CSC Group Joint Conference

December 21, 2023

Agenda

1 CSC New Vision and Strategies Development

- Supply Chain Transformation Strategies
- Digital Transformation Strategies
- Low-carbon Transformation Strategies

2 Steel Market Outlook

3 Appendixes: Sales Analysis, Financial Performance and Dividend Policy

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This cautionary statement is applicable to all forward-looking statements contained in this presentation.

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CSC New Vision and Strategies Development

1 A Concept, Two Cores, Three Transformations, Ten Strategies

In strength but not size, build specialized strong core capabilities and cultivate differentiated competitive advantages.

Core	**Promote to High Value-added Steel Mill** / **Develop Green Energy Business**
Transformation	**Digital Transformation, low-carbon transformation, and supply chain transformation**

» Develop **100 action plans** from **10 strategies** and work diligently towards achieving **the vision of high value-added steel mill**.

1

CSC New Vision and Strategies Development

Supply Chain Transformation Strategies

1 Supply Chain Transformation Strategies

Competition among individual companies → Competition in the industrial ecosystem.

As Downstream and customers improve, CSC will improve.

Upgrade of Steel-using Industry

- Implement the concept of 'material leads to industrial upgrading'.
- Integrate industry, government, and research resources to assist downstream steel-using industries in upgrading and transforming.

Establishment of Energy-saving Service Team

- Teach energy-saving methods and assist industries in enhancing energy efficiency.

Establishment of Carbon Management Advisory Group

- Assist clients in establishing carbon inventory capabilities, promote substantial carbon reduction, and enhance low-carbon competitiveness.

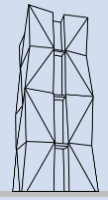
Successful companies have the ability to change with the environment.
Excellent enterprises need to lead the transformation and have an impact on the industry environment.

1 Develop Advanced Premium Steel

Definition of Advanced Premium Steel (APS)

Products with "High Technical Content, High Industrial Benefit, High Profitability."

Focus on 8 items (Meet customers' needs & Industry trend)

High-Quality Forging Steels	Superior Hand Tool Steels	High Performance Structural Steels	Steel for Green Energy	Ultra-High Strength and Toughness Steels	Advanced Alloy Steels	Cross-Generational Automotive Steels	Ultra-High Efficiency Electrical Steels
							
Year				**2024**	**2025**	**2026**	**2030**
Advanced Premium Steel proportion target (%) (APS sales volume target divided by total sales volume target, which does not include slab, and bloom, and billet.)				**9.5%**	**11.0%**	**12.5%**	**20.0%**

- **In 2023Q1~Q3, the sales volume of APS reached 7.6%, sales revenues of APS reached 11.75%, and gross profits of APS reached 86.47%.**

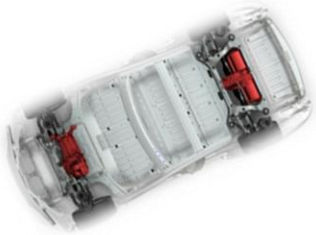
  The high technological content and application value of APS can enhance company profitability and customer loyalty, as well as better withstand economic fluctuations.

1 Ultra-High Efficiency Electrical Steels

Energy saving

High horsepower

Small volume



Low iron loss

High magnetic flux

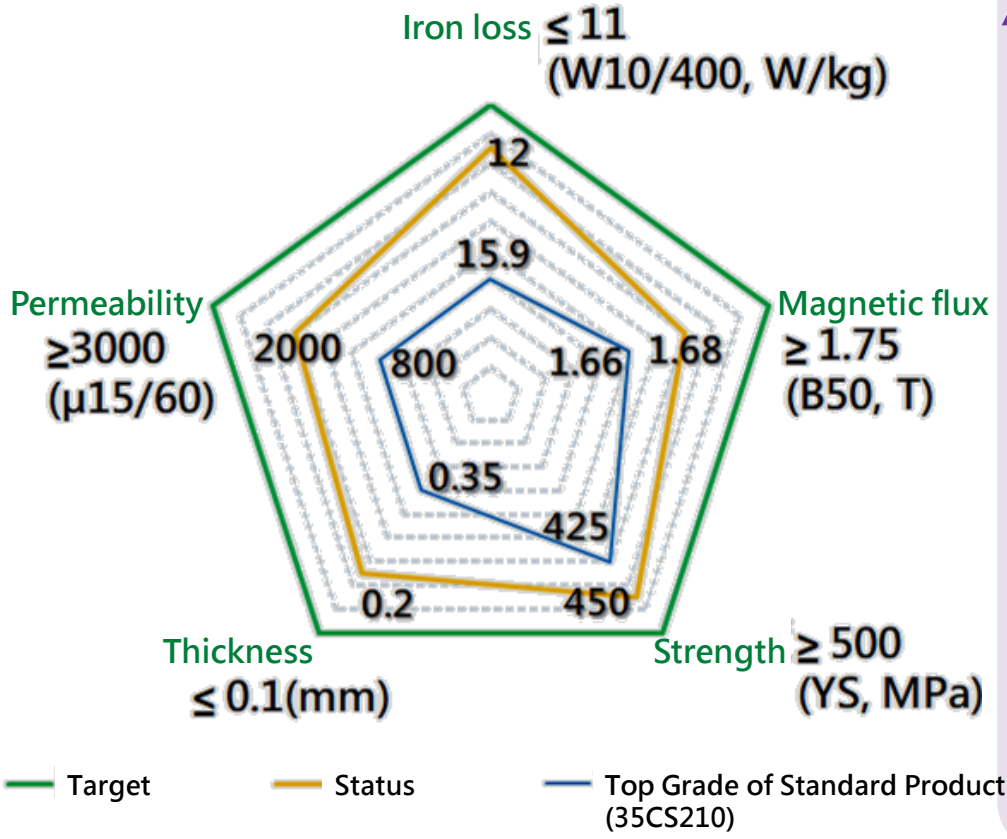
Thin thickness

Performance requirement of motor ⇔ **Quality requirement of ES**

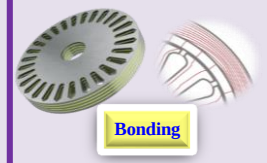
2007 Cooperates with **T brand** and supplies ES required for the motors of various models through **EVI**.

2023 Supplies to **T, V, A, M brand** EV makers, taking nearly **20%** of the global market for steel for electric vehicle motors.

High Efficiency ES Quality



Advanced method



Bonding — High magnetic flux, Low core loss

Welding — Increased core loss

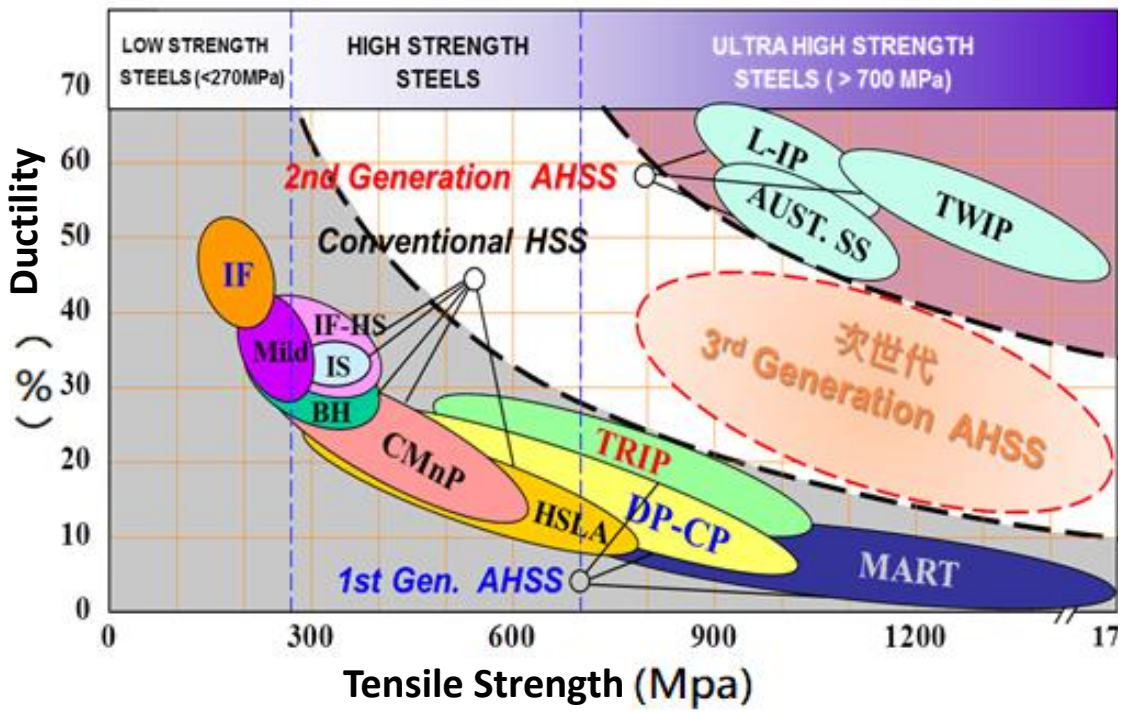
Interlock — Decreased magnetic flux

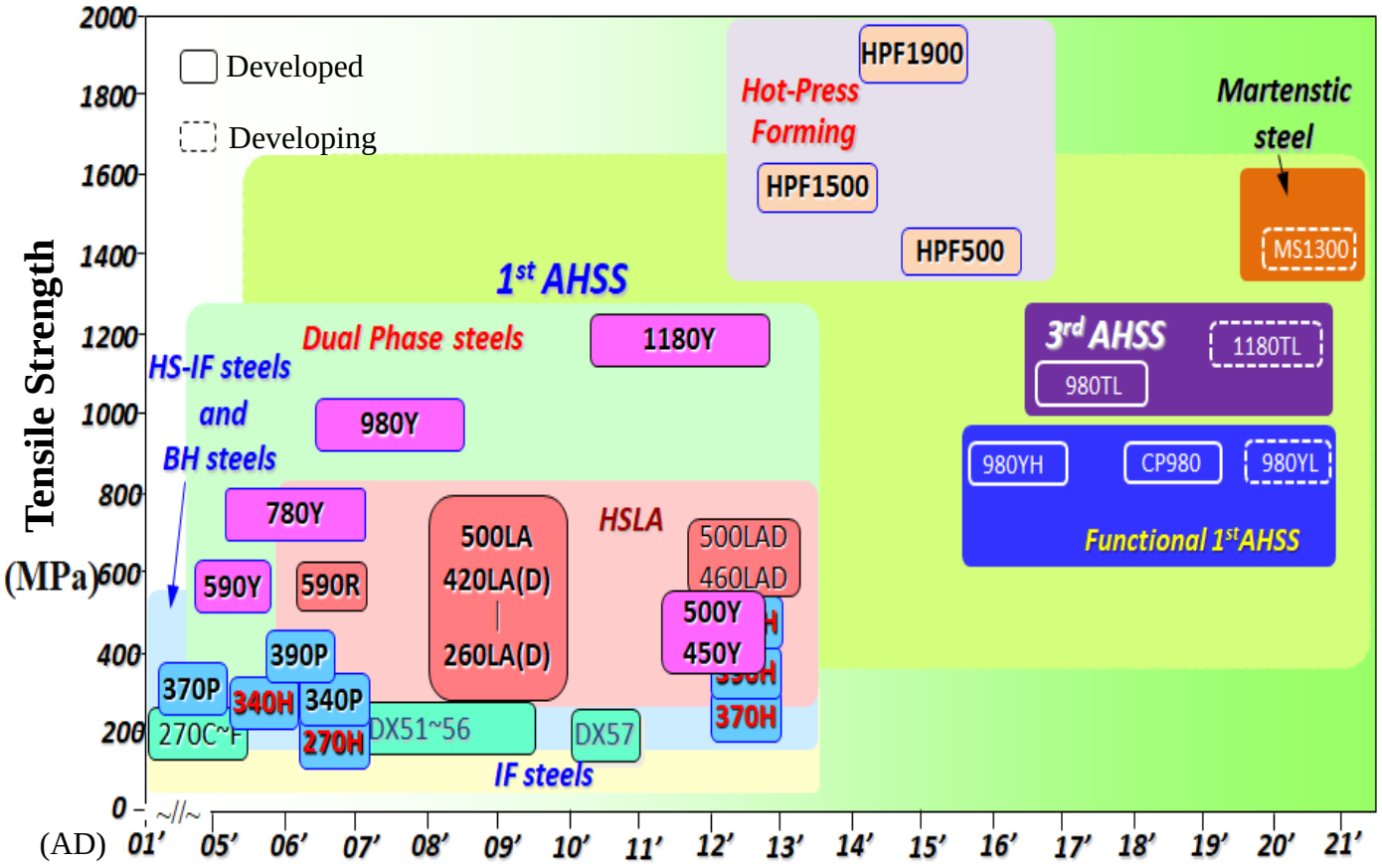
» **Continuously develop higher efficiency ES and application technologies, and co-create new business opportunities for low-carbon transformation with the industry chain.**

1 Cross-Generational Automotive Steels - High-strength Automotive Steels

High Strength → **Weight-reducing and energy saving**

High Ductility → **Easily processing**





- CSC has developed **a series of high-strength automotive steels** and **advanced high-strength steel** with high strength and ductility, the strength is **5.2 times** of the regular mild steel and able to decrease the vehicle weight by **55%**. **CO_2 emissions are reduced by nearly 70%** during the life cycle.
- **275 verifications** from **27 automakers** has been acquired.

1 Ultra-High Strength and Toughness Steels for National Defense

Applications

CSMS plates have been used in the construction of over 600 TIFV.

CRHS-56 ship-building plate have been utilized in IDS.

IDS

TIFV

JLTV

Defense Industry Outlook

- **CSC developed bulletproof plates with both resilience and ultra-high hardness to meet the lightweight requirements of the army, and military ship panels with high strength and toughness to enhance performance of naval vessels, making substantial contributions to defense technology industries.**
- **The army is also developing new indigenous tanks and armored vehicles to enhance national defense capabilities.**

1 Promote the Concept and Practices of Upgrading of Steel-using Industry

Organize 16 research alliances, gather 8 academic research units, and involve 66 companies.

Technological research and development

Collaborative innovation

Strategic investment

Channel construction

Creating brand

→ **Enhancing the industry competitiveness** →

Transformation to service value-added manufacturing industry

Industry research	R&D planning	Alliances organization	Implement application
• In-depth investigation • SWOT analysis of the industry chain	• Develop action plans for industry upgrading	• Integration of resources from industry, government, and academia research to organize alliances	• Implement the application of innovative research and development results

R&D budget of 1.413 billion dollars, development of 58 advanced premium products and advanced manufacturing core technologies, annual benefits of 50.56 billion dollars.

1 Superior Hand Tool Steels - Create Taiwan Premium Hand Tools

Gather 15 industry and academia research institutions to implement the manual tool integration technology project

Develop **specialized steel materials** and develop **deep processing techniques** to assist in the introduction of **digital technology**.

Establish hand tools **research and testing center**, and create the MIT **brand** and independent **marketing channels**.

Value chain

OEM ➡ ODM ➡ OBM

Price Up Value Up

High-Quality Forging

Traditional Forging

Cost reduction 45%

High-torque professional grade

Daily used screwdriver

Durability upgraded by 4 times

Digital hand tools
$27,000/set

General hand tools
$2,000/set

Value increased by 13 times

Taichung is the most competitive hand tool industry cluster in the world.

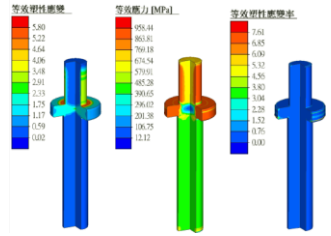
The average annual growth rate of output value was **4.7%** in the past five years, reaching **147 billion dollars** in 2022.

1 High-Quality Forging Steels - Taiwan Reliable Fasteners

Gather 12 industry and research institutions to implement the high-value fastener technological projects

Develop technologies such as mold CAE design, mold flow processing, alloy electroplating, and automatic product inspection.

Establish high-quality fastener manufacturing and inspection capabilities.



Fastener CAE analysis

Automatic screw inspection machine

Price Up Value Up

Automotive bolt
$240/kg

Value increased by 3 times

Aircraft engine bolt
$5,000/kg

Value increased by 100 times

Artificial tooth root
$3,500/unit

Value increased by 175 times

General bolt
$80/kg

General hardware bolt
$50/kg

Industrial screws
$20/unit

Kaohsiung is the most influential fastener industry cluster in the world.

The average annual growth rate of output value was 6.6% in the past five years, reaching 202.6 billion dollars in 2022.

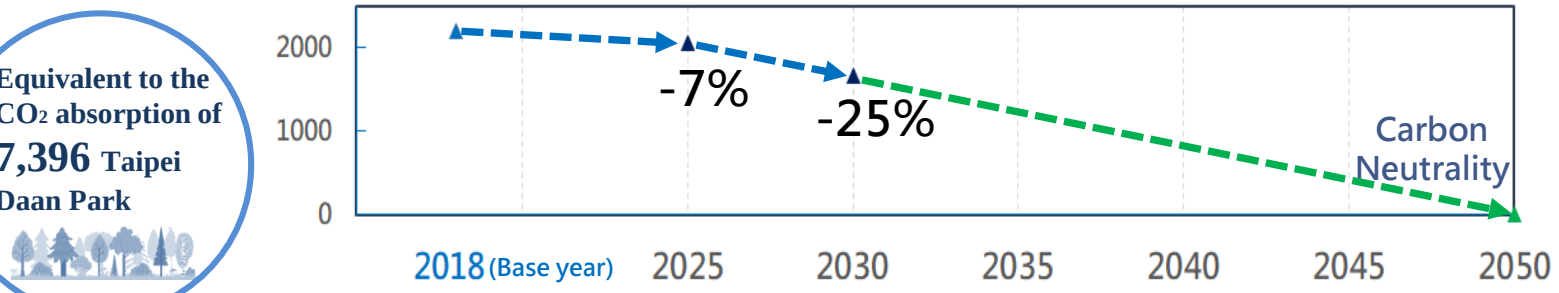
1 Collaborative Industry Chain for Low-carbon Sustainable Transformation

CSC capability

1,891 carbon reduction projects were implemented from 2004.

Accumulated annual carbon reduction reached **2.87** million tons CO_2

Equivalent to the CO_2 absorption of **7,396** Taipei Daan Park



Carbon Inventory → **Energy-saving and carbon reduction technology** → **Carbon Neutrality Pathway**

Counseling achievements

- **CSC Carbon Management Advisory Group**
- The Industrial Development Bureau promoted **1+N Carbon Management Demonstration Team**
- Promote 'Steel Industry Carbon Reduction Promotion Service Team' with TSIIA and MIRDC
- **Alliance for Net Zero Emission** by the Environmental Protection Bureau

Form the 'Carbon Management Advisory Group' from the retiree talent pool and current colleagues

Key tasks

- Carbon management and carbon neutrality information sharing
- Counseling on GHG inventory work
- Carbon reduction diagnosis service
- Promote substantial carbon reduction

One-on-one

- Counseling on carbon inventory work
- Carbon reduction diagnosis service

22 customers in 2023

- Electricity saving of about 8.68 million kwh/year.
- Carbon reduction potential of about 4,443 tonnes/year.

1 Carbon-neutral Steel Passed the Verification by BSI

Move to carbon-neutral products with downstream

Reduce carbon emissions through innovative processes, combine carbon offsetting to produce carbon-neutral steel and obtain BSI certification, provide downstream customers with carbon-neutral products, and create green business opportunities.

CSC

- **Produce billets using DSC electric arc furnace and process them into wire rods at CSC, and implement carbon reduction measures.**
- **Conduct carbon footprint inventory and verification.**

- **Calculate the remaining amount of carbon emitted.**
- **Offset with the pre-project and offset project quotas of CSC.**
- **External verification of carbon neutrality.**

Carbon-neutral wire rods

Fastener manufacturers

Process and produce fasteners according to PAS 2060 guidelines and verify.

Carbon-neutral fasteners

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CSC New Vision and Strategies Development

Digital Transformation Strategies

1 Promote Digital Transformation

Make good use of AIoT

- **Utilize advanced digital technology such as AIoT.**

Fully implement

- **Adapt AIoT to 3 domains and 11 businesses, designing a blueprint for developing intelligent technology.**

Drive transformation

- **Drive the transformation of business processes and models to achieve maximum benefits of digital transformation.**

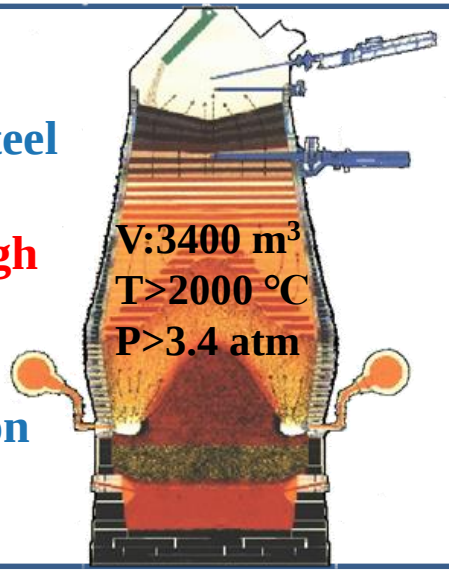
	Business	Systems			
Smart Operating	Customers service	Smart supply chain management		Product collaborative R&D and mass customization services	
	Sales and procurement	Smart sales		Smart procurement	
	Business management	Optimal product combination	Lowest cost production process	Energy-saving production and energy scheduling	
	Human resources management	Facial and biometric recognition		Smart access control management	
	Occupational safety and environmental protection	Personnel safety identification and protection		Smart environmental monitoring and warning	
Smart Production	Logistics and warehousing	Smart logistics and warehousing		Smart shipping schedule and raw material management	
	Production scheduling	Smart group dispatching		Smart factory scheduling and inventory management	
	Quality management	Smart quality design	Quality prediction	Process dynamic control	Quality monitoring and warning
	Smart factory	Raw material blending systems	BF smart systems	BOF smart systems	
		Steel plate and bar/wire rod smart systems	Hot rolling smart systems	Cold rolling smart systems	
Smart Equipment	Equipment maintenance and monitoring	Equipment monitoring and warning		Equipment maintenance prediction	
	AIoT Equipment	Equipment perception and networking	Robots and automatic factories	Smart information security systems	

133 company-level projects have been completed, with annual benefits reaching 1.2 billion dollars.

1 Smart Innovation - BF Iron-making Smart Center

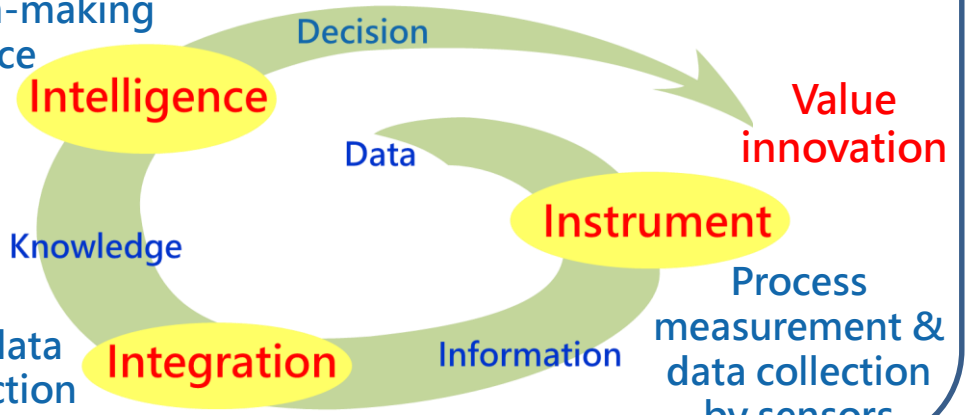
BF

- Core process of steel mill
- Large volume, high temperature and high pressure
- Reduction reaction of iron ore is unmeasurable.



AI calculations, smart modules, decision-making assistance

AI decision-making assistance



Introducing AIoT

8 smart instructions

Channeling treatment,
Equipment condition,
Smart burden charging,
BF operation, etc.

5 smart indices

Energy Balances,
BF condition index,
Channeling index,
Thermal index, etc.

Developed
27 AI modules

Decreasing fuel cost
235million NTD/y

Decreasing GHG
11,346 tons/y

5 smart condition monitoring systems

Main conveyor monitoring,
Burden profile,
BF equipment monitoring
Level gauge monitoring, etc.

9 AI prediction modules

Tuyere image,
Hot metal temperature,
Smart hot stove,
Stave thickness, etc.

Turn the black box system into a visible, predictable and easily controlled progress

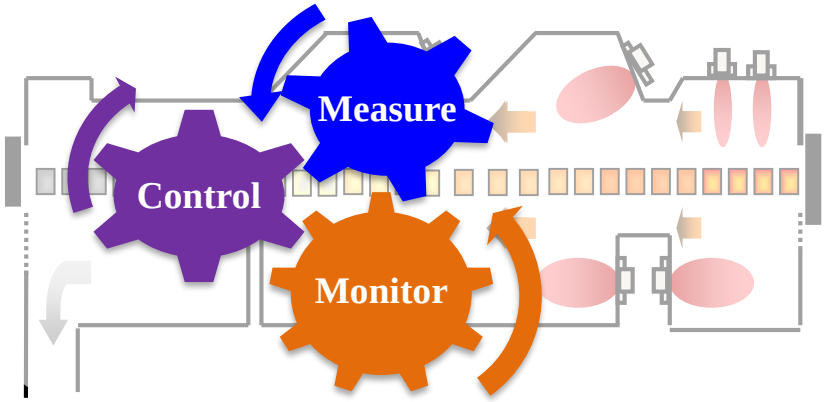
» **AI is an effective tool for process stability and energy saving, and has been fully introduced to the Company.**

1 Example of Successful Digital Transformation - Smart Temperature Control System for Reheating Furnaces

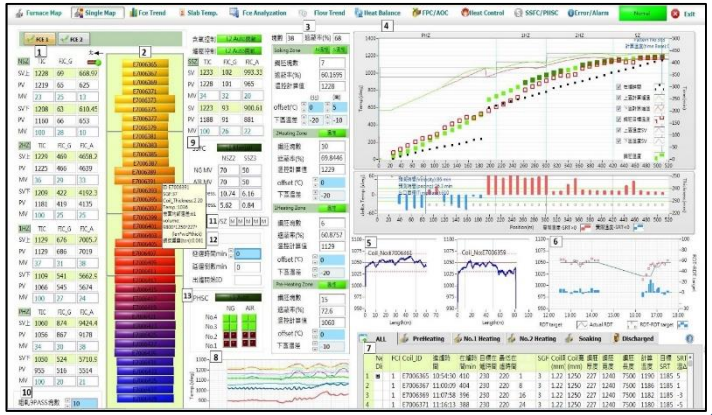
Reheating furnaces

- 20 furnaces
- High thermal inertia
  High-temperature oxidation
- Difficult to control slab temperature

System modularization



Furnace conditions visualization



Introducing AIoT

3D slab temperature virtual measurement

Virtual measurement verification,
Radiation shielding calculation,
Prediction of furnace time for slabs, etc.

Smart furnace condition monitor

Control valve performance monitoring,
Heat exchanger monitoring,
Heat storage body monitoring,
Thermal equilibrium analysis, etc.

Developed
19 Core technologies

Decreasing fuel cost
150 million NTD/y

Decreasing GHG
31,040 tons/y

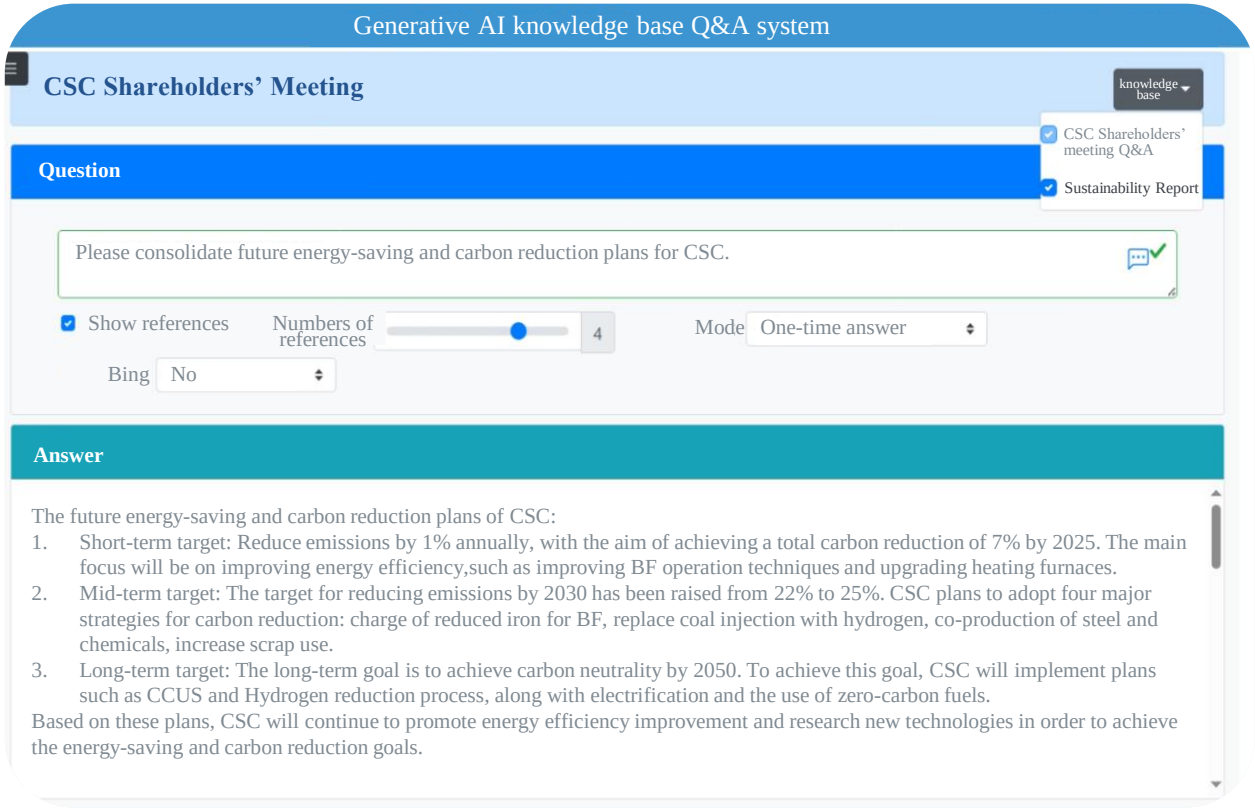
Smart temperature control technologies

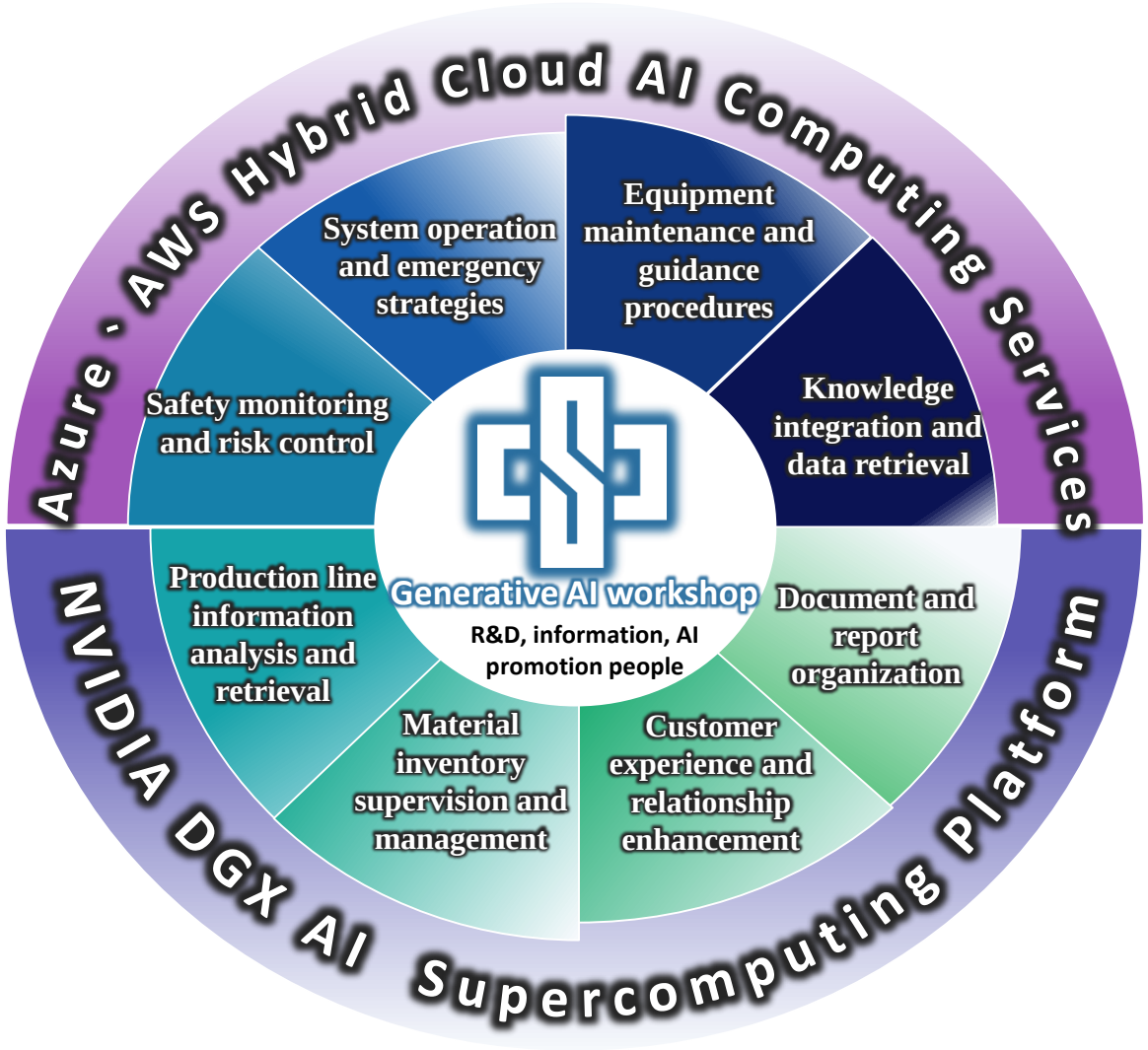
Slab temperature prediction,
Temperature setting optimization,
Control of slab oxidation and decarburization,
Big data adjusting,
Dynamic simulation,
End side heating control,
Compensation for temperature deviation,
Energy-saving temperature control, etc.

i Furnace

Combustion control
↓
Process control
↓
Smart temperature control

1 Smart Innovative Technology - Generative AI





- **Use the ChatGPT model to integrate shareholders' meeting information and quickly generate accurate responses to shareholder inquiries.**
- **Optimize workflow, accelerate knowledge transfer, and enhance work efficiency.**

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CSC New Vision and Strategies Development

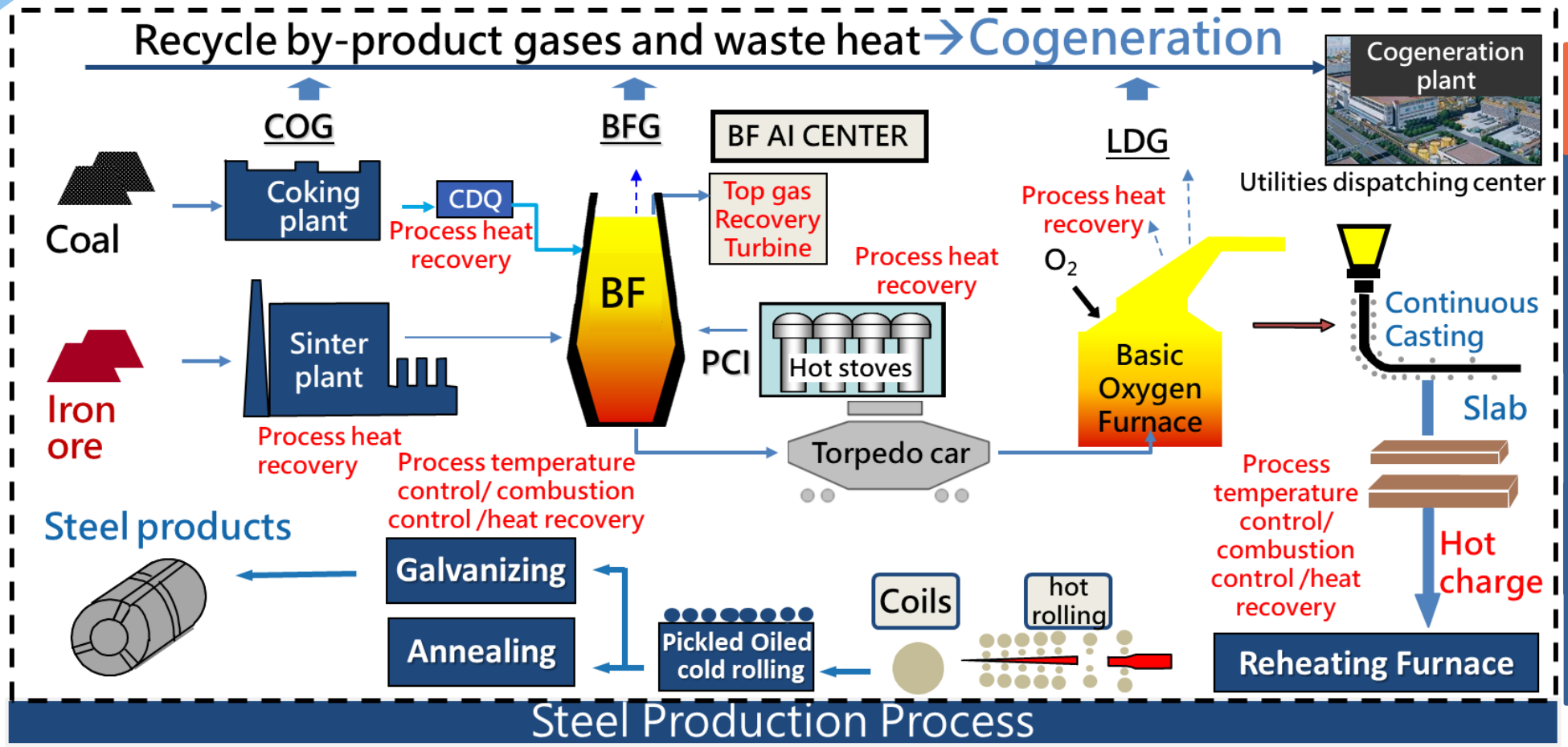
Low-carbon Transformation Strategies

CSC 5G(Green) Strategies

Green Process	Green Product	Green Partner	Green Business	Green Living
Efficient energy Use Waste heat recovery Energy dispatch intelligent management system **Water reuse**	**External energy saving and carbon reduction** ES for motors high-strength automotive steels High-strength ship steels Corrosion-resisting steels Heat treatment and process optimization steels	**Circular economy** Resource integration system in Linhai industrial park Utilization of BOF slags Utilization of coal tar	**Renewable energy** Solar power Offshore wind power Green energy materials	**Living** Green procurement Green building Green transportation Environmental education

» From the perspective of 5G, we promoted multiple initiatives to enhance environmental performance, explore green business opportunities, and establish solid foundation for carbon neutrality.

1 Carbon Reduction Opportunities in Steel Production Process



10 Carbon Reduction Strategies
Process Improvement Process Streamlining
Waste Heat Recovery Cogeneration (CHP)
Combustion Control Temperature Optimization
Improve Yield Rate & Equipment Efficiency
Energy Dispatch Intelligent Management

1,182 carbon reduction projects were implemented during 2011~2020. Accumulated annual carbon reduction reached 1.45 million tons CO_2, which decreased by 6.5%. This achievement is the result of continuous and accumulative efforts towards achieving net-zero emissions.

1 Expand Energy Business - Solar Power & Energy Storage Systems

Short-term Target & Performance

- **PV Installed:** **97.9 MW; 120mn kWh of annual power generation & 59 thousand tCO2e reduction per year**
- **Operating performance:** (Accumulated until November 2023)

Electricity output	Revenues from electricity sales	Carbon reduction	Equivalent to the CO_2 absorption of
534 million kWh	2.483 billion	around 265k tons	679 Taipei Daan Park

*Estimated based on the 2022 Taipower electricity carbon emission factor, 0.509 kg CO2e/kWh

- **Energy storage systems:** **The construction of a 4MWh energy storage system has been completed, which participates in Taipower AFC, and balances the on-site solar power supply and demand, as well as enhances grid resilience. It is expected to complete the construction of a 7MWh energy storage system by the end of this year.**

Future Development

- **Future Installation:** 2~3MW / year ▶ **2033 installation target: over 120MW, about 130mn kWh of annual power generation**
- **Future Operation:**
  - **Business Operations:** **Sales of electricity, energy storage systems, and technical services**
  - **Estimated Revenue:** **2024: about 570 million ▶ 2033: about 700 million**

1 Expand Energy Business - Substructure & Offshore Wind Farm

Offshore Windfarm Development

- **China Steel Power Corporation (CSPC), a joint venture between CSC and Copenhagen Infrastructure Partners (CIP), is developing 300MW wind farm. The main construction activities in 2023 are Jackets, Offshore Export Cables installation and Onshore Substation construction.**
- **It is expected to connect to the gird in 2024, the estimated annual power generation is 1.15 billion kWh/year, The revenue for the first 10 years is estimated to be around 6.9 billion NTD/year according to the FIT rate, with potential carbon reduction of 550k tons/year.**
- **The most localized Offshore Windfarm in Taiwan.**

Located off the coast of Changhua County in Taiwan

- **Water Depth：27 ~ 40 m**
- **Wind Speed：9.66 m/s**

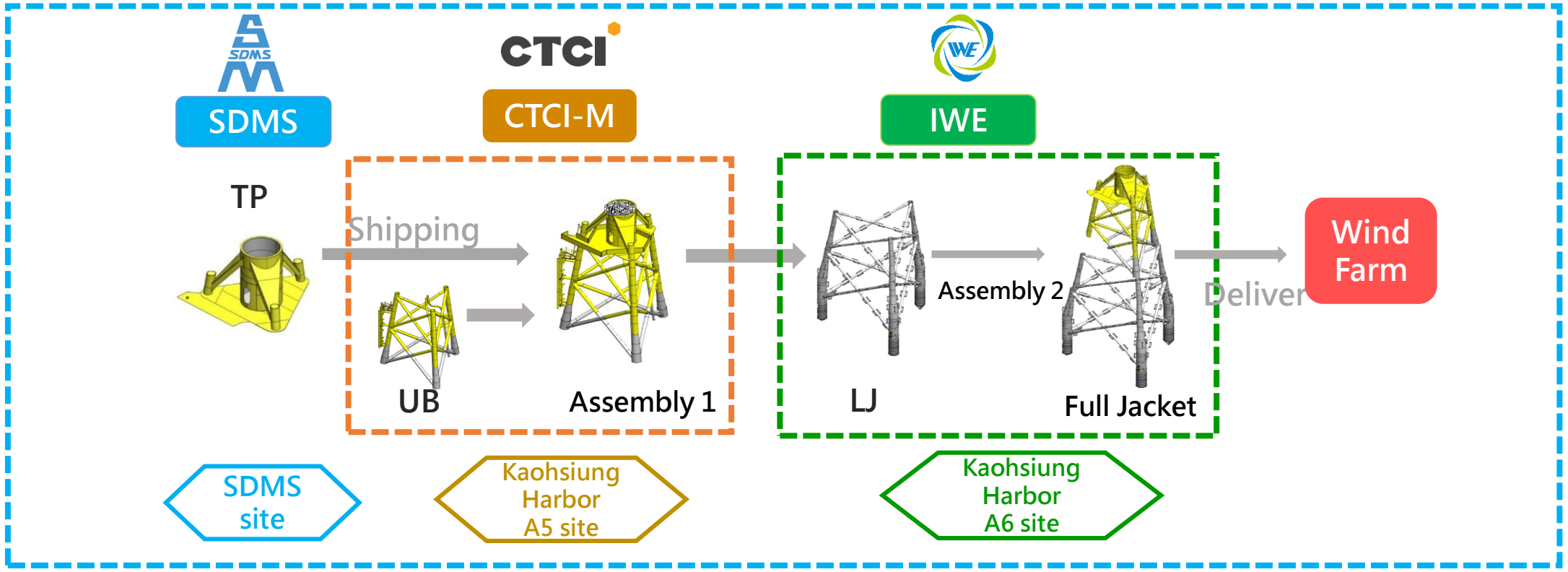
Substructure Manufacturing

- **Sing Da Marine Structure: For the manufacture of substructures**
- **In June 2023, the contract of 31 Jackets for #29 Offshore Wind Farm Project was completed and passed the owner's acceptance.**
- **Continue to approach each wind farm developers of the third round zonal development.**

1 Expand Energy Business - Substructure & Offshore Wind Farm

SDMS prepare for organizing and leading " The southern alliance team "

- **The southern alliance team possess heavy duty quay with deep water depth in Kaohsiung Harbor A6 site(15m) allowing load in/out of full jackets and its semi products. Furthermore, the integrations of nearby IWE A6 site(17ha) and CTCI-M A5 site(8ha) can optimize the fabrication flow to increase the capacities. With SDMS TP fabrication site, the team can greatly increase the full jacket supply capacities to fulfill the requirement of the project.**
- **SDMS has successfully established technical capabilities of full Jacket fabrication. SDMS will serve as Tier 1 in this southern alliance team. SDMS will not jus only be in charge in completing TP with its high-end know how, but also will be leading IWE and CTCI-M fabrication teams to complete 2D/3D and final mega assembly works in relevant sites.**



1 Low-carbon Transformation Strategies - Green Living

Green transportation

KRTC KAOHSIUNG Metro KEEP MOVING

- **The Kaohsiung MRT Red and Orange lines started regular service from 2008, striving towards becoming a low-carbon city.**
- **CSC contracted light rail projects to increase the usage rate of public transportation, thereby achieving the goal of carbon reduction.**
- **2022 Kaohsiung LRT operating section:**
  Kaisyuan Park (C32) ~ Lizihnei (C1) ~ Heart of Love River (C24)

2020 Transport volume (passengers)	Kaohsiung MRT	41.13 million
	Kaohsiung LRT	5.01 million
	Total	46.14 million

CO_2

- 2022 Carbon reduction performance
- ✓ Carbon reduction reached 41 thousand tons CO_2e.
- ✓ Equivalent to the CO_2 absorption of 106 Taipei Daan Park.

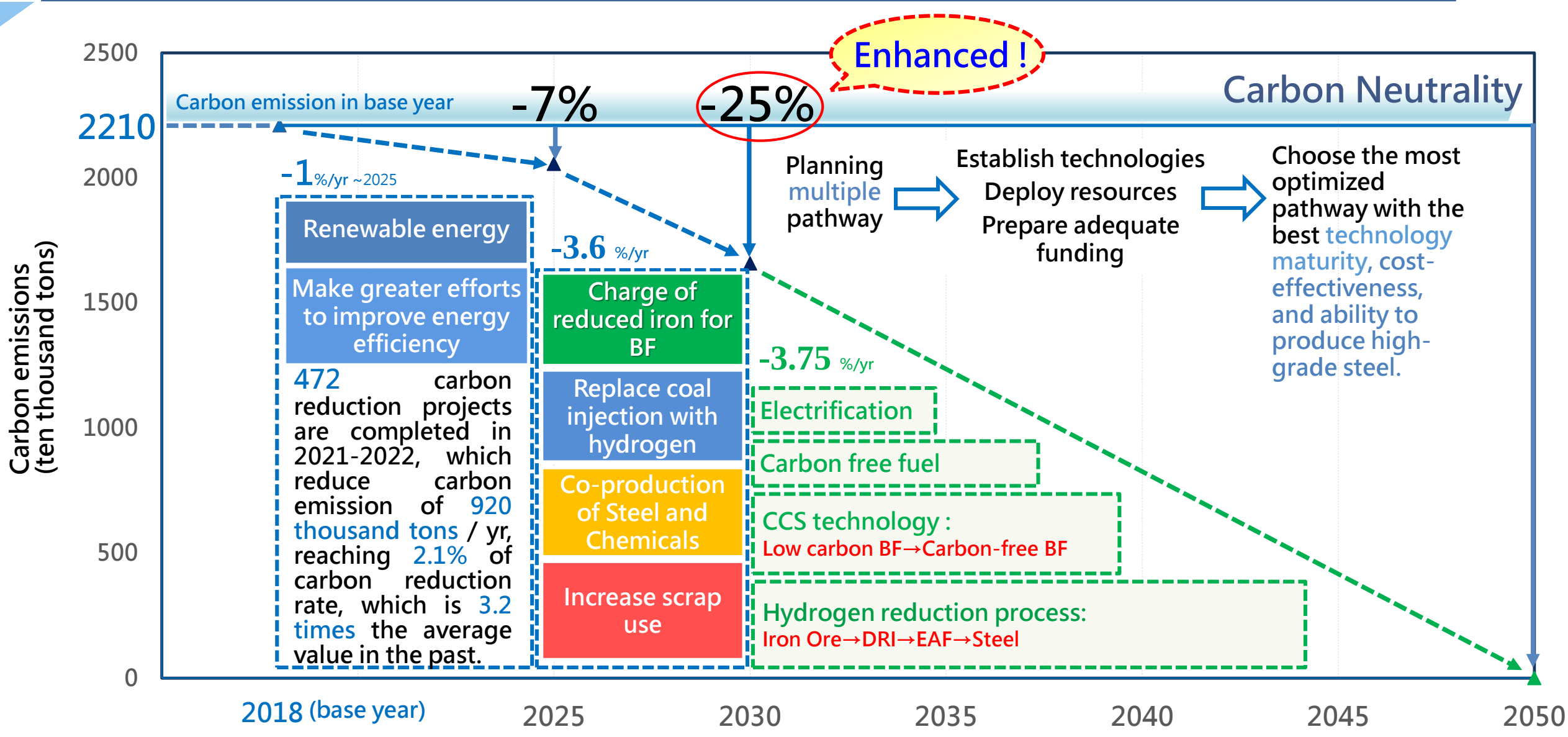
Note: The carbon reduction is calculated based on the total transport volume, the average length of the travel, and the difference in carbon emissions per kilometer between public transportation and automobiles.

Forestation

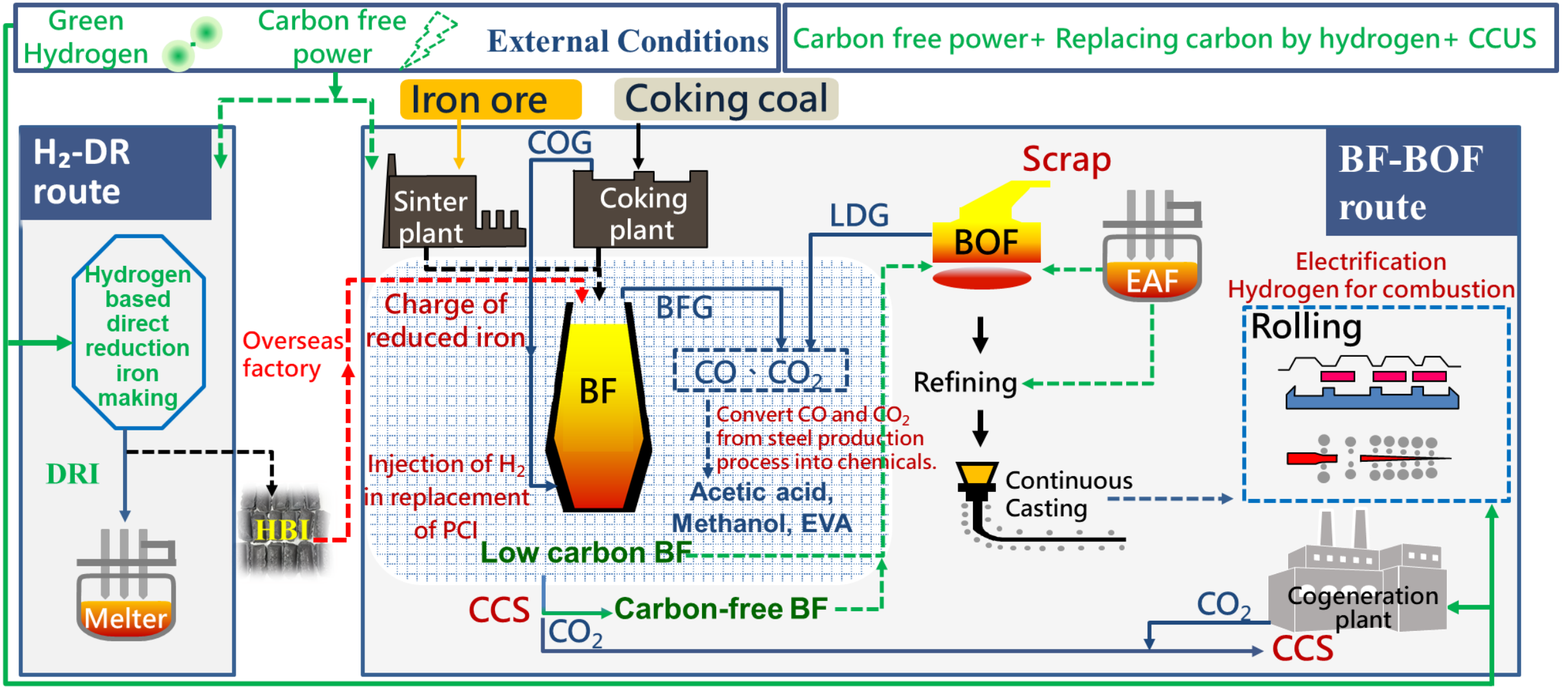
	Zhongliao Township, Nantou County	Jiaxian Dist., Kaohsiung City,	Liouguei Dist., Kaohsiung City,	Kaohsiung Metropolitan Park
	about 9 ha	about 2 ha	about 1,181m^2	Replant the missing plants
	10,000 trees	5,000 trees	1,000 trees	812 trees, 500 shrubs
CO_2 reduction (tons/yr)	about 696 tons	about 348 tons	about 70 tons	about 57 tons

Note: Refer to the evaluation report for the Company conducted by National Pingtung University of Science and Technology on 94.11.22.

1 Low-carbon Transformation - Short Term Carbon Reduction & Medium and Long Term Carbon Neutrality Pathway

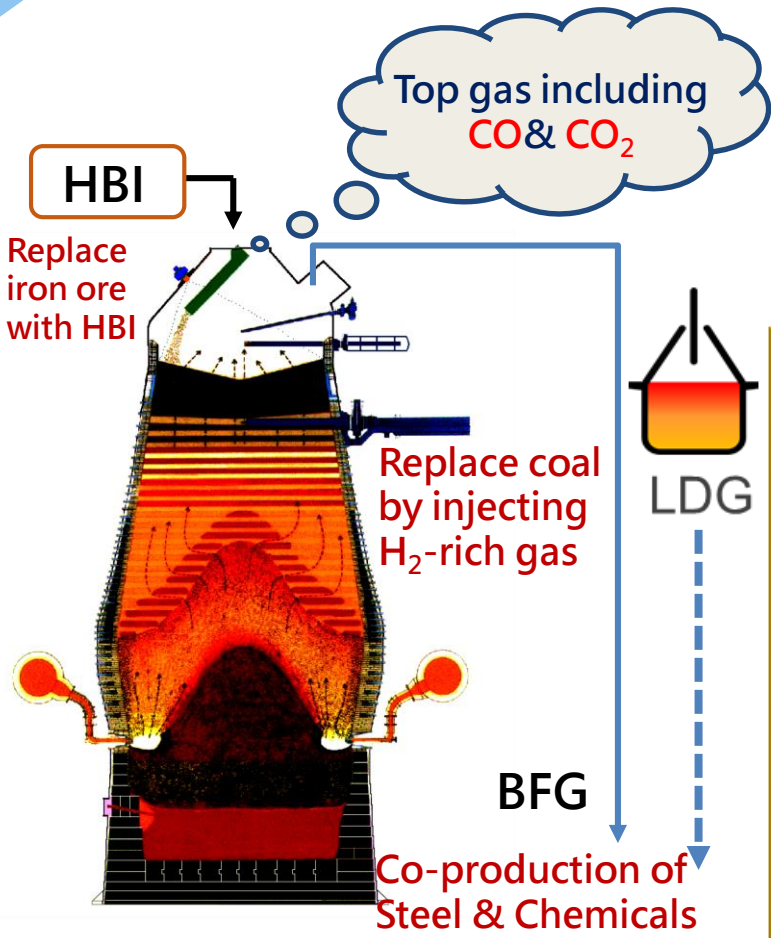


1 Innovative Green Route: Medium and Long Term Carbon Neutrality Pathway



- Facing the challenges of **technology**, **resource**, and **capital**, resulted from the lack of mature technology and green hydrogen resources, as well as the required equipment modification.

1 Technology Development: Low-Carbon BF Iron Making Technology



Research field:

1. Replace iron ore with HBI: fabrication patterns research, softening and melting properties in BF, and energy and mass balance analysis.

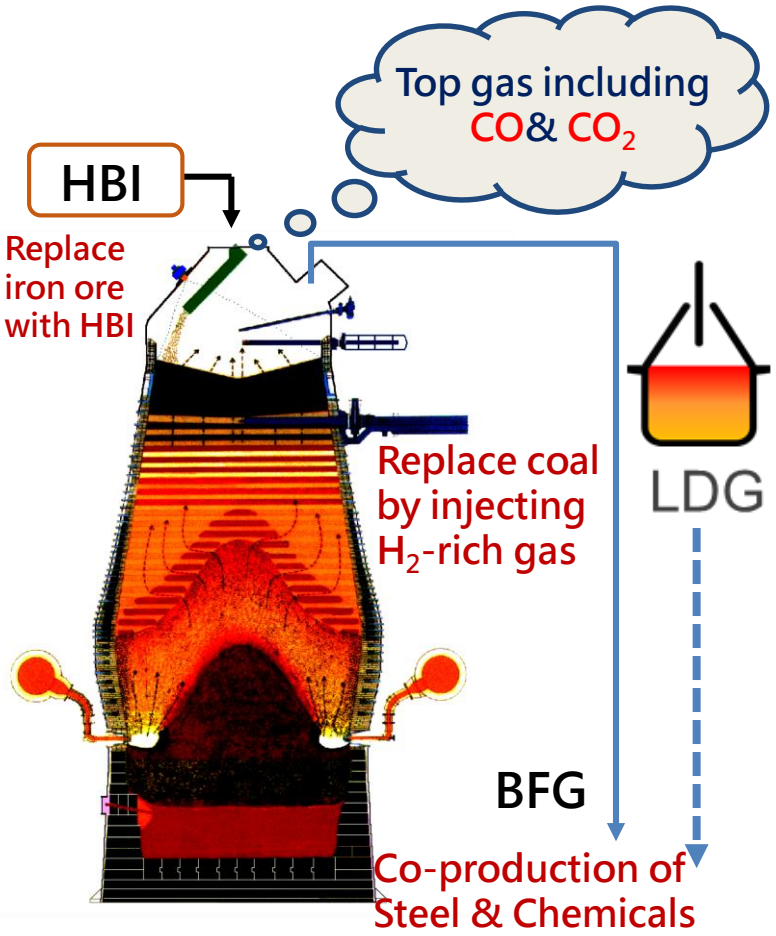
2. Replace coal by injecting H2-rich gas: nozzle design, raceway zone simulation, combustion simulation, BF flow field analysis.

3. Capture and purify top gas: capture, separate, and purify.

R&D Topics	Replace iron ore with HBI	Injecting H_2-rich gas in BF	Co-production of Steel & Chemicals
	CO_2 reduction calculation and cost analysis	H_2-rich gas safety spray technology and combustion simulation analysis	Process by-product gas and tail gas CO_2 capture and purification technology
	Energy and mass balance, and thermal flow field analysis	Raceway zone behavior simulation analysis	
	Transportation, distribution of materials on BF top, and movement patterns in BF	H_2-rich gas combustion simulation testing technology	
	Softening and melting properties of iron-containing raw materials	Thermodynamic analysis of indirect reduction of iron ore under different H_2/CO	Development of carbon cycle transformation chemical technology
	BF top reaction characteristics investigation of iron-containing raw materials	Thermodynamic experiment of indirect reduction of iron ore under different H_2/CO	
	Experiment and analysis of the reaction characteristics of different iron ores under hydrogen reduction	BF hearth and overall flow field analysis under hydrogen-rich condition	

» **Formed a research center of hydrogen metallurgy with 27 professors from 12 academic and research institutions.**

1 Low-carbon Transformation - Four Medium Term Low-carbon Technologies Development



Charging of reduced iron in BF	Injection of Hydrogen-rich gas in BF	Co-production between steel and petrochemical plants	Increase scrap use

- **Charging of reduced iron in BF:** The test was successfully completed in 2023. It shows that adding 1 tonne of reduced iron can reduce CO2e by 1.5 tonnes, and the maximum fuel rate reduction is 12.4%.
- **Injection of Hydrogen-rich gas in BF:** Expected to start testing in 2024 Q1 at the first BF.
- **Co-production between steel and petrochemical plants:** The pilot line was completed in September 2022 and CO capture technology via blast furnace gas.
- **Increase scrap use:** Developed the hot-dip galvanized steel products with 12%, 20% and 40% scrap used and electro- galvanized steel products with 12% scrap used, and obtained certification.

CO_2 emissions reduction potential (2050)

HBI Charging	Injection of Hydrogen-rich gas in BF	Co-production of Steel and Petrochemical	Raising Scrap into Steelmaking
1.4 MT CO_2e	0.665 MT CO_2e	2.9 MT CO_2e	2.24 MT CO_2e

1 Low-carbon Transformation - Development of Co-production of Steel and Chemicals

2022 | 2030 | 2040

Phase 1 : Pilot Line Reduce 4,900 tons CO_2e/yr

Phase 2 : Demo Line Reduce 240k tons CO_2e/yr

Phase 3 : Commercialization Reduce 2.9M tons CO_2e/yr

Traditional

Carbon Input

NG
Coal
Oil

Gas Production Stage

Petrochemical Company

Gas Production → Impure CO (Containing Sulfur & CO_2) → Purification → High Purity $CO\&CO_2$

Synthetic Stage

MeOH Acetic Acid Polyol Oxalic Acid

Implement Product Low-Carbonization

Terminal Industries

Polyester Fiber
Clothing, home furnishings/bedding, medical aids

Polyester Rubber
Shoes, sporting goods

Polyester Plastic
Optical lenses, vehicle parts, medical aids, daily necessities

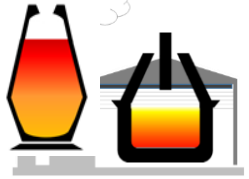
Polyester Packaging
Solar modules, LEDs

Co-production of Steel & Chemicals

Replace Carbon Input

CSC

BF/BOF Gas



CO & CO_2 Capture and Purification

High Purity $CO\&CO_2$

- Establishment of CO capture technology via blast furnace gas, and creating about 80 billion of production value.
- The pilot line achieving 1,000 hours of operation, a CO concentration of 98.9%, and a recovery rate exceeding 86.8%, meeting the specifications for acetic acid synthesis applications.

Committing to developing various resource recycling technologies, actively promoting the integration of regional resources and industrial ecological links. Honored with the highest award, the 'Gold Award for Circular Economy to Corporations' by the Ministry of Environment in 2023.

1 Overseas Investment for HBI to Achieve Carbon Neutrality

Resources for carbon neutrality

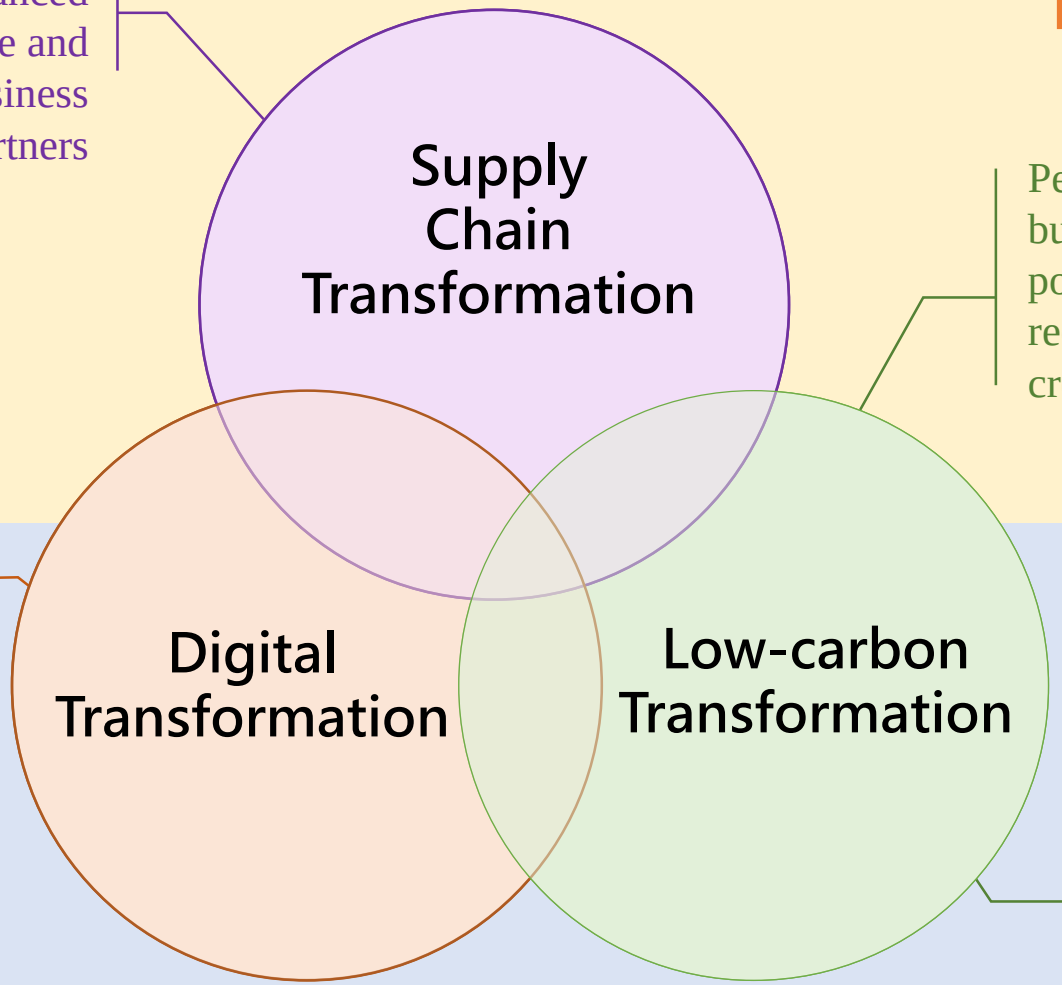
- **Considering the relatively low circulation volume of HBI in the market, CSC is actively evaluating the feasibility of investing and establishing HBI plants in regions such as Australia, Malaysia, and the Middle East with our cooperative partners.**
- **The case details cannot be disclosed due to confidentiality agreements signed with our partners.**

1 Summary of Three Transformation Strategies - Reduce Costs, Increase Profits, and Embrace Sustainability

Increase Profits

Promote high profitability advanced premium steel, create application value and demand, and establish business opportunities with supply chain partners

Persist in developing green energy business like solar power and wind power, and produce steel with high recycled content for customer demands, create green business opportunities



Achieve benefits including efficiency enhancement and cost reduction by introducing advanced digital technologies, enhancing smart manufacturing, and optimizing business models

Continually developing low-carbon transformation technologies, moving steadily towards carbon neutrality, and enhancing low-carbon sustainable competitiveness

Reduce Costs

Annual performance reached 8.3 billion dollars

2

Steel Market Outlook

2 worldsteel Outlook

In the Oct. SRO, worldsteel estimates the steel demand for 2023 to be 1.815 billion tons (YoY +1.8%), forecast for 2024 is 1.849 billion tons (YoY+1.9%) , increase by 34.6 millions.

2024 outlook

North America

The demand for construction is increasing due to infrastructure policies.

Automobile production and sales volume have resumed growth.

China

The housing market remains at a low level.

The manufacturing industry is supported by automotives and home appliances, and steel demand is expected to rebound.

India & Southeast Asia

The demand is on the rise. The market will grow in 2024.

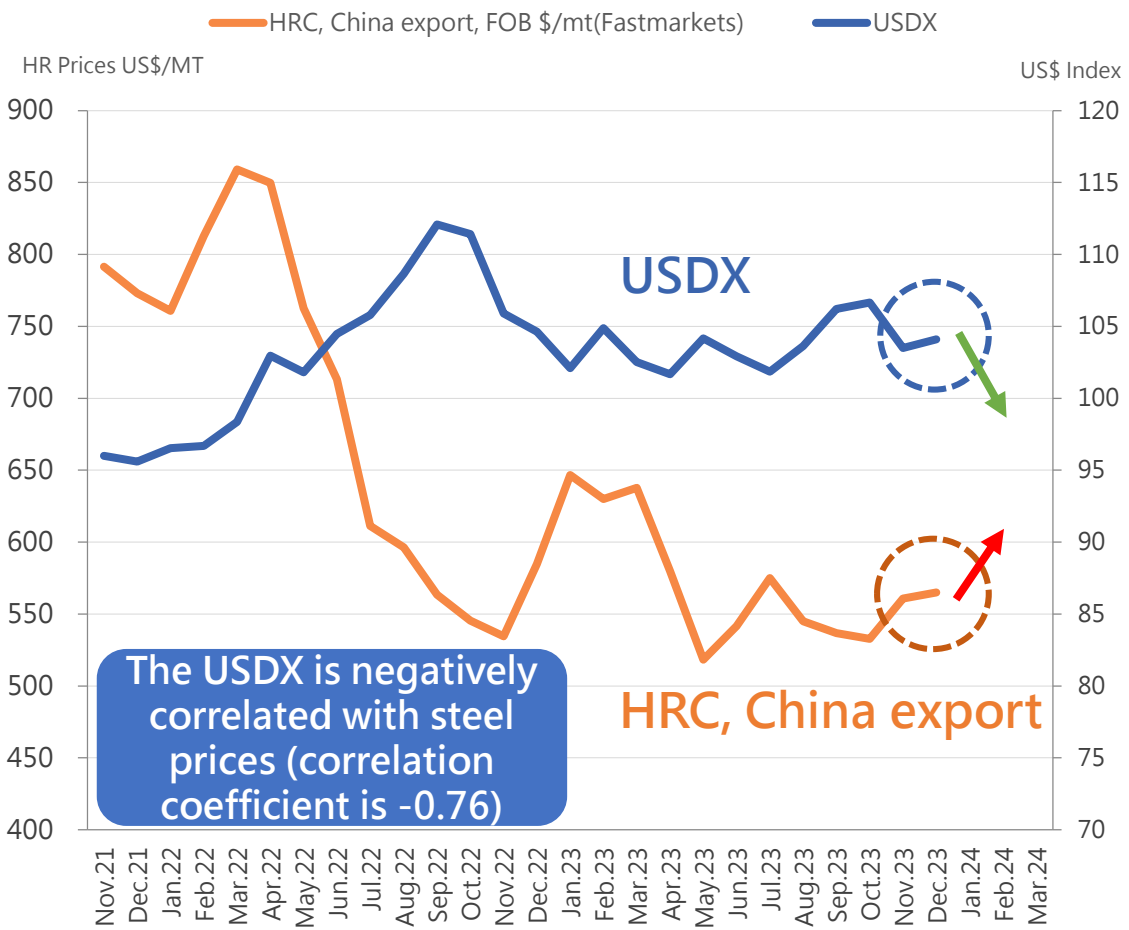
Europe

Due to the low base period, steel demand is expected to experience a significant rebound. Slowing consumption could be a potential risk.

worldsteel SRO October 2023	MT			YOY (%)	
	2022	2023(e)	2024(f)	2023(e)	2024(f)
European Union & United Kingdom	152.0	144.3	152.7	-5.1	5.8
Other Europe	39.2	45.0	47.3	14.8	5.1
Russia & other CIS + Ukraine	51.6	54.6	55.2	5.8	1.1
USMCA	132.9	134.1	135.1	0.9	0.7
Central & South America	44.9	44.2	45.1	-1.6	2.0
Africa	39.5	37.9	39.9	-4.1	5.3
Middle East	57.1	56.1	57.9	-1.8	3.2
Asia & Oceania	1,265.3	1,298.5	1,314.9	2.6	1.3
China	920.9	939.3	939.3	2.0	0.0
Developed Asia	128.2	129.0	130.7	0.6	1.3
Developing Asia excl. China	208.9	222.9	237.9	6.7	6.7
Global	1782.5	1814.5	1849.1	1.8	1.9

Source: worldsteel SRO, 2023.10.17

2 USDX Retreats from Highs - Conducive to the Recovery of Steel Prices



The FED's rate hike cycle is coming to an end

- ✓ As inflation continues to slow and the U.S. economy shifts from high-speed growth to moderate growth, the FED has decided not to raise interest rates in December this year and has hinted that it will start cutting interest rates next year.
- ✓ Data such as core inflation, non-farm payrolls and unemployment rates will determine the timing of interest rate cuts next year.

USDX falls

- ✓ USDX fell back from a high of 107 to 102.
- ✓ The replenishment of overseas manufacturing companies and the rebound in economic data restrained the momentum of rising USDX.
- ✓ The trend of USDX and steel prices is inversely related (negatively related). With the FED interest rate hike coming to an end and interest rate cuts expected next year, there is a high chance that USDX will fall in the short term, which will be beneficial to the recovery of steel prices.

Source: Compiled by CSC Marketing Administration Dept.

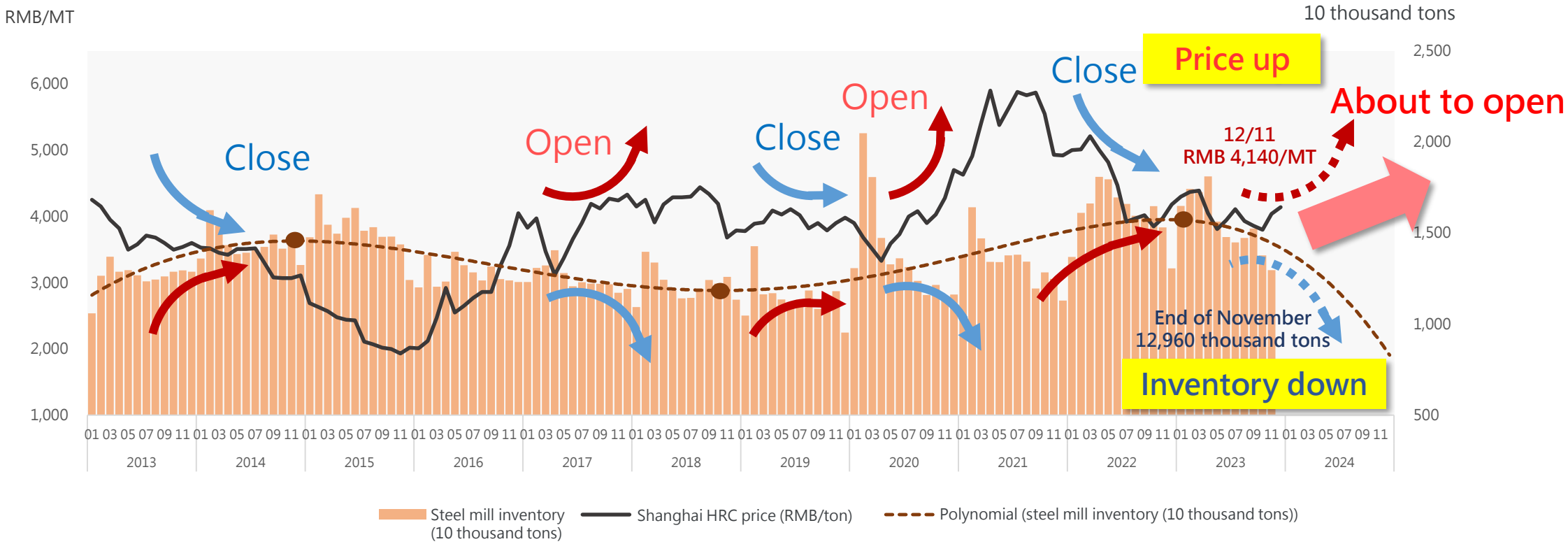
2 Global Steel Demand Forecast - Steel Demand has Passed its Low Point

	Mt		%	
	2023	2024	23/22	24/23
World	**1 814.5**	**1 849.1**	**1.8**	**1.9**
European Union (27) & United Kingdom	144.3	152.7	-5.1	5.8
Other Europe	45.0	47.3	14.9	5.1
Russia & other CIS + Ukraine	54.6	55.2	5.8	1.0
USMCA	134.1	136.1	0.9	1.5
Central & South America	44.2	45.1	-1.6	2.2
Africa	37.9	39.9	-4.1	5.4
Middle East	56.1	57.9	-1.7	3.2
Asia & Oceania	1 298.3	1 314.9	2.6	1.3
China	939.3	939.3	2.0	0.0
Developing Asia excl. China	222.9	237.9	6.7	6.7
Developed Asia	129.0	130.7	0.6	1.3
World excl. China	875.2	909.8	1.6	4.0

- ✓ Global steel demand in 2023 is revised down to 1,814 million tons, with an annual growth rate of 1.8%, which is revised down by 0.5% from the 2.3% forecast in April.
- ✓ Global steel demand is estimated to be 1,849 million tons in 2024, with an annual growth rate of 1.9%. The low point of demand has passed, and recovery momentum has emerged. The estimated annual growth rate of steel demand is increased by 0.2% from the previous 1.7%, with demand increasing by 34.6 million tons. .
- ✓ As China's urbanization level (first-tier cities) has reached saturation, growth is limited. It is expected that steel demand in 2024 will be the same as in 2023.
- ✓ Although steel demand in Europe and the United States is expected to maintain growth next year, the growth rate will be slower than the previous forecast.

Source: worldsteel SRO, 2023.10.17, compiled by CSC Marketing Administration Dept.

Chinese Steel Mill Inventory vs. HRC Price



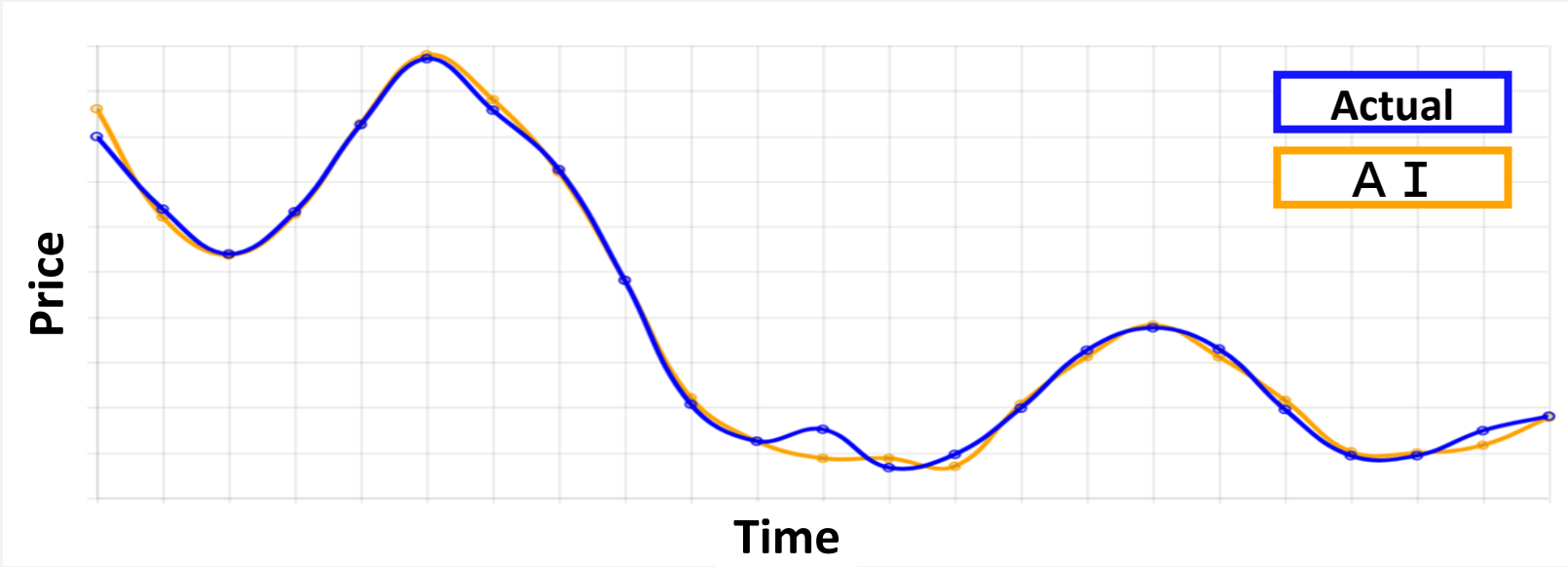
Steel mill finished goods inventory VS HRC price

When open, rise ★ When close, fall

Source: Compiled by CSC Marketing Administration Dept.

2 Example of Successful Digital Transformation - Prediction of HRB Market Trend

Schematic Diagram
(for reference)



Keep abreast of market trends

- Increase of the global economic and market changes
- Need to do the correct adjustment on the steel price in response to the market changes

BACKGROUND

AI-driven Decision

- Predictions of local & global steel market trends through AI
- Improvement of the accuracy on the market trend prediction

APPROACH

Significant Result

- Enhance the ability of market change monitoring
- Enhance the ability of product sale and price decision

BENEFITS

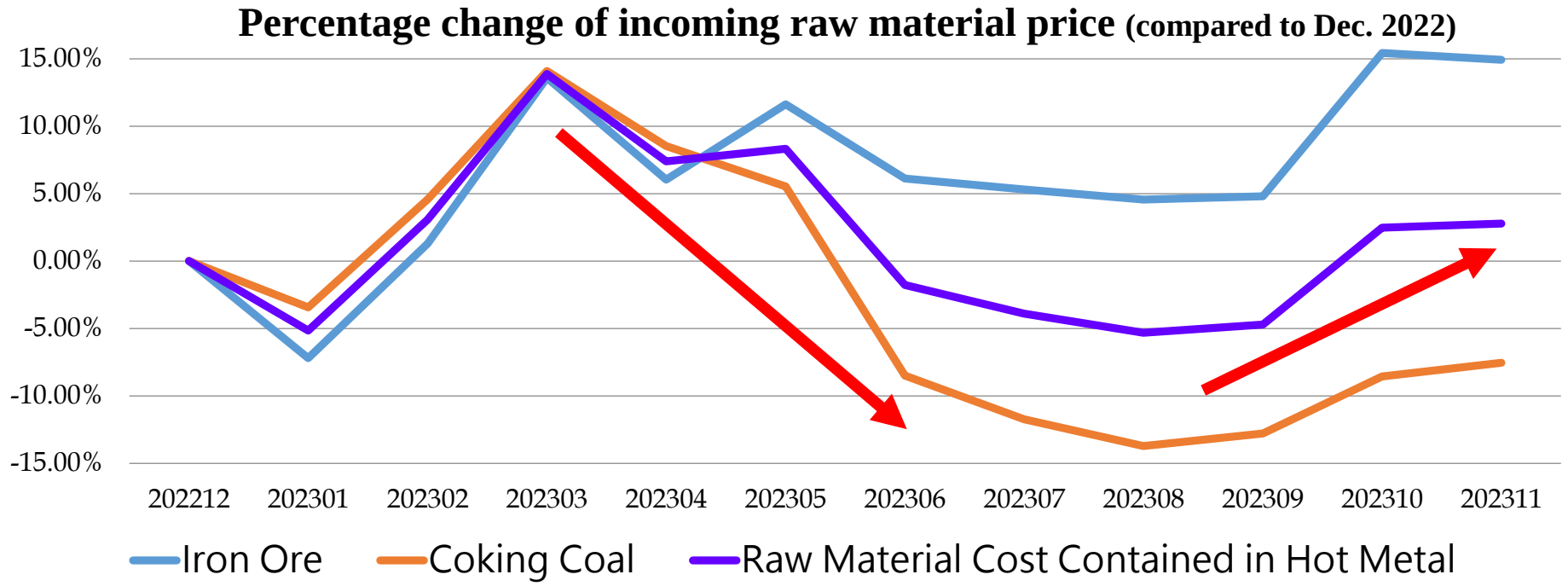
2 Raw Material Trend - Iron Ore & Coking Coal

Coal

- ✓ At the end of the year, some Australian mining areas have slowed down mining and strengthened security inspections. The market expects supply to decrease.
- ✓ India's domestic demand for steel is strong and coal demand is emerging. Indian steel mills purchase coal at high prices, pushing up prices.
- ✓ Frequent mining disasters in China have restricted domestic coal production, causing a strong rise in domestic coal prices and stimulating an increase in the price of imported seaborne coal.

Iron

- ✓ China's blast furnace utilization rate remains high, supporting demand for seaborne iron ore, and imported iron ore inventories rose slightly.
- ✓ The China Development and Reform Commission launched an investigation into iron ore prices, which caused iron ore prices to fluctuate downward once.
- ✓ Since the Lunar New Year holiday falls in February, the purchase situation of iron ore for delivery in January has improved, and steel mills and intermediate traders have begun to replenish their stocks, supporting iron ore prices.



2 Steel Market Recovers Moderately - Q1 is Stable Upward, Q2 is the Key

✓ China

Production cuts are gradually implemented

China's crude steel output in October was 79.09 million tons, a 13% decrease from the previous peak of 91.11 million tons in June. Social inventories of steel fell from a high of 12.21 million tons in August to 8.88 million tons, a decrease of 27%, indicating that the implementation of winter production restrictions and crude steel leveling control measures has achieved initial results.

✓ Geopolitics

Continue to pay attention to the follow-up

The Israel-Hamas conflict has not substantially impacted crude oil supply or transportation, and the ceasefire agreement has temporarily reduced geopolitical risk uncertainty.

The war between Russia and Ukraine has reached a stalemate. The U.S. debt ceiling dispute limits financial aid to Ukraine. The Israel-Hamas conflict diverts the resources of Europe and the U.S.

Western society is gradually losing its support for Ukraine, and the unfavorable war situation continues in the winter. There may be a chance for a turnaround after next spring.

✓ Raw materials and steel prices

Costs push up steel prices

Iron and coal costs continue to remain high, with theoretical HRB costs of approximately 668. Asia's first-tier steel mills are taking advantage of the momentum to restore profit margins, and steel prices are expected to maintain an upward trajectory.

✓ The U.S.

Global steel price engine starts

The end of the car factory strike has released deferred demand for automotive steel. Coupled with the short-term misalignment of supply and demand caused by previous production cuts by steel mills, U.S. steel mills have raised prices four times in a row since October. U.S. hot-rolled coil prices have rebounded from the bottom in late September to rise by more than USD 400/ton ex-works (a 64% increase), and this increase has been passed on to Europe and Asia.

✓ Europe

Warming up from the bottom

The bottom of the manufacturing industry has passed, and Q4 continued to actively reduce inventories. European steel mills shut down seven blast furnaces, and production cuts gradually began to take effect. Steel prices have risen cumulatively by more than US$80/MT (an increase of more than 12%).

✓ Q1 Outlook

Three major improvements are expected

1. Policy：Chinese authorities have invested RMB 1 trillion in government bonds for infrastructure and post-disaster reconstruction, and regulators have drafted a "white list of real estate developers."
2. Demand：The World Steel Association has upwardly revised global steel demand growth to 1.9% next year (originally 1.7%), and indicated that the bottom of the steel market has passed.
3. Supply：China's environmental protection production restrictions and crude steel leveling control measures are gradually implemented.

✓As “Terminal demand slowly picks up” and “Market confidence/sentiment gradually improves”, steel market feels the recovery in Q4.

✓Q1 is stable upward (less working days during the Spring Festival). In Q2, pay close attention to the U.S. financial tightening/China real estate market.

Q1 Asian HRC price targeting range：US$700/MT and above

Thank you

Q & A

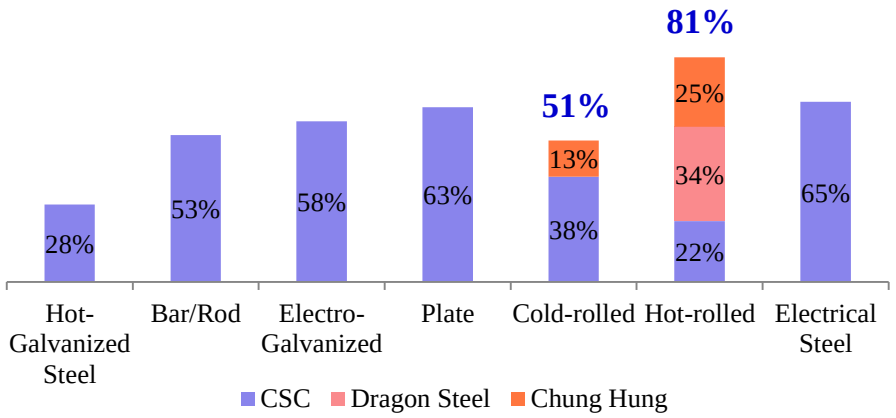
3

Appendixes

3 Company Overview - Business Snapshot

- CSC is the leading Taiwanese steel manufacturer with integrated production capabilities.
  Crude steel capacity of CSC Group reached about 16 mmt.
  - ✓ CSC: 9.9 mmt
  - ✓ DSC: EAF & No.1&2 BF around 6 mmt
- Dominant position in the domestic market
- Focus on Leading-edge Steel Mill & green energy business.
  Improve the percentage of high-end and high-margin products.

CSC Group domestic market share (2023.1~3Q)



Steel	Engineering	Industrial Materials	Logistics & Investment	Green Energy
• CSC • CHS • DSC • CSC Steel Sdn. Bhd. • CSVC • CSCI	• CSSC • China Ecotek • CSMC • Info-Champ Systems	• CSCC • CHC Resources • CSAC • Himag Magnetic • CSPM	• CSE • CSGT • Gains Investment • China Steel Security • CPDC	• SDMS • CSC Solar • China Steel Power • KRTC

3 Consolidated Financial Performance

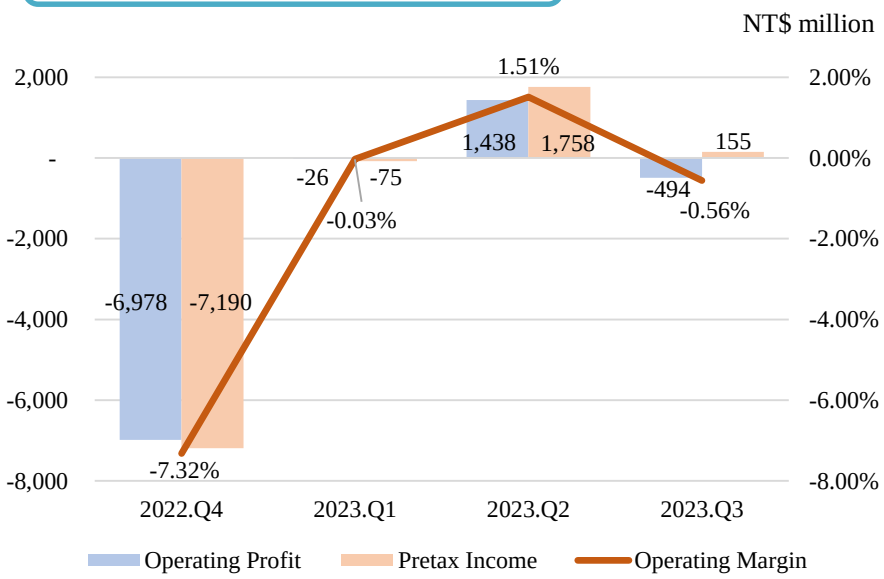
Latest operating results

Amount: NT$ million

Item	*2023.11	2023.10	MoM	2023.1~11	2022.1~11	YoY
Operating Revenue	29,863	29,052	3%	333,847	418,596	-20%
Operating Income	1,264	517	144%	2,700	21,148	-87%
Operating Income Margin	4.23%	1.78%		0.81%	5.05%	
Income Before Income Tax	1,013	823	23%	3,674	26,233	-86%

*preliminary result

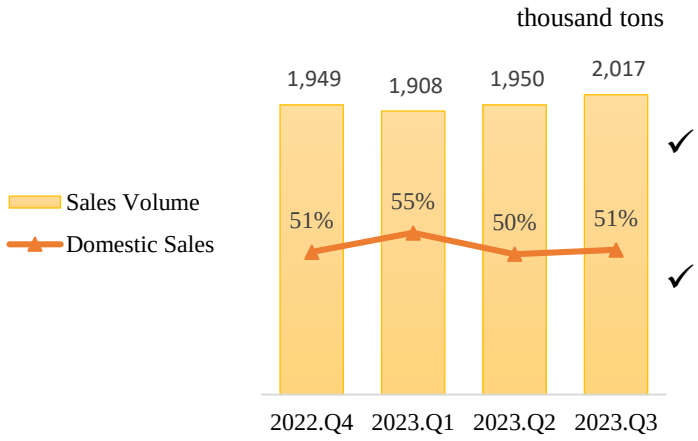
Quarterly profits trend



- ✓ In early 2023, as China lifted its lockdown and demand improved in Europe and the U.S, steel prices and profits rebounded. However, due to the turmoil in China's housing market starting from Q2, the demand for construction steel was lower than expected. The fall in the steel market once again impacted the ASP and margin of the Company in June and July.
- ✓ In August and September, as prices had fallen deeply and the supply side was under control, the international steel market entered a bottoming stage. In addition, benefiting from the decline in raw material costs, profits gradually improved.

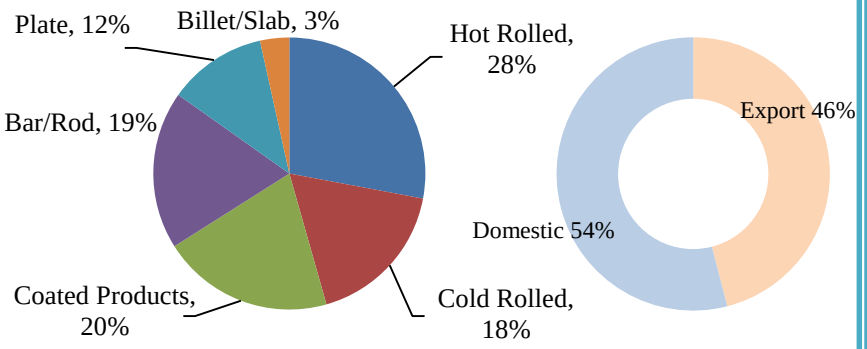
3 Production / Sales Performance

Sales analysis

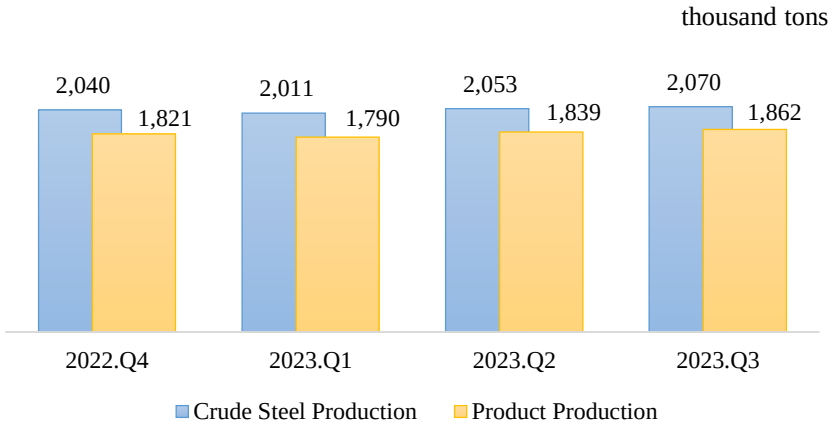


- ✓ In 2023Q2, affected by the fall in the international steel market, customers became more cautious in purchasing, and sales fell from a relatively high position in March. Sales volumes remained stable from Q1 to Q2.
- ✓ In Q3, as domestic public projects began to be constructed, the steel market bottomed out, and customers' destocking came to an end, the sales volume gradually recovered from a relatively low point.
- ✓ Looking forward to 2023Q4 and 2024, the overall global economic environment is gradually stabilizing, and the World Steel Association estimates that global steel demand will increase by nearly 34.6 million tons in 2024 compared with 2023. Sales volume is expected to grow.

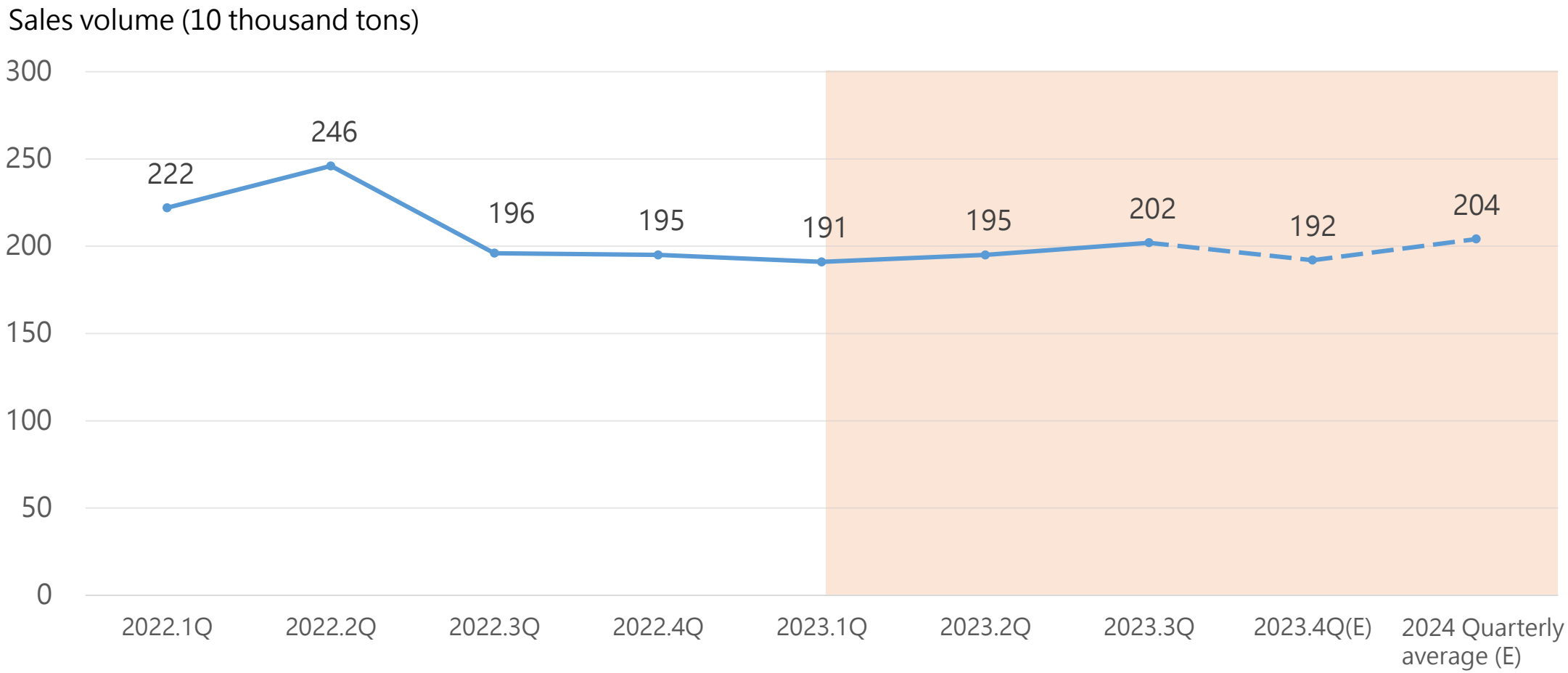
2023.1~3Q Sales value breakdown



Production analysis



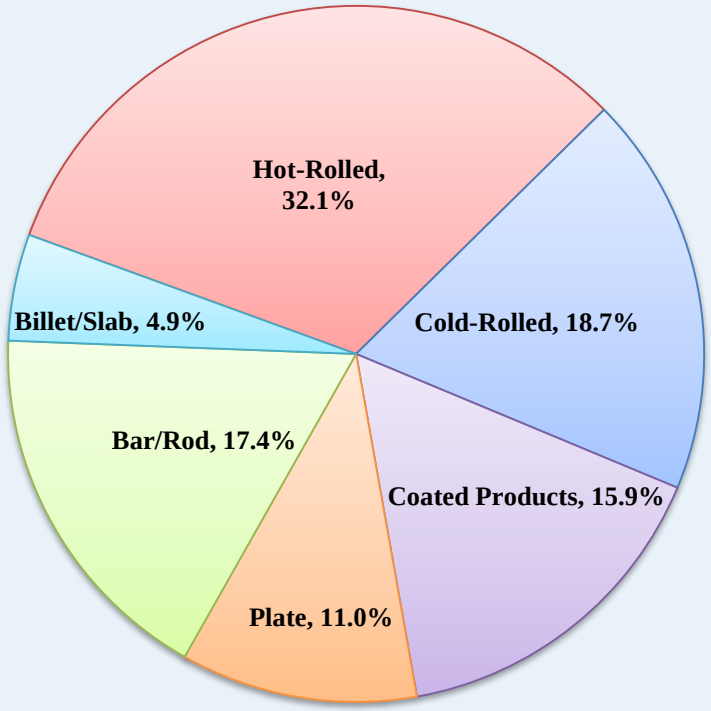
3 Sales Analysis



- Affected by the turmoil in China's housing market, the high interest rate environment and the uncertainty in the Middle East exacerbated by the Israel–Hamas war, sales in 2023 was relatively weak. However, the order has improved in the latter part of 2023.Q4, and sales are expected to rise steadily next year.

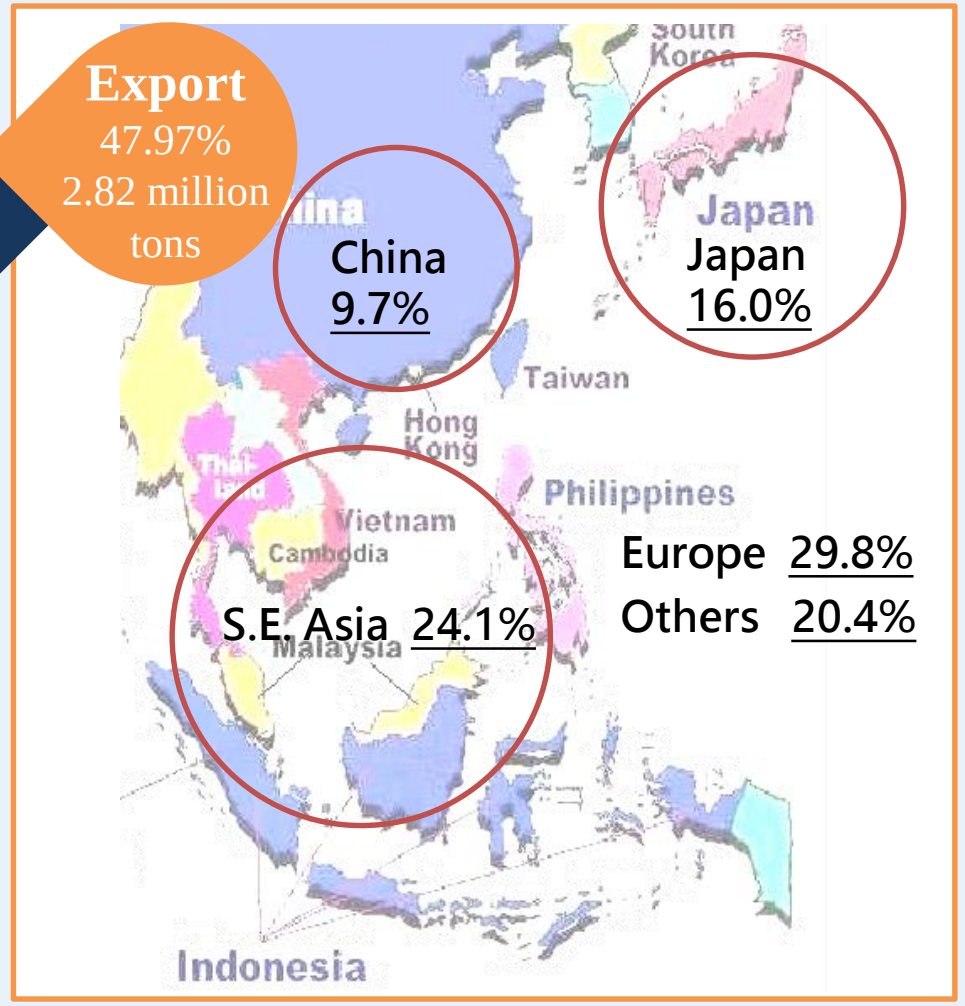
Sales Analysis - CSC

2023.1~3Q sales volume totaled 5.87 million tons – Sales Breakdown



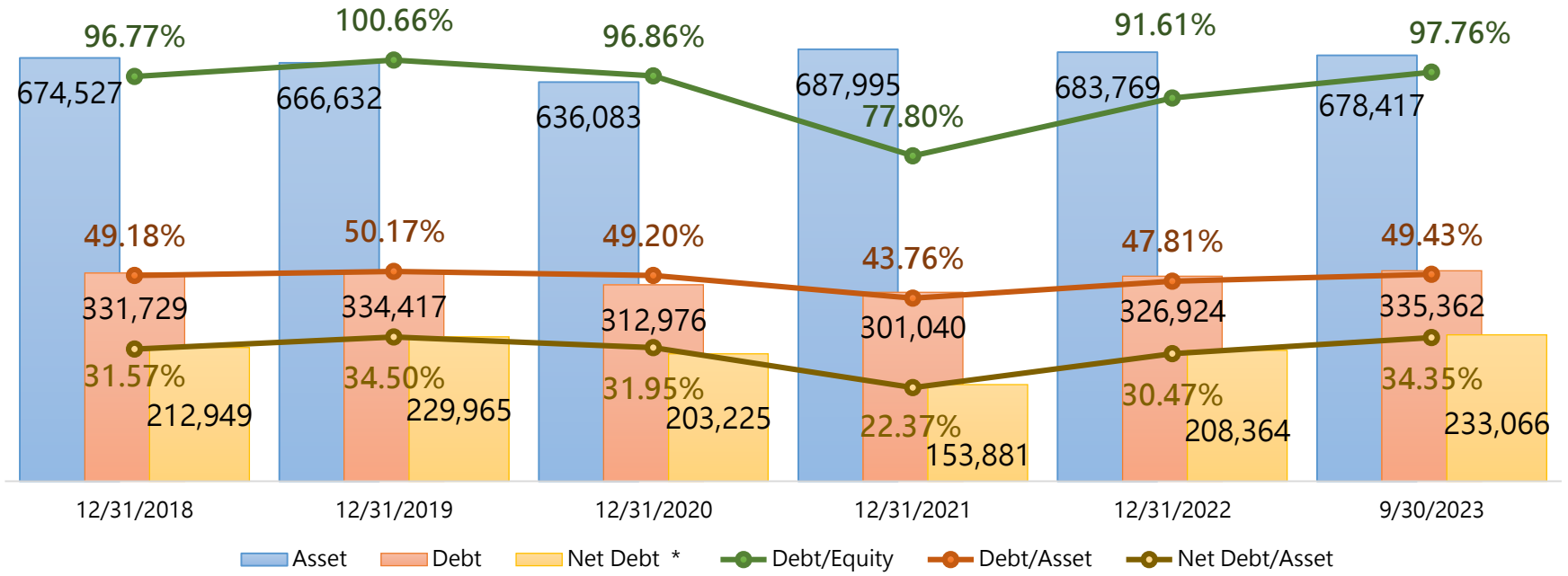
Domestic
52.03%
3.05 million tons

Export
47.97%
2.82 million tons



3 Consolidated Financial Position

Units: NT$ millions

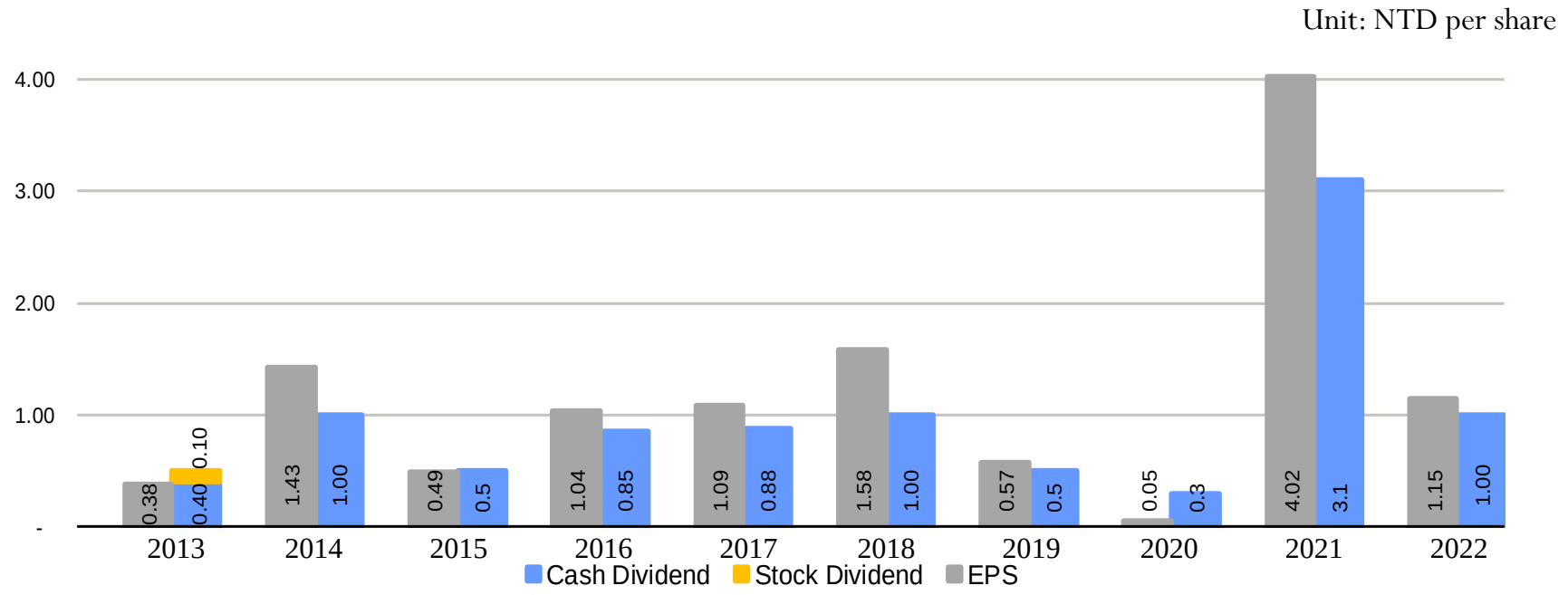


- ✓ In response to the environment of rising interest rates, multiple domestic financing channels, such as issuing corporate bonds, are used to reduce the impact of rising financial costs.
- ✓ Credit rating: Taiwan Ratings twAA- ; Outlook Stable (2023.04.28)
  Fitch Ratings AA (twn); Outlook Stable (2023.12.05)

＊Net debt = Interest Bearing Debt – cash & cash equivalents – (*financial assets at fair value through profit or loss-current+ financial assets at fair value through other comprehensive income-current)*

3 Historical EPS and Dividends Paid

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Dividend payout(%)	86	70	102	82	81	63	88	600	77	87
Cash Dividend payout(%)	67	70	102	82	81	63	88	600	77	87



- According to data from the Market Observation Post System, CSC has paid dividends since 1991.