product gas, which reduces compressor energy consumption by 10% under the same production capacity and reduces production costs.



Note: The annual carbon absorption of a Daan Forest Park is about 389 tonnes CO₂e/year, which is based on the "2021Solar Photovoltaic 6.5GW Standardization Plan of the Energy Bureau of the Ministry of Economic Affairs"

3.4 Biodiversity

CSC Biodiversity and No Deforestation Policy

+ https://www.csc.com.tw/csc_e/esg/pdf/env4.pdf

Biodiversity Assessment

To fulfill our commitment to biodiversity, we periodically conduct biodiversity assessments and commissioned the Department of Biological Sciences, National Sun Yat-sen University to help plan ecological investigation for plant areas and establish the baseline for species. The period is 2 years (November 2022 to October 2024), during which an investigation is conducted every quarter. Investigations are conducted on a monthly basis when migrant birds pass through, and the contents include land animals (mammals, birds, amphibians, reptiles, and butterflies) and plants. In addition, data from bird investigations conducted by CSC Birdwatching Club from 1987 to 2019 and plant species recorded have also been compiled. Endemic species, critically endangered, endangered, and near-threatened species are primarily birds and plants. The bird species are migrant and transit birds observed and recorded by the CSC Bird Watching Club since 1987, while the plants were cultivated by CSC after the establishment of the plant for landscape greening purposes and are non-native species. The summarized results are presented in the table below:

Classification	Families	Species	Endemic	Endemic Subspecies	Conservation ^{Note I}			Red List ^{Note II}			
					I	II	III	CR	EN	VU	NT
- Mammals	4	8	0	1	0	0	0	0	0	0	0
- Birds	39	75	2	8	0	9	2	1	1	0	2
- Reptiles	2	4	0	0	0	0	0	0	0	0	0
- Amphibians	1	1	0	0	0	0	0	0	0	0	0
- Butterflies	5	22	0	0	0	0	0	0	0	0	0
- Plants	94	304	7	0	0	0	0	5	4	12	4
- Total	145	414	9	9	0	9	2	6	5	12	6

Note I: Conservation levels based on the Council of Agriculture's Announcement No. 1071702243A issued on January 9, 2019: I - Endangered Species, II - Rare and Valuable Species, III - Other Conservation-Deserving Wildlife.

Note II: Rarity categories based on the Red List of Terrestrial Mammals of Taiwan (2017): CR - Critically Endangered, EN - Endangered, VU - Vulnerable, NT - Near Threatened

The complete survey results from this project will be used to establish a baseline dataset of ecological species in the plant area. This baseline data will serve as a reference for identifying indicator species and will be utilized by the research team to provide subsequent ecological assessment items and guidance on implementing environmentally friendly measures. The aim is to maintain ecological balance and achieve the goal of no net loss (NNL) on biodiversity.

+ For more details [Biodiversity] https://www.csc.com.tw/csc_e/esg/env/env4.html

3.5 Green Development

3.5.1 Green Products

CSC's green products are finished products with external energy saving and carbon reduction benefits. As an upstream manufacturer of the industry, CSC plays an important role in developing and expanding the supply of green steel products and driving the green supply chain. External carbon reduction information on green steel materials can be an important international topic to improve the Company's image, and highlight the Company's contribution to energy conservation and carbon reduction, fulfilling its corporate social responsibility.

In 2023, 2.56 million tonnes (order amount) of green steel products were shipped, helping reduce carbon emissions which summed up to an estimated 5.649 million tonnes.

Wear-resistant thick plate

The AR400F abrasion-resistant steel plate is a product that exhibits full-thickness hardening and -45°C extreme low-temperature toughness. It is suitable for using in mechanically demanding structures that require high wear resistance and high impact strength, particularly in cold regions. Typical applications include mining truck beds, excavator buckets, and similar equipment, where it provides excellent resistance to wear and extends the lifespan of the machinery.

High Performance Bridge Steel

With high strength and good processing properties, this product can not only increase bridge span and use safety, but also reduce the welding preheating temperature and improve welding efficiency. It is a green steel material that meets the value of energy saving and carbon reduction.

Socket steel which is easily spheroidization annealed

To promote energy conservation and carbon reduction in the industry chain, CSC optimized the microstructure and hardness of hot-rolled wire rod, assisted downstream customers with shortening the spheroidizing annealing process time, and created synergies from energy conservation and carbon reduction.

Hole-expansion type high strength steel for automobile products

Developed the hot-rolled 65kgf hole-expansion type high strength steel, which has high strength and good stretch-flangeability performance, helping to reduce the weight of the car body and reduce carbon emissions associated with car weight reduction.

Cold-rolled automotive steel products with high-elongation & ultra-high strength

The third generation of advanced high-strength steel has both high ductility and high strength, helping to reduce the weight of the car body and reduce carbon emissions.

Top grade thin-gauge electrical steel

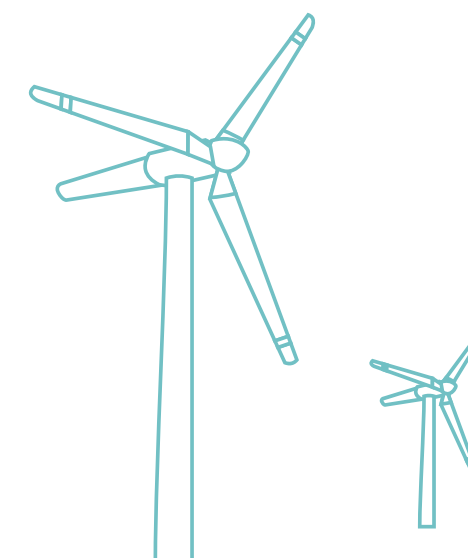
It reduces motor temperature rise, reduces motor weight, saves materials, and increases motor efficiency, and is thus extensively applied in the manufacturing of electric vehicles and compressors.

Note: The calculation of coefficient (average life-cycle carbon reduction coefficient per ton of steel) for external carbon reduction performance is based on the Japanese Steel Alliance and Economic Institute, ITRI, and CSC Green Energy & System Integration Research & Development Department. The coefficient used by CSC includes high-strength steels for ship plates, steel for buildings, steels requiring no further quenching and tempering, fast cutting steel, steel for cold forging screws and nuts, steel for cold forging to save customers' time on heat treatment, reduce customers' energy consumption in straightening procedures, premium ES used in motors, corrosion-resistant steel for bridges, high-strength steel for automobiles, and other steels. The carbon reduction benefit is calculated by adding up the results of the order amount for each item in 2023 multiplied by the corresponding coefficient.

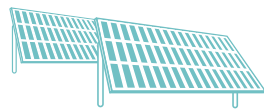
3.5.2 Green Industry Development

Offshore Wind Power

CSC cooperates with the government policy to develop green energy and contributes to environmental sustainability. CSC has thus engaged in areas related to steel for offshore wind power installations and those in which it is capable of engaging through a series of initiatives, including setting up Sing Da Marine Structure Corporation (SDMS), a subsidiary of CSC, to engage in the manufacture of underwater foundations; establishing CSPC, another subsidiary of CSC, to develop Zone 29 Offshore Wind Farm and participate in Taiwan International Windpower Training Corp. (TIWTC) led by Taiwan International Ports Corp. Zhong Neng Offshore Wind Farm has completed most underwater foundations (including foundation piles), offshore export cable installation, and onshore substation construction in 2023, while Sing Da Marine Structure Corporation completed the 31 underwater foundations for Zhong Neng Offshore Wind Farm in June 2023, which were accepted by the owner after inspection.



Solar Photovoltaics (PV)



CSC actively responded to the renewable energy policy. In October 2016, CSC combined companies within the group to establish the CSC Solar Corp., which is responsible for promoting the development of CSC's solar power generation business.

At present, CSC Solar has established a professional solar photovoltaic team as a project system supplier with EPC technical and engineering capabilities. CSC Solar has obtained the electricity generation license, specializing in the development, construction and operation of solar photovoltaic sites, also the sale of solar green energy, providing customers with stable power generation efficiency and comprehensive services. As of the end of 2023, CSC Solar has installed a capacity of approximately 61 MW on the roof of CSC's plant, which is currently the largest rooftop solar photovoltaic project site of a single company in Taiwan. Since September 15th 2017, the cumulative installed capacity of the solar photovoltaic system by CSC Solar at the CSC Group (16 companies including CSC, Dragon Steel, Chung Hung Steel, C.S. Aluminium Corporation, China Steel Machinery Corporation, CHC Resources Corporation, China Steel Chemical Corporation etc.) had reached 97.9 MW, and the cumulative power generation had reached about 540 million kWh. In the future, CSC Group can contribute at least 110 million kWh of green electricity and 54,000 tonnes of CO₂ reduction annually.

Green Transportation with Low-carbon Light Rail Transit

“Rail transit” is one of the best transportation solutions for energy saving and carbon reduction. CSC participates in public construction, upholds corporate responsibility, and carefully evaluates the participation in rail projects in accordance with policies. CSC cooperates with local governments to provide citizens with a light rail transit system that is safe, comfortable, convenient, and environmentally friendly. For example, Ankeng light rail began operations in February, 2023, and the entire Kaohsiung Light Rail system was completed and opened to traffic on New Year's Day of the 2024. Danhai/Ankeng light rail transits are designed and manufactured by Taiwan Rolling Stock Co., Ltd in cooperation with foreign manufacturers. With a gradual increase in the proportion of localization and the establishment of light rail transit procurement guidelines led by the Railway Bureau, these projects create new opportunities for the future design and manufacture of light rail rolling stock.

+ For more details [Green Industry Development] https://www.csc.com.tw/csc_e/esg/env/env2_1.html

+ For more details [Green Buildings] https://www.csc.com.tw/csc_e/esg/env/env14.html

+ For more details [Green Living] https://www.csc.com.tw/csc_e/esg/env/env11.html



Kaohsiung Light Rail's “Totoro Tunnel”

4

Corporate Commitment

Feature Employee Stock Ownership Trust,
CSC and Employees Grow Together
to Create a Win-win Situation

- 4.1 Recruitment and Retention
- 4.2 Happy Workplace
- 4.3 Employee Rights
- 4.4 Occupational Safety and Health



Feature



Employee Stock Ownership Trust, CSC and Employees Grow Together to Create a Win-win Situation

Employees are also shareholders, retaining outstanding talents

CSC cultivated employees' awareness that they are also shareholders in order to increase employee engagement. This way, employees pay attention to the Company's long-term performance and growth, and increases their engagement and enthusiasm for work. CSC established the Employee Stock Ownership Trust (ESOT) in July 1998 to provide employees better security for their post-retirement life. The ESOT has been implemented for more than 25 years with a participation rate of 90%, showing that this system is widely recognized and supported by CSC employees. At present, the total shareholding ratio of ESOT is second only to the Ministry of Economic Affairs, making it the second largest shareholder of CSC.

Accumulate employees' second pension

According to the results of the "2022 National Retirement Financial Management Survey" conducted by "Business Today" and the Pension Fund Association of the R.O.C. in September 2022, more than 70% of the respondents believed that their retirement preparation ratio was less than 50%, showing that it is important to establish and strengthen the third pillar of retirement life through personal savings and investments. Members of CSC's ESOT allocate a certain amount from their salaries every month, and the Company allocates a corresponding bonus, providing the funds to the trust bank to purchase CSC stocks. The stocks or cash will be returned to the members when they retire or leave their jobs. CSC has seen a wave of retirements in recent years. When retired employees go through the stock return process, they are often surprised to find that they have accumulated more shares than they imagined. It is like a second pension. They are full of confidence in their life security after retirement. This shows that the ESOT has achieved the purpose it was established for.

Continuously improve the system to improve employee well-being

In order to balance the differences between the new and old labor pension systems, and to facilitate recruitment and retention, CSC has set up a public withdrawal trust deposit for ESOT members who are subject to the new labor pension system and meet certain seniority conditions. Each month, 2% of their basic salary is allocated to the public withdrawal trust deposit to purchase CSC stocks in a trust, and the full amount can only be collected upon retirement or resignation. In addition, to strengthen the care for employees after retirement, increase the appeal for recruiting and retaining talents, and encourage long-term holdings, after taking into account the current implementation status of external benchmark companies, a new trust system with an allocation rate of 30 % for the ESOT in 2024, and existing members can choose to maintain the original trust system (allocation rate of 20%) or switch to the new system, in order to enhance employees' sense of participation in the Company and employee well-being.

In the future, CSC will continue to uphold the entrepreneurial approach of pragmatism and innovation, continue to benchmark the development of external corporate systems, improve existing practices, and strengthen corporate social responsibility and sustainability concepts.

Employee Stock Ownership Trust (ESOT) amendment explanation meeting held on the 27th of December, 2023



4.1 Recruitment and Retention

Human resources are the foundation of business operations. CSC creates a happy workplace, ensures a safe working environment, and protects employee rights with a sound system to attract and retain talents. The employees are allowed to give full scope to their talents in the right positions to keep the competitiveness of the company. CSC strictly follows the Labor Standards Act and never hires underage employees. To ensure the basic human rights of employment equality, employees are hired only based on expertise and experience. Discrimination based on ethnic origin, thought, religion, political affiliation, place of origin, place of birth, gender, sexual orientation, marital status, appearance, disability, or past labor union membership is prohibited.

The management approach to talent recruitment and retention is mainly for the purpose of meeting the approved manpower requirements on time, on budget, and on spec. The operating strategy is reviewed on a quarterly basis. At present, in addition to public recruitment, there are also several channels for professionals such as expert recruitment (PhDs or legal counsels), recruitment from foreign trade associations (business students), and recruitment from funded master's programs of industry-academia collaboration (engineering students). Same as professionals, entry-level employees are not only sought from public recruitment, but also from the special recruitment scheme for indigenous people. The current important goals and objectives are: Full usage, the right person in the right place, in-service training, further research and diversified development.

By the end of 2023, the CSC workforce consisted of 17,390 people, of whom 9,621 were regular employees (9,262 males and 359 females), 7,725 were contractors (6,297 males and 1,428 females; mainly maintenance and operations contractors), and 44 were dispatched workers (2 males and 42 females, mainly for paperwork and general affairs). The contractors account for a large proportion of the CSC workforce mainly because CSC's industrial structure has many short-term outsourcing projects.

The average age of employees was 41.9 and the average tenure was 14.41 years. All of the regular employees are from Taiwan, no foreign employees were hired. CSC is an integrated steel plant. There are more male employees than female employees due to the industrial characteristic, resulting in an unbalanced gender ratio. However, CSC remains steadfast in building a diverse workplace. The female employee ratio rises every year. In the department other than production functions, such as administration, finance, and planning, female employees account for 31.35%.

+ For more details [Workplace Diversity and Gender Equality] https://www.csc.com.tw/csc_e/esg/soc/soc2_ge.html

Event	Category	2021		2022		2023	
		Employees	Ratio	Employees	Ratio	Employees	Ratio
- Total ^{Note}		9,794	100%	9,668	100%	9,621	100%
	Male	9,452	96.51%	9,324	96.44%	9,262	96.27%
- Gender	Female	342	3.49%	344	3.56%	359	3.73%

Event	Category	2021		2022		2023	
		Employees	Ratio	Employees	Ratio	Employees	Ratio
- Region	Kaohsiung	9,682	98.86%	9,559	98.87%	9,524	98.99%
	Taipei	16	0.16%	14	0.15%	14	0.15%
	New Taipei	40	0.41%	39	0.4%	32	0.33%
	Hualien	16	0.16%	15	0.16%	15	0.16%
	Overseas	40	0.41%	41	0.42%	36	0.37%
	18-29	1,421	14.51%	1,472	15.22%	1,393	14.48%
- Age	30-39	2,963	30.25%	2,956	30.58%	2,940	30.56%
	40-49	2,475	25.27%	2,777	28.72%	3,020	31.39%
	50-59	1,360	13.89%	1,071	11.08%	904	9.39%
	≥ 60	1,575	16.08%	1,392	14.40%	1,364	14.18%
	Doctorate	191	1.95%	191	1.97%	204	2.12%
	Master	1,939	19.8%	1,977	20.45%	2,039	21.19%
- Education	Bachelor	4,435	45.28%	4,749	49.12%	4,871	50.63%
	Junior college	875	8.93%	811	8.39%	761	7.91%
	Senior high/ Vocational and below	2,354	24.04%	1,940	20.07%	1,746	18.15%

Note: All the employees at CSC are permanent (full-time) employees. Hence, there are no temporary, non-guaranteed hours or part-time employees at the company. The numbers are calculated based on the figures available on December 31 of the current year.

Item	Category	Contractors			Dispatched workers		
		2021	2022	2023	2021	2022	2023
- Total number of non-employees		8,238	7,721	7,725	37	45	44
	Male	6,781	6,333	6,297	2	2	2
- Gender	Female	1,457	1,388	1,428	35	43	42
- Contractual relationship with CSC		Indirectly employed via contractors			Dispatched via dispatch work agencies		
- Type of work		In-plant projects or labor work			Administrative affairs		

Note: The numbers are calculated based on the figures available on December 31 of the current year.

4.1.1 Workforce

The total number of new employees in 2023 was 365, mainly in the 20 to 30-years-old age group from the southern region of Taiwan, which helped increase local youth employment opportunities. From 2011 on, an average of 515 people have been employed each year, and the new hire turnover rate was 6.34% in 2023.

Year	New Hires Distribution	2021		2022		2023	
		Employees	Ratio	Employees	Ratio	Employees	Ratio
- Total		487	4.97%	527	5.45%	365	3.79%
	Male	469	4.79%	512	5.28%	340	3.53%
- Gender	Female	18	0.18%	15	0.15%	25	0.26%

Year		2021		2022		2023	
New Hires Distribution		Employees	Ratio	Employees	Ratio	Employees	Ratio
Region	Northern	22	0.22%	16	0.16%	4	0.04%
	Central	30	0.31%	22	0.23%	21	0.22%
	Southern	432	4.41%	488	5.05%	340	3.53%
	Eastern	2	0.02%	1	0.01%	0	0.00%
	Others	1	0.01%	0	0.00%	0	0.00%
Age	19-29	333	3.4%	298	3.08%	202	2.10%
	30-39	135	1.38%	199	2.06%	135	1.40%
	≥ 40	19	0.19%	30	0.31%	28	0.29%

Note: New hires distribution ratio = number of new hires ÷ total regular employees x100%.

4.1.2 Workforce Structure

Employee Position Distribution

Position	Year	Female employees	Male employees	Local employees ^(I)	Total
Share of all employees	2023	3.73%	96.27%	79.73%	9,621
	2022	3.56%	96.44%	79.52%	9,668
	2021	3.49%	96.51%	80.30%	9,794
Share of management positions	2023	1.82%	98.18%	81.50%	1,265
	2022	1.66%	98.34%	81.88%	1,264
	2021	1.38%	98.62%	81.22%	1,230
Share of junior management positions	2023	1.20%	98.80%	78.48%	669
	2022	1.08%	98.92%	79.44%	647
	2021	0.78%	99.22%	78.81%	637
Share of senior management positions (CEO ≤ Two job levels)	2023	2.44%	97.56%	87.80%	82
	2022	1.22%	98.78%	84.15%	82
	2021	2.41%	97.59%	86.75%	83
Share of management positions in revenue-generating functions	2023	1.08%	98.92%	81.37%	1,208
	2022	0.92%	99.08%	81.83%	1,200
	2021	0.76%	99.24%	81.70%	1,186
Share of STEM (Science, Technology, Engineering, Mathematics) related positions	2023	5.34%	94.66%	74.51%	1,236
	2022	5.22%	94.78%	73.71%	1,206
	2021	5.53%	94.47%	73.57%	976

Note I: The revenue-generating functions refer to the company's Commercial Division, Production Division, Technology Division, and Engineering Division.

Note II: Local employees refers to the number of employees whose permanent address is in Kaohsiung.

4.1.3 Training Framework

China Steel Corporation has placed special emphasis on talent cultivation and development in response to a large number of senior employees retiring, the employment of younger generations, and the digital transformation in plants. The talent cultivation and development focus on four main principles: common training, professional skills inheritance, nurturing AI talent, and shaping an organic learning organization. In 2023, the education and training programs mainly included AI training, management, language, professional studies (technical, quality management), computer, environmental health and safety, new employee training, supervisor management training, and general education training. The training expenses for talent cultivation in 2023 amounted to 46,160,906 TWD, with an average annual training cost of 4,798 TWD per person. Not only will the employees be educated and trained immediately after onboarding, but it also continuously explores organizational and individual needs in the talent development process. It constantly reviews and gradually implements various essential trainings to enhance the knowledge and skills required for personal career development.



4.1.4 Career Development

Promotion for technical positions

CSC established channels for entry-level employees to be promoted to professional-level positions and entry-level managers; a total of 12 entry-level employees were promoted to level 4 managers in 2023.

Internal hires

Based on the philosophy of putting the right talent in the right position for career development, CSC also provides internal recruitment channels, and a total of 11 employees were transferred to other job positions through internal hires in 2023.

Domestic and overseas training

To enhance production, R&D, technology, management, and foreign language abilities, CSC selects qualified employees, professionals, and managers needed for its strategy of diversification and internationalization every year to take a paid leave to study in academic institutions in Taiwan or overseas. The overseas program was suspended due to COVID-19 in 2023.

4.1.5 Turnover

The personnel change, resignation, and retirement of employees are handled according to relevant CSC regulations. Regular employees can apply for retirement at the age 65 or for voluntary retirement at an earlier age with reference to the Labor Standards Act. Personnel change is discussed by the line manager with the employee before the change and will be announced only after and with employee consent. In the case of difficulties in labor service performance arising from a personnel change, employees may request for termination of employment contract or file a grievance within 30 calendar days of personnel change. If grievance is rejected, employees can request for termination of employment contract within 10 calendar days of grievance rejection.

CSC has established the “Directions for Handling Employee Voluntary Resignation and Retirement” and the “Directions for Handling Compensations for Retirement, Relief, Occupational Accidents, and Layoffs” to institutionalize applications for voluntary resignation and retirement. In 2023, a total of 414 people left the company, representing a turnover rate of 4.30%. 306 of them, who were 60 years old or above, exited the company mainly because they have reached the retirement age.

General Employees Turnover Rate in 2021-2023

		2021		2022		2023	
Category	Event	Employees	Ratio	Employees	Ratio	Employees	Ratio
-	General employee attrition number	742	7.57%	621	6.42%	414	4.30%
-	Voluntary turnover rate	742	7.57%	619	6.40%	411	4.27%
- Gender	Male	719	7.34%	604	6.25%	403	4.19%
	Female	23	0.23%	17	0.17%	11	0.11%
	Northern	2	0.02%	7	0.07%	5	0.05%
	Central	0	0%	1	0.01%	6	0.06%
	Southern	738	7.53%	611	6.32%	403	4.19%
- Region	Eastern	2	0.02%	2	0.02%	0	0.00%
	Others	0	0.00%	0	0.00%	0	0.00%
	18-29	38	0.39%	27	0.28%	26	0.27%
	30-39	31	0.31%	37	0.38%	48	0.50%
	40-49	29	0.3%	19	0.20%	25	0.26%
- Age	50-59	17	0.17%	6	0.06%	9	0.09%
	≥ 60	627	6.4%	532	5.50%	306	3.18%

Note I : General employee turnover rate = number of turnover ÷ number of total regular employee x 100%.

Note II: General employee turnover excluding retirement in 2023 was: 107 people; the turnover rate was 1.11%.

Parental Leave

CSC policies regarding parental leave comply with government regulations. The rate of employees returning to work after parental leave is 90.4% in 2023 which shows the friendliness and the adaptability of colleagues when they return to the workplace.

4.2 Happy Workplace

+ For more details [Happy Workplace] https://www.csc.com.tw/csc_e/esg/soc/soc1_lr.html

4.2.1 Compensation Management

Employee remuneration includes basic salary (base salary, meal allowance, and allowance for special work environments or special maintenance), year-end bonus, and production/sales profit bonus. Employees are remunerated based on their duty, current market wage standards, the company financial status, and organizational structure. Pay is determined without gender-based differences, and the basic salary paid to women and men of the same position and level is the same. However, the pay grade of the same position may vary due to difference in seniority because of the link between salary and tenure. For employees of the same position and the same tenure, pay is the same regardless of gender. The average remuneration of regular employees in non-managerial positions is 1.24 million TWD, and median is 1.156 million TWD.

Item	2021	2022	2023
(1) Annual total compensation for the organization's highest paid-individual / Median annual total compensation for all of the organization's employees excluding the highest-paid individual	6.7~13.5	6.7~10	4.3~8.7
(2) Percentage increase in annual total compensation for the organization's highest-paidindividual / Median percentage increase in annual total compensation for all of the organization'semployees excluding the highest-paid individual	1.9	1.2~1.8	0

4.2.2 Welfare

The China Steel Corporation Employee Welfare Committee is jointly formed of 12 units, including CSC and its 5 subsidiaries (including CSAC, Dragon Steel, China Steel Global Trading Corporation, China Prosperity Development Corporation and Sing Da Marine Structure Corporation, etc., a total of 5 companies), and 27 welfare committee members are appointed by both labor and management. In order to provide generous working conditions and meet the needs of employees, the Committee set up a welfare center that provides multiple welfare facilities such as employee convenience shop, cafeteria, resort, single dormitory, gym, commute bus, laundry service and reading room. These facilities are not only opened to employees but also contracted labors and local residents. Every year, CSC conducts a satisfaction survey of the welfare center. The average score for satisfaction survey in 2023 was 85.3.

Furthermore, to make it more convenient for employees to take care of their families and pick up/drop off their children, the Company implements flexible working hours. Day shift employees can adjust their working hours in increments of 30 minutes after obtaining approval from their supervisor. Apart from setting up breastfeeding and lactation rooms, CSC has also drawn up a group insurance for employees, which is partially subsidized by the company. Starting in 2021, CSC has not only added overseas outpatient insurance coverage to the aforesaid group insurance, but also taken out the “Notifiable Communicable Disease Health Insurance” in Taiwan for this group of employees, which covers COVID-19 and other communicable diseases announced by the Ministry of Health and Welfare.

Because of the severe conditions of COVID-19, CSC established the “Regulations Governing Leave and Subsidies for COVID-19 Quarantine and Isolation” . According to these regulations, employees who apply for unpaid COVID-19 isolation or quarantine leave before December 31, 2022 are entitled to receive a daily subsidy of 1,000 TWD for a maximum of 14 days each time. A total of 1,213 people applied for subsidies with total subsidy amount reaching 4.23 million TWD until May, 2023. The Company divided employees into different groups and implemented work from home in coordination with the government's epidemic prevention policy in 2022 to prevent cluster infections. The Company also provided employees diagnosed with COVID-19 with sick leave that does not affect their attendance. If an employee still tests positive after the statutory quarantine period has ended, an additional 2 days of paid quarantine leave is provided, so that all employees will have less to worry about at work.



The purpose of establishing the ESOT is to increase employee engagement, and raise their awareness that they are also shareholders. We hope that employees will combine their work performance with the Company's growth, so that their lives after retirement can be better protected. To increase the Company's appeal for talent recruitment and retention, take care of employees after retirement, and encourage long-term holding, a new plan with an allocation rate of 30% scheme was implemented for the ESOT in 2024, in hopes of improving employees' wellbeing, and increase participation in the ESOT and employee engagement.

Event	Summary
- Cafeteria	The CSC Employee Welfare Committee operates various types of restaurants including a buffet restaurant, Ming Pang Hall, and restaurants within the CSC Group Resort. These facilities offer a variety of dining options, including Chinese and Western style buffets, boxed meals, and banquets.
- Employees Residence	Priority will be given to new employees whose original residence is outside Kaohsiung city; there were 911 residents in 2023.
- Shuttle Bus	CSC encourages employees to take public transportation to work for energy conservation and carbon reduction. The CSC Employee Welfare Committee signed contracts with bus companies and provided subsidies for commute fare. Currently, there are 18 routes serving approximately 650 employees who take the commute buses.
- Gym	The fitness center at CSC has a SPA, a heated swimming pool, a billiard room, a basketball court, a badminton court, a table tennis room, and a ballroom. These facilities are available for employees, their family members, and residents of Hsiao Kang District.
- Childbirth Gifts	In 2023, the CSC Employee Welfare Committee distributed a total of 1.35 million TWD in childbirth cash gifts (including 0.92 million TWD for CSC's employees and the rest for subsidiary companies).
- Education Scholarships	The CSC Employee Welfare Committee offers scholarships or financial aids for the children of employees at all education levels from elementary school to PhD. In 2023, it received a total of 10,925 applications and awarded a total of 19.99 million TWD.
- Group Insurance from the Employee Welfare Committee	In order to enhance the protection and welfare of all employees, the CSC Employee Welfare Committee has specially liaised with insurance companies to plan group insurance for members. The insurance covers the employees themselves, spouses, children and parents. The insurance package includes group life insurance, accident insurance, hospitalization and cancer treatment.
- CSC Kindergarten	The kindergarten was established with the support and guidance of the CSC Employee Welfare Committee. It aims to create a nurturing and friendly environment for children, with priority given to the enrollment of children of CSC employees.
- Club Activities	The CSC Employee Welfare Committee has set up 41 clubs and allocates funds every year to organize various activities, including sports, fitness, leisure, art and charity events. It aims to promote clubs' affairs and enhance the mental and physical health of members.
- Flexible Welfare Points Subsidies	The CSC Employee Welfare Committee allocates welfare points from the annual budget. Members can choose the welfare items according to their own needs. Currently, 16 items are available for application. For the needs of elderly employees, the welfare committee provides options such as full-body precision health check, care and support for the family members, self-paid additional insurance for major diseases, and remote health care.
- Health Examination	The items and frequency of employees' health examinations are better than required by law, for further information please refer to the Chapter 4.4.2 Health Care.

4.2.3 Work-life Balance

Regulations on employee leaves are superior to regulatory standards

Leave	Number of day	Explanation
- Children's Wedding Hosting Leave	2	+ Not clearly stated in current regulations.
- Marriage Leave	9	+ Superior to the 8-day leave stated by the Labor Standards Act of the Ministry of Labor.
- Pregnancy Checkup Leave	8	+ Superior to the 7 days stated by the Gender Equality in Employment Act of the Ministry of Labor.
- Maternity Leave	60 (Starting from 1st of January, 2024)	+ Superior to the 8 weeks stated by the Gender Equality in Employment Act of the Ministry of Labor.
- Pregnancy Checkup Accompaniment and Paternity Leave	8 (Starting from 1st of January, 2024)	+ Superior to the 7 days stated by the Gender Equality in Employment Act of the Ministry of Labor.
- Special Leave for New Employees	One day annual leave will be given after 3 months of employment	+ Superior to the 3-day leave given for new employees after 6 months of employment stated by the Labor Standards Act of the Ministry of Labor.
- Long Service Leave	For those who have served for 20 years, 30 years, and 40 years (including service before privatization), one additional day of leave will be granted in the current year.	+ Current regulations do not specify on this.
- Funeral Leave	1 ~ 14	+ Depending on whom the funeral is for, the number of days may vary. If the funeral is held for a (foster) parent or spouse, 14 days are given, which is superior to the 8-day leave stated by the Regulations of Leave-Taking of Workers of the Ministry of Labor.

Employee Assistance Program

CSC arranged for professional counselors from the Teacher Chang Foundation and Bitter Sweet Counseling Center to provide counseling sessions at its plants. CSC also held four psychological adaptation seminars on "workplace adaptation", "family relationship (including elderly care)", "parenting education" and "marriage management" were organized to help employees relieve psychological stress. In addition to providing legal advice, the Employee Welfare Committee has also set up a mediation committee to help employees and their dependents mediate civil cases or other matters.

Family Bonding Activities - Organized by CSC

CSC has formulated the Rules for Family Bonding Activities aimed at inviting employees and their dependents to participate in various outdoor activities, such as mountaineering, hiking and trekking, outside its plants. In 2023, a total of 9,613 people applied for subsidies for family bonding activities, which benefited domestic travel.

Family Hiking Activity - organized by CSC Labor Union

CSC Labor Union organizes Family Hiking Activity every year to provide leisure and entertainment for union members and their families, as well as CSC's Welfare Committee members and their families. By doing so, employees and their families can enjoy outdoor picnics, and get to know about the company's operating status and the achievements by Labor Union of CSC in the past year. The number of applicants in 2023 exceeded 43,000.

CSC 52st Anniversary Celebration and Year-end Raffle

In 2023, coinciding with the 52nd anniversary of the establishment of CSC, a celebratory event was held on December 9, 2023, in the Hsiao Kang Administrative District of CSC. The event was themed 'Our love, CSC, Thriving Sustainably', hoping that all colleagues will continue to strive for a sustainably shining future. On that day, approximately 6,000 employees and their families took part in the event. Additionally, on December 11, a year-end lucky draw was held at the company's welfare restaurant, as a gesture of gratitude to employees for their hard work throughout the year.



4.2.4 Services for Retired Employees

In response to the coming retirement wave and to care for retired employees, CSC has established the Retirees Services Section under the Human Resources Department to provide retirees services regarding health, finances, partner, leisure, and friendship. CSC Retirees Services Section mainly supports soon-to-be-retiring employees to recognize their rights and plan a balancing life after retirement. For retirees to contribute to society, the Services Section encourages them to attend senior citizens learning centers or voluntary activities. In addition, CSC Retirees LOHAS Society was established in 2014 by CSC Group retirees for healthy lifestyles and social welfare activities, and to become a model of life for the elderly.

4.3 Employee Rights

4.3.1 Labor/management Relations

Owing to its strong commitment to labor relations, CSC holds labor-management meetings monthly. A total of 12 labor-management meetings were convened throughout the year to strengthen labor-management cooperation and improve work efficiency on an ongoing basis. On top of that, with a view to encouraging exchange of ideas and uncovering problems at its plants (or departments) (including second echelon units of subordinate departments), each plant (or department) is required to arrange meetings to communicate with employees every two (or three) months in accordance with the implementation directions for communication meetings for plants (or departments). These meetings are intended to gather opinions from employees and seek solutions together, thereby enhancing employees' sense of belonging to the company. A total of 224 communication meetings (approximately 4,299 participants) were held across all plants (or departments) in 2023.

Collective Agreements

CSC values employer-employee relationships. To maintain unobstructed communication channels, to ensure fair and decent labor conditions, to provide a dependable reference, and to develop a stable and harmonious relationship, CSC signed the 1st Collective Agreement with CSC Labor Union on 14 Feb. 1997. The collective agreement, which covers all Labor Union of CSC's members (100% of full-time employees with membership qualifications), came up for review every 3 years, and this set a milestone for employer-employee harmony and settlement of affairs. With articles and concept superior to relevant legal requirements, CSC's Collective Agreement has since become a benchmark for other labor unions.

6th collective agreement was signed on March 15, 2024. In the agreement, labor benefits that are better than the regulations were added, which includes extending maternity leave to 60 days, one day plus in pregnancy checkup accompaniment and paternity leave, in order to respond to the government's encouragement of childbirth policies and to strengthen care for female colleagues, and also to express gratitude for the contributions of our employees to the company. Moreover, long service leave was added, providing one day of leave to colleagues who have completed 20 years of service, with an additional day granted for every subsequent 10 years of service. CSC hopes that our colleagues will make good use of this leave by engaging in community service activities within their abilities. After retirement, employees are encouraged to join the ranks of senior volunteers and participate in various public service activities such as guiding tours for the "Steel Journey," conducting environmental education tours for the foundation, and assisting in citizen lectures. It is hoped that the employer and employees, through stable labor/management relations, can create a positive and friendly workplace to enhance corporate competitiveness.

4.3.2 Labor Union of CSC

Founded on December 30, 1980, with a vision to “develop the production business, promote unity among members, safeguard members’ rights, improve members’ lives, and enhance members’ competencies,” the Labor Union of China Steel Corporation (LUCSC) is made up of employees who hold the positions of second echelon manager and assistant manager or below at each department. Having been established for more than 40 years, LUCSC is not only one of the largest labor union for “a single factory” in Taiwan at present, but also the first in the country to realize union democracy. LUCSC faces demand from its members with an open attitude, pioneers the direct election approach in the election of chairman, enhances the bargaining power of labor unions, and fights for the best welfare benefits for its members.

Organization

Membership is compulsory for all qualified employees, excluding managers of certain sections such as the manager of the Employment Section (Human Resources Dept.) and the Guard and Fire Brigade (General Affairs Dept.), who are deemed as the representatives of the employer. At present, The Union members have covered all the employees who are qualified to join the Union.

Involvement in Corporate Governance

CSC holds periodic labor-management meetings and sets one seat for the labor representative on the Board. Since 31 May 2001, industrial democracy has been realized as the union was selected as the labor representative on the Board. The union later joined Corporate Government and Sustainability Committee playing an active role in corporate governance. The Union also delegate members to participate in the Human Resources Development Committee and in the Employee Rewards and Punishment Review Committee.

Pursuit of Labor Rights and Benefits

The Labor Union of CSC pursues labor rights and benefits in a rational and peaceful manner, including labor-management meetings, seminars with directors and management, and collective bargaining.

External Exchange and Cooperation

Apart from fighting for union members' rights and enhancing service quality, the Union has regularly arranged meetings with unions in Taiwan and abroad and frequently interacted with major unions in Taiwan in recent years. The Union has participated in the Labor Day Parade organized by the Taiwan Confederation of Trade Unions in northern Taiwan many times to express the concern and to speak for workers.

+ [For more details \[CSC Labor Union\] https://www.csc.com.tw/csc_e/esg/soc/soc1_lr.html](https://www.csc.com.tw/csc_e/esg/soc/soc1_lr.html)

+ [\[CSC Labor Union\] http://www.cscunion.org.tw/index.asp](http://www.cscunion.org.tw/index.asp)

4.3.3 Human Rights Protection

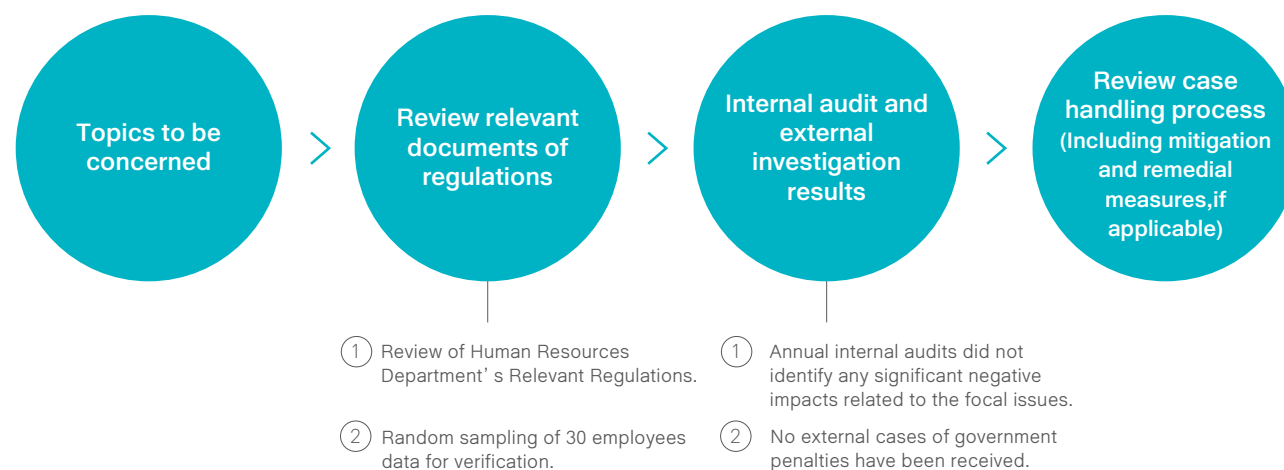
CSC adheres to the regulations of the respective locations of its global operations, supports and complies with the principles and spirits set forth in international human rights conventions such as the United Nations Universal Declaration of Human Rights, the United Nations Global Compact, and the International Labour Organization's Declaration on Fundamental Principles and Rights at Work. CSC treats current employees and contractor personnel with dignity and respect, and strives to eliminate any actions that violate human rights.

+ For more details [CSC's Human Right Policy] https://www.csc.com.tw/csc_e/esg/soc/soc2_ibh.html

CSC conducted company-wide human rights due diligence in 2023, and proposed improvement measures based on results, in hopes of lowering the probability of human rights risks.



Human rights due diligence flowchart



Human rights due diligence results

Topic of concern	Investigation subjects	2023 Investigation results	Remedial measures
Eliminate discrimination and ensure equal employment opportunity	Employees	Did not receive internal or external complaints or receive fines from the government during the year.	We provide interview training to interviewers, stress that unlawful discrimination is prohibited, and comply with the Employment Service Act and relevant laws and regulations.
Prohibit the use of child labor		Did not receive internal or external complaints or receive fines from the government during the year.	Applicants provide their personal data for verification during the registration stage, and their identity is verified during interviews and when they report for duty.
Ban on forced labor		Did not receive internal or external complaints or receive fines from the government during the year.	1. Working hours is managed by a system according to government laws. 2. Employees are encouraged to take leave during the off-peak period to relax their body and mind.
Freedom of association and collective bargaining rights		Did not receive internal or external complaints or receive fines from the government during the year.	1. CSC labor union covers 100% of its full-time employees.. 2. Labor/management meetings are convened on a monthly basis, and there is a website regarding labor/management meeting for employees to inquire about the progress of agenda items.
Provide a safe and healthy work environment		In 2023, there were no government penalties imposed. However, there was an external investigation into workplace misconduct. After an investigation by labor inspectors, two recommended actions were issued.	1. After an investigation into the workplace misconduct incident, it was found that the handling process lacked objectivity due to the grievance procedure being limited to the supervisor and the investigation committee operating on a flexible basis without involvement of third-party units mandatorily. This mechanism may not align with the spirit of addressing misconduct objectively. After discussing a different grievance procedure with the Human Resources Department and the Labor Union. Here is a summary of the adjustments: (1) The EIP reporting mailbox, is the new grievance procedure, handing by the Occupational Safety and Health Department. (2) The Occupational Safety and Health Department, Human Resources Department, and the Labor Union are the required members of the workplace misconduct investigation team. Additional investigation members may be added depending on the case circumstances. 2. In 2023, CSC conducted five sessions of the "Workplace Misconduct Prevention and Communication Skills Training" course. CSC specially invited labor inspectors to present real cases to help participants understand what constitutes workplace misconduct and how to handle it.

CSC amends its policy in accordance with the Regulations for Prevention Measures, Complaints, Correction and Punishment of Sexual Harassment promulgated by the Social Affairs Bureau of Kaohsiung City Government. The amendments made by the company comprised the introduction of an investigation team and an external expert mechanism aimed at upholding fairness and justice. On top of that, sexual harassment prevention announcement are carried out via electronic documents sent to all employees. Each unit at the company is also required to put up written statements and stickers regarding the prohibition and prevention of sexual harassment in appropriate places at the unit, so as to create a workplace and a service environment without sexual harassment as well as prohibit any sexual harassment

incidents. With a view to safeguarding employees’ rights, CSC has also set up grievance channels in place, which can be used by employees when their legitimate rights are violated, they suffer from improper treatment, or their problems cannot be resolved. The Company's regulations governing the complaint system and sexual harassment complaints, as well as complaint forms are available on the internal website. Sexual harassment prevention is communicated during new employee training, and employees can express their opinions through the following channels:

- Grievance System/ Hotline	1. For employees who feel their rights have been violated, or when their problems are not reasonably solved after they have followed the standard administrative procedures to file complaints about difficulties in work. 2. The regulation stipulate that the contents of complaints must be kept strictly confidential and may not be leaked. The contents are handled as confidential documents to ensure that the human rights of complainants are protected.
- Labor Union of CSC	• Members can submit the complaint to the union.
- Periodic communication meetings of factories	• Discusses benefits, rights, and improvements that each unit needs to make
- Labor/management meetings	• Discusses the improvement of work conditions, improvement of benefits, improvement of work efficiency, coordinating labor-management relations, and facilitating cooperation between labor and management.
- Occupational Safety & Hygiene Committee	• Regarding safety, health, environmental protection, etc.
- Employee Welfare Committee	• Employee Welfare and Benefits.
- Employees' Retirement Reserve Fund Supervisory Committee	• Storing, using, and managing retire reserve funds.
- Sexual Harassment Grievance Committee	1. The Committee is responsible for handling sexual harassment grievances in the workplace and providing a work environment without sexual harassment. 2. The regulations expressly state that personnel participating in the investigation, review, resolution, and handling of sexual harassment complaints shall maintain the confidentiality of the contents of the complaint. The case shall be handled as a confidential document to protect the human rights of the parties.

Human rights requirements set forth in the Supplier Code of Conduct include requiring suppliers to ensure that their products do not use minerals that directly or indirectly finance violence, violation of human rights, or criminals or crime organizations; human rights of laborers, freedom of employment, prohibit the use of child labor, work hours shall not exceed the limit set forth by local laws, humane treatment, anti-discrimination, etc.

Meanwhile, each plant (or department) organizes forums to communicate with employees every two to three months, while union representatives are also invited to attend these forums. The items discussed in these forums are also tracked on an ongoing basis. All new employees are required to undergo human rights-related training (including contents such as anti-harassment and anti-discrimination) as part of new employee training, whereas all senior employees have attended human rights-related training. In 2023, CSC conducted 6,765 hours of human rights-related training with 2,009 attendees; on the other hand, 10,310 hours of related communication and awareness sessions were also conducted.

+ For more details [Human Right Protection] https://www.csc.com.tw/csc_e/esg/soc/soc2_ibh.html

+ [Employee Rights] https://www.csc.com.tw/csc_e/esg/soc/soc1_lr.html

4.4 Occupational Safety and Health

+ Material Topic

4.4.1 Occupational Safety



- 2023 Highlights

- Development of hot work training system for multi-user immersive collaboration
- Implementation of the large vehicle blind spot detection system installation project

| Policy or Commitment

A sound labor system is intertwined with a nation's development. The management quality of occupational safety and health affects the safety and health of workers as well as the supply of labor; it is also one of the important factors for corporate sustainability. Therefore, countries around the world are increasingly stricter with occupational safety and health requirements. By working with all employees and contractors, CSC implements good occupational safety and health management in hopes of maintaining a safe work environment.

| Management Approach

The occupational safety and health management in CSC is mainly based on the occupational safety and health management system (ISO 45001 & CNS 45001). With the continuous improvement of the PDCA, the “Occupational Safety and Health Committee (OSH Committee)” also convenes meetings regularly to review the performance indicators of each unit, improve the working and environmental safety of colleagues, and promote health care.

There are two performance indicators for assessing occupational safety and health: One is an active indicator such as near miss incidents or proposal of safety and health; the other is a passive indicator such as accident experience, administrative sanction, and audit results. Apart from compliance with occupational safety regulations, CSC has increased the frequency of health check-ups with more tests added, and requested each employee to take the physical safety training. These measures, superior to the current legislation, can help increase employees' safety awareness and promote health caring.

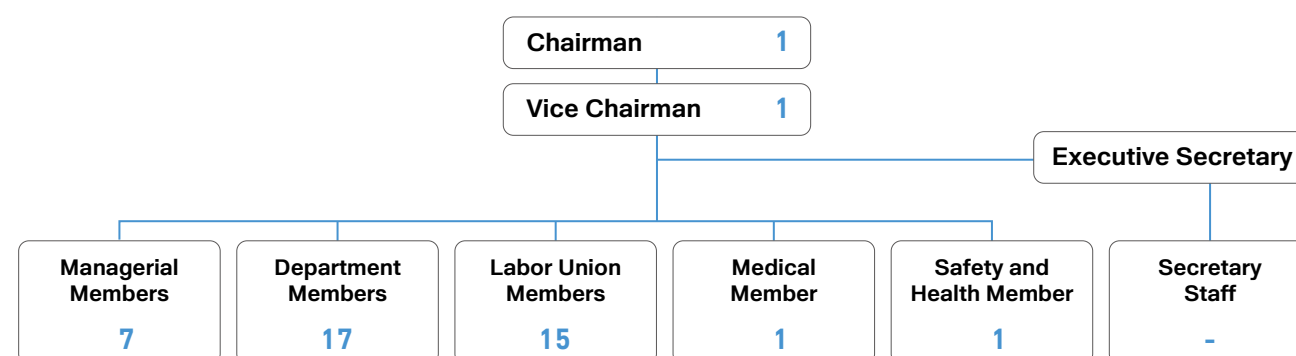
+ For more details [Contractor Occupational Safety and Health Management], please refer to 7.4.4

Occupational Safety and Health Management System

For continual improvement on our management in occupation safety and health, CSC introduced the occupational safety and health management system (OSHMS) in 2000, and obtained certifications on OHSAS 18001 (2002) and TOSHMS (2008, TOSHMS is also known as CNS 15506). The scope of safety and health management system applies to all employees and workers in CSC. Contractors have to follow the CSC safety regulations as well. Each department shall take hazard identification and risk assessment first and carry out corrective actions according to the results. Furthermore, the effectiveness of the actions would be assessed through performance indicators. To comply with the new ISO 45001:2018/TOSHMS (CNS 45001:2018), CSC revised the current regulation and obtained the new certification from BSI in June 2020.

Occupational Safety and Health Management System Flow Chart

Occupational Safety & Health Committee



To effectively discuss and solve practical problems, CSC has established an Occupational Safety & Health Committee. CSC President serves as the Chairman, and the Executive VP serves as the vice chairman in the committee. There are 15 representatives from CSC Labor Union, account for 34% of all committee members. The Committee holds bi-monthly meetings and disclosures OSH management performances at the shareholder annual report for public review.

Liability and Grievance Mechanism

Each factory and department convenes a meeting with Occupational Safety and Health Committee every month to communicate opinions and publicize company policies. If the relevant opinions are company-related, they can be raised during the quarterly communication session between the Industrial Safety & Hygiene Dept. and Safety & Health Planning Engineers.

Annual Goal for OHS

Year	2021		2022		2023	
Type	Control Limit	Performance	Control Limit	Performance	Control Limit	Performance
Employee Disabling Frequency Rate (FR)	≦ 0.18	0.14	≦ 0.18	0.05	≦ 0.18	0.1
Number of Employee Disabling by Traffic Accidents in Commute	≦ 9	21	≦ 9	13	≦ 9	22
Contractor Disabling Frequency Rate (FR)	≦ 0.3	0.40	≦ 0.3	0.20	≦ 0.3	0.05
Zero major occupation accident	Zero Fatality	Not Achieved	Zero Fatality	Achieved	Zero Fatality	Achieved

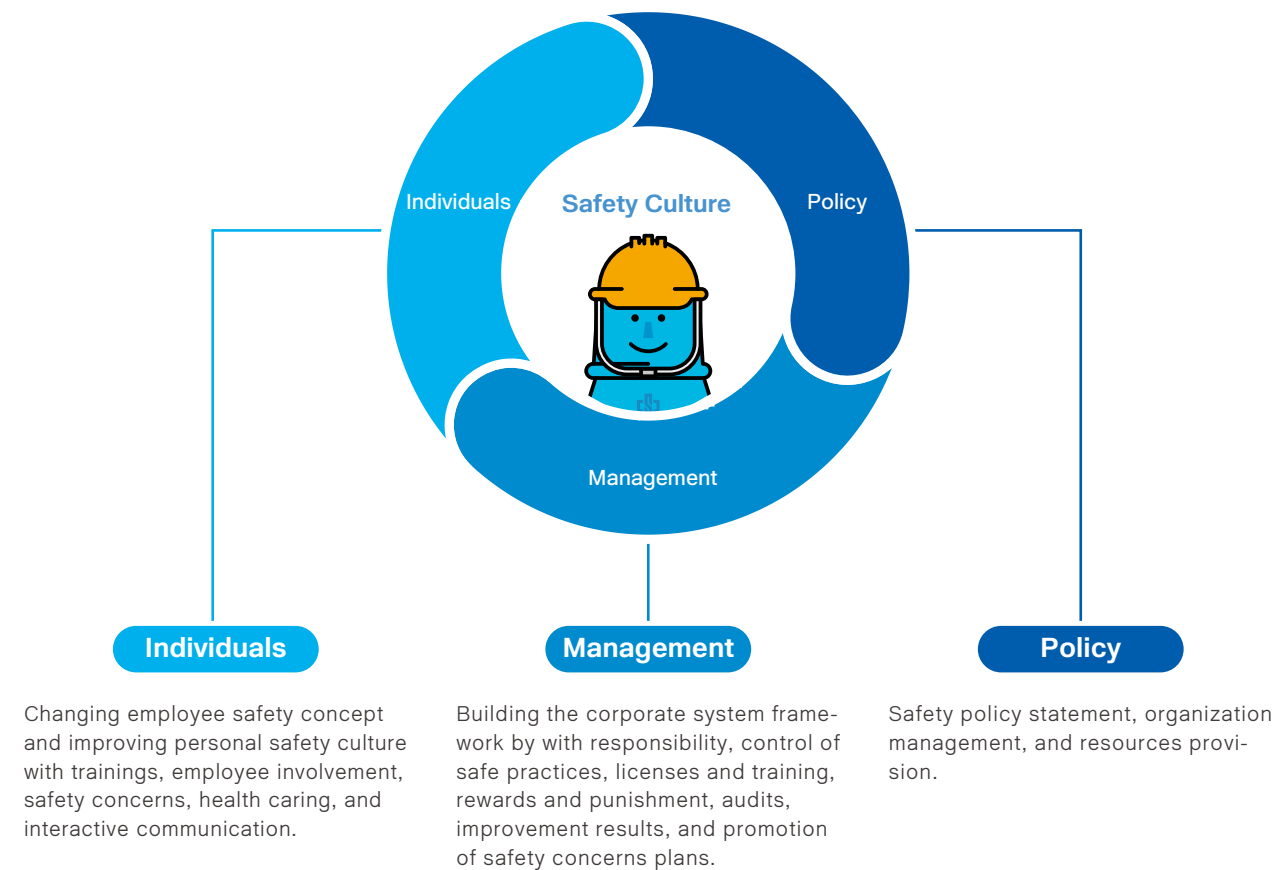
Note : One contractor fatal accident was reported on April 19, 2021.

Action Plan

Safety Culture

The goal of occupational safety management is to instill safety awareness and knowledge into every employee and form a so-called “workplace safety culture”. Employees are inspired to improve the environment and equipment by Employee Suggestion Program and Creative Development Activities. Employees and contractors formulate the safety job procedures after discussions and together ensure the compliance with the procedures. CSC offers “Non-disabling Reward.” If the company can reach 5 million man hours without disabling events, employees will be rewarded. The bonus raises as the non-disabling man hour accumulates. This encourages employees to value more about workplace safety. In 2023, the accumulated working hours without disabling injuries reached 25.34 million hours (2022.03-2023.06), breaking the previous record of 23.31 million hours. The labor union proposed an amendment to the reward rules to add a reward for record-breaking, so as to encourage employees' efforts in work safety.

CSC's safety culture is composed of the following three aspects, including policy, management and individuals.



Training and Publicity

CSC utilizes a computerized Safety and Health Training Management System to oversee the individual training records of all employees, and actively promotes bottom-up Safety SOP Revision to let employees and contractors involved in the actual operations formulate the workplace safety procedures, in order to effectively control risks and reduce the probability of occupational accidents.

CSC set up the “Physical safety Training Classroom” for physical safety training in 2009. With scenarios simulating the on-site environment and equipment, employees can combine theory and practice by experiencing the simulation in person and understand the hazards in workplace. A total of 596 new employees received training in 2023, and arrangements will be made for employees to complete training. Apart from employees, CSC also helps subsidiaries, government agencies, and external organizations offer training or organize visits to raise awareness of labor safety and fulfill corporate social responsibility. CSC assisted subsidiaries in offering 34 courses with a total of 515 trainees in 2023. In addition, CSC's affiliated Vocational Training Center (Physical Safety Center) achieved a Silver Award in the biennial Talent Quality-management System (TTQS) assessment conducted by the Workforce Development Agency, Ministry of Labor in September 2022. This accomplishment underscores our commitment to regularly reviewing and continuously improving the quality of training.

Trainee	Course	2021		2022		2023	
		Sessions	Persons	Sessions	Persons	Sessions	Persons
Employees and Contractors	On-the-job training for radiation protection staff, radiation staff and inspection staff for radioactive steel building materials	4	435	5	450	5	447
	Transportation Safety Training	4	24	8	84	22	245
	Basic training on safety management of explosion-proof electrical equipment	1	46	1	43	1	42
	TS Certification Introduction and explosion-proof safety training	2	92	--	--	--	--
	Production safety basic training	2	85	1	42	--	--
	Workplace Misconduct Prevention and Communication Skills Training	--	--	--	--	5	324
	Respiratory Protection and Safety Harness Application Training	--	--	--	--	1	60
Employees	Physical safety Training	15 (3 types)	141	41 (3 types)	460	61 (3 types)	678
	OHS Internal auditor training	2	55	1	33	--	--
	ISO 45001 Transition Promotion Meeting (Comparative Analysis)	2	17	1	29	--	--
	Occupational Safety and Health Act	71 (11 types)	2,455	67 (15 types)	2,106	74 (11 types)	2,706
Contractors	Training for replacing contractor certificates	69	2,130	106	3,139	83	4,148
	Physical safety training for replacing contractor certificates	1	7	0	0	1	6
	Training for supervisors in contractor high-hazard operations	23	638	13	250	15	313
	On -Job Training for Supervisors of High-Risk Operations Conducted by Contractors	--	--	--	--	15	445

Note I : This course started in August 2019. Since December 2019, the registration approach was changed from on-site registration to appointment registration based on demand. Students become qualified managers only after passing the test. The passing rate was 75%. Thus the course sessions increased.

Note II : The scope for all courses is the entire workforce of CSC.

Abnormality Control and Prevention

- Safety Observation and Audit

For early detection and correction of unsafe work behavior and improvement of work environment and equipment, site managers are asked to patrol work sites regularly. Employees, contractors, and the work environment are reviewed with reference to the 5-step procedure: Decide, Stop, Observe, Act, and Report” which are subject to timely encouragement and correction. If any employees or contractors are found to violate safety work procedures, engage in unsafe behaviors, or encounter unsafe conditions, immediate communication and correction will be conducted without compromising operational safety. In 2023, safety observation and audit of site by managers (including site inspection) totaled 87,095 times.

- Near Misses

After a near miss occurs, the responsible department, personnel, or contractor should register the near miss at Near Miss Report Registration on the CSC EIP online system. After the approval of Second Echelon Supervisors, the case is referred to the Occupational Safety and Hygiene Dept. for confirmation, documentation, publication, or announcement on the EIP. In 2023, 3525 near misses were reported (including 1,404 falls, 533 collisions, 334 objects drop, 430 commuting-related, and 824 others). Potential hazards were reviewed and improved for prevention.

- Prevention of Occupational Diseases

CSC has the responsibility and obligation to prevent occupational diseases derived from various operating procedures and to protect the employees against conditions that are risky to health and well-being. There are some health hazards such as high temperature, noise and dust are inevitable in the production process of traditional industries. These hazards and the health status of employees are controlled through "Work Environment Monitoring" and "Special Health Examinations". Doctors in Occupational Medicine will pay a visit to the plant when abnormalities are found. Through training, personal protective equipment and inspection, the risk of exposure to health hazards is greatly reduced. There have been no cases of occupational diseases among employees in recent years.

- Work Environment Inspection

In accordance with the "Regulations for Implementing Work Environment Monitoring", CSC implements work environment inspections regularly to evaluate whether or not triggers non-compliance with the regulation. Abnormalities will soon be corrected once identified to protect employees' health. In 2023, work environment inspection was completed on 3,136 testing points (including areas and personnel), all following the inspection plan. Subjects for inspection include noise, wet bulb globe temperature (WBGT) index, carbon dioxide, chemical substances, and dust. All inspection results met the requirements.

I Implementation Results

While no employee fatal accident was reported in 2023, CSC recorded a number of work-related accidents among full-time employees, including 2 disabling injuries, 2 minor injuries, and 4 medical incidents; contractor work-related incidents include 0 fatal accidents, 1 disabling injuries, 13 minor injuries, and 10 medical incidents in the same year. On the other hand, employee commuting accidents were also reported in 2023, including 23 minor injuries and 23 disabling injuries. Review and improvements for the accidents mentioned above have been completed. To persistently advancing OHS performance, CSC has taken further measures including physical safety training, in-plant manager inspections, workplace safety diagnosis, bottom-up workplace safety activities (for entry-level employees and/or union team leaders), near miss reporting management, 5S(V) self-management, self-protection, mutual protection, and mutual supervision.

Year	Category	Working Hours	Fatality	Disabling	Minor injuries	Medical treatment	Fatality rate ^(I)	LTIFR ^(II)	Disabling Frequency Rate ^(III)	TRIFR ^(IV)
2021	Employee	20,921,313	0	3	9	11	0	0.14	0.14	1.10
	Contractor	22,690,862	1	8	13	12	0.04	0.35	0.40	1.50
2022	Employee	20,976,151	0	1	10	10	0	0.05	0.05	1.00
	Contractor	19,519,409	0	4	9	12	0	0.20	0.20	1.28
2023	Employee	20,623,939	0	2	2	4	0	0.10	0.10	0.39
	Contractor	18,503,079	0	1	13	10	0	0.05	0.05	1.30

Note I : Fatality rate means the number of deaths per million working hours, the formula: Number of deaths caused by occupational injuries x 1,000,000 ÷ Total hours worked.

Note II : Using lost time injury frequency rate (LTIFR) to represent serious occupation injury rate. The LTIFR is the number of lost time injuries (disabling injuries) per million hours worked, calculated using the formula: Number of lost time injuries (disabling injuries) x 1,000,000 ÷ Total hours worked.

Note III : Disabling Frequency Rate (F.R.) means the number of disabling (include deaths) per million working hours, the formula: Number of disabling caused by occupational injuries x 1,000,000 ÷ Total hours worked.

Note IV : Total Recordable Injury Frequency Rate, TRIFR means the number of total recordable injuries (include deaths, disabling, minor injuries and medical treatments) per million working hours, the formula: Number of total recordable injuries x 1,000,000 ÷ Total hours worked.

Note V : 5S refers to the initials of the five Japanese words, Sorting (Seiri), Systematize (Seiton), Cleaning (Seiketsu), Sweeping (Seis ō), and Educating (Shitsuke).

Occupational Accident statistics

Total Disabling (excluding fatality)											
Year	Category	Falling	Pinch	Rolling	Scald	Cut & Bruise	Collision	In-plant Traffic Accidents	Objects Drop	Others	
2023	Employee	0	0	1	1	0	0	0	0	0	
	Contractor	0	0	0	0	0	0	0	1	0	

Minor Injuries											
Year	Category	Falling	Pinch	Rolling	Cut & Bruise	Improper action	scald	Collision	In-plant Traffic Accidents	Objects Drop	Others
2023	Employee	1	0	0	1	0	0	0	0	0	0
	Contractor	5	4	0	3	0	0	0	1	0	0

Medical treatment													
Year	Category	Falling	Pinch	Rolling	Electric shock	Cut & Bruise	Improper action	scald	Collision	In-plant Traffic Accidents	Objects Drop	Inhalation	Others
2023	Employee	0	0	0	1	1	0	1	0	0	0	0	1
	Contractor	0	1	0	0	1	0	1	2	2	2	0	1

In the occupational safety and health management system, companies are required to commit to regulatory compliance and identify relevant laws and regulations. CSC sends information about safety and health regulations to each dedicated unit using the legal compliance system, with the intention of identifying relevant laws and regulations to determine the regulations and places for which compliance is needed and prepare in advance. The Labor Inspection Office conducted a total of 53 on-site inspections in 2023, and the routine inspections found no deficiencies. There were two suggestions for the Company's workplace misconduct handling process and required training for employees. CSC subsequently completed improvements according to the suggestions.

	2021	2022	2023
· Issuer	KLSIO	KLSIO	None
· Count/Fine (TWD)	3/510,000 ^I	3/360,000 ^{II}	None

Note I: The Labor Standards Inspection Office of Kaohsiung City Government investigated the Company's violation of Article 6, Paragraph 1 and Article 27 of the Occupational Safety and Health Act in 2021 and imposed a fine of 510,000 TWD.

Note II: In 2022, CSC received a number of fines totaling 360,000 TWD from the Labor Standards Inspection Office of Kaohsiung City Government, which conducted an on-site investigation. The investigation result found the Company in violation of Articles 26 and 27 of the Occupational Safety and Health Act, and the Company was fined 60,000 TWD and 150,000 TWD, respectively.

To improve contractor management of the CSC Group, CSC's Safety and Health Department selected 13 factories and 17 subsidiaries of the CSC Group to implement the inspection guidance project in accordance with Articles 26 and 27 of the Occupational Safety and Health Act.

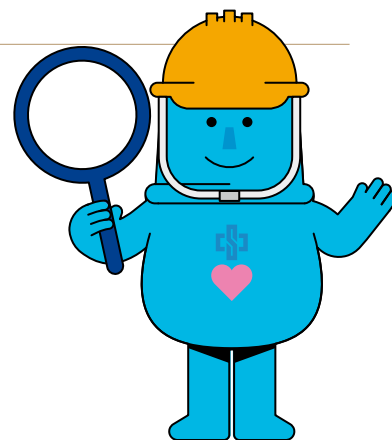
The project is implemented in six stages, including preliminary planning to diagnose the current status of contractor management. Each unit conducts a self-inspection, review, makes improvements and adjustments, and an on-site visit is made to provide guidance and understand the actual implementation by the affiliate. Examples of improvements completed by each unit are used as a template to inspect the compliance of other construction projects, and effective methods for improving contractor management are implemented.



Improvement Highlights

1. Forklift safety warning system test plan

- (1) Forklifts are highly maneuverable and commonly used machine in factories. However, forklifts may drive, reverse, and rotate at high speed and it may cause serious injuries. We use forklifts for many operations in CSC. In order to avoid collisions between forklifts and personnel, CSC has set up isolated operating areas and monitoring personnel, and strengthened planning of systems to actively monitor people in surrounding areas, assisting and reminding drivers that people are near the forklift to effectively reduce the risk of personnel collision.



Improvement Highlights

- (2) The Industrial Safety & Hygiene Department introduced a mature product of forklift alarm system in the market (VIA Technologies - Mobile360) and selected a coil processing plant for function testing. It subsequently shared the testing experience to assist each plant in implementing the system, in order to reduce the risks of the Company's forklift operations.

2. Guidance project to improve the effectiveness of hazard notification

- (1) The Industrial Safety & Hygiene Department implemented a guidance project on March 27, 2023 to assist plants in improving the effectiveness of hazard notifications, and the project was completed on October 27, 2023. In addition, guidance provided by seed instructors at each plant was completed on December 29, 2023. The conclusion of the closing report is excerpted below.

- Promote personnel participation in hazard identification to raise their awareness of hazards in operations.
- The prevention of operational hazards relies on personnel to master key work steps before operation, and then take safety precautions to effectively prevent occupational accidents.
- "Simplify complex work" and dedicate efforts to implementing the concept of "simple" are the best labor safety management strategies. Hazard notification is the most important safety activity before operations. Allowing it to serve its purpose will establish the first line of defense to prevent occupational accidents.

- (2) After compiling the suggestions from each plant, the reference principles subsequently implemented by each plant are as follows.

- Integrate action plans into the current zero-disaster activities and regard them as a further implementation of zero-disaster activities.
- Considering the diversity of on-site operations, each factory can select the applicable scope based on the effectiveness of the action plan and implement it step by step.
- To simplify the forms, each plant can continue to use the forms used in action plans, and can also reference and modify the unit's current forms, adding three fields: key work steps, unsafe factors, and safety protection.

4.4.2 Health Care

CSC Clinic takes care of labor health protection matters on-site, offering services such as health management, occupational disease prevention, and health promotion. Our primary responsibilities include providing first aid, conducting health examinations, organizing health management and promotion events, and delivering medical and health services to employees. In addition to health examinations, the analysis and classification of examination results, our Occupational Medicine doctors carry out on-site occupational suitability assessments. These assessments include evaluating the fitness of injured or sick workers and making recommendations for job reassignment or adjustments. China Steel has developed an online health management system linked to the occupational safety and health system. In addition to make appointments with the professional medical team, it can notify colleagues to arrange for health check-up time and read health check reports online. Furthermore, the online health management system, through the internal occupational safety cloud database, arranges a list of colleagues from high-risk special workplaces who need to undergo special health check-ups, and regularly keeps tracks of their physical conditions.

Since 2018, we have installed 60 Automatic External Defibrillators (AEDs) in each plants, and the total number of AEDs available until 2023 is 69. We have provided AED operation education and training to first-aid personnel to strengthen CSC's emergency response network. In 2023, a total of 513 people received training.

Consultation services

The Company began hiring counselors to provide on-site services in 2014, facing and handling issues or troubles together with employees, and helping employees to take their mental health seriously and use the Company's counseling resources when appropriate. Counseling services were provided 500 times in 2023, in which the majority of issues were family, workplace and self, and outlook on life. Over the years, services were provided a total of 2,666 times to help employees become more flexible and open when facing issues in life. It also helped employees learn to understand their situation from a different perspective and find purpose in life.



Medical Services

CSC Clinic employs professional medical and nursing teams from KMUH, KMSH, and Kaohsiung Armed Forces General Hospital to provide primary diagnosis/treatment, chronic disease prevention, and basic medical services. The number of medical visits in 2023 was 39,944. Having a close relationship with local hospitals, the clinic provides referral service for patients.

The clinic health management website provides online health consultation services. As of December 31, 2023, the website of the health management center had been explored 645 thousand times. A shortcut to access the clinic was also added in the mobile phone App of CSC, allowing employees to read their health examination reports over the years or make appointments for the clinic.

Health examination

To provide proper care for employees, CSC Clinic offers comprehensive health check-ups so that employees don't have to spend time visiting other clinics. The health examination items and frequency offered by the clinic exceed the current regulatory requirements. Medical staffs at CSC Clinic manage the health conditions of employees based on the examination results. The Clinic offers cancer screening that focus on common cancers such as lung cancer, liver cancer, and colorectal cancer. Additionally, the health examination items have included the lateral view of chest X-ray, abdominal ultrasound examination and quantitative immunoassay fecal occult blood test to enable early detection. CSC Clinic also implements health management measures based on the health examination results and offers services such as consulting, primary diagnosis, treatment, and referral. In 2023, a total of 7,432 employees received health examinations and 3,722 employees participated in Special Health Checks for Personnel in Special Workplaces. Among them, 3 individuals (working in environments with loud noise) were classified under level 4 health management. Review meetings have been conducted, and improvement measures have been implemented.

Health Examination Procedures



5

Social Participation

- 5.1 Concepts and Management
- 5.2 Local First
- 5.3 CSC Group Education Foundation



5.1 Concepts and Management

5.1.1 Concepts of Participation

Proactivity and Responsibility

CSC actively fulfills its corporate responsibility by being responsible for the safety, health, remuneration, fringe benefits, equal rights, and training of employees and personnel of contractors.

Diversity

In addition to focusing on the rights and interests of the shareholders, employees, contractors, and local residents, CSC also offers dissuasion to the government about the country's public policies and international-related issues.



Local First

CSC places great emphasis on the quality and safety of the local environment, paid business income tax and environmental fees to the Kaohsiung City Government and facilitated the development of the local areas.

Accountability

Being a benevolent corporation, CSC conducts a lot of charitable activities with the assistance of its related departments, the union, clubs, and the CSC Group Education Foundation.

5.1.2 Multi-involvement and Commitment

Highlight case

CSC's Water Environment Patrol Team wins the Contribution Award in the 2023 evaluation of the Environmental Protection Bureau of Kaohsiung City Government



Photos of CSC's Water Environment Patrol Team removing garbage from the river

Highlight case

The CSC Group's Water Environment Patrol Team has operated for 18 years. It is the first corporate water environment patrol team in the country. Team members are all employees of CSC. Every day the patrol team patrols the water area, removes garbage, observes the water quality, cleans the environment, and handles emergency response to major water pollution incidents. The team removed approximately 23 tonnes of garbage in 2023. CSC fully supports operations of the Water Environment Patrol Team with its corporate resources. In addition to investing a large amount of funds and equipment every year to provide the resources needed by the patrol team, it also established a Yanshui Port environmental monitoring system in the patrolled river section. Team members can monitor the water area through cameras at any time, monitoring the situation of Yanshui Port and marine environment.

The CSC Group's Water Environment Patrol Team spares no effort in river cleanliness and environmental protection. Its outstanding performance has repeatedly been recognized by Kaohsiung City Government Environmental Protection Bureau's Water Environment Patrol Team. In 2023, it was awarded the Corporate Contribution Award again by the Water Environment Patrol Team. CSC thanked the Environmental Protection Bureau of Kaohsiung City Government for its recognition, and will continue to protect the water environment of Yanshui Port and fulfill its corporate social responsibilities.

Diversified Social Involvement

	Diversification	Highlight Performances
Job Category Central and Local Public Affairs Organizer Public Affairs Dept.	+ Good neighborliness, social care, and assisting with local education. + Positive interactions between public representatives, administrative agencies, the media, and opinion leaders.	+ "The Journey of Steel" Outdoor Educational Activity: Inviting graduating classes from 13 elementary schools in Hsiao Kang District to visit our company for a guided tour. + Conducted over 400 mutual visits and negotiations through the Public Affairs Dept. + Arranged a total of 25 professional media interviews for disclosing important company information.
Job Category Social Education Organizer CSC Group Education Foundation	+ Cultivate domestic steel talents to improve domestic steel core technologies, and promote steel-related popular science education. + Promote environmental sustainability education and take root in local arts and cultural activities.	+ The popularization of steel science, seminars and activities to encourage girls to study science and technology have benefited 5,558 individuals. + Environmental Classroom, Ecological Camp, Environmental Education Tour Bus have benefited 1,442 individuals. + Lectures and the promotion of artistic and cultural activities have benefited 5,300 individuals.

		Diversification	Highlight Performances
Job Category	Social Care and Art Activities	+ Post-disaster emergency relief and reconstruction. + Caring for the disadvantaged. + Caring for the ecological environment. + Enhancement of humanistic quality and cultivation of art.	+ Collaborated with Kaohsiung Philharmonic Orchestra, Baroque Soloists Ensemble, Berliner Philharmoniker, and others to organize 11 concerts. + Provided festival gifts of money during the Taiwan traditional festivals to assist local low-income families, and provided tuition assistance to students from low-income families, benefiting a total of 2,488 individuals during 2023.
Organizer	CSC, the CSC Group Education Foundation, Labor Union of CSC, and employee clubs		
Job Category	Human Rights and Workforce Development	+ Negotiate and formulate reasonable workplace policies.	+ Implemented a 3.5% salary adjustment in 2023. + Signed the 6th collective agreement in 2024 which increased maternity leave days, introduced "Long Service Leave," and enhanced other labor rights.
Organizer	Human Resources Dept.		
Job Category	Safety and Health	+ Prevent incidents and diseases derived from the corporate operation. + Prevention of epidemic diseases. + Domestic and international exchanges.	+ Participated in the Kaohsiung City High-Risk Industry Process Safety Management Forum and Health Promotion Exhibition in the 2023, where approximately 400 individuals experienced exhibits demonstrating electrical hazards.
Organizer	Industrial Safety & Hygiene Dept.		
Job Category	Labor Policy	+ National labor rights, benefits, and welfare policies. + Collaboration and interactions with other union groups.	+ Participated in 2 meetings of the Human Rights Working Group convened by the Ministry of Labor in 2023 and attended 6 meetings of the Labor Autonomy Committee convened by the Kaohsiung City Government. + Assisted in counseling 3 subsidiary company labor unions within the group, facilitating the signing of collective agreements with the employers, and subsequently receiving counseling bonuses awarded by the Ministry of Labor for each successful agreement.
Organizer	Labor Union of CSC		
Job Category	Environmental Protection	+ Promote exchange of knowledge on environmental protection through visits. + Establish a Carbon Management Advisory Team to cooperate with downstream customers on energy-saving and carbon reduction efforts. + Participate in the water environment patrol team promoted by the government to fulfill corporate social responsibility and safeguard water resources.	+ The Ministry of Environment arranged visits to CSC for the "Air Pollution Prevention Specialist Training Program" on November 3rd and December 8th, 2023. + Engaged 16 counseling personnel, assisting a total of 22 customers, generating a potential reduction of approximately 4,443 tonnes of carbon emissions per year. + In 2023, a total of approximately 23 tonnes of river waste were cleared; the Water Environment Patrol Team won the Corporate Contribution Award from Kaohsiung City Environmental Protection Bureau.
Organizer	Utilities Dept. and Environmental Protection Dept.		

5.1.3 Expenditures of Social Responsibility

Unit: million TWD				
Event	Summary	Amount in 2021	Amount in 2022	Amount in 2023
- Social charity donations	Social and local charitable support and assistance of relief in emergencies.	102.36	122.56	61.5
- Donations to the CSC Group Education Foundation	Implementation of cultural education and promotion of education and nurturing of new talent in steel-related fields.	12.54	2.81	0 ^{Note}
- Donations for institutes and associations	Sponsorship for seminars, conferences, and advertisements.	1.92	1.871	2.3
- CSC Retirees Services Sec.	Retiree benefits reserve.	12.52	12.06	11.94
- Support the development of culture and art	Sponsor domestic theater performances and music activities, support and promote local art and culture, and dedicate efforts to cultural heritage.	-	-	7
Total		129.34	139.301	82.74

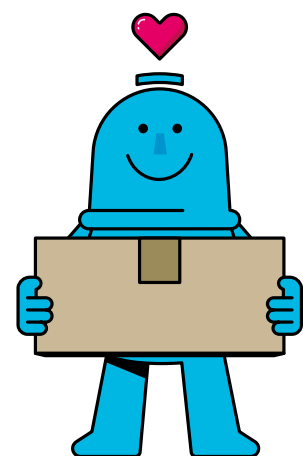
Note : CSC did not make an annual donation in 2023 because the balance of the Foundation's funds was still sufficient.



5.2 Local First

5.2.1 Community Care

To fulfill its corporate social responsibility, CSC has continued to take action to provide care and assistance to the nearby communities for their development and sponsor charitable activities in Hsiao Kang for decades. It upholds the concept that what is taken from the society must be returned to it, and sincerely takes concrete action to care about and contribute to the society, communities, and disadvantaged groups from the aspects of environment protection, community care, and charity.



1. Distributed funds for social relief and gifts of money during the Taiwan traditional festivals to assist low-income families in Hsiao Kang District
2. According to “the Guidelines for new recruitment”, the candidates who are Hsiao Kang residents are given a certain percentage of bonus points in their written tests when applying for positions in CSC.
3. CSC provides merit scholarships for students and tuition assistance to students from low-income families in Hsiao Kang.
4. The CSC Employee Welfare Committee operates a CSC Kindergarten, which recruits children of employees from which recruits children from employees of CSC group companies as well as residents in the nearby areas.
5. CSC assisted 17 elementary and junior high schools in Hsiao Kang District, Kaohsiung City, in upgrading their teaching equipment to enhance students’ learning efficiency.



5.2.2 Cultural Heritage

CSC adheres to the concept of “Proactivity and Responsibility, Diversified involvement, Local First, and Accountability”, and invests in the selection of resources for continuing cultural heritage, deepening local roots and strengthening cultural identity among local students.

1. An annual commendation event for filial piety role models is held in Hsiao Kang District to promote the traditional virtue of filial piety. In 2023, we cooperated with junior high school and elementary school children in Hsiao Kang District to hold a Mother's Day filial piety role model commendation and scholarship award ceremony, in order to promote filial piety and gratitude.
2. Nanan Elementary School in Mituo District has promoted shadow puppetry with excellent results. Since 2018, CSCGEF has been sponsoring their traditional arts development activities to help preserve this artistic heritage, benefiting about 900 participants in 2023.
3. Cooperated with Taiwu Elementary School in Pingtung in organizing the "Aboriginal Cultural Experience," which introduced participants to indigenous culture through activities, such as hand-made glass beads and shell-flower leaf weaving, preserved traditional culture while improving parent-child relationships, and benefited approximately 60 people.
4. CSCGEF co-organized the "Hakka Cultural Experience" in collaboration with Fuan Elementary School in Meinong District, allowing participants to learn about the relationship between crops and people through local history, and also experience the taste of nature by picking and pickling white radishes. The event benefited approximately 200 participants.



5.3 CSC Group Education Foundation

CSC, as a leader in Taiwan's steel industry, established the CSC Group Education Foundation in 2006 through the CSC Board of Directors to further expand and implement corporate social responsibility, which aims to promote education and cultivate talents in steel-related fields, care for ecological conservation, enhance the humanistic spirit, and pursue sustainable development as its mission to promote the concept of holistic education.

Event	Unit:10,000 TWD		
	Amount of 2021	Amount of 2022	Amount of 2023
- Administrative expenses	84	78	85
- Expanded activities related to steel	55	44	37
- Grants to the nurturing of research talent	145	135	187
- Promotion of sustainable development of the environment	424	466	472
- Promotion of educational activities of arts	484	449	617
- Other charitable educational affairs	45	103	98
Total	1,237	1,275	1,496

Promote steel-related educational activities

Teacher workshops

With National Kaohsiung Normal University co-organized the popular science workshop "Steel Holds up The World" for teachers. 40 teachers listened to the introduction, visited the R&D Exhibition Hall, toured the hot rolling line and had a Q&A session. They learned about the use of steel in life and CSC's efforts in environmental protection. Participants gave positive feedback and highly recommend the program to their colleagues when they returned to their respective schools.

Steel Journey Activity

Since 1993, the "Journey of Steel" event has been held every year for new graduates of elementary schools in Hsiao Kang District, Kaohsiung City for over three decades. Nearly 1,100 new graduates from 13 elementary schools were invited to visit CSC to understand and learn about the origin of steel, steel production processes, energy conservation, carbon reduction, and environmental sustainability.



"Steel Journey" Quick Answer

Cultivating female in the field of natural science and technology

In cooperation with National Sun Yat-sen University, 17 female engineers from the CSC Group were invited to Tainan and Kaohsiung High school. They shared their learning and working experiences, aiming to help the students understand the practical work of female scientists. The goal was to serve as role models for female students and to enhance their confidence and courage to enter the field of science and technology.



Female engineer lecture at Yujing Junior High School



Female engineer lecture at Tzu Kuan Junior High School

Awards and scholarships for science and technology related to steel and environmental protection:

Cultivate talents in the domestic steel field

The course on steel production processes is offered in the departments of materials science of National Taiwan University, National Tsing Hua University, National Chung Hsing University, National Cheng Kung University, and National Sun Yat-sen University, and in the Department of Mechanical and Electro-Mechanical Engineering of Sun Yat-sen University to cultivate talents in the steel field. CSCGEF also provides scholarships to encourage students to conduct research. 23 students received scholarships in 2023. Since 2007, a total of 213 students have received the scholarships.



Teachers and students enrolled in the "Steel Special Lecture" course visited DSC

Incentives to Participate in the World Steel Making Challenge

Encourage the college students of Taiwan to participate in “steelChallenge-18” Regional Championship (East Asia). Top three Taiwanese students received CSCGEF scholarships..

Environmental Conservation and Care for Sustainable Environmental Development

Summer Ecology Camp

2023 Summer Ecology Camp went to Fonghuanggu Bird and Ecology Park and Taiwan Biodiversity Research Institute, the camp's courses were designed, planned, and executed by the foundation, which provided the human and material resources required by the camp and subsidized participants' fees. This three-day and two-night event was held in 2 batches, with a total of 142 elementary school students in grades 4-6 participating. Participants can learn about Taiwan's endemic species and invasive species through close observation and experiential courses.

Environmental Classroom

Cooperate with National Kaohsiung Normal University to build an environmental classroom, which promotes the concept of circular economy. It takes root in the school's environmental education concept of sustainable development, and extends it to the community. Currently, project is being implemented at Shanwei Elementary School in Linyuan District. It combines the school's existing marine education to develop unique lesson plans and shared them with other schools.



Fuan Elementary School in Meinong District holds Hakka cultural experience activity



Wenshan Elementary School In Fengshan District set Environmental Classroom Slag Display

Green Living Camp

With Kaohsiung Rapid Transit Corporation organized the 2023 Kaohsiung Metro Summer Camp, and courses included a tour of the Operation Control Center (OCC), large-scale public art, and logistic and maintenance work, in order to encourage the children to use the public transportation system and achieve the common goals of carbon reduction and environmental sustainability.

With China Steel Chemical Corporation and Zhongshan Junior High School jointly organized the "King of Wisdom Summer Camp" and arranged diverse courses to guide students to find their own interests, laying a good foundation for future learning and development.



Kaohsiung Metro Summer Camp

Promotion of traditional culture, humanities, and arts

Collaborated with National Kaohsiung Normal University in organizing the "Qishan Cultural Experience," inviting 400 people to Qishan to experience Qishan's traditional agriculture and culture. Developed whole plant utilization of bananas, from planting, harvesting, eating, weaving, dyeing, and table games, experiencing the past culture and future life of the whole banana plant utilization.

Organizing Charity Concerts

Invited Die 12 cellisten der Berliner Philharmoniker to perform in Taiwan, and broadcast the performance live outdoors at Kaohsiung. Collaborated with Baroque Camerata to perform "Sweet Memories - Authentic Songs of Taiwan Baroque Camerata" at the Social Education Hall. Collaborated with Chang Chen-Chieh of Pro-Art Camerata to perform the "Wheelchairer Concert" in Banyan Plaza of National Kaohsiung Center for the Arts.

Collaborated with Kaohsiung Museum of Fine Arts in the "2023 Children's Art Camp" to broaden children's horizons, develop their complete personality, and cultivate their aesthetic abilities. A total of seven activities were held with 250 participants. In addition, in coordination with the special exhibition "Anthropocene," three parent-child activities were held to explore the impact of humans on the environment from an artistic perspective.



National Kaohsiung Center for the Arts held the Wheelchairer Concert

6

Corporate Governance

- 6.1 Strategies and Targets
- 6.2 Board of Directors
- 6.3 Operational Finance
- 6.4 Risk Management



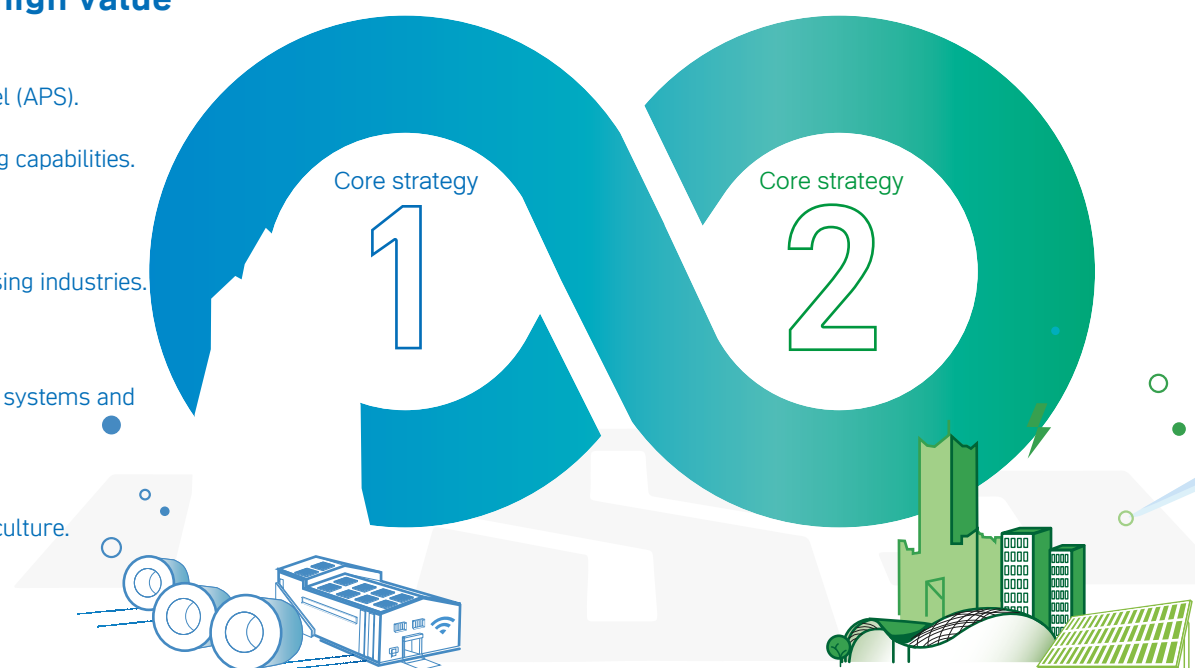
6.1 Strategies and Targets

Ten-year Operational Strategies

Each year, CSC proposes its operation and development strategies for the next 10 years. CSC strives to become a leading-edge steel mill that provides premium products and services, and engages in developing the green energy industry. CSC planned 10 operation and development strategies in 2024-2033:

To become a steel mill that produces advanced premium products with high value

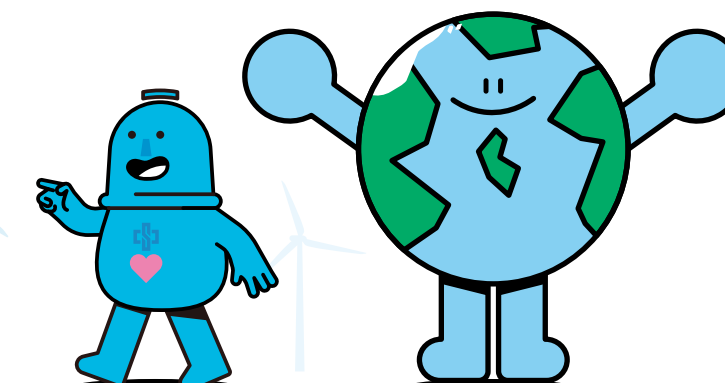
- 1 To develop Advanced Premium Steel (APS).
- 2 To establish excellent manufacturing capabilities.
- 3 To enhance marketing capabilities.
- 4 To deepen the upgrading of steel-using industries.
- 5 To introduce the application of AIoT.
- 6 To build up highly efficient business systems and processes.
- 7 To move towards high productivity.
- 8 To pass on and enhance corporate culture.



To develop the green energy industry

To develop the green industry business. **9**

To develop and improve carbon reduction technologies. **10**



6.1.1 Annual Business Directives and Performances

Business Directives for 2023 include the 4 main points, the implementation results are as follows:

Business Directives



Advanced Premium Steel to build Resilience



Energy Conservation and Carbon Reduction to balance Environmental, Social and Governance



Smart Steel Mill to transform and to upgrade Industrial



Green Energy Business to increase Diversification

Performances

- Continuously promote the "Cost Reduction and Profit Increase" activities, while leveraging open innovation to link internal and external R&D resources. Accelerate the development of highly competitive products, low-cost processes, and value-added application technologies to enhance product cost-effectiveness, create differentiated competitive advantages, and achieve annual cost reduction and profit increase goals.

- Stay attuned to market dynamics, expand the customer base, and explore premium/advanced premium steel markets. Introduce diverse and flexible projects to increase order volume, prioritize supplying advanced premium steel demands, establish strategic partnerships, and boost order capacity.

- Implement a computerized total quantity control system to aid in energy and material management. Continuously implement large-scale carbon reduction schemes and devise carbon reduction action plans to earnestly achieve carbon reduction targets.

- Aim for smart production lines, smart energy resources, and smart scheduling. Utilize system intelligence to establish high-quality smart manufacturing capabilities. Complete digital transformation through cross-departmental cloud integration to continuously drive advanced premium steel plant construction and establish smart production lines.

- Continuously promote effective audits, safety information exchanges of CSC group, and on-site safety observations to strengthen the safety awareness of all employees and contractor safety supervisors. Implement mid-term and long-term plans of factory road traffic safety inspections. Introduce traffic safety VR training modules to enhance compliance and defensive driving concepts among road users, achieving the goal of zero major occupational accidents this year.

6.1.2 Response to Major Impacts

Taiwan passed the Climate Change Response Act in 2023, and set the goal to achieve net zero emissions before 2050. In response to climate change and the new carbon fee system, industries with high carbon emissions, including steel, semiconductor, cement, and power, will begin to collect carbon fees. Taiwan established the Taiwan Carbon Solution Exchange in August 2023 and completed the first carbon credit transaction in December the same year. The EU plans to implement the Carbon Border Adjustment Mechanism (CBAM) for upstream and downstream products of imported steel and aluminum on a trial basis starting in October 2023. Importers will be required to report the carbon emissions of imported products during the trial implementation period, and carbon tariffs will be formally levied in 2026. The United Nations' TNFD (Taskforce on Nature-related Financial Disclosures) framework in September 2023 extended companies' attention from the original TCFD (Taskforce on Climate-related Financial Disclosures) to natural development crises, and carefully assesses the impact of the production process on natural ecology. It has become the standard for disclosing financial information on the response of companies to the impact of operations on nature. The trend of green pricing and carbon neutrality will bring an era of high steel prices. As the leader of Taiwan's steel industry, CSC will work together with downstream industries that use steel to make preparations in advance.

CSC utilizes logistics and production resources and continues to strengthen its marketing channels and supply chain services to take care of downstream industries that use steel. In response to the government's strategy of "large enterprises leading small enterprises," CSC and customers formed a "1+N" Carbon Management Demonstration Team (1 refers to the leading manufacturer, N refers to the industry chain) to assist downstream companies in the steel industry with establishing basic carbon management abilities, so that they can implement energy conservation and carbon reduction in processes, and enhance their competitiveness to response to the global trend of low carbon.

In addition, the manufacturing industry declined in 2023 due to high interest rates in the United States and Europe suppressing demand in the global economy, China's economy cooling off, and the escalation of geopolitical conflicts. CSC still adhered to the strategy of "domestic sales first, supplemented by foreign sales," and made flexible adjustments according to changes in market conditions, accelerated the R&D of new products, and promoted new applications. CSC combined government policies and industry trends, played the role of a steel mill that provides premium products and services, focused on orders for high value-added products, and strengthened customer relationships. Internally, CSC carries on upgrading production equipment and optimizing manufacturing processes to reduce costs while aligning itself with the international trends of green energy and carbon reduction. At the same time, CSC advances intelligentization and refines sales and operation plans to enhance its overall competitiveness.

6.1.3 Regulations and Implementation Business Integrity

Business Integrity

CSC established the "Ethical Corporate Management Best Practice Principles for CSC" and "Procedures for Ethical Management and Guidelines for Conduct" to specify matters that personnel must pay attention to when performing their duties. CSC's ethical corporate management policy is declared in its internal regulations, annual reports, company website, promotional materials, and external activities. In addition, CSC regularly identifies internal and external regulations by reviewing the latest amendments of external laws and regulations, and regularly checking for any discrepancies with internal regulations. The identification rate of regulations in 2023 is ≥95%.

In addition, with the aim of strictly requiring employees to comply with work rules and implement the "Procedures for Ethical Management and Guidelines for Conduct," CSC also advocates employees to sign the "Letter of Declaration and Undertaking with regard to Employees' Code of Conduct" at the same time when initiating and promoting the Taiwan Intellectual Property Management System (TIPS), so that they understand and undertake that they shall neither directly nor indirectly provide, promise, demand or accept any improper benefits, or engage in other behaviors that are in breach of integrity, laws and regulations or fiduciary duty when performing their duties. CSC also organized speeches on ethics and compliance (including trade secret protection) issues, such as inviting benchmark companies to communicate on innovative management of trade secrets, and inviting accounting firms to provide training for middle and senior managers of each unit of the Company on the theme "Implementation and Development Trends of Sustainable Innovative Enterprises and Ethical Corporate Management Best Practice Principles".

CSC expects all employees to act lawfully and ethically in accordance with the abovementioned regulations. Therefore, in annual training workshops for new employees, CSC arranges for a series of lectures on company rules and regulations, corporate culture, information security, and intellectual property. The company also raises awareness of the importance of integrity among employees by providing information on various topics, such as "part-time jobs," "accepting improper benefits," "use of information," and "trade secrets." Employees are also required to comply with laws and regulations as well as the company's rules and regulations. Violation to the abovementioned regulations may result in disciplinary actions, including, but not limited to, termination of employment, written warning or adverse pay treatment. In 2023, CSC arranged 12 training sessions for new recruits, and 365 trainees were trained. To improve the professional and legal knowledge of directors and supervisors in the CSC Group, CSC arranged 2 corporate governance courses on corporate fraud risk and net zero carbon emissions.

Avoiding Conflicts of Interest

To promote honest and ethical behaviors of directors, "The Codes of Ethics for Directors" of CSC strictly stipulates avoidance of conflict of interest and sets anti-corruption principles. Also, "Rules of Procedure for Board of Directors Meetings", which was enacted in accordance with "Regulations Governing Procedure for Board of Directors Meetings of Public Companies", provides that if there is a

conflict of interest for any director with respect to any matter on the agenda at the board meeting the director must recuse from discussion and voting on that matter and must not exercise voting rights as proxy for another director on that matter. With consideration to the trend of corporate governance, when amending the Rules of Procedure for Board of Directors Meetings in 2022, the Company deems directors to have a conflict of interest if the director's spouse, relative within the second degree of kinship, or a company with controlling interest or subordinate relationship with the director has a conflict of interest in the agenda item.

Please refer to CSC's 2023 annual report Chapter 3 and its Annex- Consolidated Financial Statements Transactions with Related Parties for the execution results of principles and regulations mentioned above; the report also provides a further disclosure on cross-board membership, cross-shareholding with suppliers and other stakeholders, existence of controlling shareholders, and related parties including their relationships, transactions, and outstanding balances.

In addition, the organizational regulations state the relevant rules regarding avoidance of conflict of interest and corresponding penalties, such as: 1. “The Code of Ethics for General Managers and Above”, which clearly regulates that personnel above General Managers should handle business in an objective and efficient manner, avoiding using their positions to cause undue benefits to related personnel or the company; 2. “The Ordinance for Avoiding Conflict of Interests”, prohibiting employees from using their power or position and information to plot private interests.

Preventing Malpractice

CSC has always banned dishonest behaviors such as “soliciting, accepting, and being bribed with improper benefits from suppliers or stakeholders”, and this stance has been a part of CSC's corporate culture. Complying with Article 7.1.1 of the “Political Donations Act”, CSC does not contribute to political donations. According to “Ethical Corporate Management Best Practice Principles for CSC”, all of the CSC’s directors, managers, employees, mandataries or anyone who de facto controls the management of CSC should neither directly nor cause other dishonest behaviors such as violation of integrity, illegality, or breach of fiduciary duty when engaging in commercial activities.

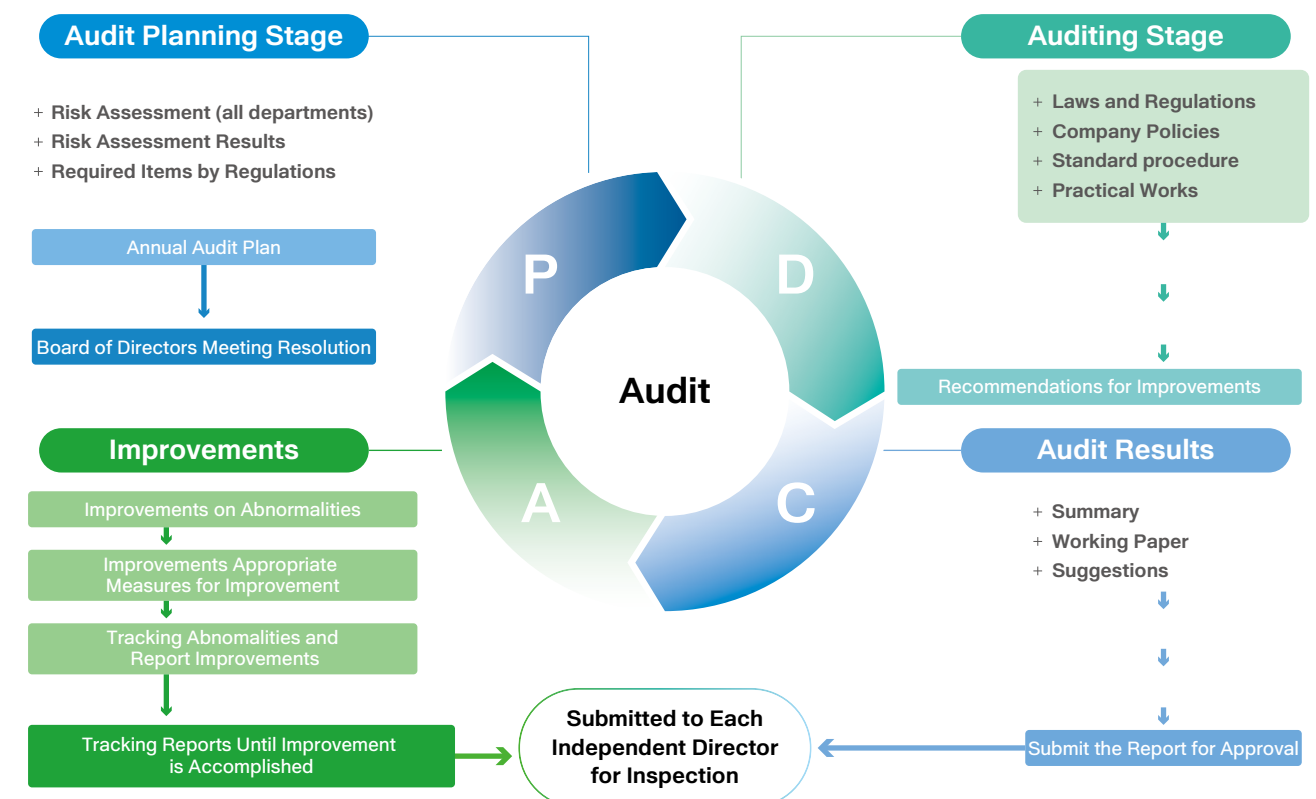
The company establishes an open whistleblowing channel through the hotline, fax, and website etc. The Internal Audit Office is responsible for handling the whistleblower case, keeping the information of such case confidential throughout the investigation process.

Aspect	Anti-Corruption Measures
Organizational Regulations	CSC stipulates moral requirements of CSC such as “Ethical Corporate Management Best Practice Principles for CSC”, “Procedures for Ethical Management and Guidelines for Conduct”, “The Code of Ethics for Directors”, “The Code of Ethics for General Managers and Above”, “the Ordinance for Avoiding Conflict of Interests”, “Integrity and Ethics Directions for Employees of China Steel Corporation Group”.
Employee Training	New employees are trained on ethical practice, discipline following, information utilization, confidential items and other organizational regulations. Promotion of corporate culture is accessible to all employees through the CSC Semimonthly Journal and website.

• Evaluation of Compliance and Operations	The Internal Audit Office(IA) annually evaluates compliance with relevant laws and regulations and the execution of operational cycle tasks in accordance with the FSC's "Guidelines for Establishing Internal Control Systems for Publicly Issued Companies," and formulates an annual audit plan based on the evaluation results.
• Self-inspection	In 2023, 39 departments, 7 divisions, and 25 subsidiary companies of CSC Group conducted self-assessment independently and submitted individual reports. These reports were reviewed and approved by respective vice president, president, and chairman of subsidiary company before being consolidated by the Internal Audit Office. Timely adjustments to the design and execution of internal control systems are made in response to environmental changes to ensure the effective implementation of the company's self-supervision mechanism.
• Anti-Corruption Reporting channel	+ Hotline: +886-7-8021111#2191 (Head Office) or +886-7-3371111#22191 (China Steel Building) + Mailbox: P.O. BOX 47-13 Kaohsiung, Taiwan + Website: https://www.csc.com.tw/csc/cg/ia_p6_1.html + Information regarding reporting incidents of malpractice, bribery, and fraud is also provided in the procurement inquiry section within the e-commerce system. The Internal Audit Office is tasked with receiving whistleblowing related to improper conduct, including graft, fraud, actions detrimental to the Company's interests, and violations of company regulations. + In 2023, a total of 26 cases were received, and each was meticulously examined and processed in collaboration with all relevant units. None of these cases involved significant drawbacks or resulted in serious losses to corporate profits.

+ For more details [Regulations and Implementation] https://www.csc.com.tw/csc_e/cg/cg.html#cg1

6.1.4 Internal Auditing and Correction



The Internal Audit Office (IA) is under the Board of Directors. In addition to regularly reporting audit activities to the Audit Committee, the chief auditor also attends Board meetings to report the status of internal control. The purpose of internal auditing is to assist the Board and managers in checking and reviewing defects of the internal control system, to evaluate the effect and efficiency of operations, and to provide timely suggestions of improvement to ensure the continuous practice of internal control systems.

Correction and Operation: IA requested that related units revise 2 internal control procedures and control key points in 2023.

Annual Audit and Tracking

In 2023, the Audit items include control operations of various operating cycles, crosschecking functions between systems, compliance with the regulations of Financial Supervisory Commission (FSC), and the audit management of subsidiaries. A total of 45 auditing reports and 505 suggestions of improvement were proposed in 2023, and subjected timely improvement measures by audited units and subsidiaries, and filed in the CSC's IA Management System for follow-up. After completing each audit item, it is to be reported to the independent directors for review.

6.1.5 Information Transparency

CSC, according to "Guidelines for Online Filing of Public Information by Public Companies", "Taiwan Stock Exchange Corporation Rules Governing Information Filing by Companies with TWSE Listed Securities and Offshore Fund Institutions with TWSE Listed Offshore Exchange-Traded Funds" and "Taiwan Stock Exchange Corporation Procedures for Verification and Disclosure of Material Information of Companies with Listed Securities", discloses the Company's material information and other important information on the Market Observation Post System (MOPS), and provides CSC-related information through corporate website, the shareholder service direct line, spokesperson and designated media contact for the reference of all stakeholders.

6.2 Board of Directors

			Diversified Core Competences							
Title	Name	Gender	Business Management	Decision-Making	Industry Knowledge	Industry Management Experience	Finance and Accounting	Marketing	Technology	Risk Management
Chairman	Chao-Tung Wong	Male	●	●	●	●		●		●
	Wen-Sheng Tseng	Male	●	●	●					
Director	Ming- Jong Liou	Male	●	●	●					
	Shyi-Chin Wang	Male	●	●	●	●			●	
	Chien-Chih Hwang	Male	●	●	●	●		●		
	Cheng-I Weng	Male		●	●				●	
	Shou-Tao Chen	Male	●	●	●	●			●	
	Chun-Sheng Chen	Male	●	●	●					●
	Shyue-Bin Chang	Male	●	●	●				●	
Independent Director	Min-Hsiung Hon	Male	●	●	●				●	
	Lan-Feng Kao	Female			●		●			●

According to Article 192-1 of the “Company Act” and Paragraph 1, Article 22 of the CSC’s Articles of Incorporation, the directors are selected by the nomination system for candidates. Independent directors and non-independent directors are nominated separately, and are elected by shareholders from the two candidate lists. All directors are covered by liability insurance to reduce the risks of decision-making.

CSC specifies six professional expertise of directors (law, accounting, industry, finance, marketing, and technology) in the Rules Governing the Election of Directors. These skills cover important abilities required for corporate governance, as well as the knowledge required for sustainable development.

For example, Director Chun-Sheng Chen is a representative of CSC Labor Union and has long been concerned about labor-related issues. Meanwhile, some directors are top managers at CSC and are familiar with corporate governance and CSC's business operations. Also, Director Shyi-Chin Wang, with his experience as the vice president of the Technology Division, can make the Board of Directors better understand technological developments such as energy conservation and carbon reduction. In addition, independent directors can also pay attention to ESG issues from an outside perspective and provide suggestions to the Company.

CSC’s 18th Board of Directors consists of 11 members, including 3 independent directors, who were elected on June 17, 2022 with a tenure of three years. Of the 11 members in the Board of Directors, 10 are

male directors while the remaining one is a female director. These directors, whose age lies between 54 and 79 years old, specialize in a variety of fields, including steel, resource engineering, civil engineering, business administration, industrial management, mechanical engineering, materials engineering, electrical engineering, aerospace, and accounting, thus fully realizing the goal of diversity in the Board of Directors.

The Company's directors Chao-Tung Wong, Shyi-Chin Wang, Chien-Chih Hwang, and Shou-Tao Chen are involved in business decision-making, Shyi-Chin Wang is the Company's president and has expertise in steel business management, leadership decision-making, knowledge of the industry, and technology. Chien-Chih Hwang is the Company's executive vice president and has expertise in steel business management, leadership decision-making, industry knowledge and marketing. Shou-Tao Chen is the Company's vice president of the Production Division, and has expertise in steel business management, leadership decision-making, knowledge of the industry, and technology. The above-mentioned directors assist the Company in operations using their expertise and report to the Board of Directors.

In addition, the Company's "CSC Group GHG Inventory and Assurance Schedule," as well as "implementation of energy conservation, carbon reduction, and carbon neutrality" and "implementation of digital transformation" are reported to the Board of Directors every quarter. The Company's "ESG goals and implementation status" and "risk management implementation status" are reported to the Board of Directors every six months.

6.2.1 Committees of the Board

For strengthening the operation of the Board of Directors, the Board has three functional committees such as "Audit Committee", "Remuneration Committee", and "Corporate Governance and Sustainability Committee".

Audit Committee

The committee is composed of 3 independent directors, one of whom has accounting and financial expertise. Its main responsibility is to assist the Board in overseeing integrity of the company's financial statements, Certified Public Accountant (CPA) appointment (termination) and integrity/performance, effective implementation of the company's internal control, and the company's control of compliance with legal and regulatory requirements, and the company's existing and potential risks. The committee convened 5 meetings in 2023. The proposals drawn from the resolutions of the meetings shall also be presented to the Board.

Remuneration Committee

The committee is composed of all 3 independent directors who shall review and assess the performance evaluation system for commissioned managers, the evaluation results, and related remuneration systems. The committee convened 3 meetings in 2023. The proposals drawn from the resolutions of the meetings shall also be presented to the Board.

CSC's remuneration policy:

- Directors :

- According to Article 6, Paragraph 1 of CSC's Articles of Incorporation, no more than 0.15% of the company's profit shall be set aside as remuneration for directors under the resolution of the meeting of the Board of Directors if there is profit in any given fiscal year, and the distribution of directors' remuneration shall be reported in the shareholders' meeting.
- Independent directors receive fixed compensation and do not receive director's remuneration described above.
- Each year, the distribution of directors' remuneration is first reviewed by the Remuneration Committee before it is submitted to the Board of Directors for approval. Remuneration is allocated to each director according to the principles for the allocation of directors' remuneration and the results of performance evaluation for individual directors.

- Senior executives:

- According to the rules for senior executives' remuneration set forth in CSC's regulations governing salary management and related provisions, the major components in the remuneration of appointed managers include basic salary, bonuses, and employee compensation. Basic salary is determined by reference to the usual pay levels in the industry and listed companies as well as in consideration of the reasonableness of the connection between individual performance, the company's business performance, and future risks.
- To enhance sustainable operation and management at the Company, fulfill its commitment to sustainable development, and meet the expectations of its stakeholders, the Company aims to achieve sustainable development by taking into consideration economic growth, environmental protection, and the common good of society. In addition to job-related indicators, the performance evaluation items of senior managers also include company-level environmental, social and governance goals (accounting for at least 5% of all performance evaluation indicators, included in the annual performance evaluation and linked to salary), so that the remuneration of senior managers is linked to the Company's business performance and sustainability performance, and concrete actions are taken to make ESG and economic contributions, in order to deepen the foundation of sustainability.

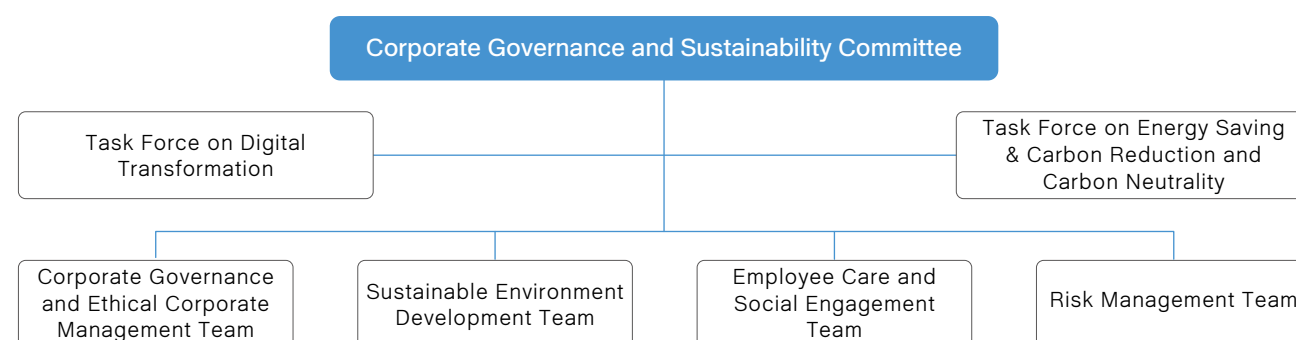
6.2.2 Corporate Governance and Sustainability Committee

CSC established the Corporate Governance and Sustainability Committee in November 2019. The committee is primarily charged with assisting the Board of Directors in overseeing the promotion, implementation, and execution of various sustainability-related matters, such as corporate governance, ethical corporate management, sustainable development policies, risk management, energy conservation & carbon reduction and carbon neutrality, and digital transformation.

+ For more details [Corporate Governance and Sustainability Committee] https://www.csc.com.tw/csc_e/cg/bof3.html

The Corporate Governance and Sustainability Committee is composed of 5 directors, and 3 of them are independent directors who excel in mechanical engineering, material science, and finance and accounting. The other 2 directors are an employee director who values labor welfare and a manager with hands-on practices in management. The Committee meets the skills needed for corporate governance and sustainable development. 3 meetings were held in 2023.

Organizational Structure of the Corporate Governance and Sustainability Committee:



The heads of the four execution teams, Corporate Governance and Ethical Corporate Management Team, Sustainable Environmental Development Team, Employee Care and Social Engagement Team, and Risk Management Team, are served by the vice presidents of the relevant divisions, while the Corporate Governance Officer serve as the convener. Task force on energy saving & carbon reduction and carbon neutrality is headed by the chairman of the Board and Task Force on Digital Transformation is led by the President. Each execution team is responsible for reporting implementation plans and results to the Corporate Governance and Sustainability Committee and the Board of Directors on a regular basis. In addition, the Corporate Governance and Sustainability Committee periodically reports important information regarding the annual stakeholder communication outcomes and investor expectations to the Board of Directors, facilitating the Board's understanding of external expectations for the company's sustainable development.

In 2023, 4 execution teams and 2 task forces continued to promote corporate governance strengthening, air pollution reduction, overall community construction, regular risk assessment, greenhouse gas management and smart production line development, and implement ESG targets in 2023 as planned. Please refer to corporate website for detailed implementation results. In 2024, CSC plans to gradually implement its sustainable development commitment based on the short-term, medium-term, and long-term ESG goals set in 2023.

+ For more details [Corporate Governance and Sustainability Committee] https://www.csc.com.tw/csc_e/cg/bof3.html

6.2.3 Board Performance and Evaluation

With a view to implementing corporate governance and strengthening the functions of the Board of Directors, performance targets are set to enhance the efficiency of the Board of Directors' operations and implement ESG work. During the 4th meeting of the 17th Board of Directors held on November 11, 2019, the "Regulations Governing Performance Evaluation of the Board of Directors" was approved in accordance with Article 18 of the "Operation Directions for Compliance with the Establishment of Board of Directors by TWSE Listed Companies and the Board's Exercise of Powers" and Article 37 of the "Corporate Governance Best Practice Principles for TWSE/TPEX Listed Companies." Based on this set of regulations, internal performance evaluation is conducted once a year by means of a questionnaire survey. The "Rules for Performance Evaluation of Board of Directors" was revised in 2021 to incorporate an evaluation item of "ESG issues engagement" starting from 2022. Considering that directors are independent of each other, every director is required to answer the questionnaire. After the Secretariat Department collects the questionnaires from them and compiles the results of performance evaluation, a report on the results is then submitted to the Board of Directors by the end of the first quarter of the following year for review and improvement. Meanwhile, external performance evaluation is carried out by an external independent institution or a team of experts and scholars at least once every three years.

The evaluation scope includes performance evaluation of the overall Board of Directors, individual directors, and functional committees. Self-evaluation items encompass the level of involvement in company operations, enhancing the quality of Board decision-making, Board composition and structure, etc. Performance evaluation items for Board members include their understanding of director duties, level of involvement in company operations, internal relationship management and communication, etc. The results of the Board's performance evaluation are applied as reference criteria for the selection or nomination of directors. Additionally, the individual performance assessment results of directors (excluding independent directors) serve as a basis for determining director remuneration distribution.

The average score in the Board performance self-evaluation is 4.95 points in 2023. Hence, the Board of Directors has good operational performance.

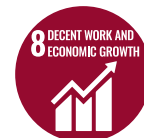
Furthermore, the company periodically arranges for directors and managers of CSC's group to take ESG-related sustainability courses. Topics of courses in 2023 include "Insights into Corporate Fraud Risks and Prevention Measures through Real-life Cases" and "Practical Management in the Area of Net Zero Carbon Emissions." In line with the five action plans of Corporate Governance 3.0 Sustainable Development Roadmap, CSC will continue to arrange further courses or workshops for Directors, in order to follow the global trends.

+ For more details [Board Performance Evaluation Method] <https://www.csc.com.tw/csc/cg/cg.html#law>

+ For more details [Further Study for the Board of Directors] https://www.csc.com.tw/csc_e/cg/cg.html#Con

Material Topic

6.3 Operational Finance



- 2023 Highlights

- The Long-term Credit Rating given by Taiwan Ratings is twAA-. The Long-term Credit Rating given by the Fitch Ratings is AA (tw).
- Selected as a constituent stock of the “Corporate Governance 100 Index”, the “Taiwan High Compensation 100 Index”, and the “FTSE4Good Emerging Index.”

Policy or Commitment

Financial performance is a demonstration of the stability and efficiency of corporate operations. By strengthening the financial structure and implementing cost control, CSC continues to steadily drive the improvement of economic value and gives back to all stakeholders to achieve the long-term target of sustainable development. CSC follows the business philosophy of “Implementing Actual Performance”, and continues to create profits through increasing income and reducing costs. When there is a surplus in the year, under the maintenance of a stable financial structure, the annual surplus will be returned to shareholders in the form of dividend distribution to establish the value of the company's long-term investment.

CSC makes short, mid, and long-term targets to reach financial stability. By fully implementing the action plans, CSC assists important Group companies in making financial plans and financial integration projects. In compliance with the mission of “the high value added steel mill”, CSC continues to raise product value and improve gross profit structure, with an aim to make both the profitability rate and sales ratio of the advanced premium steel over 20% in 2030.

Action Plan

Financial information platform

- Continue to improve the integrated banking data platform and build an integrated information management platform for customer cash flow/logistics to improve the efficiency of financial operations.
- Continue to expand functions of the group capital system to strengthen the synergy of the group's capital utilization and to lower financial risks.

- Continue to optimize the group financial information inquiry platform, and provide access to important financial management information.

Developing Sustainable Financial Solutions

- In response to the large capital expenditures for carbon reduction transformation, besides formulating financing plans of different scales, CSC will continue to pay attention to domestic and overseas green financing market conditions, and maintain contact with financial institutions to obtain the latest information to respond to market changes.
- CSC assesses the structure of new insurance from a group perspective, in order to collect information on international insurance while pursuing reinsurance underwriting capacity. CSC also evaluates the portfolio requirements of green insurance products.

Transparent Communication Channels

- CSC participated in the investor conferences and road shows held by the brokers to have face-to-face communication with domestic and international investors.
- Corporate website has Investor Section in both Chinese and English, where financial information will be regularly disclosed, as well as the investor conference presentation, annual report, and stock-related information.

Corporate website has a Stakeholder Section where the phone number and email of spokesperson, deputy spokesperson, and shareholders service & investor relations section are disclosed. Shareholder service e-mail and free shareholder hotline have been established to instantly respond to the questions and comments of the shareholders/investors.

Implementation Results

According to the update status of equipment and operating conditions, CSC properly plans funding sources and dividend policies and adjusts the dividend distribution rate to meet the expectations of shareholders and investors, and retain appropriate funding positions to meet capital expenditure needs.

CSC's rating by Taiwan Ratings and Fitch Ratings remained the same in 2023, in which the outlook of Taiwan Ratings changed from positive to "stable," mainly due to the shrinking buffer for financial leverage and the delayed recovery of steel demand. The outlook of Fitch Ratings was maintained at "Stable." It is evident that rating agencies recognize CSC's ability to respond to fluctuations in the steel market through its cost advantage and the ability to maintain steady and stable cash flow. Maintaining good performance in credit ratings will help with short-, mid- and long-term financing and reduce financing costs.

2023 Credit Rating

Rating Agency	Credit Rating		Rating Outlook	Effective Date
	Long-Term	Short-term		
Taiwan Ratings	twAA-	twA-1+	Stable	2023/04/28
Fitch Ratings	AA (tw)	F1+(tw)	Stable	2023/12/05

6.3.1 Business Performances

Operating Revenues

Standalone				
	Unit: 1,000 TWD	2021	2022	2023
- Sales Revenue		254,290,694	244,865,758	191,708,554
- Service Revenue and Others		5,491,777	5,734,871	5,440,604
- Total Operating Revenues		259,782,471	250,600,629	197,149,158

Consolidated				
	Unit: 1,000 TWD	2021	2022	2023
- Sales Revenue		441,129,034	419,868,253	335,681,275
- Service Revenue and Others		27,198,467	29,699,235	27,645,223
- Total Operating Revenues		468,327,501	449,567,488	363,326,498

+ For more details [Financial Information] https://www.csc.com.tw/csc_e/ss/fin/fin.html

Operating Expenses

Standalone				
	Unit: 1,000 TWD	2021	2022	2023
- Operating Costs		209,566,237	232,344,138	190,093,873
- Operating Expenses		9,512,321	7,957,924	7,259,043
- Total Operating Expenditure		219,078,558	240,302,062	197,352,916

Consolidated				
	Unit: 1,000 TWD	2021	2022	2023
- Operating Costs		373,012,890	417,665,025	346,553,753
- Operating Expenses		15,557,338	13,637,110	13,186,803
- Total Operating Expenditure		388,570,228	431,302,135	359,740,556

Net Profit

Standalone				
	Unit: 1,000 TWD	2021	2022	2023
- Profit before Income Tax		71,051,347	20,366,569	2,107,226
- Net Profit		62,053,033	17,783,775	1,681,679

Consolidated				
	Unit: 1,000 TWD	2021	2022	2023
- Profit before Income Tax		84,413,648	23,258,596	4,590,094
- Net Profit		68,906,072	17,995,059	3,531,205

Surplus Distribution

In 2023, the amount of distributable earnings was 19.479 billion TWD, the Board of Directors adopted the resolution to distribute a cash dividend of 1.4 TWD per preferred share and cash dividend of 0.35 TWD per common share. Dividend distribution and return on investment over the past three years are as follows:

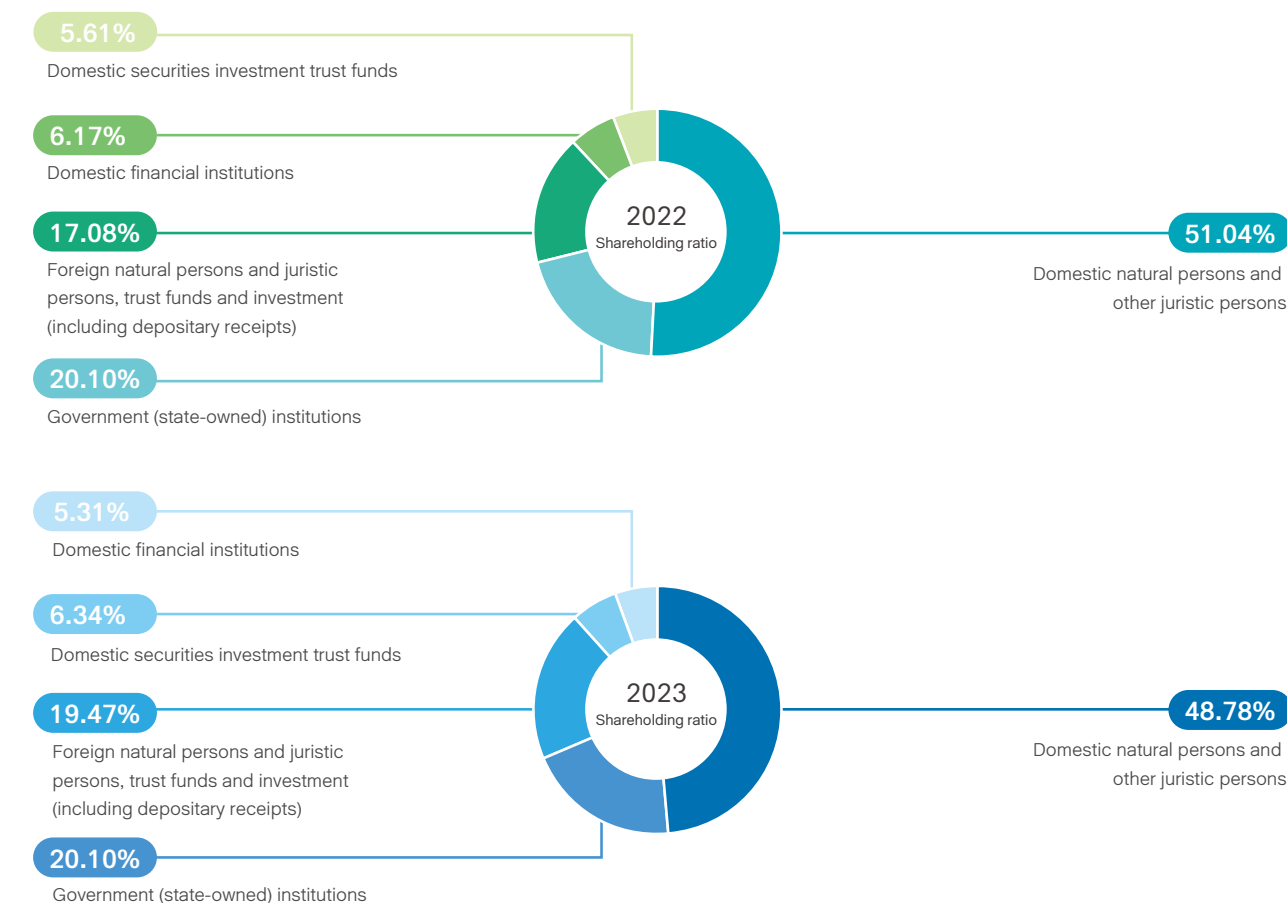
	Unit: TWD	2021	2022	2023
- EPS		4.02	1.15	0.11
- Cash Dividend		3.1	1	0.35
- ROE (%)		19.32	5.32	0.54
- P/E Ratio		8.27	27.77	257.45
- P/D Ratio		10.73	31.94	80.91
- Cash Dividend Yield (%)		9.32	3.13	1.24

According to CSC's Articles of Incorporation, in case of any earnings earned in any given fiscal year being reported from the final annual accounting, CSC shall appropriate or reverse a special reserve firstly after taxes, losses and legal reserves have been paid, made up and set aside respectively. Secondly, a preferred share dividend shall be distributed at 14% of the par value. In case the account still remains any distributable earnings, additional bonuses shall be distributed according to the percentage of shares held by each shareholder of preferred and common shares.

CSC's cash dividend payout ratio is approximately 60~80%. For future dividend distribution, the Company will make best effort seeking balance between long-term growth stability and investor's expected dividend yield.

6.3.2 Shareholder Structure and Subsidiaries

Shareholder Structure (According to the information on the book closure date, August 1, 2023)



CSC will continue to adopt a steady dividend policy, and engage in exchanges and communication with investors during routine investor conferences and the Annual General Meeting each year, thereby strengthening investors' confidence in CSC's long-term investment value. Furthermore, CSC periodically discloses information on its financial position, business performance, and corporate governance on its website and the Market Observation Post System, fulfilling its responsibility and obligation of transparent company information to protect shareholders' rights and interests.

Based on Article 10 of the Statute for Industrial Innovation, CSC's expenditure on R&D is credited against its income tax payable. In 2023, the amount of the tax credit applied for R&D expense was 20.30 million TWD.

+ For more details [Tax Policy] https://www.csc.com.tw/csc_e/esg/cg/cg5_1.html

6.4 Risk Management

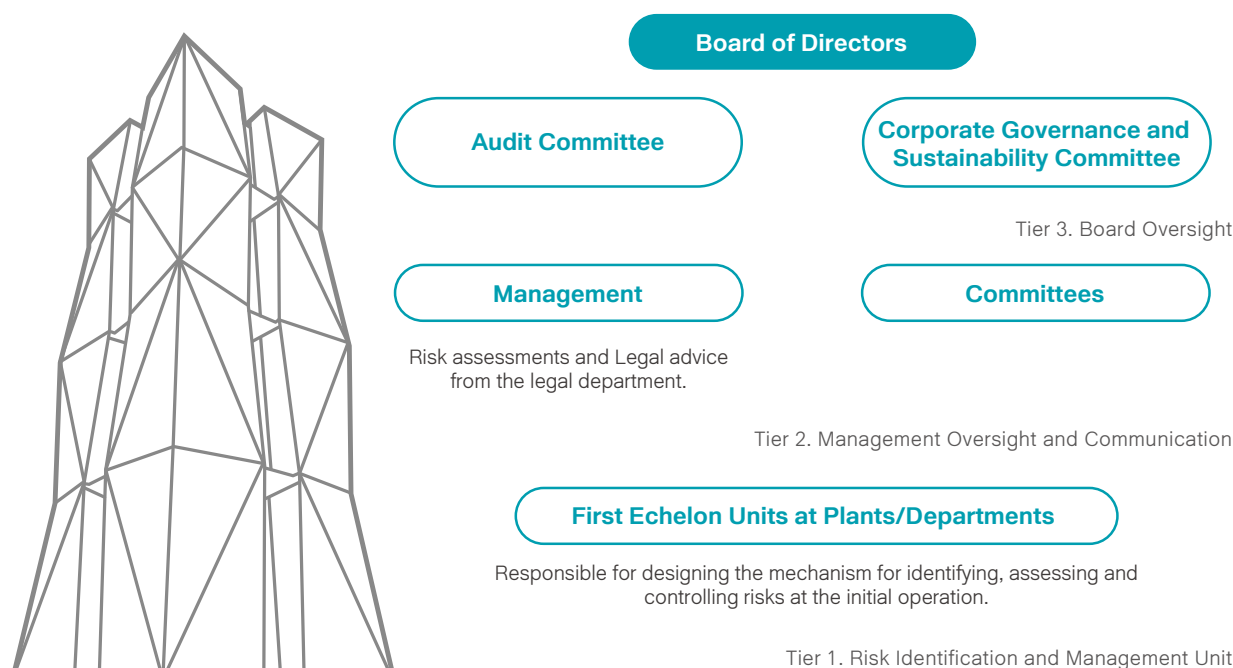
6.4.1 Operating System of Risk Management

Organization of Risk Management

Risk control at CSC is divided into three levels with different mechanisms. It adopts comprehensive risk control over all employees, but does not assigns the task to one single department. At ordinary times, control is executed level by level, including the identification, assessment and prevention of risks.

In the first half of each year and regularly throughout the year, the risk assessment information is compiled and reported to the Corporate Governance and Sustainability Committee and Board of Directors, while the frequency of evaluation for each issue (monthly/quarterly) is determined by the respective responsible departments who report to their functional committees.

Procedures and Policies of Risk Management



For the purpose of stable operations and sustainable development at CSC, the Board of Directors approved the establishment of the “Risk Management Policy and Procedures” as the highest guiding principle for risk management. According to the Risk Management Policy and Procedures, the executive units should identify, evaluate, and formulate response strategies or measures for risk factors. Risk monitoring is carried out by management personnel at all levels, managers, and functional committees, and the status of risk management is regularly reported to the Board of Directors twice a year to properly control related risks.

In 2023, CSC conducted risk identification on operational risks, financial risks, information security risks, environmental risks, legal compliance risks, and other areas covering economic, environmental, and social aspects, and divided the risk levels into five levels to confirm the priority of risk management strategies. According to the assessment results, there are two items with high risk or above, including carbon control (implementation of carbon pricing mechanism) and major occupational accidents. There are 21 items with medium risk or higher, including geopolitical risks, market demand risks, inflation risks, rising insurance costs, hot-rolled slab inventory risks. For the risk items that had been identified and analyzed, the staff from relevant departments were responsible for the formulation and implementation of subsequent risk management strategies and plans.

As risks derived from the rapid changes in the global economy, society, and environment are diverse and complex, CSC had established an emerging risk management system to responds to and manage potential threats in a timely manner through identification, assessment and responses, and supervision mechanisms. After having internal and external emerging risk information collected, a total of seven emerging risk issues and their potential impacts were identified in 2023 and the impact of each issue was assessed by managers. The survey results showed that the top three emerging risks that CSC should pay priority to were carbon pricing controls, customer demand moves towards low-carbon products, and low-carbon production technology; the relevant countermeasures had been developed.

Risk Management Policy and Procedures



+ For more details [Risk Management] https://www.csc.com.tw/csc_e/esg/cg/cg3.html

6.4.2 The Implementation of Risk Management

CSC's emerging risks, major risks and response measures are as follows:

Aspect	Type	Potential Risk	Control Strategies and Measures
Economy/ Governance	Low carbon production technology (Emerging risks)	Obstacles to developing autonomous low-carbon production processes, low-carbon energy, and carbon sequestration technologies	Low carbon processes and production technologies 1. In the short term, we will first develop production technology to increase the use of scraps to meet customers' small-volume transfer orders for green steel. 2. Gather R&D capabilities of domestic industry, academia, and research institutes, utilize government resources to expand the scale of R&D for proprietary technology, and properly manage and control production expenditures to cope with the increased costs after transfer to new process production lines. 3. Low-carbon raw materials that contain iron are recycled within the Company and used in the blast furnace process to reduce expenses from purchasing raw materials with low-carbon emissions. 4. Search for multiple channels for purchasing raw materials, build partnerships, and sign contracts with stable raw material sources. 5. Initiative early evaluation for the connection of electric arc furnace and basic oxygen furnace in continuous casting factories and plan the technology development schedule. Low-carbon energy and carbon capture technologies 1. Plan and develop low-carbon fuel application technologies, analyze possible problems in the fuel conversion process, and formulate solutions. At the same time, preparations for on-site application will be carried out to establish the first demonstration case of hydrogen-enriched combustion. 2. Develop highly efficient carbon capture technologies with low energy consumption, and formulate a long-term carbon reduction plan for planning the installation of carbon capture equipment. 3. Work with other organizations in adopting commercial carbon capture technologies with a proven track record, and work with petrochemical companies for co-production between steel and petrochemical plants.
	Carbon pricing (emerging risk)	The imposition of domestic and overseas carbon fees/levies will put pressure on operations and weaken competitiveness in exports	Production side 1. Collect and research the supporting measures of carbon taxes and fees in advanced countries that have implemented carbon taxes and fees, and formulate response measures in advance. 2. In view of the potential risk of duplicate controls from the Ministry of Environment's "carbon tax and fee" and "total quantity control and trading," formulate response strategies as early as possible and actively participate in relevant government symposium. Customer side 1. Actively invest in carbon-reduction production technology or related carbon-reduction investments, and reduce carbon emissions per unit product, which will help reduce the carbon border tax levied and thereby enhance export competitiveness. At the same time, downstream customers can also enhance the competitiveness of end products through low-carbon steel, and maintain the support of downstream customers for CSC. 2. Encourage the government to develop proof of payment of carbon surcharges, and actively understand how to make relevant fees recognized by the EU (and other countries that implement carbon border adjustment mechanisms in the future) to offset CBAM voucher fees (or carbon border taxes in other countries). 3. For carbon fees paid in Taiwan to be recognized internationally, CSC will work with relevant government departments and downstream customers to actively introduce internationally recognized third-party certifications, so that regulations are aligned with major countries, thereby maintaining the export competitiveness of CSC and its downstream customers.
	Customer demand moves towards low-carbon products (Emerging risks)	As rising awareness of carbon neutrality will drive domestic and foreign customers' demand for low-carbon products	1. The main raw material for low-carbon products in the near future is scraps, and the stability of scrap supply should be ensured. 2. Low-carbon products are susceptible to market demand fluctuations. Economic recession or changes in industry demand will affect the amount of purchase orders. Therefore, production should be planned more carefully, and green premiums should be appropriately reflected in steel production costs. 3. Strive for low-carbon certification and labeling of steel-related products to ensure that products meet customer requirements.

Aspect	Type	Potential Risk	Control Strategies and Measures
Economy/ Governance	Geopolitical risk	Geopolitical risks will heighten the uncertainty of the Company's operations, impacting export activities and affecting revenue.	<u>Sales</u> 1. With the goal to become a steel mill that produces advanced premium products with high value, CSC will focus on optimizing the structure of purchase orders, giving priority to consolidating the customer base for high-end products, increasing customer dependence, and reducing the risk of geopolitical factors affecting customer demand. 2. Predict the time and areas affected by blockade, negotiate with ships and shipowners early to establish contracts, and ensure that routes avoid high-risk areas. 3. Discuss packaging methods with sales and transportation units to ensure smooth entry and exit of goods.
			<u>Raw Materials</u> Continue to pay attention to geopolitical changes and provide timely suggestions to relevant units in production planning to adjust inventory accordingly.
Environment	Extreme Weather Risk	The increased risk of water scarcity resulting from extreme changes in weather patterns could impact production.	1. In response to water resources risks, CSC continues to improve processes to reduce the use of natural resources. From January to December 2023, the average usage of tap water was approximately 51,200 cubic meters/day, compared with the 130,000 cubic meters/day in 2017, consumption has been reduced by approximately 60.6%. 2. Increased the use of reclaimed water purified from sewage in coordination with government measures, statistics show that in addition to the existing water usage contract volume from March to April 2023, a total of approximately 414,000 tonnes of reclaimed water was used.
Society	Hazardous Events	Major Occupational Accidents	1. Employees are trained to strengthen their knowledge and skills on industrial safety. 2. Audits on effectiveness are performed to enhance the auditing capacity. 3. Reviews are carried out to ensure that improvement and corrective measures are constantly effective.

+ For more details 【Completed Implementation of Risk Control】https://www.csc.com.tw/csc_e/esg/cg/cg3.html

7

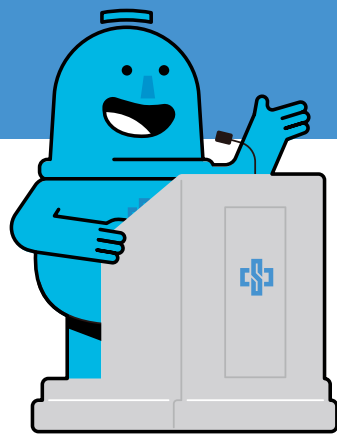
Value Creation and Industry Chain Improvement

Feature Build a trademark portfolio to enhance sustainability and resilience

- 7.1 Product and Sales
- 7.2 Research Innovation and Product Management
- 7.3 Information Security
- 7.4 Supply Chain Management
- 7.5 Industry Upgrade



Feature



Build a trademark portfolio to enhance sustainability and resilience

Digital transformation of intellectual property management to become a model enterprise for ESG sustainability

The Company was granted the patent and trade secret Grade A certification of Taiwan Intellectual Property Management System (TIPS) in 2021. To comprehensively improve the intellectual property management system the following year, the Company added two management targets, trademarks and copyrights, and obtained four intellectual property Grade A certifications the same year. In 2023, CSC was selected as one of the three manufacturers to be guided by the Industrial Development Administration of the Ministry of Economic Affairs for the innovative intellectual property management system, and successfully developed an electronic trademark management system on its own.

Intellectual property management linked to ESG to highlight brand value

CSC was invited to apply for the "Reinforcement Plan for Corporate Intellectual Property Management" organized by the Industrial Development Administration, Ministry of Economic Affairs and implemented by the Institute for Information Industry (III), in order to deepen the Company/group's emphasis on its ESG brand image, on the basis of sound intellectual property management combined with the Company's operational strategies, such as introducing AIoT, developing green products, and developing and improving carbon reduction technologies. CSC independently developed an electronic trademark management system under the theme of "Innovative Intellectual Property Management System." The system's intellectual property rights belong to the Company. The system's systematic and electronic trademark management methods improve the efficiency of trademark management, highlight CSC's brand value, and strengthen the resilience of the Company's sustainable operations.

Innovate intellectual property management practices to enhance international competitiveness

The Company's intellectual property management systems include "Patent Search Analysis Platform," "Patent Management System," and "Trade Secret Registration System." The "Trademark Electronic Management System" newly added in 2023 is a self-developed program on the existing ERP system through cross-departmental collaboration. The system not only improves the electronic storage and management of existing trademarks, which is beneficial to internal management efficiency, but can also promptly provide supporting information when facing trademark disputes to secure trademark rights. The system also collects green trademark registration information of steel mills in the supply chain (mainly including trademark registration information of overseas production bases in Vietnam and Malaysia), which serves as an important reference for formulating the Company's trademark portfolio strategy.



Self-develop Trademark
Electronic Management
System



Value Added

Incorporate with CSC
sustainable business
development strategies



[Link to ESG Innovative Intellectual Property Management System](#)

Number of certified trademarks by countries



Project implementation results and benefits

The implementation of this system echoes CSC's dual cores and three transformations strategies for sustainable business development, promotes the development of a steel mill that produces advanced premium products with high value and the development of the green energy industry. It is linked to digital, low-carbon and supply chain transformation. Through cross-departmental collaboration, the transition of information and management between the old and new systems is smooth and complete. In addition to automating trademark management, consolidating CSC's brand image, and collecting information, CSC is also implementing paperless management to reduce resource consumption. Furthermore, it can be used to formulate trademark strategies and combined with green steel supply chains increase social recognition of CSC's sustainability brand.

1+4 Granted the TIPS certification

By 2023, CSC and 4 subsidiaries were granted the TIPS certification.

2+N Apply for TIPS certification

By 2023, 2 subsidiaries are under process of applying the TIPS certification, taking "patent" as the main target.

10↑ Understand the importance of trademark

By self-developed innovative intellectual property management systems, CSC has communicated the importance of trademark management to more than 10 subsidiaries and demonstrated cases of connecting intellectual property management with ESG, thereby overall enhancing international competitiveness.

E Environment

By integrating trademark information into the system, trademark management risks are reduced. This system automates trademark lifecycle management, timely sends trademark extension notifications, and establishes a database of trademark usage evidence within the system. This optimization improves the quality of handling trademark-related cases and significantly reduces the need for paper-based operations.

S Social

Starting from CSC's overseas production sites, we observe the application status of green trademarks in the steel supply chain to enhance industrial competitiveness.

We aim to equip the system with the functionality to collect information on green trademark registrations in the steel supply chain. Leveraging the strengths of CSCs overseas production bases, such as in Vietnam, Malaysia, etc., we will gather and organize green trademark registration data from local steel supply chains. This data will serve as crucial reference material for formulating our trademark layout strategy.

G Governance

In line with CSC sustainable development strategy of dual cores and three transformations.

"To become a steel mill that produces advanced premium products with high value" benchmarks the field of artificial intelligence manufacturing, while "to develop the green energy industry" aligns with carbon neutrality and the circular economy. This corresponds to three transitions: "digital transition," "low-carbon transition," and "supply chain transition." We systematically collect text, graphics, or combinations thereof to serve as trademark layout references, aiming to deepen the company/group's emphasis on ESG brand image. This system is a collaborative project across departments (Legal, Information System, Environmental Protection), aiming to deepen cooperation between various units within the company in the future.

7.1 Product and Sales

7.1.1 Major Products and Usage

The production of crude steel in 2023 was 7.77 million tonnes approximately, decreasing by 0.67 million tonnes compared to 8.44 million tonnes in 2022 and the decrease rate is about 7.94%. The productivity per capita was 807.1 tonnes/man-year approximately.

Major products and usage

Steel	Applications
Plate	Shipbuilding, bridges, steel structures, oil country tubular goods (OCTGs), storage tanks, boilers, pressure vessels, die, truck chassis, general construction, offshore wind power, etc.
Straight bars, bars in coil	Nuts and bolts, hand tools, loudspeaker parts, automobile and motorcycle parts, suspension spring, bearing, machinery parts, free cutting rod, gear, polished bar, etc.
Wire rods	Nuts and bolts, steel wire and rope, P.C wire and strand, hand tools, welding electrodes, tire cord, bearing, free cutting rod, umbrella part, polished bar, etc.
Hot rolled coils, plates, and sheets	Steel pipes and tubes, vehicle parts, containers, pressure vessels, building structures, hydraulic jacks, substrate for galvanized and coated steel sheets, hand tools, light shapes and formed parts, etc.
Cold rolled coils	Steel pipes and tubes, steel furniture, kitchenware, home appliances, oil barrels, automobile panels and parts, enamelware, substrate for galvanized and coated steel sheets, hardware, etc.
Electro-galvanized coils	Computer cases/parts and accessories, home appliance panels/parts and accessories, LCD TV back plates/parts, motor cases, construction materials, furniture hardware and components, motorcycle fuel tanks, etc.
Hot-dip galvanized coils	Automobile panels and parts, home appliance panels/parts and accessories, computer cases/parts and accessories, PPGI substrate, construction materials, furniture hardware and components, etc.
Electrical steel coils	Electric vehicles, decoders, compressors, household appliances, electric machine tools, transformers, fluorescent ballasts, drones, spindle motors, water pump motors, reducer motors, servo motors, industrial motors, etc.

Production volume of major products

Unit: 10,000 tonnes	2021	2022	2023
Plate	92.4	92.1	81.3
Steel bar	66.6	53.6	39.8
Steel wire rod	129.8	112.9	87.0
Hot-rolled	234.1	211.3	219.1
Cold rolled	350.6	286.9	261.1
Slab	36.3	38.1	42.6
Cast iron	1.36	1.28	1.48
Total	911.2	796.1	732.4

7.1.2 Product Sales

In 2023, the total sales of steel products were 7.75 million tonnes (Mt) and Cold-rolled/Coated products took up 33.90%, followed by Hot-rolled products accounted for 32.18%. Among the total sales, domestic sales accounted for 52.38% (4.06 Mt approximately), and export sales accounted for 47.62% (3.69 Mt approximately). The major exporting markets included Europe, Southeast Asia, Japan, and China.

Sales Distribution in 2023

Unit: 10,000 tonnes	Plate	Bar/Wire	Hot-rolled	Cold-rolled/Coated	Others	Total	Ratio
- Domestic	74.4014	123.6073	86.9805	82.0896	38.8065	405.8853	52.38%
- Export	6.0997	13.5530	162.4135	180.6321	6.3470	369.0453	47.62%
- Total	80.5011	137.1603	249.3940	262.7217	45.1535	774.9306	100%
- Ratio	10.39%	17.70%	32.18%	33.90%	5.83%	100%	-

Export Sales Distribution by Foreign Regions

Export Sales by Country	Quantity (10,000 tonnes)	Percentage
- Japan	58.2582	15.79%
- China (Including Hong Kong)	37.4636	10.15%
- Vietnam	27.5735	7.47%
- Thailand	27.1801	7.36%
- Italy	25.7429	6.98%
- Malaysia	19.5360	5.29%
- Germany	18.2234	4.94%
- Belgium	17.5034	4.74%
- Indonesia	16.2927	4.41%
- Mexico	15.9448	4.32%
- India	14.3959	3.90%
- Portugal	12.9198	3.50%
- Spain	12.5165	3.39%
- Bangladesh	10.4997	2.85%
- Others	54.9948	14.91%
Total	369.0453	100.00%

7.2 Research Innovation and Product Management

Material Topic

7.2.1 Research Innovation



- 2023 Highlights

- Developed 50kg grade High Performance Bridge Steel SBHS400 for steel plates, and it has high strength and good processing properties. In addition to improving welding efficiency, it also improves the safety of bridges, and reduces construction costs.
- Developed bits steel BT9885V together with customers. Through composition and process optimization, coupled with downstream heat treatment control, the bits products produced have both high hardness and excellent fatigue life.
- Developed 60kgf high-strength steel for automobiles with strict mechanical properties. It improves the internal quality of steel and stably controls the mechanical properties and strength of products through metallurgical strengthening design of nano-precipitation, and uses low-sulfur control together with dynamically controlled coiling temperature process technology for hot-rolling. The products have been promoted for use in vehicle body structural parts.
- Developed high-elongation ultra-high-strength automobile steel 980TT, which is third-generation advanced high-strength steel. In addition to high strength, it also has high ductility and can meet the strict cold stamping processing requirements of automobile structural parts. This will help domestic automobile parts manufacturers improve their competitive advantages.
- Supply of steel with high recycled content: In response to the trend of brand manufacturers increasing the percentage of recycled materials used, the Company is actively engaging in development in its plant, and the amount of purchase orders in 2023 was 25,813 tonnes. The galvanized steel products SGCC RC40 (scrap ratio of 40% or above) and SECC RC20 (scrap ratio of 20% or above) obtained UL 2809 validation in March and August 2023, respectively.

- Target

Short-term targets (2024)

- Sales ratio of premium steel $\geq$ 50.0%
- New products: 30 items

Mid-term targets (2025)

- Sales ratio of premium steel $\geq$ 50.3%

Long-term targets (2030)

- Sales ratio of premium steel $\geq$ 52.0%

I Policy or Commitment

CSC follows the concept of “five Is”, which includes Information, Imagination, Ideation, Innovation, and Implementation, by which the innovation capacity can be unlimitedly excited.

The R&D of CSC includes two fields: steel and non-ferrous metals. The major research objectives include:

1. Product Development: developing high quality and premium grade new products with top specification and high added-value.
2. Product Application: developing advanced second and third processing technology to enhance the competitiveness of overall steel industry.
3. Process Development: setting up diverse production capability in steel refining and tight rolling technologies with low quantity, cost and pollution.
4. Enabling Technology: integrating AI technology with ICT industry, implementing AI technology in steelmaking process, and establishing AI production and marketing system to advance CSC towards a sophisticated steel company.
5. Energy Conservation and Environment Protection: enhancing the efficiency of energy use and pollution prevention technology, furthering energy conservation and emission reduction to create a sustainable environment. The Company develops technologies for low-carbon production and carbon fixation applications in coordination with the different carbon reduction paths. We also set KPIs and periodically review and move forward individual work items under key strategies.

∞ Action Plan

New Product Development

In order to create differentiation and enhance competitiveness, the "Total Quality Management (TQM) Committee," the subordinate "New Product Development and Quality Committee," and the "New Product Development Examining Group," "New Product Development Working Group," and "New Product Development Technology Group" will apply the results transfer proposed by the R&D unit, and the customer needs determined by the technical services unit and the market unit into mass production, in order to meet customers' needs. A total of 30 new product development projects were completed in 2023, including High Performance Bridge Steel, defense-tech steel, high temperature creep resistant pressure vessel steel, abrasion resistant steel, vehicle ball screw for electro-hydraulic braking system, high-strength bits steel, and supply of hot-rolled sheet high-strength steel for the HGI (Hot Dip Galvanizing) process; Customized automotive high-strength steel, Hot-Dip Galvanized products with high recycled content, Electro-Galvanized products with high conductivity, and high-strength low iron loss self-adhesive coated electrical steel.

Sales of Premium Steel

In order to implement competitive strategies through product differentiation, CSC includes the expansion of premium steel with “high technical content, high profitability, and high industrial benefit” as an important target in the planning of its ten-year business development strategies and reviews it annually on a rolling basis. Hence, this target was listed as one of its business targets this year. Approximately 3.607 million tonnes of premium steel was sold in 2023. The sales ratio was 49.8%, which fell short of the annual target (4.22 million tonnes/50%). Specific results include: Steel plate SBHS400 is used in bridge structures; Bar steel S55CM is used in ball screw for electro-hydraulic braking system; Wire rod BT9885V is used in next generation bits products; Supply hot-rolled sheet high-strength steel for the HGI (Hot Dip Galvanizing) process, which is used in building materials and solar panel frames; Develop a series of customized high-strength steel products with stringent mechanical properties requirements, such as CUST S460MC and SPH590-OD, to meet the forming and processability requirements of vehicle manufacturers; Cold-rolled high-strength low-alloy steel CR240LA and HX420LAD are used in vehicle parts; top-grade ES has become the number one choice of major motor vehicle manufacturers (including Tesla, Audi, and VW) for motors of new energy vehicles. The continued promotion of premium steel products will not only consolidate the Company's technological foundation for sustainable development, but also guide the direction of product differentiation. The quantity and ratio of premium steel in recent years is as follows.

Year	2019	2020	2021	2022	2023
Quantity (10,000 tonnes)	522.8	477.2	467.8	429.2	360.7
Ratio (%)	48.6	46.5	56.1	55.8	49.8

Note: Figures from 2019 to 2020 are presented in terms of order quantity, whereas since 2021 are presented in terms of sales quantity in line with the promotion of advanced premium steel.

Recycled steel

Environmental sustainability has become a topic of global concern in recent years. Customers have successively provided their demand for recycled materials and requested that CSC apply for recycled material validation. In response to the trend of brand manufacturers using and increasing the percentage of recycled materials, the Company is actively engaging in development in its plant, and the amount of purchase orders in 2023 was 25,813 tonnes. The galvanized steel products SGCC RC40 (scrap ratio of 40% or above) and SECC RC20 (scrap ratio of 20% or above) obtained UL 2809 validation in March and August 2023, respectively.

∞ Action Plan

Process Refinements

To enhance product competitiveness and client value, CSC continues to follow the strategy of improving “Quality, Grade and Variety”, as these dimensions can enhance the upgrade of make-to-order products. In 2023, important process technologies were enhanced, such as the advancement of top gauge electrical steel casting technology; Established wind power steel plate strain aging testing and passed DNV verification to improve order-taking capabilities; For bar and rod products, developed ID tracking

from bloom to bar/rod and billet surface defect optical detection system ASIS; Establish high-precision slow cooling control of hot-rolled high-strength steel coupled with dynamic coiling temperature control and other process technologies, optimizing product structure to achieve simultaneous improvement in strength and elongation properties; Implement the streamlined process of cold-rolled medium and high carbon alloy steel, and improve the conforming rate of Hot-Dip Galvanized products.

7.2.2 Quality Control

To achieve the target of "continuously providing products that meet customer and regulatory requirements and improving customer satisfaction," CSC is committed to delivering high-quality products while enhancing its own adaptability. CSC adopted the international quality management system IATF 16949 and ISO 9001 to establish "Steel Product Quality Management System", ensuring that all processes within the system are effectively executed, while continuously improving the management process and product quality.

Product Certification

CSC has obtained certifications used in Japan, Malaysia, India, Thailand, Vietnam, Saudi Arabia, the United Kingdom, and the European Union, with 490 steel grades of plate, bars and wire rods, hot and cold rolled coils, and coated products. This enables us to provide overseas customers with compliant products and is our niche for smoothly importing products, enhancing the competitiveness of our exported steel products.

In June 2023, CSC re-applied for certification of hot-rolled products in Indonesia in response to the needs of Indonesian customers, and successfully obtained a new certificate. In addition, in order to help customers' compressor products enter the EU market, CSC applied for EU PED (Pressure Equipment Directive) material manufacturer certification in 2023, and successfully passed the assessment in November of the same year.

For years CSC has provided galvanized steel products to customers for manufacturing the casings for electronic products. After becoming the first steel mill in the world to pass UL validation when the SGCC RC12 steel product passed UL 2809 validation in November 2021, CSC continued to cooperate with the eco-friendly strategies of 3C electronics brand manufacturers, and further worked with Dragon Steel in the connection of electric furnace and basic oxygen furnace for the steel-making process, producing the galvanized steel product SGCC RC40 with recycled content reaching 40% and above. In March 2023, the new product also successfully passed the UL 2809 validation, which not only set a new milestone in the verification of recycled content, but also met the material needs of downstream customers, continuing to move forward on the road to a circular economy.

7.2.3 Hazardous Substance Process Management of Products

Hazardous Substance Process Management (HSPM) is a part of achieving sustainable development, and CSC thus established a hazardous substance process management system through the implementation of IECQ HSPM QC 080000. From raw material selection to new product development and design, CSC monitors restricted substances that have a significant impact on the environment to provide high quality eco-friendly products that comply with international specifications and meet customer requirements.

Product Life-Cycle Perspective Control

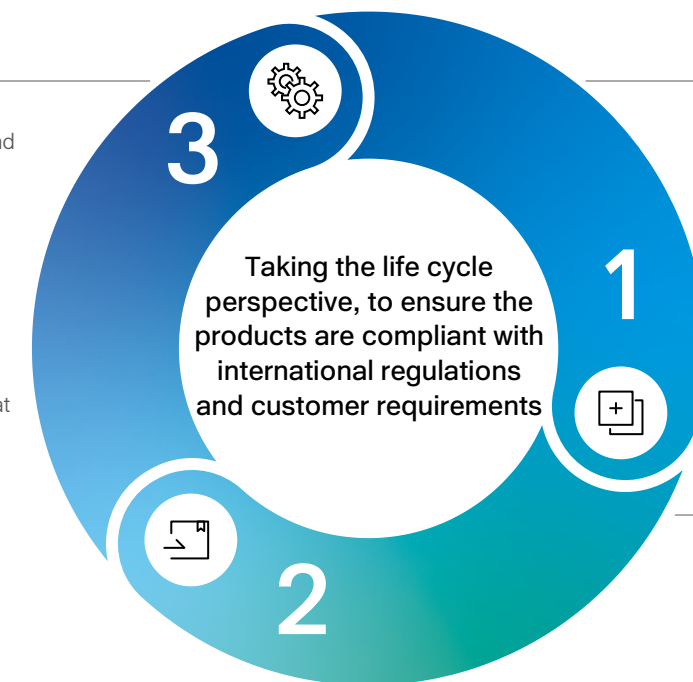
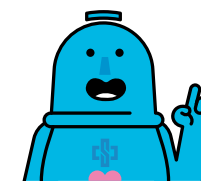
We avoid using raw materials that contain hazardous substances during the procurement and product development stage, and reduce alloys that contain SVHC (Substances of Very High Concern) in the manufacturing process. As for outsourcing, the contracts ensure that products comply with international regulations and meet customer requirements. In the material selection stage, restricted substances that have a major impact on the environment, such as: the EU RoHS, REACH-SVHCs, packaging regulations, Germany's AfPS GS PAHs, California Proposition 65, Montreal Protocol on Substances that Deplete the Ozone Layer, and restricted substances of international motor vehicle manufacturers, are all closely monitored and included in the scope of control. There were no incidents of non-compliance concerning the health and safety impacts of products and services in 2023.

In terms of outsourcing and management of raw material suppliers, CSC requires contractors and raw material suppliers to comply with hazardous substance restrictions of CSC or its customers and provide a "Statement of Compliance with CSC Restriction of Hazardous Substances." This reduces hazardous substances during early stages of the PLC, and extends CSC's restriction of hazardous substances to contractors and raw material suppliers, ensuring that CSC's products do not contain hazardous substances from the source. CSC included the indicator "Hazardous substance content of steel products (including products from outsourced processes) meets the statutory conforming rate" as an internal management target for control and tracking, and the conforming rate of implementation results in 2023 was 100% (the conforming rate has been 100% every year since 2013).

Production control

STEP 1
Use qualified raw materials and outsourcing manufacturers

STEP 2
Product sampling for testing at third-party laboratory



Design and Development

Select raw materials and outsourcing manufactures that meet regulatory and customers' requirements.

External provider control

Request external providers to comply with the restriction of hazardous substances (RoHS, REACH SVHC, PAHs..)

+ For more details [Quality Control] https://www.csc.com.tw/csc_e/esg/cg/cg4.html

+ [Customer Service] https://www.csc.com.tw/csc_e/esg/soc/soc4.html

+ [Intellectual Property Management] https://www.csc.com.tw/csc_e/esg/cg/cg2_4.html

Material Topic

7.3 Information Security



- 2023 Highlights

- Strengthen multi-level information security measures, raise users' information security awareness, and integrate information security detection and vulnerability management. With the goal of improving information security resilience, CSC developed a company information security dashboard in 2023.
- No major information security accident happened in 2023.

Policy or commitment

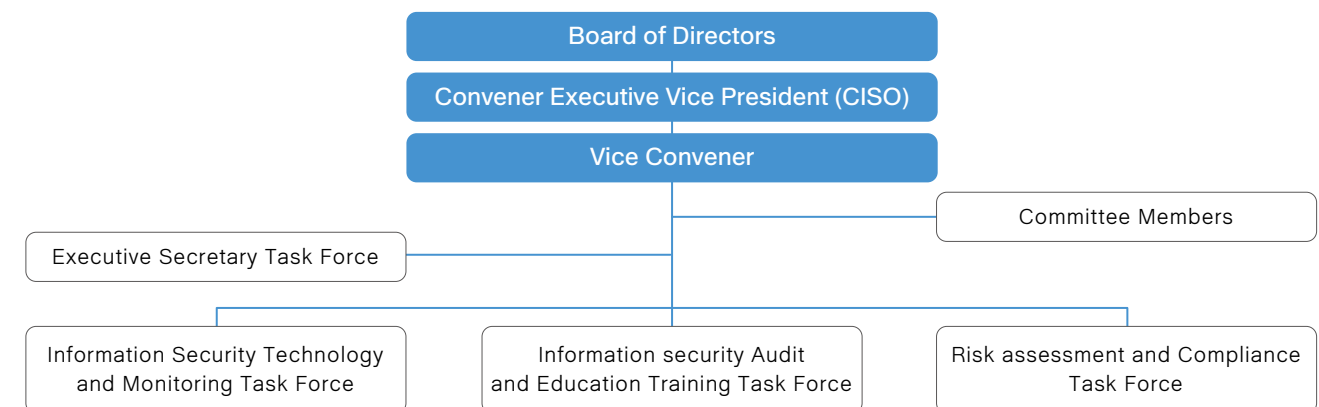
The Company established an "Information Security Committee" in December 2020, in which the executive vice president serves as the Chief Information Security Officer and the convener of the committee, and the assistant vice presidents of finance and production serve as deputy conveners. Members include experts appointed by the Information System Department, Electrical & Control Department, Human Resources Department, Legal Department, Green Energy & System Integration Research & Development Department, and Utilities Department. The committee has an Executive Secretary Task Force and Information Security Technology and Monitoring Task Forces. The committee convenes quarterly meetings to coordinate the formulation, implementation, risk management, and compliance assessment of information security-related policies, and to review and make decisions on information security and information protection guidelines and policies, as well as the effectiveness of the implementation of information security management measures.

To strengthen the management of information security risks, CSC regularly reports the overall implementation of information security to the Board of Directors through the Corporate Governance and Sustainability Committee every year, in order to ensure the appropriateness and effectiveness of operations and the implementation of information security supervision. The goal of information security is to ensure the confidentiality, integrity and availability of the Company's business-related information, so as to achieve the goal of business continuity.

Action Plan

The Company has an Information Security Committee as its information security governance organization, in which the executive vice president serves as the Chief Information Security Officer. Members of the organization include the Human Resources Department, Information System Department, Legal Department, Green Energy & System Integration Research & Development Department, Utilities Department, and Electrical & Control Department. The committee also has an Information Security Technology and Monitoring Task Force, Information Security Audit and Training Task Force, and Risk Assessment and Compliance Task Force.

In addition, CSC established regulations for information asset and risk assessment management. These regulations involve performing risk identification, and adopting appropriate security protection and control measures, in order to reduce the threat of information and communication security incidents. CSC also established the Information Security Incident Reporting and Response Management Regulation and CSC Group Information Security Incident Reporting Procedure to ensure that when an information security incident occurs in CSC or affiliated enterprises, it can be quickly reported to the CSC Information Security Committee according to procedures to complete damage control or recovery operations, and reduce the impact of information security incidents on the Company.



Implementation Results

CSC passed the ISO/IEC 27001:2013 Information Security Management System (ISMS) review and verification by BSI, Taiwan, and the certification continues to be valid. Maintain zero major information security incidents and no customer/employee data leakages.

7.4 Supply Chain Management



CSC's supply chain management can be categorized by supplier types as follows: Equipment and Material Procurement, Transportation, Security and Contractor, and each of the aforementioned supplier is managed by a different responsible department. The management and assessment of suppliers are handled by each division in accordance with the provisions of the CSC's quality control regulations, the "Steel Quality Manual", of which coverage controls products and services provided to external parties as well as relevant processes. Furthermore, CSC established the "Supplier Code of Conduct" and requires qualified suppliers to comply with the code of conduct.

In order to enhance supply chain management, the following anti-corruption clause is stipulated in the contract signed between CSC and vendors in its supply chain: "The vendor guarantees that at the tender price will not include bribes, gifts, commissions, remunerations, gratuities or other improper benefits, and the vendor guarantees that no bribes, gifts, commissions, remunerations, gratuities or other improper benefits will be paid to managers, employees, part-time employees appointed by CSC, or their spouses, immediate family members or consultants in connection with the tender." In case of any violation, the vendor shall be liable for all damages. In the event of any serious violation, CSC may cancel or terminate all other contracts signed with the vendor. CSC shall suspend its dealings with vendors that violate ethical principles and urge these vendors to make improvements before resuming its dealings with them. According to statistics for 2023, the Company suspended dealings with 1 vendor for violating ethical principles according to the Purchasing Department Directions for Violation of Integrity Principles by Vendors.

The hotline for reporting incidents of corruption, bribe and fraud is specified in Article 14 of the "Supplier's Quotation Notice" to be +886-7-8021111 #2191.

(URL: <https://cs.csc.com.tw/mqz/open/mqzp2>)

+ For more details 【Supply Chain Management】 https://www.csc.com.tw/csc_e/esg/cg/cg6.html

+ 【Supplier Code of Conduct】 https://www.csc.com.tw/csc_e/esg/pdf/par-conduct.pdf

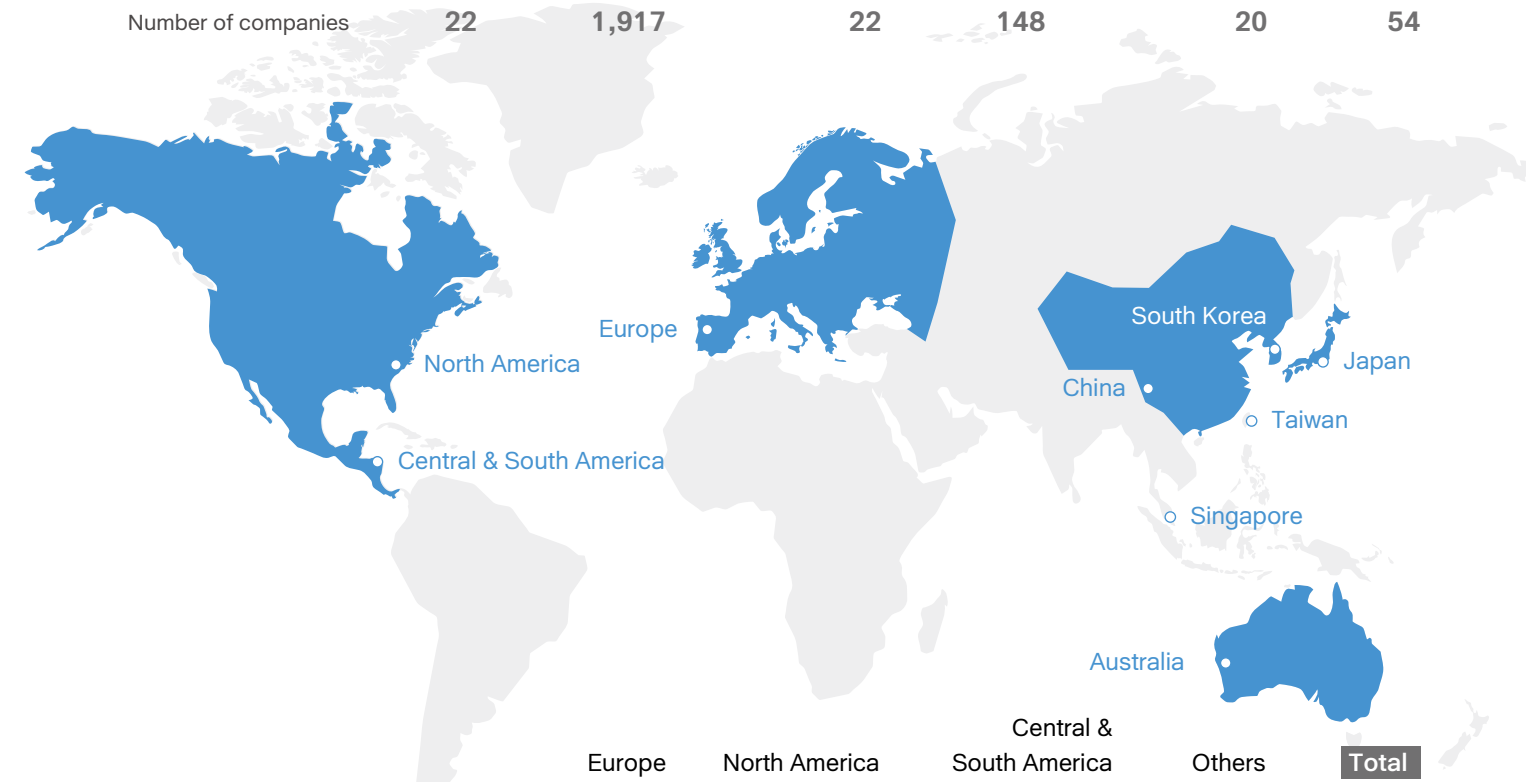
7.4.1 Equipment and Material Procurement

CSC has committed to not using any minerals from Democratic Republic of the Congo, its neighboring countries or any mines controlled by armies or rebel groups, in its products or packing. Through enhancing supply chain management, CSC effectively identifies and traces material sources to eliminate the use of conflict minerals. Any mine that is suspected to be involved in conflict minerals would be disregarded in investment evaluation. CSC also pays attention to human rights conditions in the countries providing equipment and materials and adjusts procurement decisions accordingly. The tender instructions and contract terms stipulate no bribery, no infringement, and environmental and safety in-plant regulations.

In accordance with the "Occupational Safety, Hygiene, Pollution Prevention of Procurement and Contracting Rules", suppliers were evaluated for indirect risk on environmental aspects for six types of raw materials in 2023. The results were that all suppliers had risks below moderate level except for one with high indirect risk. CSC's relevant units will conduct joint on-site audits and visits to ascertain the supplier's improvement.

Procurement of Raw Materials and Equipment by Country, 2023

	Australia	Taiwan	Singapore	Japan	South Korea	China
Percentage	37.66%	27.21%	8.66%	7.02%	0.63%	0.49%
Number of companies	22	1,917	22	148	20	54



	Europe	North America	Central & South America	Others	Total
Percentage	10.33%	5.26%	1.04%	1.7%	100%
Number of companies	182	50	2	27	2,444

7.4.2 Transportation

CSC has a total of 49 business partners associated with the AEO supply chain spanning across seven industries, including manufacturing; import and export; customs brokerage; sea freight forwarding, freight forwarding or shipping agency; warehousing and storage; and road transportation.

While exercising strict control over risks associated with transportation suppliers, CSC not only requires transportation suppliers to participate in and obtain ISO 45001 certification, but also steps up accident risk management during transportation in order to minimize the risk of occupational accidents.

CSE holds environmental control-related certificates for its own ships. In addition, CSE has required all its self-owned and chartered ships to switch to low-sulfur fuel for the entire voyage according to the International Maritime Organization (IMO) regulations since 2020 for the purpose of complying with environmental regulations.

From October 2019, all vehicles for delivering products are in compliance with the stage 4 or stage 5 emission standards and the vehicle service life must be no more than 15 years old. Rail transportation is used for transportation at Hualien Yard to reduce the pollution caused by road transportation. Starting from January 2020, CSC requires drivers to fill out information on the Safety and Health Self-management app before reporting for duty, pushing drivers to run a quick physical and mental examinations and fully understand occupational hazards before work, thereby improving road traffic safety and protecting other drivers. A total of 18 violations were found during on-site supplier audits in 2023, and all suppliers involved were immediately interviewed and required to make improvements.

An environmental impact assessment was conducted for all 1,616 vehicles of suppliers in 2023, none were found to be non-compliant with environmental protection standards, and all vehicles for transporting products complied with stage 4 and 5 emission standards. We conducted a social impact assessment on 128 suppliers, and none were found to be non-compliant with labor safety risks this year. We placed greater emphasis on the social responsibility of suppliers in 2022, and included external violations of suppliers into evaluation, none were found to be non-compliant this year. We hope to grow together with our suppliers in shouldering our corporate social responsibility.

7.4.3 Security

The Risk Management Team under the Corporate Governance and Sustainability Committee of the Company's Board of Directors regularly assesses various operational risks every year. The political, economic, and social risks that may cause conflicts from specific stakeholders (employees, community residents, environmental protection groups or organizations) are assessed separately by the Human Resources Department, Public Affairs Department, and Environmental Protection Department.

Access control and security

The access control and security of CSC's factory is assigned to China Steel Security (CSS) Corporation, with 138 security members (105 security guards and 33 firefighters) deployed at CSC. According to the provisions of Article 10-2 of the Private Security Service Act, "When a security company hires security guards, it shall offer them pre-service professional training of one week or above. For current security guards, it shall provide them with in-service training of at least four hours every month." CSS not only manages education and training according to law, but also offers legal knowledge, skills required on duty, human rights advocacy, etiquette, etc., the total training hours for all employees reach 600 hours per month. Furthermore, regular emergency response drills are conducted annually at various sentries and administrative buildings to maintain access control security. In 2022, CSC had signed the "Supplier Code of Conduct" with CSS to ensure that they adhere to ethical standards, comply with laws and regulations, respect human rights, prioritize employee health and safety, fulfill environmental responsibilities, and implement appropriate management systems while performing contractual duties. For more information, [please refer to the CCS website: https://www.csccss.com.tw/index.htm](https://www.csccss.com.tw/index.htm).

Complaint Mechanism

CSC has designated personnel and contact phone numbers ([please refer to the website: https://www.csc.com.tw/csc/wb/wb.html#wb3](https://www.csc.com.tw/csc/wb/wb.html#wb3)) to provide care and services for stakeholders. If you have any concerns about access control security operations, please call (886-7)802-1111.

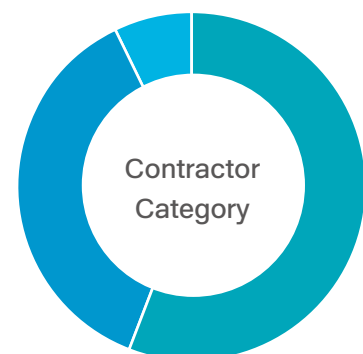
7.4.4 Contractor

Owing to the industrial characteristics of steel manufacturing, a large number of manpower would be required for equipment revamping or periodic/annual/major repairs at the production units for a short period of time. CSC uses contracted workers to cope with the fluctuating demand. Due to the time constraints for production equipment maintenance tasks, contractors located in nearby areas are preferred, thus creating a vast amount of stable job opportunities locally. This is yet another example of CSC fulfilling corporate social responsibilities while maintaining sustainable business operations.

CSC Improves Working Conditions of Contractor

- Increase safety and health management fees.
- Establish vacation policies and compensation for working on holidays.
- Establish job safety cultures.
- Regularly review the reasonableness of outsourcing contract fees in line with the basic wage and market prices of raw materials.

According to "Management Guidelines for CSC Operations, Maintenance, and Environmental Protection Contractors", operations, maintenance, and environmental protection contractors are to enter



56%

Maintenance Contractors

4,336

Responsible for repair and maintenance of equipment; or repair, manufacture and process of spare parts or test samples in production and technology divisions.

37%

Operations Contractors

2,873

Responsible for operations-related tasks that require basic technical skills and have only indirect access to production equipment, or involved in non-technical labor works in production and technology divisions and transportation department.

7%

Environmental Protection Contractors and Others

516

Responsible for the disposal of industrial waste produced during production.

long-term or case-by-case contracts with CSC, providing manpower, equipment, and technical support for CSC in maintenance, operations and environmental protection related tasks. These contractors are categorized based on the nature of the tasks, amongst which the ones related to maintenance are the majority.

Contractor employees working in CSC must have insurance mandated by the government, and comply with CSC's safety and health work rules. A penalty would be imposed for any violation, and the fine will be designated exclusively to a fund for supervision, correction, and improvement of the safety and health of contractor employees. New contractors must fill out evaluation forms, disclosing information including primary business activities and verified certifications (ISO 45001/ISO 14001) to prove that they are legally registered, adequately insured, tax-paying companies with healthy financial status. Also, they must genuinely report on the critical occupational safety and/or environmental protection issues for the past three years to allow respective departments to classify and evaluate as well as arrange on-site inspections.

The agreements between CSC Plant Engineering & Maintenance Department and service providers are in compliance with regulations. Also, in accordance with the ISO 9001 regulations on contractors, CSC assesses new contractors and reevaluates them every three years to ensure that all contractors abide by national regulations, and no child labor is used or no regulation breaching the right to freedom of association and collective bargaining is in place. CSC also dedicates to the supervision of contractors to enhance the working conditions of their employees and to ensure the compliance with the Labor Standards Act by carrying out inspections on the labor conditions of contractors in general performance evaluations. No incident was reported on use of child labor, forced or compulsory labor, or violation against labor conditions in 2023.

Contractor Evaluation and Assessment



According to "Management Guidelines for CSC Operations, Maintenance, and Environmental Protection Contractors", evaluation units must provide annual evaluation reports of contractors two to four months prior to the expiry date of contract, based on regular evaluations and daily performance, as part of the supporting documents for contract renewal. The "Management Guidelines for Contractor" also states that contract executing units must conduct a monthly evaluation based on contractor's performance and compile the results in the "annual evaluation report", in which a score below 70 would result in disqualification for contract renewal. No contractors with a score below 70 were reported in 2023.

Contractor Evaluation Categories

Access Control and Traffic Regulations	Work Quality and Personnel Management	Occupational Safety and Environmental Protection	Outstanding Performance
8	45	35	12

Establish Stable Partnership

CSC cares for its contractors in such broad aspects so that they can work with peace of mind and ultimately reduce turnover rate. During the "Outsourcing Strategy Review Meeting" held at the end of each year, CSC ensures that the wage level of its subcontracts is superior than the minimum wage stated in the Labor Standards Act. At the same time, CSC verifies the labor conditions every July to confirm through document review that the minimum basic salary and payment in lieu of annual leave given by contractor employers are in compliance with the Labor Standards Act and the regulations put forth by CSC. Any discrepancies with regulations need to be explained by contractor employers and signed by contractor employees.

Safety and Health

CSC Contractor Safety and Health Committee was founded in 1983. Plant Engineering & Maintenance Department established "Safety and Health Guidelines for Plant Engineering & Maintenance Department Contractors" in May 1984, to appoint a team consisting of experts from Industrial Safety & Hygiene Department and Plant Engineering & Maintenance Department to assist with the implementation and monitoring of the committee affairs. The committee members consisting of about 97 contractor

companies in the areas of mechanical engineering, civil and steel construction, electrical engineering, and refractories, collaborating towards the common goals of ensuring the safety and health of contractor employees, strengthening labor quality, improving technical quality and establishing safety culture.

- Contractor Safety and Health Propaganda	Gather contractors every month to announce new safety and health related information and regulations by CSC.
- New Contractor ID Issuing Assessment	New contractors must attend mandatory safety trainings and be interviewed by managers of ID issuing organization. (Listed in the Industrial Safety & Hygiene Department's system)
- Safety Care	Conduct on a monthly basis. (Listed in the Industrial Safety & Hygiene Department's system)
- Report of Near Misses	Reporting near misses is encouraged with rewards.
- Implement and Promote Inherent Safety	Urge contractors to comply with CNS 4750, and reinforce by frequent inspections to reduce scaffolding related safety hazards.
- Safety Inspections	All levels of management personnel regularly conduct safety inspections at contractors' workplace and keep records. (Listed in the Industrial Safety & Hygiene Department's system)

Contractor Training

Contractor Training CSC maintenance units are responsible for arranging training courses and certifications based on the health and safety requirements as well as technical skills required for contractors to perform their work at CSC. The training has been proven to be effective. In 2023, contractor workers received a total of 37,615 hours of training in CSC.



Supplier Welding Skill Certification

7.4.5 Local Procurement

Domestic Procurement Results

Items		2021	2022	2023
- Refractory Materials ^{Note}	Amount (100 M TWD)	20.3	20.6	22.6
	Local Manufacturer	62.5%	61.9%	67.4%
- Spare Parts & Equipment	Mechanical	Number of Work Orders	163	190
		Amount (100 M TWD)	2.1	2.1
	Electrical & Control	Number of Work Orders	77	76
		Amount (100 M TWD)	2.1	2.0
- Production Equipment	Production Line and Turnkey Engineering Projects	Number of Work Orders	62	67
		Amount (100 M TWD)	14.9	12.7

Note: Currently, CSC have long-term contracts with domestic refractory material suppliers. However, in recent years, international refractory material prices and sources have been unstable, which may further affect the prices and supply of domestic manufacturers. Based on the consideration of cost and stable supply of materials, we have gradually developed new sources of foreign materials, reducing the number of domestic manufacturers' long-term contracts by 20-30%, and switching to low-priced and high-quality foreign manufacturers to supply materials, which has achieved cost reduction and material source stability.

7.5 Industry Upgrade

7.5.1 Industry Upgrade and Innovation

- Facilitate Industry 4.0

To facilitate industry 4.0, CSC builds industry cloud and uses cloud services to forge connections, assisting steel-related industries in enhancing their capabilities of smart manufacturing, smart production and sales services. CSC combined three major cloud platforms in the fastener industry (i.e., CSC, the Metal Industries Research & Development Center (MIRDC), and National Kaohsiung University of Science and Technology (NKUST). This new platform aims to offer a full range of services for Taiwan's fastener industry.

- Devotion to Core Technology

CSC adheres to upgrade the industry by enhancing the material used and integrates industry-government-academy resources according to the industry developments. CSC executes A+ Industrial Innovative R&D programs and academia-industry collaboration projects in developing relevant core technology.

- Driving Collaborative R&D within the Supply Chain

Through collaborative R&D, CSC and its customers face the demand of end customers together, and provide our customers with unique and differentiated technology and services by developing customized steel materials and manufacturing technology.

- Launching Industrial Service Team

Realizing that, "What benefits the customers will benefit CSC," CSC sets up "Industrial Service Team" to collaborate with MIRDC and the Corporate Synergy Development Center (CSD). The team consists of external experts from its talent pool of retirees with extensive professional experience. By means of walking into customers' business premises, CSC continues promoting industrial services to integrate upstream and downstream sectors for increasing its competitiveness.

7.5.2 Upgrading Steel-using Industries

Faced with competition of steel mills from China and emerging countries, and tariff barriers in various countries, CSC not only provides excellent premium steel products and technical support, but also combines domestic manufacturers, government and academic resources to assist steel-using industries, including fasteners, hand tools, automobile parts, electric vehicle motors, wind power towers, to innovate on product application technologies and to achieve competitiveness.

- Strengthening the Manufacturing Capabilities of the Fastener Industry Chain

CSC identifies and fills the gaps in industry processing technologies, and collaborates with other industries. CSC continuously works with the Alliance for High Value Fasteners of National Kaohsiung University of Science and Technology, in order to help the fastener industry develop high value products, CSC develops the design analysis for metal forming technologies, and introduces R&D resources to

strengthen industry connections. With the creation of the “Taiwan Fastener Service Cloud,” which contains a knowledge platform, matchmaking platform, and technology service platform, CSC helps downstream customers transform their business models with online innovation and e-commerce using a thematic index.

- High-value Next-generation Hand Tools

CSC and the Metal Industries Research & Development Centre (MIRDC) jointly implemented the Hand Tools Competitiveness Enhancement Project. The project systematically collects data on material characteristics to establish a database for heat treatment and forming, which will benefit future development of smart manufacturing and digital simulation, and continuously provides technical services, including materials R&D, surface treatment, and structural analysis.

- High-value Auto Parts Industry Chain

CSC founded Honley Auto. Parts Co., Ltd. with resources from various companies and MIRDC, in hope of enhancing the overall competitiveness of Taiwan’s automotive industry through highly flexible operation among private enterprises and the sales networks of automobile manufacturers. High strength aluminum alloy plays an important role in making vehicles lighter. CSC developed not only high strength aluminum alloys, but also developed warm/hot forming technologies for aluminum alloy plates, in order to increase the application of high strength aluminum alloys in vehicles, and further contribute to the energy conservation and carbon reduction of the automobile industry.

- Electrical Steel for Electric Vehicle Motors

CSC’s technical team has overcome the technical bottleneck for developing thin gauge top-grade electrical steels. The quality of CSC’s ES has been approved worldwide. The ES has been adopted by many well-known international automobile manufacturers and motor manufacturers. Furthermore, fast-curing self-bonding coating C3S1 has also been successfully developed to continuously enhance CSC’s competitiveness and dominance in EV motor supply chain. CSC also established a demonstrative motor core production line for mass production of self-bonding coating, accepting visitors from customers and providing technical guidance. To provide more advanced products in the future, CSC will focus on the development of electrical steel used in electric vehicle traction motors.

- Local Offshore Wind Power Industry Chain

Strategized planning for the wind power industry, CSC not only produces ultra-thick steel plates for wind turbine towers and underwater foundations, but also invests in Sing Da Marine Structure Corporation to import production technologies. By teaming up with around 20 manufacturers in Taiwan’s supply chain, CSC is committed to fostering local offshore wind power industry chain.

- Forward-Looking Technology and Industry-Academia Collaboration Project

The " Forward-Looking Technology and Industry-Academia Collaboration Project – Development of Low-Carbon Emission Technologies for Blast Furnace Ironmaking Process " proposed by CSC and National Cheng Kung University was approved by the National Science and Technology Council in November 2022. The project will be implemented over a three-year period from November 2022 to October 2025. CSC integrates R&D capabilities of industry and academia to develop next generation low-carbon

iron making technologies suitable for Taiwan, including: (1) charging low-carbon iron-bearing materials; (2) injecting hydrogen-rich gas; and (3) refining top gas by removing CO₂.

The developed technologies will be applied in the blast furnaces of CSC for the reduction of CO₂ emissions. Benefits from low-carbon ironmaking technologies directly spill over to domestic industries that use steel, reducing the carbon footprint of domestic steel products. CSC hopes to enhance the overall competitiveness of Taiwan's exports, and gain bargaining chips for political and economic negotiations. Besides, the development of the low carbon ironmaking technology in Taiwan is relatedly late. Concerned by the shortage in research manpower at high temperature metallurgy, CSC hopes the project will cultivate 20 Ph.D. talents for next generation ironmaking technology.

- A+ Industrial Innovative R&D program

CSC applied to the Department of Industrial Technology of the Ministry of Economic Affairs for the A+ Industrial Innovative R&D program with the theme of "Development of Low-Energy Carbon Capture and Utilization Technology for Steel Mills." It passed the review and completed contract signing at the end of December 2023. This project combines efficient carbon capture from flue gas and waste heat recovery technology to reduce the energy consumption of carbon capture, and converts CO₂ into CO using basic oxygen furnace, achieving cyclical carbon use in the plant. The project will enhance the Company's technical capabilities for the path to carbon neutrality and carbon capture and storage plans. It will also increase the production capacity of co-production between steel and petrochemical plants, which is related to more than 10 million tons of carbon reduction in the future. The plan mainly consists of three sub-items:



The "efficient carbon capture" sub-item establishes a pilot plant that captures 500 tons of CO₂ per year as a R&D platform for developing long-lasting absorbents, in order to reduce operating costs



The "process energy-saving" sub-project develops energy-saving technology for carbon capture processes to reduce energy consumption, and developed sintering heat recovery technology to supply the heat energy required for carbon capture, reducing the demand on external energy and carbon emissions.



The "Conversion of CO₂ to CO by basic oxygen furnace" sub-project develops reaction control technology, and achieves optimal CO₂ conversion while taking into consideration the quality of liquid steel and the service life of refractory materials.

The project is expected to reduce absorbent consumption by 15%, energy consumption of carbon capture by 5%, and achieve a CO₂ conversion rate exceeding 70%. The project is a three-year project with total funding of 259 million TWD, in which 118 million TWD is subsidized by the Ministry of Economic Affairs. This is a high subsidy ratio (45.6%) that is rarely seen, and shows that the Ministry of Economic Affairs attaches great importance to and supports this issue. This project also shows the Company's positive attitude and efforts in carbon reduction R&D. The Company's internal specialists collaborated with an external consulting team. This project will integrate R&D and professional capabilities inside and outside the plant, consolidate technologies for carbon capture from flue gas with low energy consumption and basic oxygen furnace reaction control, and enhance the competitiveness of the Company's future low-carbon products.

8

Appendix

- Appendix 1 GRI Standards Content Index
- Appendix 2 Sustainability Accounting Standards Board (SASB)
- Appendix 3 TCFD Content Index
- Appendix 4 Climate-Related Information of CSC
- Appendix 5 Domestic and International Organizations
- Appendix 6 Assurance Statement

Appendix 1

GRI Standards Content Index

General Disclosures

GRI Standards	Disclosure	Page	Chapter	Note/Reasons for Omissions	
GRI 2	The organization and its reporting practices				
General Disclosures 2021	2-1	Organizational details	1	0.1	Reasons for omission are not permitted
	2-2	Entities included in the organization's sustainability reporting	2	0.1	
	2-3	Reporting period, frequency and contact point	1	0.1	
	2-4	Restatements of information	-	Explanations to all the restatement are denoted in the report	
	2-5	External assurance	2	0.1	
Activities and workers					
	2-6	Activities, value chain and other business relationships	5	0.2.2	
	2-7	Employees	93	4.1	
	2-8	Workers who are not employees	94	4.1	
Governance					
	2-9	Governance structure and composition	140	6.2	
	2-10	Nomination and selection of the highest governance body	140	6.2	
	2-11	Chair of the highest governance body	140	6.2	
	2-12	Role of the highest governance body in overseeing the management of impacts	142	6.2.2	
	2-13	Delegation of responsibility for managing impacts	142	6.2.2	
	2-14	Role of the highest governance body in sustainability reporting	2	0.1	
	2-15	Conflicts of interest	136	6.1.3	
	2-16	Communication of critical concerns	143	6.2.2	
	2-17	Collective knowledge of the highest governance body	144	6.2.3	
	2-18	Evaluation of the performance of the highest governance body	144	6.2.3	

GRI Standards	Disclosure	Page	Chapter	Note/Reasons for Omissions
GRI 2	2-19 Remuneration policies	142	6.2.1	
	2-20 Process to determine remuneration	141	6.2.1	
General Disclosures 2021	2-21 Annual total compensation ratio	98	4.2.1	
Strategy, policies and practices				
	2-22 Statement on sustainable development strategy	13~18	1.1、1.2、1.3	
	2-23 Policy commitments	55、106	3.1、4.3.3	
	2-24 Embedding policy commitments	56、106	3.1、4.3.3	
	2-25 Processes to remediate negative impacts	57、106	3.1、4.3.3	
	2-26 Mechanisms for seeking advice and raising concerns	138	6.1.3	
	2-27 Compliance with laws and regulations	67、115	3.1、4.4.1	
	2-28 Membership associations	192	Appendix 5	
Stakeholder engagement				
	2-29 Approach to stakeholder engagement	27	1.4	
	2-30 Collective bargaining agreements	103	4.3.1	

Material Topics

The following table shows corresponding GRI topic-specific disclosures of CSC's material topics identified in 2023.

Material Topics					
GRI Standards	Disclosure		Page	Chapter	Note/Reasons for Omissions
GRI 3 : Material Topics 2021	3-1 Process to determine material topics		32	1.5	Reasons for omission are not permitted
GRI 3 : Material Topics 2021	3-2 List of material topics		33	1.5	
Research Innovation					
GRI 3 : Material Topics 2021	3-3	Management of material topics	35 、 162	1.5 、 7.2.1	
CSC indicators		Sales ratio of premium steel	162	7.1.1	
Operating Financial Performance					
GRI 3 : Material Topics 2021	3-3	Management of material topics	23 、 35 、 145	1.3 、 1.5 、 6.3	
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	147	6.3.1	
	201-4	Financial assistance received from government	148	6.3.2	

Material Topics				
GRI Standards	Disclosure	Page	Chapter	Note/Reasons for Omissions

Information/Cyber Security

GRI 3 : Material Topics 2021	3-3	Management of material topics	35 、 167	1.5 、 7.3	
CSC indicators		Number of major information security accidents happened	23 、 168	1.3 、 7.3	

Water

GRI 3 : Material Topics 2021	3-3	Management of material topics	35 、 71	1.3 、 1.5 、 3.2.4	
GRI 303: Water and Effluents 2018	Management approach	303-1 Interactions with water as a shared resource	71	3.2.4	AA 1000 AS Type 2
		303-2 Management of water discharge-related impacts	74	3.2.4	
		303-3 Water withdrawal	73	3.2.4	
	Topic-specific	303-4 Water discharge	73	3.2.4	
		303-5 Water consumption	73	3.2.4	
		New water intensity (tonnes water / tCS)	72	3.2.4	
		Production process water recirculation	73	3.2.4	
		Processing water recycling rate (%)	73	3.2.4	
CSC indicators		Water quality of water discharge	74	3.2.4	

Climate Change

GRI 3 : Material Topics 2021	3-3	Management of material topics	25 、 35 、 39	1.3 、 1.5 、 2.1	
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	52	2.3	
	305-2	Energy indirect (Scope 2) GHG emissions	52	2.3	
		Other indirect (Scope 3) GHG emissions	52	2.3	
	305-4	GHG emissions intensity	8 、 52	0.3.1 、 2.3	

Air Quality

GRI 3 : Material Topics 2021	3-3	Management of material topics	25 、 35 、 67	1.3 、 1.5 、 3.2.3	
GRI 305 : Emissions 2016	305-6	Emissions of ozone-depleting substances (ODS)	70	3.2.3	AA 1000 AS Type 2
		Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	70	3.2.3	
	305-7	SOx, NOx and Par. emission intensity (kg / tCS)	67	3.2.3	
CSC indicators					

Material Topics				
GRI Standards	Disclosure	Page	Chapter	Note/Reasons for Omissions

Raw Materials

GRI 3 : Material Topics 2021	3-3	Management of material topics	35 、 59	1.5 、 3.2.1	
GRI 301: Materials 2016	301-1	Materials used by weight or volume	58	3.2	
	301-2	Recycled input materials used	60	3.2.1	
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	60	3.2.1	
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	60	3.2.1	

Energy Efficiency

GRI 3 : Material Topics 2021	3-3	Management of material topics	25 、 35 、 62	1.3 、 1.5 、 3.2.2	
GRI 302: Energy 2016	302-1	Energy consumption within the organization	66	3.2.2	AA 1000 AS Type 2
		Energy intensity	63	3.2.2	
		Reduction of energy consumption	66	3.2.2	

Occupational Safety and Health

GRI 3 : Material Topics 2021	3-3	Management of material topics	25 、 35 、 108	1.3 、 1.5 、 4.4.1	
GRI 403: Occupational Health and Safety 2018	Management approach	403-1 Occupational health and safety management system	108	4.4.1	
		Hazard identification, risk assessment, and incident investigation	112	4.4.1	
		403-3 Occupational health services	117	4.4.2	
		Worker participation, consultation, and communication on occupational health and safety	117	4.2.3 、 4.4.2	
		Worker training on occupational health and safety	112	4.4.1	
		403-6 Promotion of worker health	115	4.4.2	
	Topic-specific	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	115	4.4.1	AA 1000 AS Type 2
		403-7			
		403-9 Work-related injuries	114	4.4.1	

The following table shows corresponding GRI voluntary disclosures of CSC’ s non-material topics.

Non-material Topics						
GRI Standards		Disclosure		Page	Chapter	Note
GRI 204-1 Procurement Practices		204-1	Proportion of spending on local suppliers	175	7.4.5	
GRI 306: Waste 2020		306-3	Waste generated	77	3.3.1	AA 1000 AS Type 2
GRI 306: Waste 2020		306-5	Waste directed to disposal	78	3.3.1	
GRI 401: Employment 2016		401-1	New employee hires and employee turnover	94、97	4.1.1/4.1.5	
GRI 402: Labor/Management Relations 2016		402-1	Minimum notice periods regarding operational changes	97	4.1.5	
GRI 406: Non-discrimination 2016		406-1	Incidents of discrimination and corrective actions taken	93	4.1	No violation
GRI 407: Freedom of Association and Collective Bargaining 2016		407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	173	7.4.4	No violation
GRI 408 Child labor 2016		408-1	Operations and suppliers at significant risk for incidents of child labor	173、93	7.4.4/4.1	Prohibition of child labor
GRI 409: Forced or Compulsory Labor 2016		409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	173	7.4.4	No violation
GRI 410 : Security practices 2016		410-1	Security personnel trained in human rights policies or procedures	171	7.4.3	100%
GRI 411 : Rights of indigenous Peoples 2016		411-1	Incidents of violations involving rights of indigenous peoples	-	-	No violation
GRI 413: Local Communities 2016		413-1	Operations with local community engagement, impact assessments, and development programs	56、125	3.1/5.2.1	
GRI 415 : Public policy 2016		415-1	Political contributions	137	6.1.3	Prohibition of political contributions
GRI 416: Customer Health and Safety 2016		416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	166	7.2.3	No violation

Appendix 2

Sustainability Accounting Standards Board (SASB)

Index of Iron & Steel Producers				
Aspect	Topic	Code	Accounting Metric	CSC’ s Response
Environment	Greenhouse Gas Emissions	EM-IS-110a.1.	Gross global Scope 1 emissions (tCO ₂ e.), percentage covered under emissions-limiting regulations (%)	(1) 16,809,455 tonnes CO ₂ e (2) No regulatory limits on Scope 1 emissions currently >> For more information, please refer to Ch 2.3 Actions on Climate Change Adaptation
		EM-IS-110a.2.	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	CSC has set a series of carbon reduction targets as detailed below. CSC aims to achieve a 7% reduction in carbon emissions by 2025 compared to 2018 primarily by implementing energy efficiency enhancement measures in existing processes and establishing cooperation between the R&D Division and the Production Division to study local and overseas energy efficiency enhancement technologies and assess the incorporation and application of these technologies. Next, CSC expects to a 25% reduction in carbon emissions by 2030 compared to 2018 mainly through a series of measures, including engaging in co-production between steel and petrochemical plants, replacing coal injection with hydrogen, and increasing scrap use while stepping up collaboration with academic and research institution and participating in basic research on the required technologies. Thereafter, CSC will work towards realizing the ultimate target of carbon neutral via two pathways - developing carbon-free blast furnaces using low-carbon blast furnaces supplemented by carbon capture and storage (CCS) or engaging in ironmaking using hydrogen energy. >> For more information, please refer to Ch 2.3 Actions on Climate Change Adaptation
		EM-IS-120a.1	Air emissions of the following pollutants (tonnes): (1) CO (2) NO _x (excluding N ₂ O) (3) SO _x (4) Particulate Matter (PM ₁₀) (5) Manganese(MnO) (6) Lead (Pb) (7) Volatile Organic Compounds (VOCs) (8) Polycyclic Aromatic Hydrocarbons (PAHs)	(2) 5,209 tonnes (3) 4,163 tonnes (4) 1,776 tonnes, which represents the total suspended particulate (TSP) data, with no PM ₁₀ data available. (6) 0.48 tonnes (7) 306 tonnes No data are available for the rest of the items as detection and reporting of these pollutants are not required by regulations. >> For more information, please refer to Ch 3.2.3 Air Pollutants

Index of Iron & Steel Producers				
Aspect	Topic	Code	Accounting Metric	CSC' s Response
Environment	Energy Management	EM-IS-130a.1	(1) Total energy consumed (GJ) (2) Percentage grid electricity (%) (3) Percentage renewable (%)	(1) 199,073,601 GJ * (2) 4.63% * (3) 0.05221% * Note: These values are calculated based on higher heating value. Total self-generated energy = 58, 554 kWh*, 25 renewable energy certificates obtained >> For more information, please refer to Ch 3.2.2 Energy
		EM-IS-130a.2	(1) Total fuel consumed (GJ) (2) Percentage coal (%) (3) Percentage natural gas (%) (4) Percentage renewable (%)	(1) 12,636,022 GJ * (excluding raw materials and electricity) (2) 0% * (3) 97.89% * (4) 0% *(Renewable energy accounts for 1.13% of purchased electricity) Note: These values are calculated based on higher heating value. >> For more information, please refer to Ch 3.2.2 Energy
	Water Management	EM-IS-140a.1	(1) Total fresh water withdrawn (thousand cubic meters) (2) Water consumption (thousand cubic meters); Percentage in regions with High (40-80%) or Extremely High (>80%) Baseline Water Stress (%)	(1) 40,962 thousand cubic meters* (including 18,623 thousand cubic meters of tap water and 22,339 thousand cubic meters of reclaimed water) (2) 26,435 thousand cubic meters. According to the Aqueduct Water Risk Atlas provided by the World Resources Institute, Kaohsiung City' s overall water risk is low to medium (1 to 2). Therefore, there is no water withdrawal in areas of high or extremely high water stress in Kaohsiung City. >> For more information, please refer to Ch 3.2.4 Water
	Waste Management	EM-IS-150a.1	(1) Amount of waste generated (tonnes) (2) Percentage hazardous (%) (3) Percentage recycled (%)	(1) 517,164.16 tonnes * (2) 0.006% * (3) 94.9% * >> For more information, please refer to Ch 3.3.1 Waste and Byproduct Management

Index of Iron & Steel Producers				
Aspect	Topic	Code	Accounting Metric	CSC' s Response
Human Capital	Workforce Health & Safety	EM-IS-320a.1	(1) Total recordable incident rate (TRIR) (2) Fatality rate (3) Near miss frequency rate (NMFR) for (a) full-time employees and (b) contract employees	(1) employee=0.08 contractor=0.26 (2) employee=0 contractor=0 (3) employee=34.18 contractor: no record available Note: rates are calculated as: (statistic count × 200,000) / hours worked Number of Occupational Disasters (Employees) = 8* Ratio = 8/9,621 = 0.08% * >> For more information, please refer to Ch 4.4.1 Occupational Safety
		EM-IS-430a.1	Discussion of the process for managing iron ore and/or coking coal sourcing risks arising from environmental and social issues	At present, CSC sources its raw materials, such as coal and iron ores, from the world' s largest miners with which it has signed long-term supply contracts, such as BHP, Rio Tinto, Teck, and Vale. The mines, which produce these raw materials are located in advanced mining countries such as Australia, Canada, and Brazil, and subject to stringent inspections in accordance with local laws and regulations before mining can be maintained over the long run. These mines primarily serve the top steel mills in the world, which also pay attention to ESG management issues associated with their suppliers. Meanwhile, in the procurement contracts with coal and iron raw material suppliers, CSC has also required the suppliers to comply with the relevant ESG terms. In addition, the CSC Code of Conduct for Suppliers was formulated with reference to international norms and standards, such as the Responsible Business Alliance (RBA) Code of Conduct Version 7.0 and the United Nations Supplier Code of Conduct Rev. 06. The Code contains five parts on ethics, labor and human rights, health and safety, environmental standards, and management system. In addition, special clauses will be added to the contracts as necessary to We expect our suppliers to adopt the same standards and to comply with these standards and the laws and regulations of the countries in which they operate in all their business activities. >> For more information, please refer to Ch 7.4 Supply Chain Management
Business Model & Innovation	Supply Chain Management			

Appendix 3
TCFD Content Index

Code	Activity Metric	CSC' s Response
EM-IS-000.A	Raw steel production (tonnes), percentage from: (1) basic oxygen furnace processes, (2) electric arc furnace processes	8,099,163 tonnes*
		(1) 100%
		(2) Not Applicable
		>> For more information, please refer to Ch 3.2.1 Raw Materials Management
EM-IS-000.B	Total iron ore production ^(II) (tonnes)	Not Applicable, CSC imports iron ores from abroad.
		>> For more information, please refer to Ch 3.2.1 Raw Materials Management
EM-IS-000.C	Total coking coal production ^(III) (tonnes)	Not Applicable, CSC imports coking coal from abroad.
		>> For more information, please refer to Ch 3.2.1 Raw Materials Management

Note: I. The scope of production includes iron ore consumed internally and that which is made available for sale.
Note: II. The scope of production includes coking coal consumed internally and that which is made available for sale.
Note III: * indicates the disclosure metrics required in Schedule 1-6 of the "Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Lised Companies" .

Framework	Disclosures	Page
Governance	a) Describe the board' s oversight of climate-related risks and opportunities.	39-40
	b) Describe management' s role in assessing and managing climate-related risks and opportunities.	
Strategy	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	43-46
	b) Describe the impact of climate-related risks and opportunities on the organization' s businesses, strategy, and financial planning.	
	c) Describe the resilience of the organization' s strategy, taking into consideration different climate-related scenarios, including a 2° C or lower scenario.	41-46
Risk Management	a) Describe the organization' s processes for identifying and assessing climate-related risks.	39-42
	b) Describe the organization' s processes for managing climate-related risks.	39-46
	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization' s overall risk management.	39-40、150
Metrics and Targets	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	43-46
	b) Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.	52
	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	43-46

Appendix 4

Climate-Related Information of CSC

Code	Metric	Page
1	Describe the board of directors' and management's oversight and governance of climate-related risks and opportunities.	39-40
2	Describe how the identified climate risks and opportunities affect the business, strategy, and finances of the business (short, medium, and long term)	43-46
3	Describe the financial impact of extreme weather events and transformative actions.	43-46
4	Describe how climate risk identification, assessment, and management processes are integrated into the overall risk management system.	39-40、150
5	If scenario analysis is used to assess resilience to climate change risks, the scenarios, parameters, assumptions, analysis factors and major financial impacts used should be described.	41-46
6	If there is a transition plan for managing climate-related risks, describe the content of the plan, and the indicators and targets used to identify and manage physical risks and transition risks.	47-52
7	If internal carbon pricing is used as a planning tool, the basis for setting the price should be stated.	50
8	If climate-related targets have been set, the activities covered, the scope of greenhouse gas emissions, the planning horizon, and the progress achieved each year should be specified. If carbon credits or renewable energy certificates (RECs) are used to achieve relevant targets, the source and quantity of carbon credits or RECs to be offset should be specified.	43-46、47-48
9	Greenhouse gas inventory and assurance status, reduction targets, strategies, and specific action plans.	47-52

*Prepared in accordance with the "Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies".

Appendix 5

Domestic and International Organizations

CSC actively participates in the activities hold by domestic institutes and associations to strengthen mutual communication and cooperation.

In 2023, we invited the organizations which CSC involved to response to the survey of Climate Policy Preferences. According to the results, the majority of organizations involved have made progress in promoting and adapting to climate policies. They are committed to taking concrete actions and implementing practical measures to mitigate the impacts of climate change to create an even more environmentally friendly and resilient future. Still, organizations will contribute to net-zero carbon emissions activities in a more proactive and feasible manner if risk management and guidance measures are strengthened.

+ For more details [Climate Policy Inclination Survey Questionnaire] https://www.csc.com.tw/csc_e/esg/env/env10.html

The major institutes and associations CSC participated in 2023 are as follows:

Field	Organization	Visions and Goals
Steel Industry	Taiwan Steel and Iron Industries Association CSC Chairman Chao-Tung Wong as the chairman	To assist the government with economic development and foreign investments and coordinate relationship among peers for the collaboration and development of the steel industry as well as common interests.
	Chinese Institute of Engineers CSC Vice President Shou-Tou Chen is as a director	- To strengthen close ties and interactions with members and professional institutes worldwide. - To advance the technology, expertise and professionalism in engineering. - To enhance the welfare of people and society by introducing applied engineering and advanced technology.
Corporate Sustainability	Enterprise member of Taiwan Business Council for Sustainable Development of	- To cooperate with members in promoting corporate sustainability and environmental protection for the purpose of sustainability. - To help develop national construction, enhance engineering-related expertise and skills, and promote the well-being of the people and society through the application of engineering and technology.
	Director of Taiwan Association of Soil and Groundwater Environmental Protection	
	Director of Center for Corporate Sustainability	
	Taiwan-U.S. CCUS Industry Promotion Alliance President Shyi-Chin Wang is a founder	Net zero emissions is the international goal for mitigating climate change. We reviewed Taiwan's development opportunities and strategies for carbon neutrality and CCUS based on international development and promotion experience with carbon neutrality and CCUS, accelerating the achievement of carbon neutrality by domestic enterprises.

Field	Organization	Visions and Goals
Corporate Sustainability	Founding member of Taiwan Association for Net Zero Emission	Based on the core philosophy of “advocating for net zero emission among enterprises and organizations and assisting the government in making Taiwan carbon neutral,” Taiwan Association for Net Zero Emission aims to guide all sectors of society in Taiwan towards net zero emission, drive the trend of net zero emission in Taiwan, and assist the government in making Taiwan carbon neutral.
	Taiwan Future Vision Digital Sustainability Alliance	The Taiwan Future Vision Digital Sustainability Alliance is centered around ESG sustainability. In response to the global trend towards environmental friendliness, it advocates for the application of digital technology in sustainable development. It assists businesses in transforming and upgrading, accelerating companies towards international sustainable development with net zero carbon emissions.

International Organizations

Organization	Cooperation	Benefits
World Steel Association, worldsteel	As a key member - CSC participates in the sustainability reporting task force and provides data, offers opinions, and participates in public communication campaign. - CSC participates in the committees of technology, safety and health, environment, raw materials, economy, as well as product sustainability. - CSC takes parts in CO₂ data collections, LCA, energy consumption, and sustainability reporting or joins expert groups and offers comments as well as supports public communication campaign.	CSC shares experiences via exchanges, cooperation, and services, and thereby obtains the latest development and stays connected to the global steel industry.
South East Asia Iron and Steel Institute, SEAISI	As a key member - CSC assists with conference affairs regarding steel technology and environment, safety and health, and takes parts in economic discussions and technology training programs. - CSC supports the arrangement of SEAISI's annual conference and technical seminar, travelling seminars, and ASEAN technology forum, and shares reports of technology, environment, safety and health, and statistics as well as Taiwan country reports.	Through maintaining good interaction and collaboration with other steel industries in neighboring countries, CSC obtains information on the development of regional industries, technologies, and policies, which provides a good basis for business development and strategic cooperation.
Organisation for Economic Cooperation and Development, OECD	CSC regularly participates in the meetings of the OECD Steel Committee under the instruction of the Ministry of Economic Affairs, Taiwan (R.O.C.) CSC represents the industry under the instruction of the officials (Ministry of Economic Affairs and embassies abroad) and academia (MIRDC) to participate in the OECD Steel Committee in order to obtain the latest information on the global steel environment, related policies and economy.	- With this international platform, CSC can obtain important information on the steel industry and environmental protection as well as increase Taiwan's visibility and participation in international agendas. - With this platform, CSC is able to communicate with official steel authorities in different countries and seek opportunities to break through the existing trade barriers.

+ For more details [Climate Change Initiatives] https://www.csc.com.tw/csc_e/esg/env/env10.html#

Appendix 6 Assurance Statement

INDEPENDENT ASSURANCE OPINION STATEMENT

China Steel Corporation 2023 Sustainability Report

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

This independent assurance opinion statement has been prepared for the stakeholders of CSC only for the purposes of assuring its statements relating to its sustainability report, 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:

- The assurance scope is consistent with the description of China Steel Corporation 2023 Sustainability Report.
- The evaluation of the nature and extent of the CSC's adherence to AA1000 AccountAbility Principles (2018) and the reliability of specified sustainability performance information in this report as conducted in accordance with type 1/type 2 of AA1000AS v3 sustainability assurance engagement and therefore, the information/data disclosed in the report is not verified through the verification process except for data relating waste and by-products recycling, air pollutants, water, occupational health and safety and energy topics.

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

Opinion Statement

We conclude that the China Steel Corporation 2023 Sustainability Report provides a fair view of the CSC sustainability programmes and performances during 2023. The sustainability report subject to assurance is free from material misstatement and its data relating waste and by-products recycling, air pollutants, water, occupational health and safety and energy topics is materially correct without voluntary omissions based upon testing within the limitations of the scope of the assurance, the information and data provided by the CSC and the sample taken. We believe that the performance information of Environment, Social and Governance (ESG) are correctly represented. The sustainability performance information disclosed in the report demonstrate CSC's efforts recognized by its stakeholders.

Our work was carried out by a team of sustainability report assurers in accordance with the AA1000AS v3. 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 AA1000AS v3 and their self-declaration in accordance with GRI Standards 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 on CSC's approach to stakeholder engagement. Moreover, we had no direct contact with external stakeholders.
- interview with 14 staffs involved in sustainability management, report preparation and provision of report information were carried out.
- review of materiality assessment process.
- review of key organizational developments.
- review of the findings of internal audits.
- the verification of performance data and claims made in the report through meeting with managers responsible for gathering data relating waste and by-products recycling, air pollutants, water, occupational health and safety and energy topics.
- review of the processes for gathering and ensuring the accuracy of data, followed data trails to initial aggregated source and checked sample data relating waste and by-products recycling, air pollutants, water, occupational health and safety and energy topics to greater depth during site visits.

- review of supporting evidence relating waste and by-products recycling, air pollutants, water, occupational health and safety and energy topics for claims made in the reports.
- an assessment of the organization's reporting and management processes concerning this reporting against the principles of Inclusivity, Materiality, Responsiveness, and Impact as described in the AA1000AP (2016).

Conclusions

A detailed review against the Inclusivity, Materiality, Responsiveness, and Impact of AA1000AP (2016) and sustainability performance information as well as GRI Standards is set out below.

Inclusivity

In this report, it reflects that CSC has continually sought the engagement of its stakeholders and established material sustainability topics, as the participation of stakeholders has been conducted in developing and achieving an accountable and strategic response to sustainability. There are fair reporting and disclosures for the information of Environment, Social and Governance (ESG) 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 and has demonstrated sustainable conduct supported by top management and implemented in all levels among organization.

Materiality

The CSC publishes material topics that will substantively influence and impact the assessments, decisions, actions and performance of CSC and its stakeholders. The sustainability information disclosed enables its stakeholders to make informed judgements about the CSC's management and performance. In our professional opinion the report covers the CSC's materiality assessment process and material issues.

Responsiveness

CSC has implemented the practice to respond to the expectations and perceptions of its stakeholders. An Ethical Policy for the CSC is developed and continually provides the opportunity to further enhance CSC's responsiveness to stakeholder concerns. Topics that stakeholder concern about have been responded timely. In our professional opinion the report covers the CSC's responsiveness issues.

Impact

CSC has identified and fairly represented impacts that were measured and disclosed in probably balanced and effective way. CSC has established processes to monitor, measure, evaluate, and manage impacts that lead to more effective decision-making and results-based management within an organization. In our professional opinion the report covers the CSC's impact issues.

Performance information

Based on our work described in this statement, specified sustainability performance information such as GRI Standards disclosures disclosed in this report, CSC and BSI have agreed upon to include in the scope. In our view, the data and information relating waste and by-products recycling, air pollutants, water, occupational health and safety and energy topics contained within China Steel Corporation 2023 Sustainability Report are reliable.

GRI Sustainability Reporting Standards (GRI Standards)

CSC provided us with their self-declaration of in accordance with GRI Standards 2021 (For each material topic covered in the applicable GRI Sector Standard and relevant GRI Topic Standard, including the disclosures of applicable economic, environmental, and social information, comply with all reporting requirements for disclosures). Based on our review, we confirm that sustainable development disclosures with reference to GRI Standards' disclosures are reported, partially reported, or omitted. In our professional opinion the self-declaration covers the CSC's sustainability topics.

Assurance level

The moderate and partial high level assurance provided is in accordance with AA1000AS v3 in our review, as defined by the scope and methodology described in this statement.

Responsibility

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

Competency and Independence

The assurance team was composed of auditors experienced in relevant sectors, and trained in a range of sustainability, environmental and social standards including AA1000AS, ISO 14001, ISO 45001, ISO 14064, 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.



Statement No: SRA-TW-804836
2024-05-07

For and on behalf of BSI:



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