

Stock No. 6581



Taiwan Steel Union

2026Q2 Earning Conference

Deputy General Manager
Jackie Lin
July 31 2026



Disclaimer

- ◆ The consolidated financial statement is hereby based on IFRS and reviewed/audited by CPA.
- ◆ The presentation may include forward-looking statements with respect to the operations and business of the company other than the historical results. The actual results may differ from those indicated forward-looking statements due to unknown risks and uncertainties. Investors should make their own judgement and control the investment risk.

TSU - Profile

- Main Business Authority : Established by Industrial Development Administration Ministry of Economic Affairs 1995
- Competent Authority : Ministry of Environment
- Capital : US\$36 millions 、 Staff : 109 people
- Stock No : 6581(IPO in 2018)
- License Capacity : **EAFD + Zinc Contain Waste : 198,900t/y**
Fly ash : 50,000t/y
- Technology : 1,300°C 、 5-6hr high temperature Waelz Kiln X 2
- **100% Recycled Products (Zero Waste) :**
 - Crude Zinc Oxide (**Zn>56%** 、 substitute natural Zinc ore)
 - Reusable Waelz Slag (Substitute natural concrete materials)
- Fleet Pick-Up Capacity : 12 trucks 、 19,885t/month

TSU Business Overview

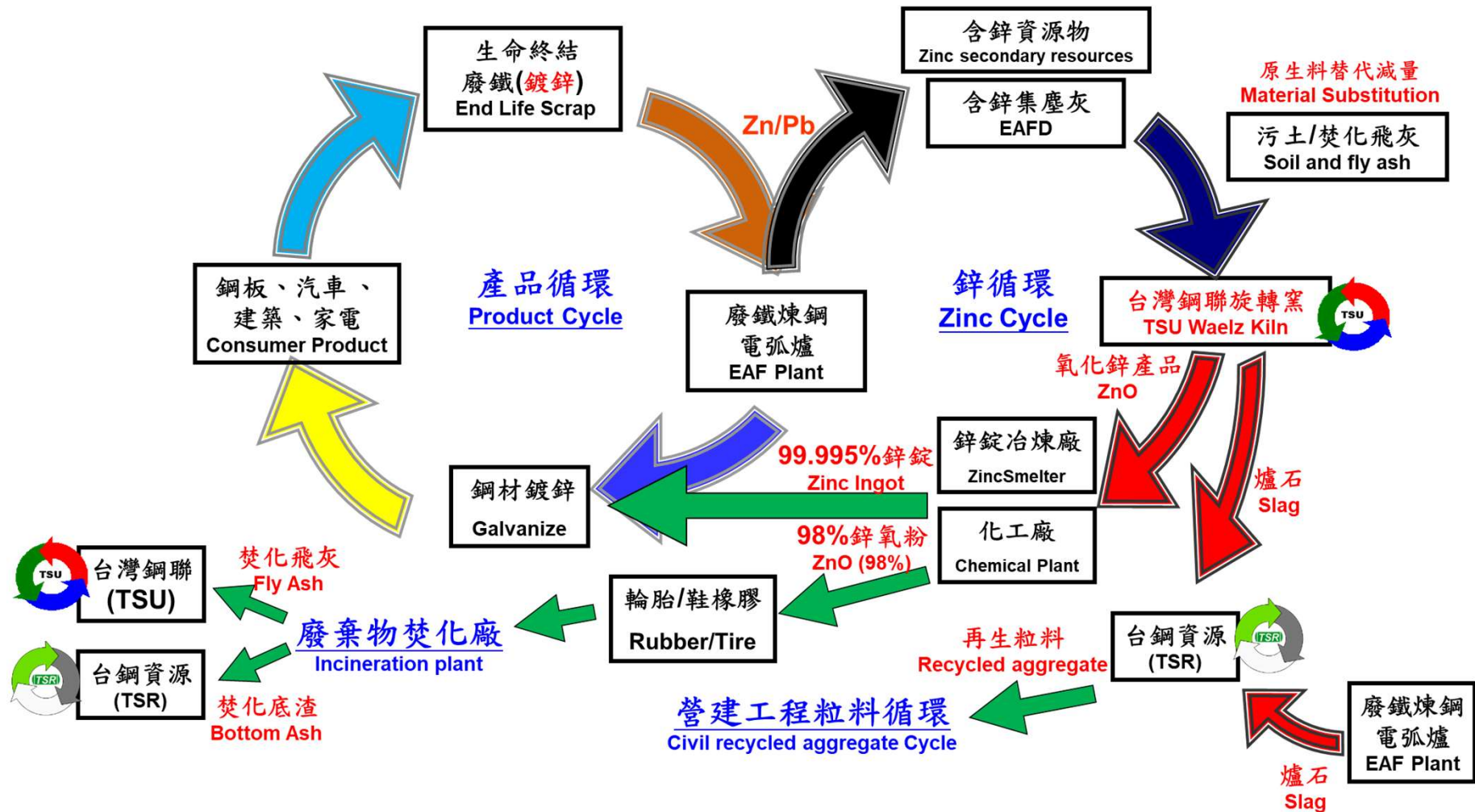
– Urban Mining and Resource Recycling

- **1** ton of Billet produces **2%** EAFD (Main Raw Materials) ◦
- To support the government's **green energy initiatives**, we successfully expanded our waste processing capacity in 2025. We are now authorized to handle **10** different types of recyclables in **2** main business sectors:

Reusable Resources		ID	Max Capacity t/y	Resources
Main	EAFD (including stainless)	A-7101	198,900	EAF Steel Mill
	Abandon EAFD site			Disposal Site
	Zinc Waste	R-1303	1,500	Recycling or Treatment Facilities, Plumbing Hardware Industry, Zinc-Copper Alloy (Brass), Chemical Industry, Electroplating Industry.
	Zinc Manganese Battery	R-2404	4,000	
	Zinc-containing products	--	8,000	
	Zinc-containing waste	--	10,000	
	Electroplating Sludge	A-8801	20,000	
Secondary	Incinerates Fly Ash	C-0102 、 D-2499	50,000	Incineration Plant
	Contaminated Soil	S-01 、 S-02	69,615	Domestic Contaminated Sites
	High-calcium alternative materials (sludge, dust and slag)	--		Various Manufacturing Industries

100% Circular Economy

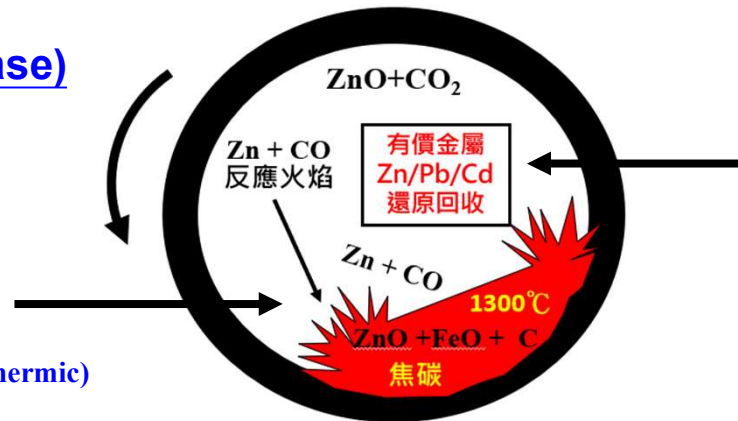
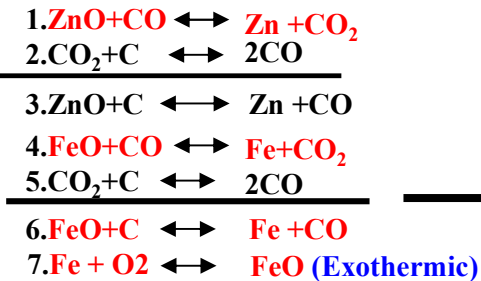
- TSU Collaborates with Taiwan's EAF Steel Industry to Create a 100% Circular Economy and Zero-Waste Model.



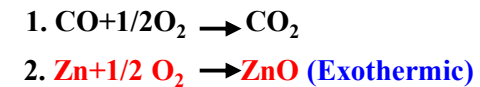
Waelz Kiln Technical principles and advantages

Carbothermic reduction
for zinc oxide recovery

Reduction (solid phase)



Oxidation (gas phase)



3H

+

2Z

Key Features :

1. **High Temperature** 1,300°C heat destroys toxic dioxins
2. **High Turbulence** Strong mixing for uniform processing
3. **High Residence time** Long Residence time (> 5 hrs) handles heavy metals

Key Benefits of Recycling :

1. **Zero Carbon emissions** Zero Carbon Emissions in Recycling
2. **Zero Landfill** 100% Circular & Zero-Landfill

Taiwan Steel Union's Leading Advantages in Global EAF Dust Recycling

1 Among the Global Top 5 in EAF Dust Recycling

World's 3rd Largest Single-Site Processing Capacity



TOP 5

World's 3rd Largest

2 Advanced Smelting Technology

Accepts the World's Broadest Range of Resource Materials



3 World's Only Full-Plant

AI + IoT Smart-Driven Recycling Facility



4 25% Lower Greenhouse Gas Emissions Than Peers

Low-Carbon Technology Exported Overseas



5 Produces the World's Lowest-Carbon Waelz Kiln Zinc Oxide

Uniquely Certified Under UL2809 for 100% Recycled Content



6 Taiwan's Only One-Stop Service

Hazardous Industrial Waste Resource Recovery, Detoxification, and 100% Circular Reuse

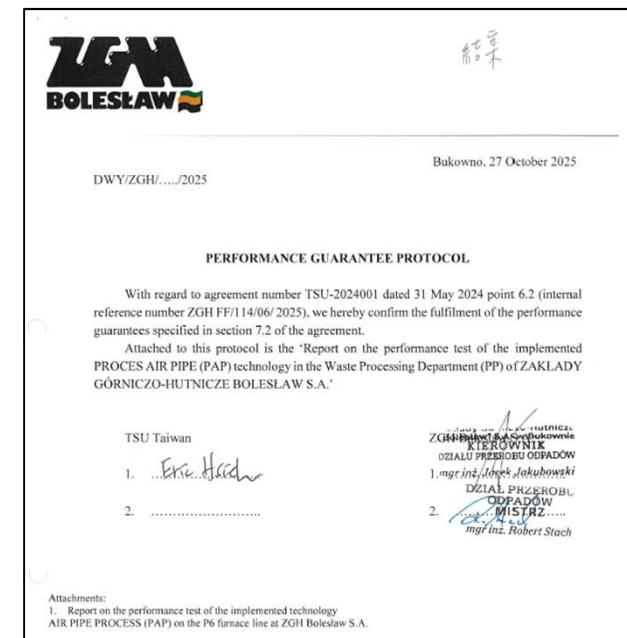


Successful Case of Low-Carbon Technology Transfer in 2025

– Central Europe's largest zinc smelter

- Key Tech Transfer: Low-Carbon **Alkaline Operation** and **Secondary Slag Heating Technology**
- Execution Period: March 31, 2024 to October 27, 2025
- Outcomes & Benefits:
 - Reduced fuel coke consumption by **30%** and eliminated **100%** of natural gas usage, leading to a significant reduction in both **operational costs** and **carbon emissions**.
 - Increased product recovery rate by **3%** and improved zinc purity by **3% to 8%**, thereby increasing overall product **revenue and profitability**.
 - Continued technical collaboration to retrofit processes across six existing plants and facilitate the Key Tech Transfer.

Categories	Before Tech Transfer	After Tech Transfer	Diff%
Coke usage (ton/year)	15,600	12,000	-30%
Gas usage (Nm ³ /year)	600,000	0	-100%
CO ₂ Emissions (ton-CO ₂ /year)	46,362	34,800	-25%



TSU Overseas Success Cases of In-House Low-Carbon Production Technologies

-Exporting Circular Technologies for International Engagement

– Decarbonization Tech Transfer Success Featured at Leading European Non-Ferrous Metals Forum (28nd May, 2026)

- 「X ANNIVERSARY NON-FERROUS METALS FORUM」 is the premier annual forum for Industry, Government, Academia, and Research in Central European Non-Ferrous Metals.
- TSU's **Low-Carbon Technologies** and **Alternative Fuel Experience** provide green transition solutions for European Peers.



Topic : Current Status, Directions, and Development Perspectives of Zinc Metallurgy
Place : Kraków
Date : 28-29nd May, 2026



01

Lanca AIR Pipe w piecach Waelz'a do przerobu EAFD - licencja Taiwan Steel Union Co., Ltd.

02

Prace B+R zastosowanie alternatywnych reduktorów (petrokoks, karbonizat, chips gumowy).

Topic 1 : AIR Pipe Lance in Waelz Kilns for EAFD Processing – Licensed by **Taiwan Steel Union Co., Ltd.**

Topic 2 : R&D Work on the Application of Alternative Reductants (Petrock, Char, Rubber Chips).

Sustainability Certifications and Governance Performance

Capacity for Climate Change Adaptation



CDP

**2024-25 Climate Change
Management B score**

First in Taiwan's Waste Recycling
Industry to Obtain Certification

Product Circularity and Sustainability



UL2809

recycled content validation

Crude Zinc Oxide-TSU contains a minimum of 50% recycled content, consisting of 100% recycled zinc.
(World's Only)

Low-Carbon Production and Manufacturing Processes



**Ministry of Environment
Carbon Footprint Reduction Label**

- ◆ Carbon Footprint of Heat Treatment Services-**4.2%**
(The Only One in Taiwan to Obtain This Certification)
- ◆ Carbon Footprint of Zinc Oxide Product-**13.2%**



**Ministry of the Interior
Green Building Material
Label(TSR)**

CLSM-Controlled Low-Strength Material

(Domestic first to obtain)



**Resource Circulation Administration
Outstanding Enterprise in Resource
Circulation**

Gold Award – Highest Honor in 2025

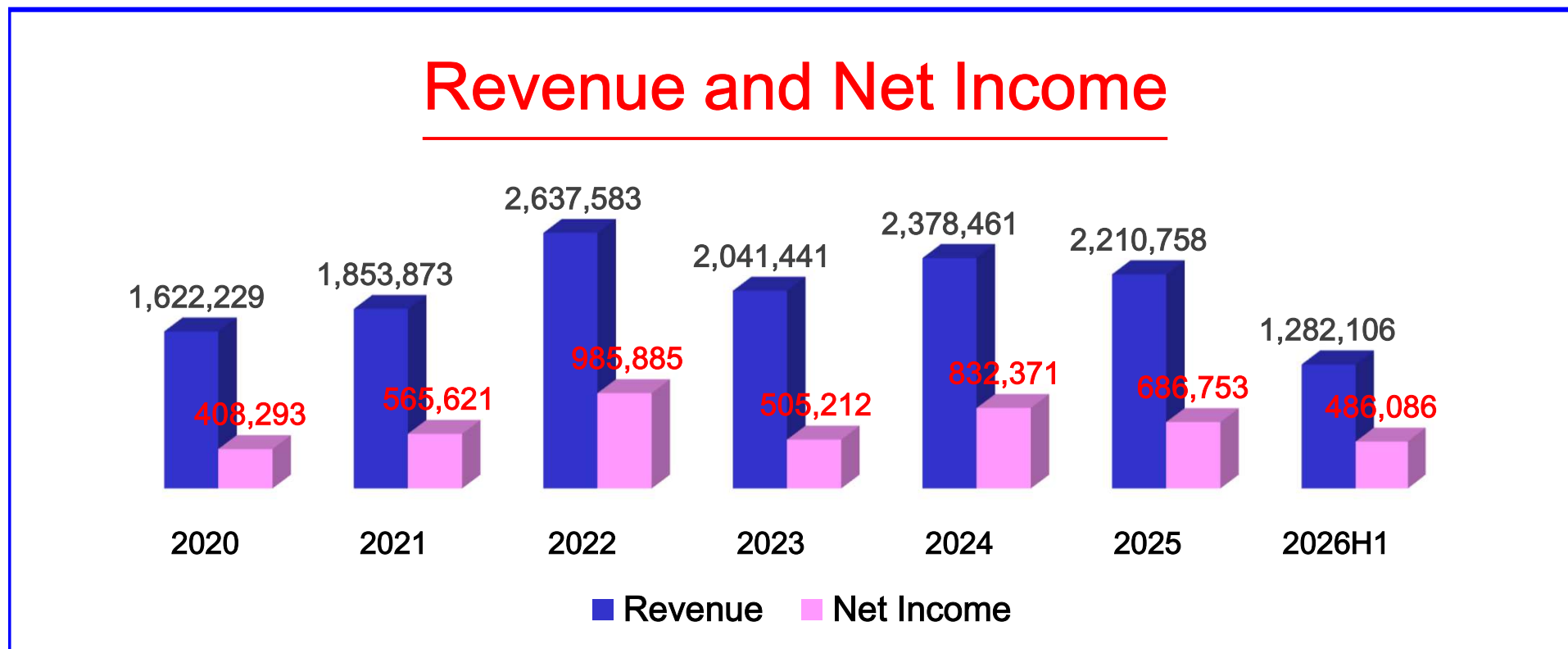


台灣銅聯股份有限公司



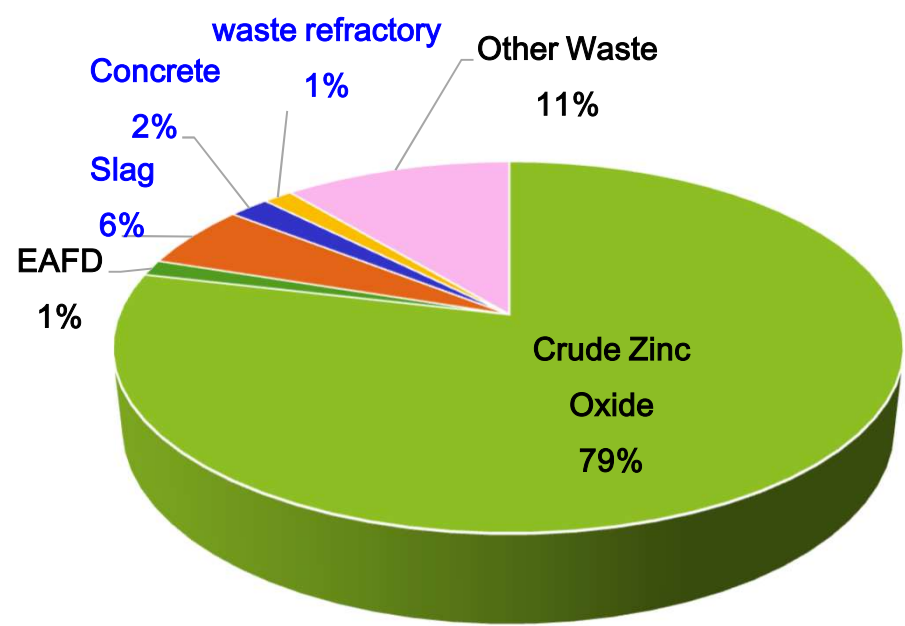
2026Q2 Performance

Revenue and Net Income

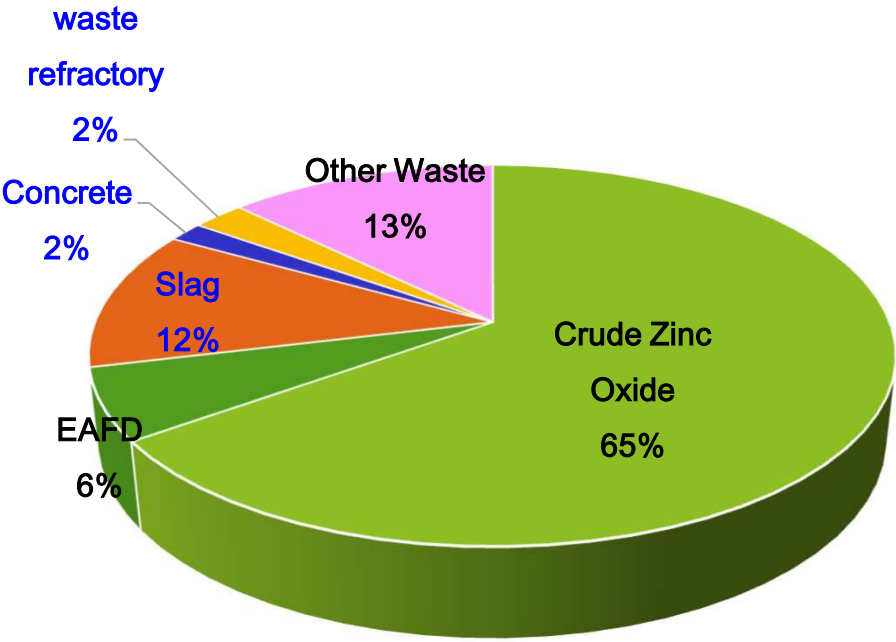


Sales Analysis

2026H1 Sales Break Down



2025H1 Sales Break Down

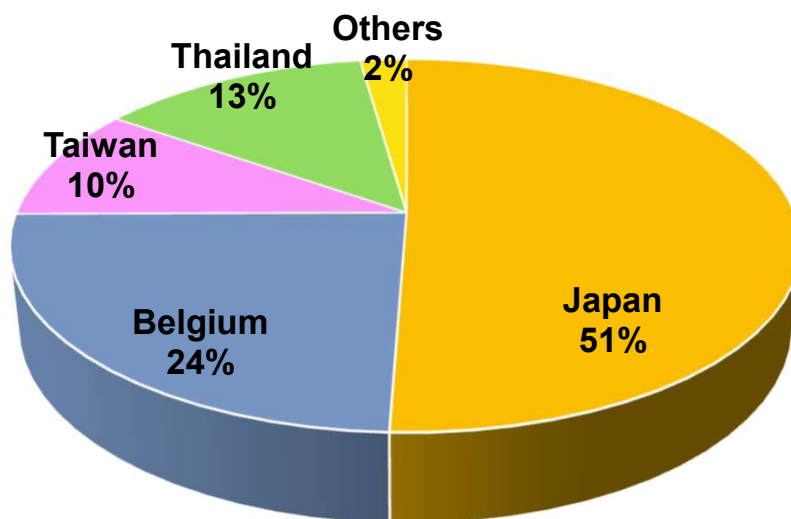


■TSR Business

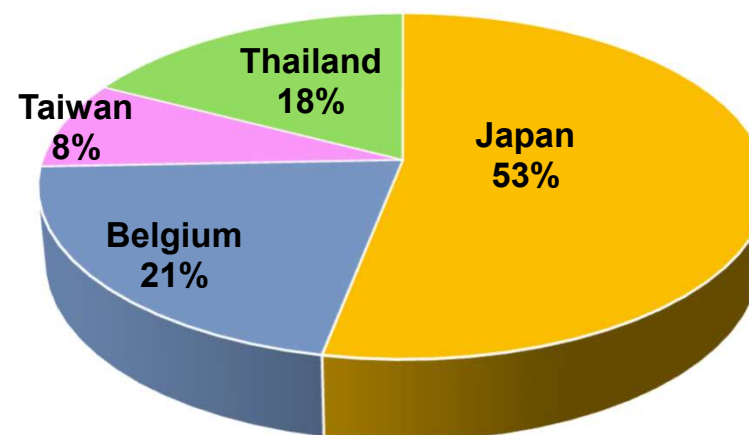
Crude Zinc Oxide (CZO)

項目	2026H1	2025H1	Diff %
Production	22,004 ton	24,899 ton	(12%)
Sales	23,505 ton	23,947 ton	(2%)

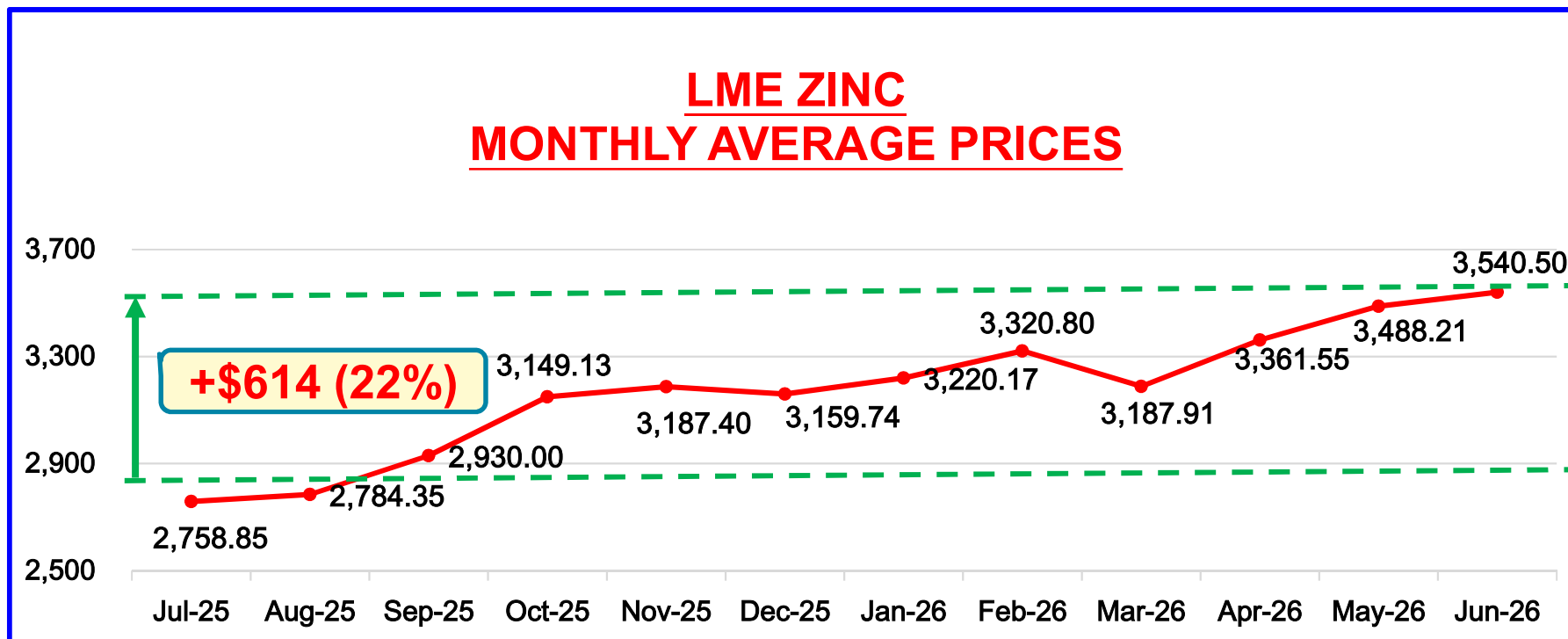
2026H1 Crude Zinc Oxide Revenues
By Location



2025H1 Crude Zinc Oxide Revenues
By Location



LME ZINC HISTORICAL PRICES



Zinc prices rose in 2026H1 due to supply constraints and rising energy prices.

Note: As of July 30, 2026, the monthly average international zinc price in July was US\$ 3,590.91 .

Revenue Contribution from TSU Waste

項目	2026H1	2025H1	Diff %
EAFD (including stainless)	46,574 ton	54,908 ton	(15%)
Product contain 2.5% Zn	14,997 ton	16,532 ton	(9%)
Wastes contain 2.5% Zn			
Electroplating Sludge			
Incinerates Fly Ash			
Contaminated Soil			
RDF			
Waste contain calorific value			

Slag - TSR

Unit : ton

Item	2026H1	2025H1	Diff %
LF Slag	30,993	60,093	(48%)
Rotary Kiln Slag (TSU)	40,416	49,119	(18%)
waste refractory	5,191	8,310	(38%)

Reused volume by TSR in 2025H1 & 2026H1



Unit : m³

Item	2026 H1	2025 H1	Diff %
Concrete	40,044	34,684	15%

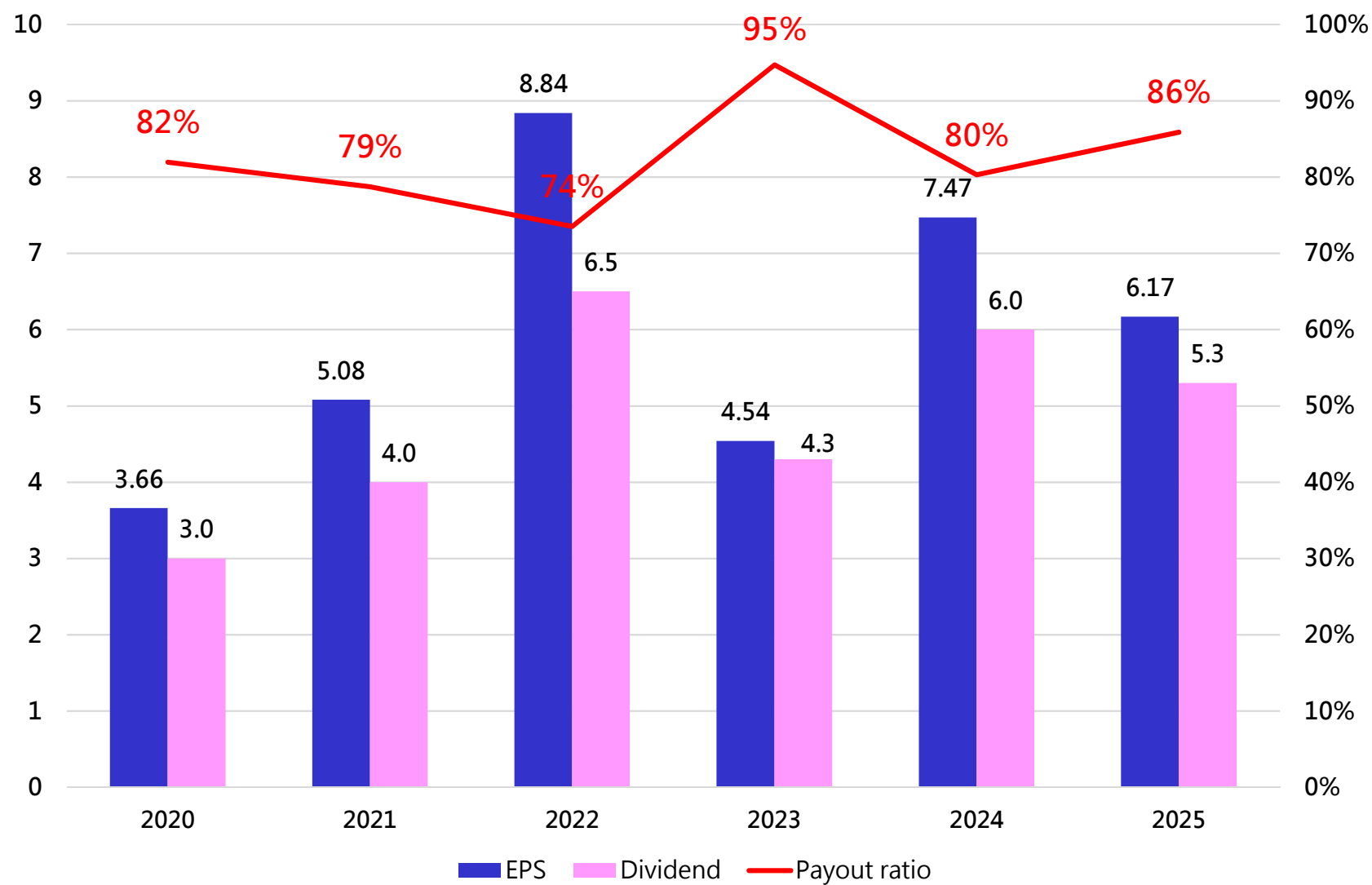
Consolidated Income Statements for 2026 H1

(NT\$million)	115Q2	115Q1	diff	diff%	114Q2	diff	diff%
Sales	847	435	412	95%	639	208	33%
Operating Costs	331	204	127	62%	302	29	10%
Gross Profit	516	231	285	123%	337	179	53%
Operating Expenses	70	63	7	11%	71	-1	-1%
Net Operating Profit	446	168	278	165%	266	180	68%
Net Income	356	130	226	174%	209	147	70%
EPS(NT\$)	3.2	1.17	2.03	174%	1.88	1.32	70%

Consolidated Income Statements for 2026 H1

(NT\$ million)	2026H1	2025H1	Diff	Diff %
Sales	1,282	1,131	151	13%
Operating Costs	535	533	2	0%
Gross Profit	747	598	149	25%
Operating Expenses	133	143	-10	-7%
Net Operating Profit	614	455	159	35%
Net Income	486	352	134	38%
EPS(NT\$)	4.37	3.17	1.2	38%

Payout Ratio >70%





Business Prospect

Crude Zinc Oxide Business Forecast

➤ CZO Sales

Demands continue exceeding supply in 2026.

Expand Zinc Waste Recycling Business is now applying.

This means we can take in more zinc materials and increase our Zinc Oxide production in the future.

2026 Treatment charge:

US\$80→US\$85, remains at the low level.

➤ Washing Plant in Longjing

We focus on washing services for Zinc Oxide products to enhance purity and drive high-value product transformation. This aligns with international market demands while increasing operating revenue and expanding our customer base. It's expected to be officially operational in 2027.

➤ LME Zinc Price

H1 2026 zinc prices rose on tight supply, and higher energy costs.

Zinc Waste Recycling Business Forecast

➤ Carbon Steel EAFD

Steel output declined due to weak domestic demand, lower steel prices, and China's overcapacity, reducing EAFD supply.

➤ Stainless Steel EAFD

Maintain last year's cooperative source.

➤ EAFD from Dumping Site

Market demand remains, pending government budget allocation.

Zinc Waste Recycling Business Forecast

➤ **Electroplating Zinc dewatered sludge**

General approval obtained, allowing nationwide acceptance.

Taiwan-U.S. tariffs confirmed at 15%; Steady Recovery Expected in Electroplating Output.

➤ **Zn $\geq$ 2.5% Wastes**

Maintaining current clients, multiple cases have been consolidated and submitted for reuse approval.

➤ **Zn $\geq$ 2.5% Products**

Maintaining current clients while exploring new business opportunities.

Secondary Raw Material Waste Recycling Business Forecast

➤ Contaminated Soil (non-agricultural)

High-margin hazardous heavy metal-contaminated soil treatment remains our core business focus for 2026.

➤ Fly Ash (Provide the best way in the market)

Market Leader in Fly Ash Recycling **(84% Share)**

EIA relaxation enables increased intake.

Secured **4** public tenders, **2** private incineration plants and **2** BOT contracts.

1 new projects pending permits to drive continuous growth.

➤ Calcium-containing Waste

Expanding into Stone Sludge Business via EIA amendment.

Other Business Outlook

➤ Roof-Top Solar Panel are continuously installed

Location : TSU and TSR

Current power generation : 1,356 KW(Renewable energy accounts for 10%)

Additional power generation : **3,831 KW**

Schedule : 2026 complete & start-up

Benefit : **Green power, carbon reduction and boosting renewable energy to 32%.**



(TSR) Slag Recycling Business Forecast

➤ Reducing Slag

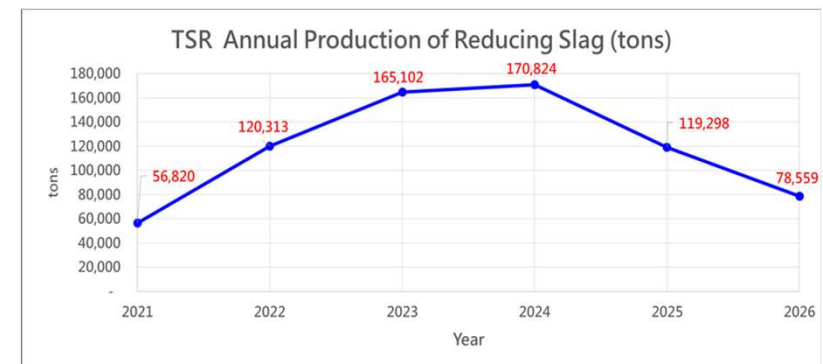
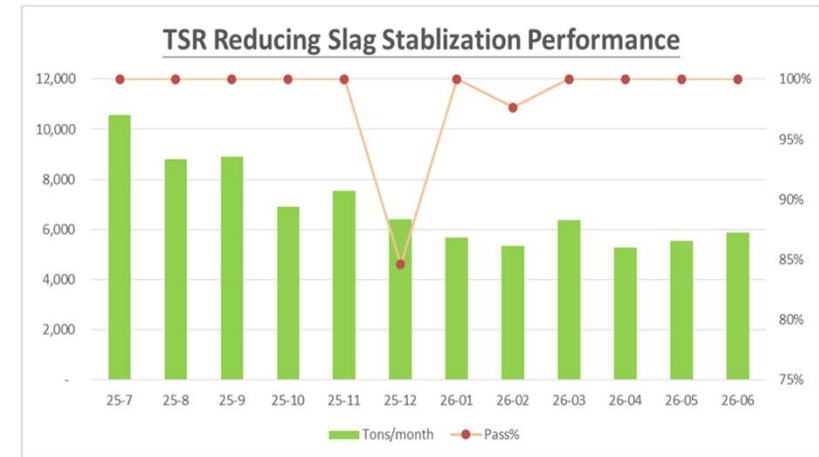
- ✓ The Taiwan steel industry is currently facing a downturn, **2026 production target 78,559 mton/yr, 100% meeting Stabilization Expansion Standard.**
- ✓ **2026Q2 production 36,184 mton, 99.63% meeting Stabilization Expansion Standard.**

➤ Other waste reuse applications

- ✓ D-1199 General fly ash or bottom residue mixtures case-by-case reuse permit application has been approved by the IDA, and the environmental permit documents are currently under application.
- ✓ The D-0501 waste refractory material case-by-case reuse permit is expected to be obtained in August 2026, followed by the application for environmental permit documents.
- ✓ TSR has obtained approval from the Board of Directors to launch the “Soil and Gravel Resource Stacking Site” establishment project, and the relevant application documents are currently being processed.

➤ TSU Kiln Slag (KS)

- ◆ **100% treated by TSR**, vertical total integration.



(TSR) Concrete Sale Forecast

➤ Concrete Product

- ✓ Type : CLSM Concrete for refill
Non-Structure Concrete
- ✓ 2026 production **target 75,968 m³/yr**,
2026Q2 concrete product sale **40,044 m³**, Quarterly
target achievement rate **101%**



➤ Developing low-carbon CLSM

- ✓ Developing Alkali-activated Concrete technology to produce **cement-free CLSM**
- ✓ Produces cement-free, low-carbon CLSM made from 100% recycled resources—the **first of its kind in Taiwan**.
- ✓ The Green Building Material Label review committee is scheduled to conduct an on-site plant inspection of the cement-free, low-carbon CLSM on July 27.

➤ Expand into new CLSM markets

- ✓ Use construction surplus soil and gravel as raw materials to produce CLSM.
- ✓ Expand the CLSM market beyond EAF slag-based materials.



**Thanks for
Your
Attention**

Q & A



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