MALAYSIAN TIN BULLETIN

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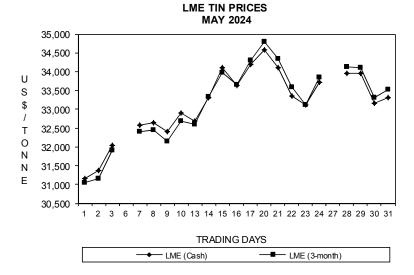
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MAY TIN MARKET REVIEW



London Metal Exchange (LME)

Tin trading on the LME during the month of May was mostly on an upward momentum influenced largely by strong demand. It was a follow through of the trading uptrend recorded in April. It also followed the same trading pattern as the other base metals traded on the Exchange during the month.

Tin trading commenced the May trading month at US\$31,150 per tonne for cash tin and US\$31,050 per tonne for 3-month tin, being their respective lowest price level for the month. They were lower than April's closing of US\$32,300 per tonne for cash tin and US\$32,150 per tonne for 3-month tin. Spurred by strong demand, trading rose the next two days to end the short first trading week higher.

Continuing strong demand boosted the tin price further towards middle of the second trading week. It softened before regaining strength at end of the week.

The tin price eased somewhat at the opening of the third trading week. It rose for two consecutive days before softening on a technical correction. The decline, however, was brief as the tin price regained its upward momentum at the close of the trading week.

The market strengthened at the start of the fourth trading week to reach its highest price level for the month recorded on 20th May at US\$34,575 per tonne for cash tin, and at US\$34,800 per tonne for 3-month tin. It dipped sharply afterwards before reversing at end of the trading week. According to a trader, the earlier downtrend was due to profit taking by investment funds, which took advantage from the prior higher prices.

The tin price plateaued somewhat during the early days of the final trading week. It slid before strengthening at end of the trading week to close the trading month of May at US\$33,300 per tonne for cash tin and US\$33,525 per tonne for 3-month tin, higher than the month's opening price level.

The month's average LME cash tin price was US\$33,153 per tonne while the average price for 3-month tin was US\$33,161 per tonne. There were 21 days of tin trading on the LME in May as the market was closed on the 6th and 27th May in conjunction with the Early May Bank holiday and the Spring Bank holiday, respectively.

NEWS HIGHLIGHTS

Malaysia Smelting Corp Earnings set to Rise

The positive global outlook for the tin market, coupled with the deployment of strategic initiatives, is set to fuel tin miner and tin metal producer Malaysia Smelting Corp Bhd's (MSC) earnings for its financial year 2024 (FY24). Group chief executive officer Datuk Patrick Yong told *StarBiz* that while there are short-term uncertainties, the long-term outlook for tin remains positive. Citing a few global developments, he said the ongoing closure of Myanmar's Wa State tin mine continues to tighten the global tin supply.

This, he said, coupled with Indonesia's potential ban on tin exports and licensing delays, geopolitical tensions in the Middle East and key tin-producing regions, such as the North Kivu province of the Democratic Republic of the Congo, can create logistical challenges and further disrupt the supply chain. "At the same time, the demand for electronics products is recovering and this is expected to increase tin consumption."

According to research and consulting firm, Gartner Inc, the improving demand for consumer electronics in the global information technology industry is expected to see an 8% growth in 2024, followed by another strong increase of 9.4% in 2025. This surge in demand for consumer electronics will potentially translate to growth in tin demand, boosting the group's earnings for 2024.

"In the long run, tin plays a critical role in the green energy transition, particularly in lithium-ion batteries for electric vehicles (EVs) and solder ribbons for solar panels. As environmental sustainability gains global momentum, the rising demand for EVs and solar energy would create a subsequent increase in tin demand, positioning the group to capitalise on this growing market. These aforementioned factors are expected to support tin prices in 2024," Yong noted.

For the fourth quarter ended Dec 31, 2023 (4Q23), the company posted a lower net profit of RM9.4mil compared with RM25.8mil in the similar period in 2022.Revenue, however, rose to RM404.6mil against RM391.2mil in 4Q22. For the full FY23, net profit stood at around RM85mil compared with RM98.3mil previously. Revenue for the period declined to RM1.4bil against RM1.5bil in FY22. For FY23, the company declared a final single-tier dividend of seven sen per share amounting to RM29.4mil.

The dividend's ex-date is June 13 and it is payable on June 28, based on the company's filing with Bursa Malaysia. Total dividend per share for FY23 amounted to 14 sen, representing a 69% payout based on its FY23 net profit as compared to previous years payout of between 23% to 30%.

For 2024, Yong said the company would implement costeffective measures that would improve its operational efficiency and overall performance. Furthermore, he said MSC would continue to focus on ensuring the top submerged lance (TSL) furnace in its new smelter in Pulau Indah is in a stable state for smelting. As part of its cost effective measures, he said MSC is in the midst of phasing out smelting activities at its Butterworth smelter. With the closure of the Butterworth smelter by mid-2025, he said the company can eliminate the duplication of expenses by operating two plants in parallel. This would help MSC to achieve cost savings of approximately 30%, Yong said.

"We are also exploring solar energy at our subsidiary Rahman Hydraulic Tin Sdn Bhd's (RHT) tin mine, which will lead to higher energy efficiency and lower energy costs, apart from adopting new mining methods and technologies to achieve higher mining output and efficiency," Yong said.

The Pulau Indah plant currently smelts third-party tin ores. The TSL furnace has a smelting capacity of 40,000 tonnes of tin ore (expandable to 60,000 tonnes with oxygen enrichment). "We are currently running at 60% to 70% utilisation rate, with production depending on the availability of tin ore. With higher utilisation of TSL furnaces, we expect to achieve higher economies of scale and smelting yield," he added.

For RHT, Yong said it is in the midst of constructing new waste dump areas and tailing ponds on adjacent lands, adding that this would extend the lifespan of the RHT tin mine.

"We are exploring new techniques and technologies to optimise mining processes. Apart from that, RHT will continue its exploration efforts to enhance mining output. With the acquisition of Asas Baiduri Sdn Bhd (ABSB), MSC has access to the tin ore located within Asas Baiduri's mining lease adjacent to RHT's tin mine. "RHT will explore this land and conduct geotechnical studies in the coming years. These initiatives are expected to increase our overall mining productivity from 10.3 tonnes per day (tpd) in 2023, to 12-13 tpd in a few years time," he pointed out.

UOB Kay Hian in its latest research report said MSC is poised for significant growth in 2024 as the London Metal Exchange (LME) tin prices have soared 43% year-to-date, mainly due to ongoing supply constraints. "We expect 1Q24 core earnings to come in at RM27mil to RM29mil on the back of sequentially stronger 1Q24 average LME tin prices of US\$26,195 per tonne (versus 4Q23's average price of US\$24,705 per tonne), similar cost structures and higher utilisation rate from TSL furnaces, "it said.

The research house also added that it expects MSC to register full-year core earnings of RM1,653mil to RM1,827mil (54% to 60% year-on-year) on the back of higher LME tin prices and cost saving from the closing down of its Butterworth plant. With the new mining area from ABSB, MSC is poised to surpass 12-13 tonnes per day, potentially boosting earnings by around 12% in the next two to three years. On smelting, the brokerage expects improved utilisation rates post-rebricking exercise in August 2023.

(Source: The Star, 6 May 2024)

Prabowo's Brother Building Tin Plant in Batam

A 100 billion rupiah (RM\$29.5 million) tin-processing plant is being built in Batam by the younger brother of Indonesian President-elect Prabowo Subianto, with the aim of supplying key raw materials to electronics makers based on the industrial island and in the region. The plant by Hashim Djojohadikusumo's company Solder Tin Andalan will source raw tin from a mine in the tin-rich Bangka Belitung islands off Sumatra, 570km south-east of Batam. That tin mine is operated by Arsari Tambang, a company controlled by Hashim.

He told reporters at the plant's ground-breaking ceremony that he hopes to tap demand from manufacturers such as electronics makers that had relocated from China to South-East Asia. The plant will churn out, among other things, solder paste and solder wire – crucial materials used in printed circuit boards.

Hashim said the plant will benefit from the relocation of electronics manufacturers to South-East Asian countries such as Vietnam, Malaysia and Thailand, and he expressed confidence that those relocated plants will likely be buyers of Solder Tin Andalan products. "Among the main sources of solders (for global supply) are Malaysia and India. Our target is to get some of their market share, relying on the tin resources in Indonesia. We can operate more competitively," he said.

Hashim, 69, said the project dovetails with President Joko Widodo's downstreaming policy that prioritises the processing of natural commodities in Indonesia, thus moving the country higher in the industrial value chain. "President-elect Prabowo Subianto has affirmed... and has vowed that the downstreaming programme will continue. The establishment of this plant is one of his commitments," he said.

(Source: The Star, 12 May 2024)

NEWS ROUND-UP

Penouta Mine to be Partially Re-opened

The operators of the Penouta tin-tantalum-niobium mine in Spain have announced a partial reopening of the mine while awaiting the court's decision over the provisional suspension of the Section C permit in October 2023 following an environmental complaint.

Strategic Minerals Europe holds two Mining Concessions at the Penouta site: Section C, covering hard rock natural mineral resources, and Section B, covering non-natural resources including tailings and waste dumps from historical operations. The company's Section C permit was provisionally suspended by the Superior Court of Xustiza of Galicia in October 2023, leading to the immediate closure of the mine. The mine produced 351 tonnes of tin-in-concentrate in 2023 before its closure.

IberAmerican, currently in the process of merging with Strategic Minerals Europe, announced that production would resume on completion of the proposed transaction, with extraction from tailings and waste materials of the Section B resource. The company also announced that it was committed to making improvements to enhance extraction efficiency from the Section C hard rock resource so that the company

can resume production as soon as possible after the lifting of the suspension.

A spokesman from IberAmerican commented: "Upon completion of the Proposed Transaction, we intend to promptly resume production in Section B, generating immediate cash flow. Concurrently, we are dedicated to executing essential capital investments to bolster production efficiencies, laying the groundwork for the reactivation of operations in the expansive Penouta resource within Section C later this year."

The Penouta mine was abandoned in 1985 due to the collapse in tin prices. It recommenced production in 2018, but in 2022, a complaint was filed by an environmentalist group against the local mining authority requesting the revocation of the permit. The claim alleged that operations at Penouta were affecting irrigation and the immediate area.

Following the court's October 2023 decision to provisionally suspend the permit, the company unsuccessfully appealed, with the court reaffirming the provisional suspension until its verdict on the original complaint, due on 31 May 2024.

South Crofty PEA Published

Cornish Metals, a tin exploration and development company, has published a Preliminary Economic Assessment (PEA) for its South Crofty project, highlighting a base case after-tax Net Present Value (NPV) of US\$201 million and Internal Rate of Return (IRR) of 29.8 per cent.

The company has been dewatering the historic South Crofty mine, which flooded since its closure in 1998, and has been developing the project with the aim of entering production in 2027 for a 14-year mine life. The project is fully permitted with mining permission to 2071, and with full planning permission to construct a processing plant.

The company's Interim CEO and Director commented: "This PEA is an important milestone for Cornish Metals and our goal of bringing responsible tin mining back to Cornwall and the United Kingdom."

The PEA outlines a mine throughput of 500 ktpa at an average of 0.94 per cent Sn, and a processed throughput of 250 ktpa at an average of 87.8 per cent tin recovery, for a production total of 49,310 tonnes contained tin over the 14-year mine life. In addition to tin, the PEA includes life of mine production totals of 3,844 tonnes contained copper and 3,225 tonnes contained zinc.

Pre-production capital costs are placed at US\$177 million, and post-production at US\$54 million, while the average life of mine net cash cost is reported as US\$12,705 per tonne tin and an all-in sustaining cost of \$13,661 per tonne tin.

Highlighting the project's economics, the company's Chief Operating Officer (COO) commented: "The PEA results are compelling with a post-tax NPV of \$201 million and IRR of about 30 per cent at a tin price of US\$31,000." The company expects an average annual post-tax cash flow of US\$65 million in years 2-6, peaking at US\$82 million in year 2, and a post-tax capital payback period of three years, reflecting a lower all-in-sustaining cost of around US\$12,400 per tonne tin in the early mine life period. The COO continued, "The low all-in sustaining cost of about US\$13,700 per tonne of payable tin is an important metric and potentially positions the project within the lowest quartile of the global tin industry cost curve."

The mine design utilises existing developments where possible, with new ramps developed to provide mechanised access to other levels, and mine waste will be backfilled as a paste into historical void spaces meaning that the underground operation does not require surface tailings storage. Additionally, Cornish Metals intends to use the historic Wheal Jane concentrator as the basis of the processing circuit, which the company has used for its 2023 metallurgical testwork.

Elementos to Complete Oropesa's DFS

Elementos, a tin exploration and development company, plans to complete the Definitive Feasibility Study (DFS) for its Oropesa Tin Project in Spain, by the end of 2024 after the Andalucian Government gave its support to the modified project layout.

The local government considering the company's Environmental Application had raised concerns about the mining project and treatment plant and relevant environmental regulations. An agreement has now been reached for layout modifications that improve environmental and community outcomes. The administration also reaffirmed its support for Oropesa as one of seven key mining projects in the government's Project Accelerator Unit.

The company's spokesman commented: "The Oropesa Project is one of the world's largest undeveloped, open-cut tin deposits with special strategic significance to the European Union which is committed to sourcing a responsible and local 'domestic' supply of critical minerals like tin. The [Andalucian Government] has always been a strong supporter of the Pro-

ject and we thank the officials in its key departments for working collaboratively with the company to find a responsible way forward which further improves the project's ESG credentials."

Elementos updated its project forecast with the DFS now set to be completed in the fourth quarter of 2024, receipt of environment and mining licences by the end of 2025, and targeted first production by the end of 2027.

Modifications to the project include the moving of the planned external waste dumps and the tailings dam to areas of lower flora and wildlife density, and the relocation of the access road to avoid overlap with an existing stock cattle route. As a result, the proposed processing plant has been moved and the open pit shell reconfigured to maintain efficient operations. Other than that, there will also be a change to the open pit rehabilitation plan, with the pit now to only be partially back-filled, therefore reducing end-of-mine-life rehabilitation costs.

Mpama South Starting Production

Alphamin Resources Corp has brought its major expansion at Bisie, DR Congo, into production.

Alphamin's Mpama South project is an expansion to the existing Mpama North mine at Bisie, which contributed 4 per cent of the world's mined tin supply in 2023. Mining at Mpama South and the construction of a second processing plant will increase the company's annual output from approximately 12,500 tonnes in 2023 to 20,000 tonnes tin-inconcentrate. The combined plant output capacity is 25,000 tonnes contained tin per annum.

The company announced on 27 May 2024 that the new Mpama South processing facility has been producing salea-

ble tin concentrate since 14 May. This comes just over two years after Alphamin declared the maiden Mineral Resource Estimate and Preliminary Economic Assessment for Mpama South in March 2022.

The facility produced 159 tonnes of contained tin from 17 May and is now operating at targeted recoveries. The first ore was processed at the plant on 29 April as the final stages of commissioning were completed and the company focused on achieving consistent throughput and producing at targeted processing recoveries.

(Source: International Tin Association Ltd. UK)

LME TIN PRICES

Period		Cash (US\$/Tonne)	3-Month (US\$/Tonne)
2016 2017 2018 2019 2020 2021 2021 2022 2023		17,982 20,098 20,168 18,671 17,134 32,584 31,384 25,973	17,889 19,994 20,086 18,610 17,079 31,105 31,122 25,951
2021	Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sep. Oct. Nov. Dec.	21,955 26,717 27,396 28,427 32,524 32,678 34,183 35,205 35,048 37,962 39,333 39,574	21,596 24,415 25,079 26,568 29,736 30,829 33,010 34,352 34,109 36,567 38,042 38,956
2022	Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sep. Oct. Nov. Dec.	41,807 44,118 44,249 43,122 35,945 31,777 25,173 24,520 21,258 19,406 21,136 24,099	30,334 41,344 43,820 43,917 42,644 35,617 31,459 24,816 24,276 21,150 19,373 21,004 24,038
2023	Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sep. Oct. Nov. Dec.	28,081 27,070 24,014 25,886 25,610 27,263 28,751 25,995 25,559 24,618 24,221 24,606	28,146 27,218 24,076 25,744 25,345 26,318 28,387 26,211 25,767 24,878 24,472 24,851
2024	Jan. Feb. Mar. Apr. May.	25,211 26,157 27,446 31,845 33,153	25,443 26,390 27,581 31,710 33,161
2024 MAY	1 2 3 6 7 8 9 10 13 14 15 16 17 20 21 22 23 24	31,150 31,375 32,050 32,575 32,650 32,400 32,895 32,675 33,300 34,100 33,625 34,190 34,575 34,195 33,350 33,125 33,725	31,050 31,150 31,900 CLOSED 32,400 32,450 32,150 32,675 32,600 33,325 33,970 33,650 34,300 34,800 34,800 34,350 33,600 33,115 33,850
	27 28 29 30 31	33,950 33,955 33,150 33,300	CLOSED 34,125 34,100 33,300 33,525

Source : London Metal Exchange

WORLD REFINED TIN STOCKS (In Tonnes)

				COUI	NTRY STO	CKS		Total	Total			
Period	LME Stock	Germany	U.K	Indonesia*	Japan	Malaysia*	Brazil*	U.S.A	Country Stocks	Commercial Stocks	US Strategic Stockpile	
									Stocks	JIOCKS	Stockplic	
2016	3,800	2,129	955	3,976	1,400	356	3,600	6,220	18,600	24,800	4,020	
2017	2,235	2,130	955	3,870	1,360	600	3,600	6,730	19,245	26,395	4,020	
2018 2019	2,165 7,130	2,130 2,130	955 955	2,587 8,600	1,469 1,806	439 400	3,600 3,600	5,610 5,920	16,790 23,217	27,226 35,678	4,020 4,020	
2020	1,890	2,130	955	8,600	1,473	271	3,600	5,100	23,217	29,464	4,020	
2021	2,020	2,130	955	8,600	1,545	377	3,600	4,530	21,737	25,142	4,020	
2022	2,990	2,130	955	8,600	1,572	230	3,600	4,740	21,827	28,900	4,020	
2019 Jan.	1,845	2,130	955	2,587	1,578	439	3,600	5,150	16,439	26,524	4,020	
Feb.	1,325	2,130	955	2,587	1,578	439	3,600	5,150	16,552	26,111	4,020	
Mar.	950	2,130	955	8,594	1,765	439	3,600	4,850	22,333	31,458	4,020	
Apr.	890 2,810	2,130 2,130	955 955	8,594	1,834 1,849	439 439	3,600	5,580 5,510	23,132 23,083	31,451 34,096	4,020 4,020	
May. Jun.	6,045	2,130	955	8,600 8,600	2,520	209	3,600 3,600	5,510	23,524	37,961	4,020	
Jul.	4,640	2,130	955	8,600	2,520	209	3,600	5,510	23,524	34,583	4,020	
Aug.	6,830	2,130	955	8,600	2,445	209	3,600	5,510	23,449	35,355	4,020	
Sep. Oct.	6,620 6,020	2,130 2,130	955 955	8,600 8,600	2,013 2,100	919 400	3,600 3,600	5,510 5,510	23,017 23,104	34,215 33,684	4,020 4,020	
Nov.	6,235	2,130	955	8,600	2,022	400	3,600	5,510	23,217	33,116	4,020	
Dec.	7,130	2,130	955	8,600	1,806	400	3,600	5,920	23,217	35,678	4,020	
2020 Jan.	6,630	2,130	955	8,600	2,041	400	3,600	4,780	22,546	36,171	4,020	
Feb.	7,440	2,130	955	8,600	1,966	400	3,600	4,780	22,431	36,261	4,020	
Mar.	6,205	2,130	955	8,600	1,966	268	3,600	4,780	22,211	32,855	4,020	
Apr. May.	5,375 2,455	2,130 2,130	955 955	8,600 8,600	1,761 1,850	268 268	3,600 3,600	4,780 5,090	22,094 22,183	31,171 28,129	4,020 4,020	
Jun.	4,230	2,130	955	8,600	1,697	268	3,600	5,080	22,330	29,666	4,020	
Jul.	3,675	2,130	955	8,600	1,645	268	3,600	5,070	22,268	29,226	4,020	
Aug. Sep.	5,040 5,550	2,130 2,130	955 955	8,600 8,600	1,520 1,663	268 432	3,600 3,600	5,080 5,100	22,143 22,480	30,811 31,518	4,020 4,020	
Oct.	4,533	2,130	955	8,600	1,621	432	3,600	5,060	22,398	31,119	4,020	
Nov.	3,805	2,130	955	8,600	1,473	432	3,600	5,100	22,290	31,100	4,020	
Dec.	1,890	2,130	955	8,600	1,473	271	3,600	5,100	22,129	29,464	4,020	
2021	020	2.120	٥٢٢	0.600	1 570	271	2,600	F 240	22.266	20.477	4.020	
Jan. Feb.	820 1,745	2,130 2,130	955 955	8,600 8,600	1,570 1,578	271 271	3,600 3,600	5,240 5,910	22,366 23,044	29,477 33,151	4,020 4,020	
Mar.	1,740	2,130	955	8,600	1,573	181	3,600	4,540	21,579	31,734	4,020	
Apr.	1,245	2,130	955	8,600	1,573	181	3,600	4,550	21,589	30,572	4,020	
May Jun.	755 2,015	2,130 2,130	955 955	8,600 8,600	1,573 1,573	181 181	3,600 3,600	4,550 4,500	21,589 21,539	28,232 27,012	4,020 4,020	
Jul.	2,290	2,130	955	8,600	1,573	181	3,600	4,460	21,499	26,954	4,020	
Aug.	1,395	2,130	955	8,600	1,581	181	3,600	4,440	21,487	24,199	4,020	
Sep. Oct.	1,235 670	2,130 2,130	955 955	8,600 8,600	1,518 1,518	265 265	3,600 3,600	4,440 4,510	21,508 21,508	24,344 23,287	4,020 4,020	
Nov.	1,285	2,130	955	8,600	1,548	265	3,600	4,530	21,508	24,894	4,020	
Dec.	2,045	2,130	955	8,600	1,545	377	3,600	4,530	21,737	25,142	4,020	
2022												
Jan.	2,390	2,130	955	8,600	1,545	181	3,600	5,040	22,051	27,505	4,020	
Feb. Mar.	2,245 2,000	2,130 2,130	955 955	8,600 8,600	1,550 1,535	181 181	3,600 3,600	5,060 4,940	22,076 21,941	27,342 26,552	4,020 4,020	
Apr.	2,000	2,130	955	8,600	1,555	681	3,600	4,750	22,267	26,222	4,020	
May	1,990	2,130	955	8,600	1,572	681	3,600	4,710	22,248	26,496	4,020	
Jun. Jul.	2,765 3,330	2,130 2,130	955 955	8,600 8,600	1,616 1,572	681 230	3,600 3,600	4,770 4,740	22,352 21,827	28,868 29,267	4,020 4,020	
Aug.	4,065	2,130	955	8,600	1,572	230	3,600	4,740	21,787	28,578	4,020	
Sep.	4,565	2,130	955	8,600	1,572	230	3,600	4,740	21,827	28,093	4,020	
Oct. Nov.	4,255 2,930	2,130 2,130	955 955	8,600 8,600	1,572 1,572	230 230	3,600 3,600	4,770 4,740	21,857 21,827	28,643 28,900	4,020 4,020	
Dec.	2,880	2,130	955	8,600	1,572	230	3,600	4,740	21,827	28,900	4,020	
2023**												
Jan.	3,015	n.y.a	n.y.a	n.y.a	n.y.a	n.y.a	n.y.a	n.y.a	n.y.a	n.y.a	4,020	
Feb.	2,950	n.y.a	n.y.a	n.y.a	n.y.a	n.y.a	n.y.a	n.y.a	n.y.a	n.y.a	n.y.a	
	l .			<u> </u>		1		<u> </u>		1	l	

Source : World Bureau of Metal Statistics

* : at producer ** : Preliminary n.y.a : Not yet available

MALAYSIAN PRODUCTION (In Tonnes) NUMBER OF MINES IN OPERATIONS AND EMPLOYMENT AT TIN MINES BY MINING METHODS

YEAR	AGGREGATE Dredging			G	Gravel Pump Open Cast					Ur	nder G	round	Pa	anning		Amo	Rtmt ro Pln	/ Min			
	Prod.	Units*	Emp.	o. Prod. Units		Emp.	Prod.	Units	Emp.	Prod.	Units	Emp.	Prod.	Units	Emp.	Prod.	Units I	mp.	Prod.	Units	Emp.
2016 2017 2018 2019 2020 2021 2022 2023**	4,158 3,894 3,868 3,611 2,963 3,013 3,517 3,767	14 16 12 13 10 13 19 23	1,406 1,286 1,295 1,387 1,534 1,844 2,037 2,496		- 1 - - - - -	- 36 - - - - - -		- - - - -	- - - - -	3,388 3,104 3,184 3,103 2,780 2,796 3,298 3,591	14 16 12 13 10 13 19 23	1,130 1,058 1,075 1,201 1,348 1,624 1,840 2,210		- - - - -	- - - - -	293 406 424 244 125 119 138 152	- - - - -	-	442 390 260 264 58 64 80 24	18 16 11 11 11 11 10 16	276 228 220 186 186 220 197 286
2020 Jan. Feb. Mar. Apr. May Jun July Aug. Sep. Oct. Nov. Dec.	289 266 162 36 252 278 272 277 292 295 272 272	12 13 13 13 12 12 13 14 13 14	1,434 1,387 1,550 1,410 1,401 1,391 1,411 1,567 1,572 1,562 1,573 1,534		-	-			-	273.0 234.0 143.9 34.2 233.4 261.4 258.4 263.7 274.5 283.7 257.1 261.4	12 13 13 13 12 12 13 14 13 14	1,248 1,201 1,364 1,224 1,215 1,205 1,225 1,381 1,386 1,376 1,387 1,348		-	-	11.4 20.1 13.2 1.8 15.5 12.0 9.0 9.2 11.7 6.9 6.0 7.1	-		3.6 11.4 4.6 - 3.2 4.4 4.2 3.8 5.8 4.1 8.4 3.3	11 12 12 12 11 11 11 11 11	186 186 186 186 186 186 186 186 186 186
2021 Jan. Feb. Mar. Apr. May. Jul. Aug. Sep. Oct. Nov. Dec.	278 257 297 294 262 44 204 233 262 301 287 295	10 11 10 11 11 10 10 9 10 12 13	1,539 1,541 1,550 1,551 1,508 1,450 1,450 1,547 1,794 1,358 1,844 1,844	-	- - - - - - - -	- - - - - - - -		-		252.1 238.9 271.9 277.7 244.5 40.1 199.2 218.1 245.4 276.2 255.6 276.2	10 11 10 11 11 10 10 9 10 12 13	1,353 1,355 1,364 1,365 1,322 1,264 1,264 1,361 1,608 1,138 1,624 1,624	-	- - - - - - - -	-	19.0 12.5 12.9 11.0 11.3 0.0 1.0 11.4 11.4 11.0 9.0 8.1	- - - - - - -	-	6.5 5.5 5.0 5.5 5.8 4.2 3.7 3.7 4.8 4.7 5.7 9.4	11 11 11 11 11 11 11 11 11	186 186 186 186 186 186 186 186 220 220
2022 Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sep. Oct. Nov. Dec.	234 252 306 273 276 285 303 338 325 322 271 331	13 12 12 12 15 15 19 19 16 18 17	1,743 1,736 2,302 1,834 1,849 1,869 1,877 1,896 1,940 1,919 1,929 2,037	-	-	-		-		218.6 234.2 272.9 251.0 262.5 265.8 283.5 314.6 304.6 310.5 258.1 322.1	13 12 12 12 15 15 19 19 16 18 17	1,557 1,550 2,117 1,649 1,658 1,678 1,689 1,744 1,722 1,732 1,840	-	-	-	7.9 6.5 11.4 12.1 12.0 16.0 12.3 18.3 16.5 7.3 10.0 7.8	- - - - - - -		7.2 10.9 21.8 10.4 1.4 3.7 7.5 4.7 4.1 4.4 2.6 1.5	11 11 10 10 10 10 10 10 10	186 186 185 185 191 191 188 197 196 197 197
2023** Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sep. Oct. Nov. Dec.	327 301 316 297 315 304 316 309 290 355 312 326	20 16 15 17 20 18 18 19 20 20 20 23	2,026 1,998 2,043 2,070 2,106 2,136 2,135 2,141 2,134 2,424 2,426 2,496	-	- - - - - - - - -	-				314.5 284.7 300.6 282.2 296.4 286.3 300.3 291.5 276.1 339.0 305.3 313.8	20 16 15 17 20 18 18 19 20 20 20 23	1,841 1,813 1,859 1,887 1,921 1,922 1,924 1,921 2,184 2,186 2,210	-		-	11.2 15.6 14.9 14.7 17.8 16.2 14.7 14.7 11.1 10.7 5.4 5.3			1.5 0.9 0.3 0.3 1.1 1.7 0.6 2.4 2.6 4.8 0.9 7.1	9 9 9 14 14 14 15 16 16	185 185 184 183 209 215 213 217 213 240 240 286

Source: Department of Mineral and Geoscience Malaysia

** : Preliminary.

- : Nil

Note: * Number of units does not include Retreatment / Mineral Processing Plant

MALAYSIAN REFINED TIN PRODUCTION IMPORT OF TIN-IN-CONCENTRATES AND EXPORT OF TIN METAL (In Tonnes)

Period	Production of Tin-In- Concentrates	Imports of Tin-In- Concentrates	Refined Tin Production	Local Consumption	Exports of Tin Metal
2016 2017 2018 2019 2020 2021 2022 2023*	4,158 3,894 3,868 3,611 2,963 3,013 3,517 3,767	30,536 29,866 27,450 25,644 22,288 322 18,043 n.y.a	26,849 27,211 27,115 24,387 22,367 16,634 19,442 n.y.a	2,238 2,707 1,964 1,441 1,512 1,156 1,152 1,161	27,470 27,147 27,342 24,418 22,597 16,441 19,299 n.y.a
2020 Jan. Feb. Mar. Apr. May. Jun. Jul. Aug. Sep. Oct. Nov. Dec	289 266 162 36 252 278 272 277 292 295 272	2,136 1,449 1,105 1,198 2,187 1,927 1,972 2,785 2,398 1,565 1,536 2,030	2,314 1,880 1,228 1,110 1,344 1,926 1,819 2,672 2,057 2,078 1,974 1,965	93 119 71 75 99 190 150 151 138 146 125	2,180 2,226 1,191 933 1,516 1,644 2,240 2,290 2,198 2,126 2,108 1,945
2021 Jan. Feb. Mar. Apr. May. Jun. Jul. Aug. Sep. Oct Nov. Dec	278 257 297 294 262 44 204 233 262 301 287 295	28 29 46 47 26 0 21 19 59 16 10	1,639 1,847 2,041 1,680 1,861 695 973 1,115 1,221 1,349 1,086 1,127	145 70 113 115 91 86 84 86 85 98 91	1,770 1,765 1,982 1,836 1,638 894 507 1,085 1,599 1,165 1,172 1,028
2022 Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sep. Oct Nov. Dec.	234 252 306 273 276 285 303 338 325 322 271 331	1,173 1,162 1,258 1,511 1,660 1,729 1,475 1,397 1,313 1,842 1,454 2,069	1,332 1,160 1,653 1,417 1,143 1,730 1,886 2,211 1,592 1,692 1,702 1,924	106 108 89 117 82 76 100 94 83 82 117	1,305 1,017 1,659 1,431 1,333 1,481 1,494 2,402 1,948 1,431 1,622 2,176
2023* Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sep. Oct Nov. Dec.	327 301 316 297 315 304 316 309 290 355 312 326	1,482 1,715 1,920 1,374 1,617 1,416 2,096 1,485 1,837 1,631 n.y.a n.y.a	1,780 1,561 2,054 1,513 1,848 1,453 1,912 1,664 1,591 2,076 n.y.a n.y.a	94 118 113 89 103 87 75 57 73 132 109 110	1,388 2,015 2,138 1,651 1,730 1,724 1,557 1,778 1,535 2,062 n.y.a n.y.a

Sources : Department of Mineral and Geoscience Malaysia

Malaysia Smelting Corporation Bhd.

* : Preliminary n.y.a : Not yet available

MALAYSIA'S DOMESTIC TIN CONSUMPTION (In Tonnes)

PERIOD	TOTAL CONSUMPTION	SOLDER *	TINPLATE	PEWTER	OTHERS *
2016 2017 2018 2019 2020 2021 2022 2023	2,238 2,707 1,964 1,441 1,512 1,156 1,152 1,161	1,314 1,348 1,019 695 738 395 400 555	750 737 759 639 626 710 639 485	86 63 39 19 8 6 9	88 559 147 88 140 45 104 116
2020 Jan. Feb. Mar. Apr. May. Jun. Jul. Aug. Sep. Oct. Nov. Dec.	93 119 71 75 99 190 150 151 138 146 125	40 62 22 19 49 74 84 49 85 77 78 99	48 52 45 53 44 67 55 65 46 59 40 52	0 0 0 0 0 3 3 0 0 0	5 4 3 6 46 8 37 7 10 5 4
2021 Jan. Feb. Mar. Apr. May Jun Jul. Aug. Sep. Oct. Nov. Dec.	145 70 113 115 91 86 84 86 85 98 91	73 30 40 39 40 29 20 25 30 29 20 20	66 37 68 68 46 50 64 57 53 69 69	1 0 0 1 0 0 0 0 0 2 0	5 3 5 7 5 7 0 4 0 0 0
2022 Jan. Feb. Mar. Apr. May Jun Jul. Aug. Sep. Oct. Nov. Dec.	106 108 89 117 82 76 100 94 83 82 117	27 35 24 39 24 20 25 30 40 30 57 49	56 69 58 67 54 50 62 54 35 41 50 43	0 1 1 1 0 0 2 0 1 1 1	23 3 6 10 4 6 11 10 7 10 9 5
2023 Jan. Feb. Mar. Apr. May. Jun. Jul. Aug. Sep. Oct. Nov. Dec.	94 118 113 89 103 87 75 57 73 132 109	60 68 79 41 50 55 20 20 27 55 40	31 40 29 39 38 30 48 27 42 56 52	0 1.5 0.1 1.0 1.1 0.1 0.1 0.2 0.1 0.1 0.1	3 8 5 8 14 2 7 10 4 21 17
2024 Jan. Feb. Mar. Apr. May.	n.y.a n.y.a n.y.a n.y.a n.y.a	n.y.a n.y.a n.y.a n.y.a n.y.a	49 42 35 41 34	n.y.a n.y.a n.y.a n.y.a n.y.a	n.y.a n.y.a n.y.a n.y.a n.y.a

Sources : Malaysia Smelting Corporation Bhd

Perstima Bhd

The figures include high-grade tin (99.9% Sn) imported for consumption.
Domestic consumption of tin metal refers to the use of tin in a particular application.
Sales to manufacturing industries have been used as proxy for consumption except Note

in the case of manufacture of tinplate which are actual tin consumption data.

: not yet available n.y.a

WORLD MINE PRODUCTION

(In Tonnes)

	2016	2017	2018	2019	2020	2021	2022	2022	2022	2022	2022	2022	2022	2022	2022	2022	2022
	2016	2017	2018	2019	2020	2021											
							Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
EUROPE Portugal Spain Russia United Kingdom	48 7 1,140 0	56 23 702 0	60 32 1,200	108 147 2,264 0	108 74 2,538 0	108 49 2,920 0	9 2 244 0	9 2 250 0	9 2 182 0	9 2 237 0	9 2 237 0	9 2 238 0	9 10 200 0	9 10 200 0	9 10 200 0	9 10 200 0	9 10 200 0
AFRICA Burundi DR.Congo Egypt Namibia Nigeria Rwanda South Africa Zimbabwe Tanzania Uganda	51 4,128 0 0 3,827 2,621 0 0 104 0	123 7,145 0 0,5,964 3,508 0 0 68 66	126 9,000 0 0 8,784 2,400 0 6 53	143 6,250 0 9 7,020 2,223 0 0 18 50	121 13,508 0 242 5,848 1,692 0 0 1,600	127 15,000 0 499 6,900 2,122 0 0 1,200	47 1,500 0 45 500 150 0 0	50 1,500 0 53 500 150 0 0	50 1,500 0 500 500 150 0 100	50 1,500 0 500 500 150 0 0	50 1,500 0 52 500 150 0 100	50 1,500 0 500 500 150 0 100	0 1,500 0 50 1,200 200 0 0 100	11 1,500 0 50 1,200 200 0 0 100	0 1,047 0 50 518 200 0 0 100	0 1,000 0 500 200 0 0 100	0 1,000 0 49 500 200 0 0
ASIA China Indonesia Kazakhstan Laos Malaysia Mongolia Myanmar Thailand Vietnam	153,100 60,000 0 1,308 4,123 36 47,435 124 5,520	163,000 60,000 0 779 3,967 50 58,883 705 4,560	157,500 84,000 0 566 3,999 60 45,900 720 4,560	142,900 86,400 0 1,156 4,080 110 33,750 720 5,520	161,300 65,400 0 1,237 3,183 120 29,100 720 5,420	152,200 60,000 0 1,415 3,180 120 29,544 720 5,400	10,500 5,000 0 249 265 10 1,800 60 450	10,500 5,000 0 157 265 10 1,800 60 450	10,500 5,000 0 200 265 10 4,300 60 450	11,000 5,000 0 337 265 10 1,900 60 450	13,800 5,000 0 54 265 10 800 60 450	6,600 5,000 0 50 265 10 800 60 450	7,000 5,000 0 117 265 10 3,500 60 450	7,000 5,000 0 312 265 10 3,500 60 450	6,200 5,000 0 195 265 10 2,600 60 450	13,700 5,000 0 200 265 10 2,500 60 450	9,200 5,000 0 200 265 10 2,000 60 450
AMERICA Bolivia Brazil Peru U.S.A.	17,614 25,500 18,789 0	17,973 18,000 17,790 0	17,259 18,000 18,601 0	17,194 18,000 19,683 0	14,710 15,000 20,647 0	19,462 17,168 26,995 0	1,700 1,500 2,410 0	1,700 1,500 2,043 0	1,700 1,500 2,366 0	1,500 1,500 2,373 0	1,500 1,500 2,406 0	1,500 1,500 2,287 0	1,500 1,500 2,675 0	1,500 1,500 1,920 0	1,400 1,500 2,263 0	1,400 1,500 2,454 0	1,400 1,500 2,368 0
OCEANIA Australia	6,635	7,217	6,871	7,738	7,836	8,691	600	600	600	900	900	900	800	800	750	750	750
WORLD TOTAL	351,948	370,299	379,482	355,116	320,452	353,820	26,942	26,699	29,494	27,893	29,345	22,021	24,197	22,705	22,827	30,358	25,271

Source: World Bureau of Metal Statistics

WORLD REFINED TIN CONSUMPTION (In Tonnes)

	2016	2017	2018	2019	2020	2021	2022	2022	2022	2022	2022	2022	2022	2022	2022	2022	2022
EUROPE							Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Austria	3,323	4,148	3,983	3,082	2,960	4,057	250	200	204	200	328	300	227	250	435	450	300
Belgium	2,400	697	720	720	720	720	60	60	60	60	60	60	60	60	60	60	60
Bulgaria	101	1	117	210	240	303	20	20	20	20	20	20	20	20	20	20	20
Czech Republic	515	532	603	605	335	439	36	22	24	29	24	20	12	44	12	15	18
Denmark	3	17	7	1	10	17	1	1	1	1	1	1	1	1	1	1	1
Finland	86	51	77	94	72	95	3	10	18	0	1	1	4	5	2	5	10
France	4,736	5,456	6,080	5,020	4,982	3,643	242	280	351	471	284	386	246	386	361	382	219
Germany	18,242	20,284	20,236	18,441	14,898	16,052	1,000	1,252	1,410	1,561	1,365	1,685	1,163	1,593	1,515	1,434	1,024
Greece	632	600	646	634	637	646	50	60	50	50	50	51	53	52	60	60	50
Hungary	145	1,177	2,050	2,036	1,714	1,706	100	100	130	130	122	100	152	150	150	150	100
Ireland	4	0	2	0	0	1	0	0	0	0	0	0	0	0	1	0	0
Italy	3,495	3,974	4,678	4,324	3,402	4,153	300	300	522	500	479	500	456	450	742	750	750
Netherlands	6,000	6,000	6,000	6,000	5,400	5,400	450	450	450	450	450	450	450	450	450	450	450
Norway	0	1	1	1	10	0	0	0	0	0	0	0	0	0	0	0	0
Poland	3,669	3,537	3,723	3,335	1,580	1,012	125	50	30	30	103	32	100	100	196	200	130
Portugal	554	856	891	831	463	476	60	90	10	10	197	58	141	104	110	110	110
Romania	336	516	866	551	442	554	25	20	50	50	64	60	23	25	20	20	10
Russia	995	1,339	495 767	1,914	1,443	2,015	99	175	175	175	180 70	180	180	180	170	170	170 75
Slovakia	465 1,495	645 1605	767 1,652	593 1562	614 1,898	669 1 715	40 160	27 100	68 200	47 200	70 148	46 150	72 128	69 150	47 80	50 80	75 200
Spain Sweden	6,492	1,605 5,457	6,020	1,563 5,835	1,898 5,343	1,715 6,105	160 600	530	200 549	200 550	148 517	541	128 500	500	80 296	300	700
Switzerland	6,492	5,457	6,020 45	5,835	5,343 44	,	1	10	10	10	13	10	500	500	296 10	10	700
United Kingdom	979	936	961	262	102	46 80	2	14	12	4	10	12		5 4	10	3	2
Yugoslavia	1,080	1,080	1,080	1,080	240	960	80	80	80	80	80	80	80	80	80	80	80
Other Europe	720	720	720	720	530	480	40	0	40	40	40	40	40	40	40	40	40
'	720	720	720	720	330	400	40	O	40	40	40	40	40	40	40	70	70
AFRICA	407	440	225	47.4	420	404	20	45	45	45	40	40	-	-	40	40	40
Egypt	107	119	225	174	139	181	20	15	15	15	10	10	5	5	10	10	10
Morocco	21 300	15	22	20	22	27 240	3	0	2 20	5	6	4	0	0	0	0	0
Nigeria South Africa		623 957	1,436	1,322 604	240 326	340	20 59	20 24	36	20 44	20 34	20 35	20 35	20 30	20 49	20 50	20 50
Other Africa	1,047 720	720	633 720	720	530	480	40	0	40	44	40	40	40	40	10	40	40
	720	720	720	720	330	400	40	U	40	40	40	40	40	40	10	40	40
ASIA	101 415	102.201	174 100	177.001	246 452	101.061	12.000	12 407	16 7 47	10 100	20.005	10.670	F 20.4	15 000	17.620	10 710	10.657
China	191,415	183,391	174,183	177,891 3,600	216,152 480	191,061	13,800	13,487	16,747	18,109 130	20,865	10,670	5,284	15,088	17,620	18,719	18,657
Hong Kong India	1,800 9,088	1,800 9,861	3,300 11,365	10,615	9,734	1,359 10,566	130 912	130 900	130 910	900	130 694	130 934	130 1,812	130 1,211	130 1,423	130 1,400	130 1,000
Indonesia	1,200	1,200	1,200	1,200	1,200	1,200	100	100	100	100	100	100	100	100	1,423	100	100
Iran	987	1,058	1,573	2,221	2,261	1,600	100	100	100	100	100	100	100	100	83	174	102
Japan	26,113	29,111	28,084	24,905	20,198	28,383	1,923	2,233	2,130	1,794	1,893	2,038	2,146	2,172	2,048	1,851	2,162
Kazakhstan	490	431	405	350	287	0	5	50	50	0	0	45	20	130	50	1,031	0
Malaysia	1,560	1,560	1,560	1,560	1,560	1,560	130	130	130	130	130	130	130	130	130	130	130
Pakistan	279	300	489	311	194	322	16	16	15	0	30	30	48	50	23	22	20
Philippines	506	220	307	1,385	776	1,045	75	24	16	97	109	29	86	61	40	40	111
Singapore	1,960	1,920	1,920	1,920	1,720	1,920	160	160	160	160	160	160	160	160	160	160	160
South Korea	14,199	13,112	13,927	11,957	13,405	14,457	1,135	858	1,229	1,274	1,220	928	1,162	1,214	1,343	872	1,040
Syria	120	120	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Taiwan	4,140	4,494	4,576	4,569	10,096	8,772	580	742	861	900	726	640	925	767	674	700	750
Thailand	3,131	4,259	3,000	3,000	3,000	3,000	250	250	250	250	250	250	250	250	250	250	250
Turkey	2,416	3,110	3,215	3,202	3,746	4,158	350	522	576	529	272	311	205	495	333	461	420
United Arab Emirates	4,800	4,800	3,600	3,600	2,160	2,160	180	180	180	180	180	180	180	180	180	180	180
Vietnam	6,000	6,000	4,200	3,600	4,639	4,622	380	380	380	380	380	380	380	380	380	380	380
Other Asia	2,160	2,160	2,160	2,160	1,690	1,560	130	0	130	130	130	130	130	130	130	130	130
AMERICA																	
Argentina	878	596	674	420	1,108	799	40	35	26	39	43	40	4	14	55	34	53
Bolivia	480	480	480	480	480	480	40	40	40	40	40	40	40	40	40	40	40
Brazil	17,258	10,009	9,357	9,398	3,333	2,466	40	85	84	100	100	100	100	100	100	100	100
Canada	2,887	2,562	2,489	2,387	1,871	3,264	148	493	351	350	350	350	68	72	202	54	94
Chile	111	82	95	111	133	130	16	5	5	7	10	11	5	17	5	10	38
Colombia	300	280	271	248	237	207	33	10	4	5	12	12	25	20	8	10	10
Mexico	4,160	4,197	4,906	4,779	4,406	4,661	400	400	454	450	242	250	267	300	160	150	300
Peru	216	216	216	216	198	216	18	18	18	18	18	18	18	18	18	18	18
U.S.A.	29,455	31,476	34,664	31,057	29,191	34,559	4,736	2,297	2,773	1,812	2,701	1,602	2,466	1,787	1,646	2,949	1,843
Venezuela	59	19	16	12	10	12	1	1	1	1	1	1	1	1	1	1	1
Other America	420	420	420	420	275	240	20	0	20	20	20	20	20	20	20	20	20
OCEANIA Australia	215	259	284	375	255	317	0	20	49	54	9	56	18	47	27	21	21
New Zealand	7	49	46	41	30	65	0	5	0	12	0	9	11	0	7	5	5
		.5	.5	''	33	03								J	,	,	_
WORLD TOTAL	387,563	381,702	378,582	368,742	384,161	377,773	29,735	27,582	32,497	32,884	35,657	24,601	20,515	30,007	32,383	34,082	32,909
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Source : World Bureau of Metal Statistics