

Stock No. 6581

Taiwan Steel Union
2022 Second Quarter
Earnings Conference

General Manager
Sean Lin
July 28, 2022

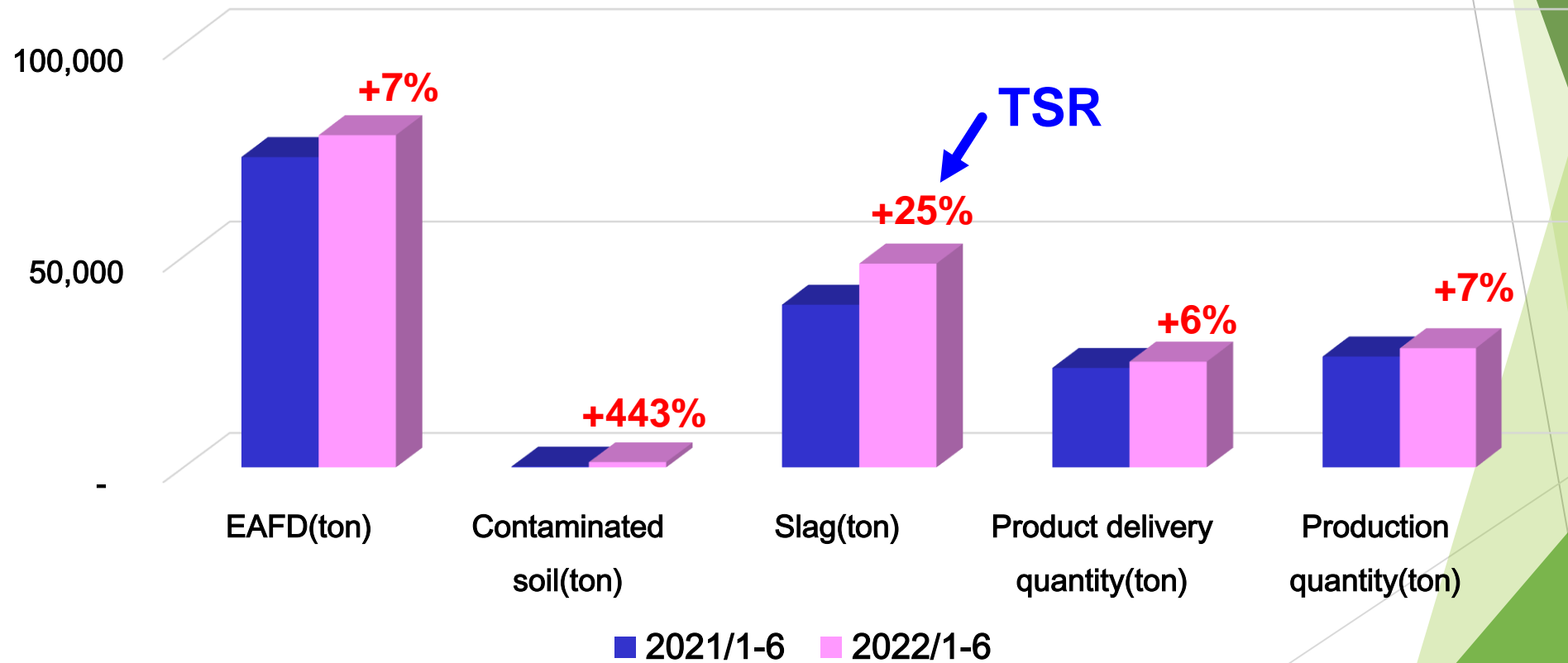


2Q 2022 Performance



1st half 2022 Performance Summary

Operating Summary for 1st half 2022



Electric Arc Furnace Dust (EAFD)

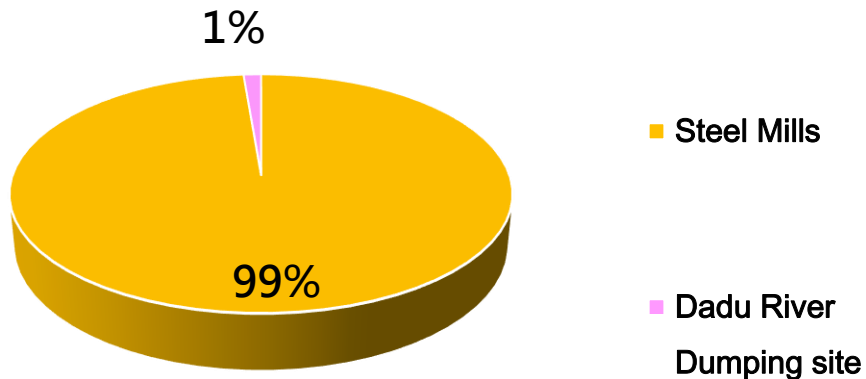
Unit: ton

(Social service, Free of charge)

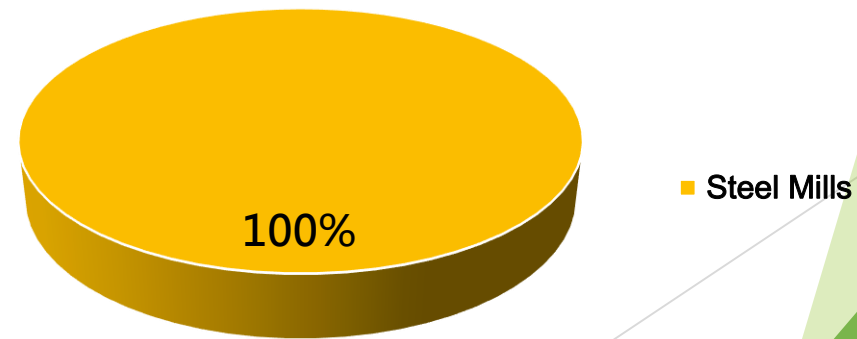
Year	Steel Mills	Illegal Dumping Site at Dadu River	Total
2Q 2021	72,459	962 (case closed)	73,421
2Q 2022	78,567	-	78,567

+8%

Proportion of EAFD sources in 2Q 2021



Proportion of EAFD sources in 2Q 2022



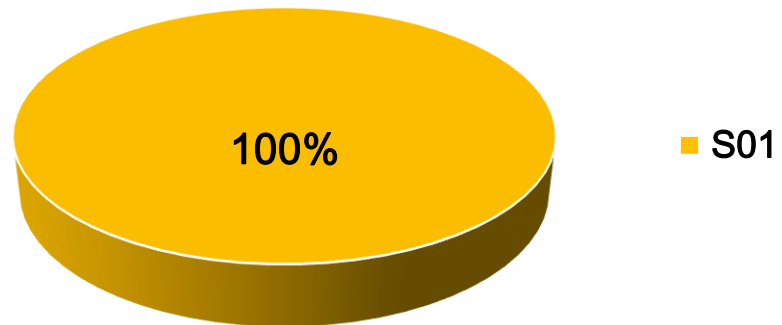
Contaminated Soil

Unit: ton

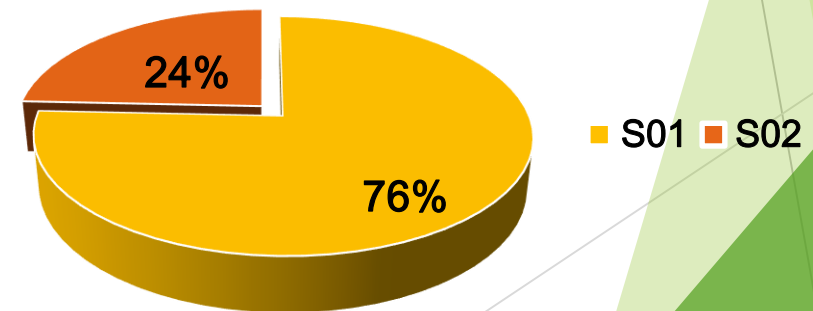
	S01	S02	Total
2Q 2021	231	0	231
2Q 2022	950	305	1,255

+443%

Proportion of contaminated soil in 2Q 2021



Proportion of contaminated soil in 2Q 2022



Contaminated Soil - Unit Price

Year	Average Price
2Q 2022	NT\$9,092/ton
2Q 2021	NT\$6,802/ton

+34%

EIA New waste for 2Q 2022

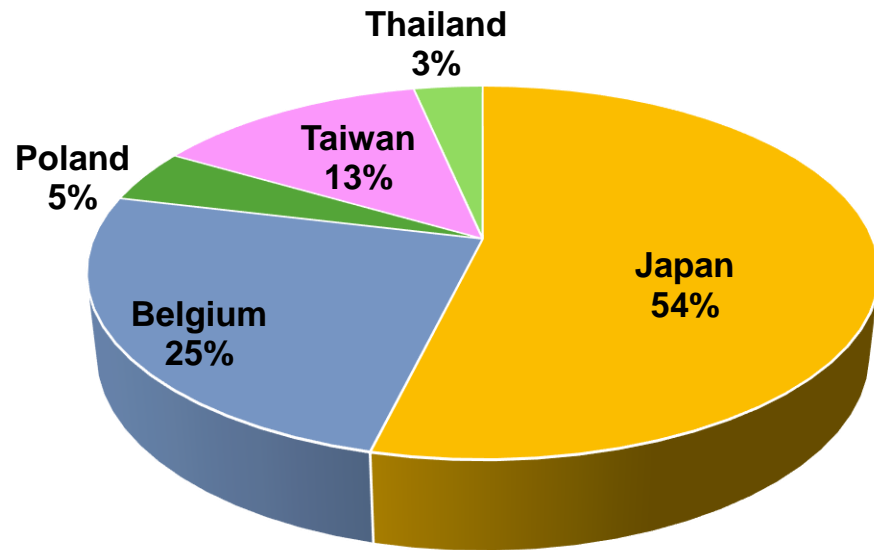
	Volume	Revenue
EIA New Waste	8,550 (ton)	NT\$ 53,754 (thousand)

Crude Zinc Oxide (CZO)

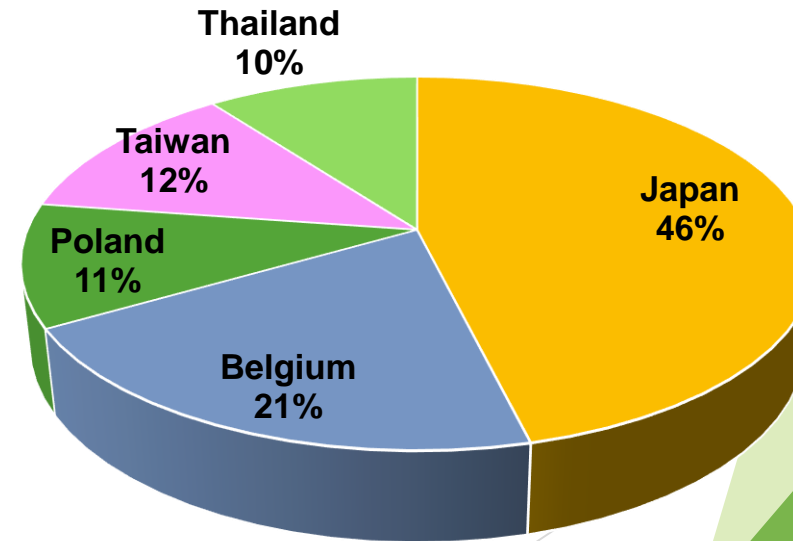
Unit: ton

	2Q 2022	2Q 2021	Diff%
Production	28,441	26,495	+7%
Sales	24,064	22,514	+7%

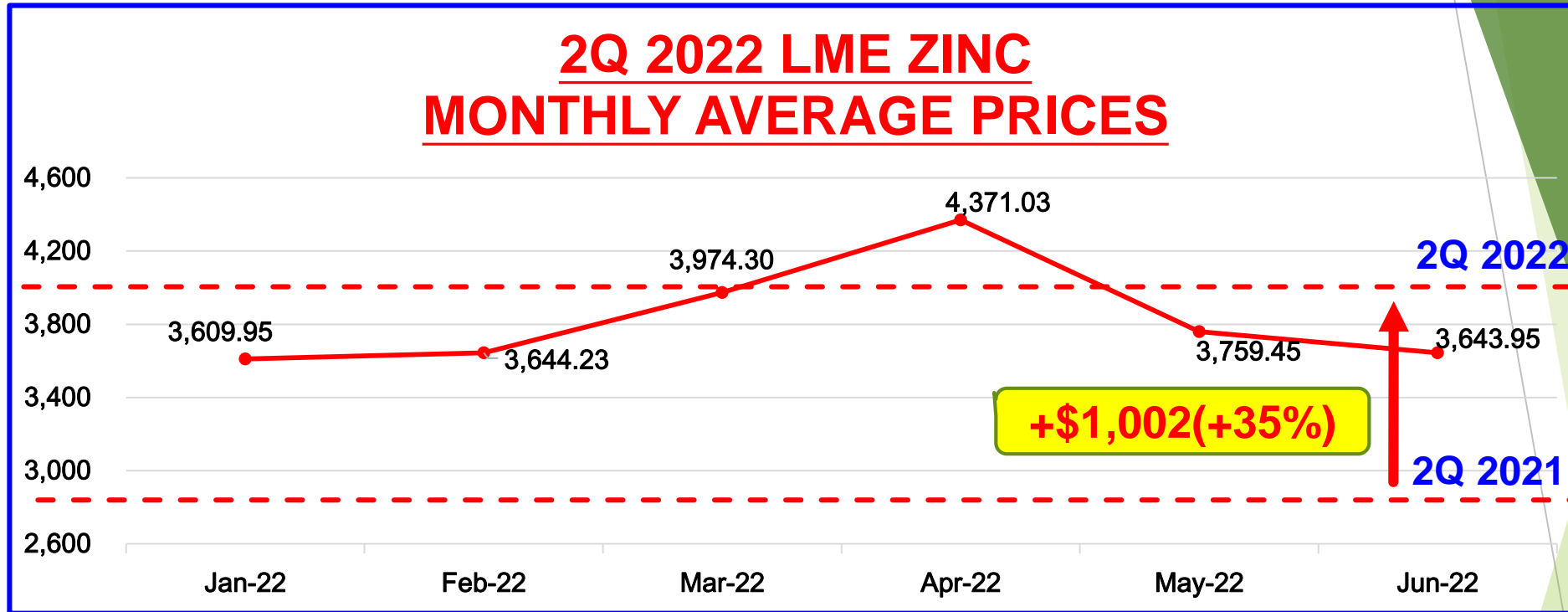
2Q 2021 Crude Zinc Oxide Revenues By Location



2Q 2022 Crude Zinc Oxide Revenues By Location



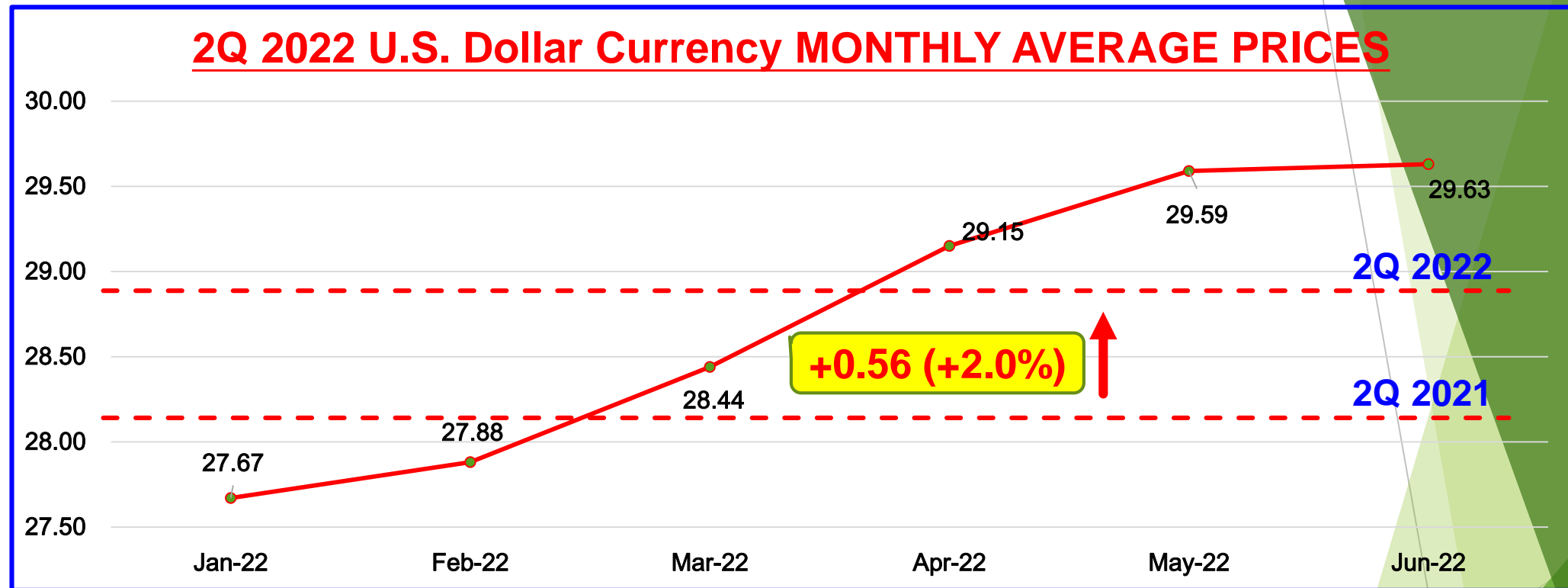
1st half 2022 LME ZINC PRICES GRAPH



2Q 2022 : Production delayed due to the pandemic spread in China → Russia-Ukraine War → Power Shortage in Europe → Major Smelters in Europe cuts production → **Zinc Price continues rising**

Average LME Zinc Price for 1st half 2022 is **US\$3,834**, which is increased for **+35%** compares to the average price **US\$2,832** in 1st half 2021.

1st half 2022 U.S. Dollar Exchange Rate



1st half 2022 U.S. Dollar Currency Average Prices **NT\$28.73/US**

1st half 2021 U.S. Dollar Currency Average Prices **NT\$28.17/US**

2.0% depreciate.

CZO Sales - Unit Price Reveal

2Q 2021	2Q 2022
NT\$26,875/ton	NT\$43,828/ton

Zinc price increased (+US\$1,002/ton) 、
Treatment Charge decreased (-US\$71/ton)

Under these two conditions

(2022 T/C : US\$230/ton 、 2021T/C : US\$159/ton)

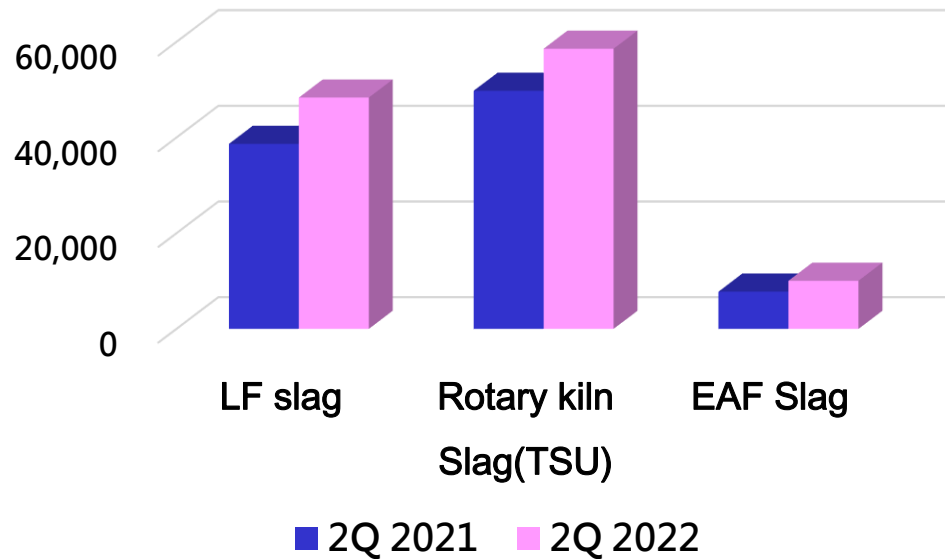
+63%

Slag Reuse Business- Subsidiary TSR

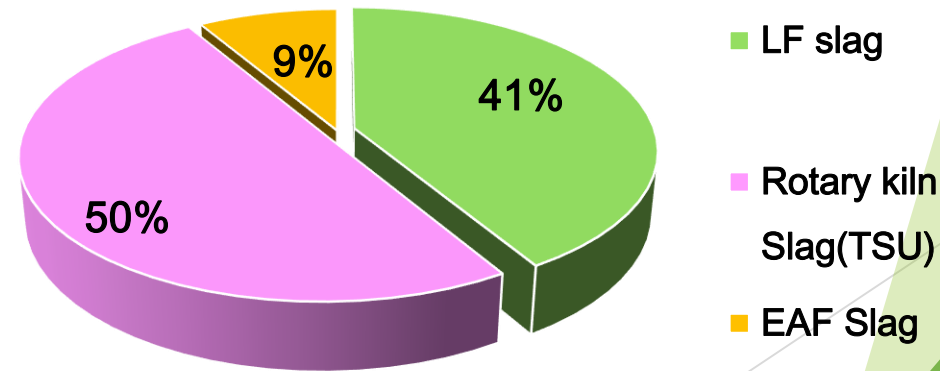
Unit: ton

	LF Slag	Rotary Kiln Slag (TSU)	EAF Slag	Total
2Q 2022	48,350	58,562	10,055	116,967
2Q 2021	38,679	49,779	7,779	96,237

Slag reused in 2Q 2021-2022

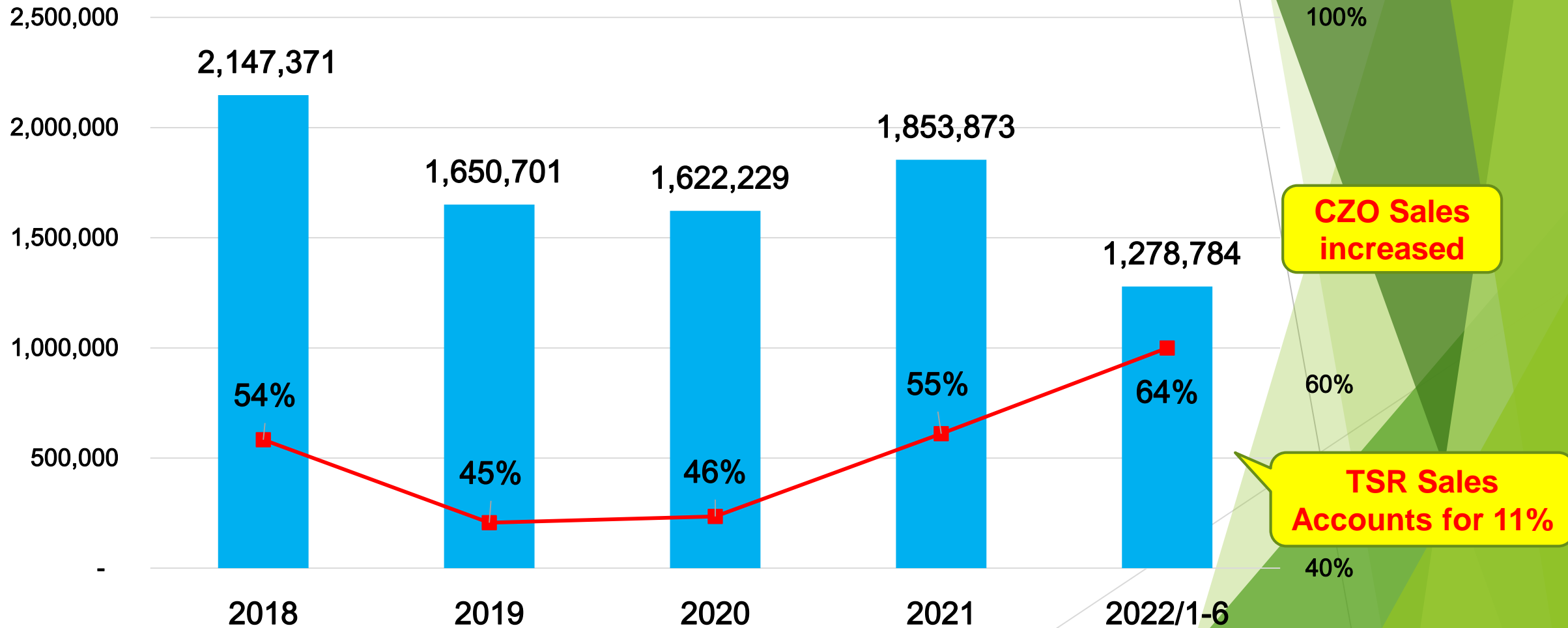


Proportion of each types of Slag reuse in 1st half 2022



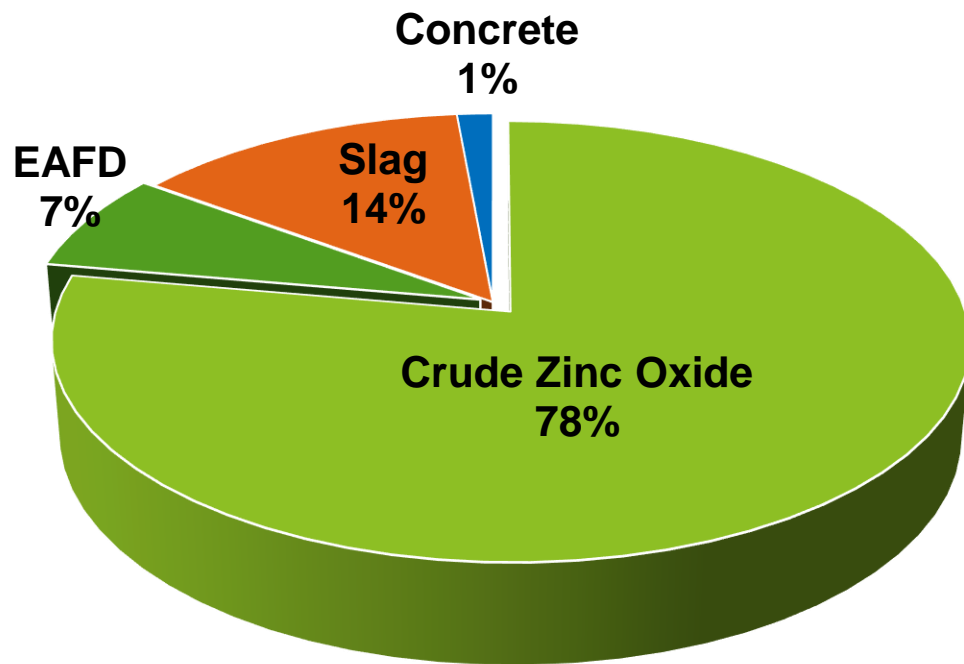
2Q 2022 Sales Revenue and Gross Margin

Unit : NT\$ thousands Sales Revenue and Gross Margin

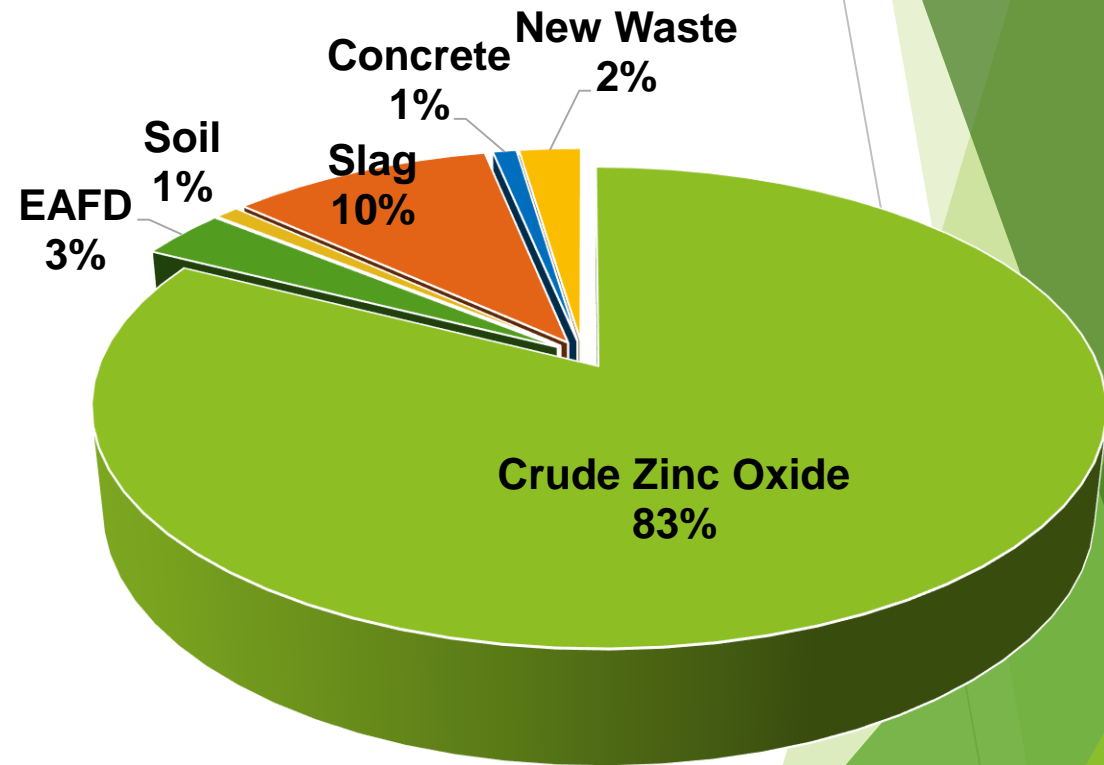


2Q 2021- 2022 Sales Reveal

2Q 2021 Sales Break Down



2Q 2022 Sales Break Down



Consolidated Income Statements for 1st half 2021&2022

(NT\$ million)	1 st half 2022	1 st half 2021	Diff	Diff%
Sales Revenue	1,279	780	499	+64%
Operating Costs	455	368	87	+24%
Gross Profit	824	412	412	+100%
Operating Expenses	160	130	30	+23%
Net Operating Profit	664	282	382	+135%
Net Income before tax	541	221	320	+145%
EPS(NT\$)	4.86	1.98	2.88	+145%

Consolidated Income Statements for 2Q 2022

(NT\$ million)	2022Q2	2022Q1	Diff	Diff%	2021Q2	Diff	Diff%
Sales Revenue	837	442	395	89%	475	362	76%
Operating Costs	282	172	110	64%	212	70	33%
Gross Profit	555	270	285	106%	263	292	111%
Operating Expenses	88	73	15	21%	67	21	31%
Net Operating Profit	467	197	270	137%	196	271	138%
Net Income before tax	385	156	229	147%	155	230	148%
EPS(NT\$)	3.46	1.40	2.06	147%	1.39	2.07	149%



2022 Business Prospect



2022– Waste Reused Business Forecast

➤ Carbon Steel EAFD

Due to the rising construction cost and the housing control policy from the government, steel production is suppressed. Therefore, EAFD volume expects to **be stable**.

➤ Stainless Steel EAFD

One SUS steel mill has signed the contract and **start treating**.

➤ EAFD from Dumping Site

Dumping site is under investigation. **(1 site)**

➤ Plant Soil

TSU has strong advantages in treating **high unit price wastes** such as soil contained with heavy metals. Treating volume expects to **remain the same**.

2022 – Crude Zinc Oxide Business Forecast

➤ CZO Sales

Demands continue exceeding supply in 2022. Additional zinc contained wastes are expecting to increase the volume of product and sales revenue.

➤ LME Zinc Price

Due to the concerns about **global economic slowdown** and **US dollar**, LME has fallen since the end of June. Currently the LME Zinc price is around \$3,000 and expected the annual average will be **higher than 2021**.

➤ US\$ Exchange Rate

US\$ Exchange rate has risen to **NT\$30**

2022 - FA/Zinc/High Heat Content Waste Business Forecast

➤ Electroplating Zinc dewatered sludge

1st Phase: Expecting to receive from **August**.

2nd Phase: Expecting to receive from 2023Q1 (**13 plants**) : ~ **1,050 tons**

➤ Zinc contained wastes

New waste Zinc battery application in 2023 : ~ **3,000 tons**

➤ Fly Ash

Received. New application(**3 plants**) : ~ **12,000 tons**

➤ High heat content waste (Coke Substitute)

SRF (3 plants) : Received.

Biomass wastes (3 plants) : ~ **5,000 tons**, Carbon Deduction Credit is under evaluation.

Others : construction **wood waste**

2022 - FA/Zinc/High Heat Content Waste Business Forecast

➤ **Zn_≥2.5% Dust or sludge**

Expecting to receive from August(2 plants) : ~2,000 tons
has reached current **EIA application limit.**

➤ **Zn > 15% Product**

Received (3 plants) : ~4,000 tons
has reached current **the EIA application limit.**

➤ **Waste EAFD Filters from Steel Mills**

Expecting to receive from Q3

2022 - (TSR) Slag Recycling Business Forecast

➤ Reducing LD Slag

Over 90% of qualified rate in Expansion stabilization, adapting **Boiler Automation**, **increase process efficiency & reduce production costs**, and treatment charge maintain unchanged in order to stay competitive against other companies.

➤ Oxidizing Slag

Concrete demands increase, OS demand is expecting to **increase** accordingly, therefore, the unit price shall maintain **unchanged** in order to stay competitive against other companies

➤ TSU Kiln Slag

100% treated by TSR, vertical integration.

2022 - (TSR) Concrete Mix Sale Forecast

➤ Concrete Mix Product

Product : CLSM Concrete Mix for refill
Non-Structure Concrete Mix

Concrete Mix Product **sale +50% expected**

➤ New Product - LD Slag Powder

Customer : raw materials for **Concrete Board** 、 **Brick**
Powder screening equipment to be completed **in Q3**

LD slag fine powder product expecting to **increase sales for +20%.**

➤ Roof-Top Solar Panel Installation

Roof-Top Solar Panel installation **under sub-contracting**

Location : TSU plant roof-top

Capacity : **7,686 m²** (~ 1,356 KW)

Schedule : 2022 Q4 complete & start-up

Benefit : **green energy** 、 **carbon reduction**

Next Phase : Planning for **TSR** Roof-Top Solar Panel



**Thanks for
Your Attention**

Q & A



TAIWAN STEEL UNION CO., LTD