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FEBRUARY TIN MARKET REVIEW

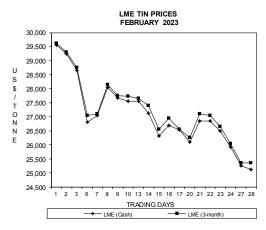
Kuala Lumpur Tin Market (KLTM)

With the absence of refined tin metal being offered for sale, the KLTM continued to remain quiet with no trade being transacted during the month of February. The market, however, was closed on the 1st and 6th February in conjunction with the Federal Territory day and the Thaipusam holidays.

London Metal Exchange (LME)

Influenced largely by weak demand, tin trading on the LME during the month of February was mostly on a downward momentum, and conducted within a wide price range of almost US\$4,500 per tonne. Trading was much easier than that recorded during the January trading month, and again followed the same trading pattern as the other base metals traded on the Exchange.

Tin trading commenced the February month at US\$29,550 per tonne for cash tin and US\$29,625 per tonne for 3-month tin, both being their respective highest price level for the month. Thereafter, it softened to end the short first trading week lower.



The decline continued at the opening of the second trading week. Backed by strong demand, the market rose for two consecutive days before easing towards end of the trading week. The strong demand came particularly from overseas interests resulting from the weakening U.S dollar.

The tin price slid further towards middle of the third trading week. It inched-up the next day before retreating to end the trading week lower.

The market weakened at the start of the fourth trading week. It rebounded and stayed somewhat flat during mid-week as market sentiment remained largely uncertain, in-line with the flat momentum of other base metals traded on the Exchange. Thereafter, it fell further to end the trading week lower.

The short final trading week saw uncertain sentiment that resulted in the tin price staying somewhat flat after its opening decline to close the February trading month at US\$25,110 and US\$25,350 per tonne for cash and 3-month tin, both being their respective lowest price level for the month.

The average LME cash tin price recorded in February was US\$27,070 per tonne, whilst the average 3-month tin price was US\$27,218 per tonne.

NEWS HIGHLIGHTS

Optimism on MSC as Production and Tin Prices Rise

Malaysia Smelting Corp Bhd's (MSC) shares have had a strong start to the year on optimism that the company's earnings will improve in tandem with the increase in tin prices. While its share price had eased from the recent high closing price of RM2.27 to close at RM1.97 last Friday, the counter had registered a gain of about 29% year-to-date.

According to UOB Kay Hian Research (UOBKH), MSC's mining division would likely register stronger earnings in the upcoming results for the fourth quarter (4Q) of its financial year ending Dec 31, 2022 (FY22), supported by higher production and better tin prices.

"We are positive on the company's outlook as its earnings are expected to improve, driven by stronger tin prices and higher production output," it said. "MSC is well-positioned for meaningful growth in FY23, backed by improved production output and better margins from the full utilisation of its new eco-friendly plant," it added.

Tin prices have rebounded in the last three months to currently trade around US\$28,000 (RM121,245) per tonne, representing an increase of about 58% from its bottom last year.

The recovery in tin prices was attributable to the ongoing structural supply constraints, coupled with rising demand amid the gradual reopening of China, which consumes more than 50% of global tin, UOBKH observed.

Its correlation analysis showed that every US\$2,000 (RM8,660) per tonne increase in its tin price assumptions would boost MSC's earnings by about 10% a year, and vice versa. Meanwhile, UOBKH pointed out that MSC managed to increase its average daily mining output by close to 11 tonnes per day in 4Q22. Although daily output fell to 9.5 tonnes in the first half of FY22 due to Covid-19-related disruptions, a rebound was noted in the second half of FY22.

UOBKH expects MSC's daily production to increase to 12 tonnes in 2023 with the utilisation of new technology and exploration of new deposits. "With the new mining area from Asas Baiduri Sdn Bhd (ABSB) in Perak, MSC is expected to enhance its mining output to over 15 tonnes per day (thus boosting earnings by around 20%) in the next two to three years," it said.

(Source: The Star, 13 February 2023)

MSC Set on Improving Operational Efficiencies

Malaysia Smelting Corp Bhd (MSC) has stated that headwinds such as high interest rates, inflation and weaker developing economies have made it cautious about market conditions and the group will remain focused on improving operational efficiencies in its tin smelting and mining segments. On the positive side, tin prices have risen in early 2023 on China relaxing its zero-Covid policy. Its new Pulau Indah (PI) plant, which uses newer and more efficient technology, is on target to achieve higher capacity and full commission in the near future.

Add that with the planned closure of the old plant at Butterworth, Penang, MSC expects higher operational efficiency, lower operational and manpower costs, while improving its overall carbon footprint in the year ahead. In a filing with Bursa Malaysia, MSC noted its tin mining segment will continue to focus on improving and increasing daily mining output and overall mining productivity.

For the fourth quarter ended Dec 31, 2022 (4Q22), MSC posted a 60% year-on-year (y-o-y) drop in net profit to RM25.9mil or an earning per share (EPS) of 6.2 sen. A stronger performance from both its tin mining and smelting divisions enabled MSC to post a significant improvement in 4Q22 from the net loss of RM31.3mil it suffered in 3Q22.

The group's tin smelting division reported a net profit of RM19.2mil in 4Q22 (vs 3Q22's net loss of RM46mil) underpinned by increased refined tin sales from the processed tin intermediates and sales of by-products as the furnace at Pulau Indah resumed operations in October 2022, following the completion of rebricking exercise.

Its tin mining segment posted a net profit of RM9.1mil in 4Q22. MSC noted tin prices were volatile during the year, falling from its pandemic peak of US\$40,000 (RM176,068) per tonne in early 2022 to around US\$20,000 (RM88,034) per tonne towards the second half of the year. MSC expects its mining operations to see higher mining productivity in 2023 as it explores more efficient mining methodologies at the Rahman Hydraulic Tin (RHT) mine in Klian Intan.

For financial year 2022 (FY22), MSC's revenue increased by 39.7% y-o-y to RM1.5bil on higher average tin prices and comparatively higher sales of refined tin. Net profit for FY22, however, fell 17% y-o-y to RM98.4mil or an EPS of 23.4 sen.

Its tin smelting segment made a net loss of RM5.5mil in FY22 as compared to a net profit of RM12.1mil in FY21, mainly due to the longer-than-expected furnace outage at the Pulau Indah smelter in 3Q22 and on higher operating costs in relation to labour, energy, fuel, reductant and furnace re-bricking costs in FY22.

MSC's tin mining operations posted a net profit of RM95.1mil in FY22, as compared to RM109.4mil in FY21. Despite higher tin prices in 2022, earnings were impacted by a one-off legal case settlement of RM4.7mil and higher operating cost in FY22. MSC has proposed a first and final single-tier dividend of seven sen per share, translating to a dividend payout of 30% of FY22's net profit.

(Source: The Star, 18 February 2023)

NEWS ROUND-UP

Another Record Year of Tin Production at Alphamin

Alphamin Resources has reported another record year for tin production from its Bisie mine located in the Democratic Republic of the Congo (DRC). The mine's tin metal production reached 3,113 tonnes in the fourth quarter, bringing its annual production to 12,493 tonnes in 2022, which was 14 per cent higher than the previous record year total of 10,969 tonnes. The increases were driven by improvements in ore processed and tin grades, with underground mining performing particularly well.

Average tin grades of 3.82 per cent for the year were 7 per cent higher than 2021. It came from a highly mineralised area, not previously included in mineral resource or mine plan, that was successfully mined. However, because of the

structurally complex nature of the material, recoveries were negatively impacted. Between the second and third quarter, plant recoveries dropped 5 percentage points to 72 per cent, recovering slightly to 73 per cent in the final quarter. Overall, the 75 per cent average plant recovery was a slight improvement on the previous year.

The company is predicting a production of some 12,000 tonnes next year, similar to 2022 production. With the Mpama South project to come online in 2024 once comissioning of the mine is completed in the final quarter of this year, production is set to increase from then on. Once the latest lab assay results are finalized, an updated Mpama South Resource is expected imminently.

2022 Global Tin Production Maintained

Refined tin production in 2022 remained steady compared to the previous year. However, performance varied from company to company.

2022 Top 10 Refined Tin Producers Refined Tin Production (Tonnes)

Order	Company	2021	2022	YOY Change %
1	Yunnan Tin (China)	82,000	77,100	-6.0%
2	Minsur* (Peru)	31,800	32,700	2.8%
3	Yunnan Chengfeng (China)	17,000	20,600	21.2%
4	PT Timah (Indonesia)	26,500	19,800	-25.3%
5	Malaysia Smelting Corp (Malaysia)	16,400	18,800	14.6%
6	Guangxi China Tin (China)	9,200	10,900	18.5%
7	Jiangxi New Nanshan (China)	11,600	10,800	-6.9%
8	EM Vinto (Bolivia)	12,100	10,300	-14.9%
9	Thaisarco (Thailand)	12,100	9,500	-21.5%
10	Aurubis Beerse (Belgium)	9,800	8,200	-16.3%

Data: Provisional data reported to ITA and rounded to the nearest 100t

^{*} Includes production from Minsur's Brazillian subsidiary, Taboca

Yunnan Tin Company (YTC) of China maintained its position as the world's largest producer of refined tin, while other Chinese companies shuffled up the rankings. PT Timah's production fell significantly compared with 2021 following a turbulent year in Indonesia. Overall, global refined tin production is estimated to have reached 380,400 tonnes, an increase of 0.3 per cent on last year's total of 379,400 tonnes.

International Tin Association (ITA) surveys global tin smelters to compile the annual list of the world's largest producers. In 2022, these top 10 companies produced 56 per cent of the world's tin, down from 59 per cent in 2021. As stated earlier,

the part of the drop in the group's output can be attributed to the difficult year experienced by PT Timah. A significant decline in output from YTC also contributed to the drop.

Despite the challenges, Chinese smelters maintained overall production during 2022. Around 90 per cent of production was shuttered during the third quarter as smelters brought forward maintenance on falling prices and low demand. Meanwhile, a wide arbitrage boosted refined tin imports. Concentrate imports were also up, year-on-year. Producers in South America maintained production from a strong baseline in 2021. European secondary production dropped due to a challenging fourth quarter.

Oropesa's Resource Upgrade Invaluable for its DFS

Elementos has improved the geological confidence of its Oropesa's Tin Resource, thus increasing the potential for a larger Ore Reserve Estimate later in the year.

The company has continuously improved Oropesa's Mineral Resource over the years after releasing its Maiden Resource estimate in 2018. Notably, an updated Mineral Resource Estimate (MRE) released in 2021 significantly improved the Resource, both in total tonnages and in geological confidence. In 2022, the company also released an Optimisation Study, which with an increased Mineral Resource and tin price, a US\$30,000 per tonne pit shell was defined. The scale of expected mining operations also increased by two-thirds.

The study was subsequently followed up by a further infill drilling campaign aiming to upgrade the Inferred Resource within the pit shell.

Elementos has released a new Updated Mineral Resource Estimate after a successful in-fill drilling campaign. Despite only marginal increases of 0.6 per cent in total tin contained in the Resource, most of the changes were from upgrading material in the Inferred and Indicated categories to Measured Resources. Tin contained in the Measured category increased by 50 per cent to over 9,000 tonnes, mainly due to 7,500 tonnes being upgraded from the Inferred Resource.

The company has now achieved its main aim to upgrade all the Inferred Resource within the US\$30,000 per tonne pit shell to Measured or Indicated. The company's spokesman said "This ... is material because only Measured and Indicated Resources can be used or assessed during the DFS process for conversion to JORC Ore Reserves."

The spokesman added that "This puts us in a privileged position at the back end of our DFS to support our goal of releasing a maiden JORC Ore Reserves Statement for the Oropesa Tin Project," Elementos hopes to release its Definitive Feasibility Study (DFS) in the second quarter of 2023.

(Source: International Tin Association Ltd. UK)

SPECIAL ARTICLE

Former Tin Dredge must be Preserved, says MB Inc CEO

The Tanjung Tualang Dredge No 5 (TT5), a former tin dredge harking back to the 1930s, is a heritage that needs to be looked after, but its maintenance is costly, says Mentri Besar Incorporated (MB Inc) chief executive officer Anuar Zainal Abidin. He said this was why it needed to work with a private company to develop the Ipoh Escape theme park in the area surrounding TT5 for its sustainability.

"The (Perak) state has mandated us to generate income to maintain the tin dredge, which is quite costly," he told reporters when met after the Meet the Consumer Day at the Indera Mulia Stadium here yesterday. "MB Inc is the land owner, generating funds through lease and profit sharing. Questions of liability or risk do not arise," he added.

It was reported that TAFI Industries Bhd had been awarded a RM11mil contract to build the theme park in Tanjung Tualang. TAFI's wholly owned subsidiary, TAFI Home & Office Sdn Bhd, was awarded the job by TT5 Theme Assets Sdn Bhd which will run for 18 months starting from Feb 15, 2023. The job scope includes constructing, testing and commissioning, as well as completing and handing over the theme park.

Anuar said Ipoh Escape, similar to the one in Penang, was only one of the attractions in the area surrounding TT5. "It aims to be the biggest obstacle course in South-East Asia. Our target market includes tourists from Thailand and Singapore," he said, adding that other attractions were a maze garden and petting zoo.

(Source: The Star, 17 February 2023)

KLTM & LME TIN PRICES

			KLTM		LI	ME	
		Average		Average Daily	Total		
D	randa al	Price *	Exchange	Turnover	Turnover	Cash	3-Month
	eriod 2016	(US\$/Tonne)	Rates	(Tonnes)	(Tonnes)	(US\$/Tonne)	(US\$/Tonne)
	2016 2017	17,528		47	11,568	17,982	17,889
	2018	20,029 20,151		37 37	8,890 9,075	20,098 20,168	19,994 20,086
	2019	19,168		26	6,445	18,671	18,610
	2020	17,504		19	4,088	17,134	17,079
	2021	26,589		16	1,955	32,584	31,105
Ź	2022	41,007		5	21	31,384	31,122
2020	Jan.	17,014		19	406	17,056	17,057
	Feb.	16,536		18	354	16,457	16,456
	Mar.	16,417	C	20	236	15,321	15,307
	Apr. May	15,110	CLOSED	17	268	15,039 15,410	14,949 15,231
	Jun.	16,605		18	374	16,806	16,627
	Jul.	17,287		16	358	17,452	17,375
	Aug.	17,515		18	343	17,672	17,649
	Sep.	17,846		21	444	17,946	17,962
	Oct.	18,026		18	383	18,154	18,152
	Nov.	18,433		20	413	18,568	18,539
00-1	Dec.	19,693		23	509	19,727	19,643
2021	Jan.	22,085		17 25	314	21,955	21,596
	Feb. Mar.	25,965 26,162		25 21	456 494	26,717 27,396	24,415 25,079
	Apr.	27,106		16	327	28,427	26,568
	May	31,132		17	298	32,524	29,736
	Jun.	31,857		12	61	32,678	30,829
	Jul.		CLOSED			34,183	33,010
	Aug.		CLOSED			35,205	34,352
	Sep.		CLOSED			35,048	34,109
	Oct.		CLOSED			37,962	36,567
	Nov.	20.500	CLOSED	-	_	39,333	38,042
2022	Dec. Jan.	39,500 41,007		<u>5</u> 5	5 21	39,574 41,807	38,956 41,344
2022	Feb.	,	NO TRANSACTION	-	21	44,118	43,820
	Mar.		NO TRANSACTION			44,249	43,917
	Apr.		NO TRANSACTION			43,122	42,644
	May		NO TRANSACTION	I		35,945	35,617
	Jun.		NO TRANSACTION	I		31,777	31,459
	Jul.		NO TRANSACTION			25,173	24,816
	Aug.		NO TRANSACTION			24,520	24,276
	Sep.		NO TRANSACTION			21,258	21,150
	Oct. Nov.		NO TRANSACTION			19,406 21,136	19,373 21,004
	Dec.		NO TRANSACTION			24,099	24,038
2023	Jan.		NO TRANSACTION			28,081	28,146
2023	Feb.		NO TRANSACTION			27,070	27,218
2023							
FEB	1		CLOSED			29,550	29,625
	2		NO TRANSACTION	I		29,250	29,300
	3		NO TRANSACTION	I		28,650	28,750
	6		CLOSED			26,805	27,050
	7		NO TRANSACTION	I		27,050	27,100
	8		NO TRANSACTION	1		28,050	28,150
	9		NO TRANSACTION	I		27,675	27,750
	10		NO TRANSACTION	I		27,550	27,725
	13		NO TRANSACTION	I		27,550	27,650
	14		NO TRANSACTION	1		27,125	27,400
	15		NO TRANSACTION	1		26,325	26,550
	16		NO TRANSACTION	I		26,700	26,950
	17		NO TRANSACTION	I		26,525	26,555
	20		NO TRANSACTION	1		26,100	26,250
	21		NO TRANSACTION	1		26,850	27,100
	22		NO TRANSACTION	I		26,850	27,050
	23		NO TRANSACTION	I		26,500	26,645
	24		NO TRANSACTION	I		25,925	26,050
	27		NO TRANSACTION	I		25,250	25,350

Sources : The Kuala Lumpur Tin Market

London Metal Exchange

 * KLTM's monthly average price is arrived at on a weighted average against total tonnage basis.

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WORLD REFINED TIN STOCKS (Tonnes)

	COUNTRY STOCKS Total										
Period	LME Stock	Germany	U.K	Indonesia*	Japan	Malaysia*	Brazil*	U.S.A	Country Stocks	Total Commercial Stocks	US Strategic Stockpile
2016 2017 2018 2019 2020	3,800 2,235 2,165 7,130 1,890	2,129 2,130 2,130 2,130 2,130 2,130	955 955 955 955 955	3,976 3,870 2,587 8,600 8,600	1,400 1,360 1,469 1,806 1,473	356 600 439 400 271	3,600 3,600 3,600 3,600 3,600	6,220 6,730 5,610 5,920 5,100	18,600 19,245 16,790 23,217 22,129	24,800 26,395 27,226 35,678 29,464	4,020 4,020 4,020 4,020 4,020
2021 2019	2,045	2,130	955	8,600	1,545	377	3,600	4,530	21,737	25,142	4,020
Jan. Feb. Mar. Apr. May. Jun. Jul. Aug. Sep. Oct.	1,845 1,325 950 890 2,810 6,045 4,640 6,830 6,620 6,020	2,130 2,130 2,130 2,130 2,130 2,130 2,130 2,130 2,130 2,130 2,130	955 955 955 955 955 955 955 955 955	2,587 2,587 8,594 8,594 8,600 8,600 8,600 8,600 8,600 8,600	1,578 1,578 1,765 1,834 1,849 2,520 2,520 2,445 2,013 2,100	439 439 439 439 439 209 209 209 919 400	3,600 3,600 3,600 3,600 3,600 3,600 3,600 3,600 3,600	5,150 5,150 4,850 5,580 5,510 5,510 5,510 5,510 5,510 5,510	16,439 16,552 22,333 23,132 23,083 23,524 23,524 23,524 23,449 23,017 23,104	26,524 26,111 31,458 31,451 34,096 37,961 34,583 35,355 34,215 33,684	4,020 4,020 4,020 4,020 4,020 4,020 4,020 4,020 4,020 4,020 4,020
Nov. Dec.	6,235 7,130	2,130 2,130	955 955	8,600 8,600	2,022 1,806	400 400	3,600 3,600	5,510 5,920	23,217 23,217	33,116 35,678	4,020 4,020
2020 Jan. Feb. Mar. Apr. May. Jul. Aug. Sep. Oct. Nov. Dec.	6,630 7,440 6,205 5,375 2,455 4,230 3,675 5,040 5,550 4,533 3,805 1,890	2,130 2,130 2,130 2,130 2,130 2,130 2,130 2,130 2,130 2,130 2,130 2,130 2,130	955 955 955 955 955 955 955 955 955 955	8,600 8,600 8,600 8,600 8,600 8,600 8,600 8,600 8,600 8,600 8,600	2,041 1,966 1,966 1,761 1,850 1,697 1,645 1,520 1,663 1,621 1,473 1,473	400 400 268 268 268 268 268 268 432 432 432 271	3,600 3,600 3,600 3,600 3,600 3,600 3,600 3,600 3,600 3,600 3,600	4,780 4,780 4,780 4,780 5,090 5,080 5,070 5,080 5,100 5,100 5,100	22,546 22,431 22,211 22,094 22,183 22,330 22,268 22,143 22,480 22,398 22,290 22,129	36,171 36,261 32,855 31,171 28,129 29,666 29,226 30,811 31,518 31,119 31,100 29,464	4,020 4,020 4,020 4,020 4,020 4,020 4,020 4,020 4,020 4,020 4,020 4,020 4,020
Z021 Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sep. Oct. Nov. Dec.	820 1,745 1,740 1,245 755 2,015 2,290 1,395 1,235 670 1,285 2,045	2,130 2,130 2,130 2,130 2,130 2,130 2,130 2,130 2,130 2,130 2,130 2,130 2,130 2,130	955 955 955 955 955 955 955 955 955 955	8,600 8,600 8,600 8,600 8,600 8,600 8,600 8,600 8,600 8,600 8,600	1,570 1,578 1,573 1,573 1,573 1,573 1,573 1,581 1,518 1,518 1,548 1,545	271 271 181 181 181 181 181 181 265 265 265 265 377	3,600 3,600 3,600 3,600 3,600 3,600 3,600 3,600 3,600 3,600 3,600	5,240 5,910 4,540 4,550 4,550 4,500 4,460 4,440 4,440 4,510 4,530 4,530	22,366 23,044 21,579 21,589 21,589 21,539 21,499 21,487 21,508 21,508 21,508 21,508	29,477 33,151 31,734 30,572 28,232 27,012 26,954 24,199 24,344 23,287 24,894 25,142	4,020 4,020 4,020 4,020 4,020 4,020 4,020 4,020 4,020 4,020 4,020 4,020
2022 Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sep. Oct. Nov. Dec.	2,390 2,245 2,000 2,010 1,990 2,765 3,330 4,065 4,665 4,255 2,930 2,880	2,130 2,130 2,130 2,130 2,130 2,130 2,130 2,130 2,130 2,130 2,130 2,130 n.y.a	955 955 955 955 955 955 955 955 955 955	8,600 8,600 8,600 8,600 8,600 8,600 8,600 8,600 8,600 8,600 n.y.a	1,545 1,550 1,535 1,551 1,572 1,616 1,572 1,572 1,572 1,572 1,572 1,572 1,572	181 181 181 681 681 230 230 230 230 230 230 230 n.y.a	3,600 3,600 3,600 3,600 3,600 3,600 3,600 3,600 3,600 3,600 n.y.a	5,040 5,060 4,940 4,750 4,710 4,770 4,740 4,700 4,740 4,770 4,740 n.y.a	22,051 22,076 21,941 22,267 22,248 22,352 21,827 21,787 21,827 21,857 21,827 n.y.a	27,505 27,342 26,552 26,222 26,496 28,868 29,267 28,578 28,093 28,643 28,900 n.y.a	4,020 4,020 4,020 4,020 4,020 4,020 4,020 4,020 4,020 4,020 4,020 1,020 1,020 1,020

Source : World Bureau of Metal Statistics

* : at producer n.y.a : not yet available

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

YEAR	A	GGREG	REGATE Dredging		Gravel Pump			Open Cast		Under Ground		Panning			Amg Rtmt / Min		n Pro Plnt				
	Prod.	Units*	Emp.	Prod.	Units	Emp.	Prod.	Units	Emp.	Prod.	Units	Emp.	Prod.	Units	Emp.	Prod.	Units	Emp.	Prod.	Units	Emp.
2016 2017 2018 2019	4,158 3,894 3,868 3,611	14 16 12 13	1,406 1,286 1,295 1,387	- - -	- 1 -	- 36 - -	- - -	- - -	- - -	3,388 3,104 3,184 3,103	14 16 12 13	1,130 1,058 1,075 1,201	- - -	- - -	- - -	293 406 424 244	- - -	- - -	442 390 260 264	18 16 11 11	276 228 220 186
2020	2,963	14	1,534	-	-	-	-	-	-	2,780	10	1,348	-	-	-	125	-	-	58	11	186
2021	3,013	13	1,844	-			-			2,796	13	1,624	-			119			64	11	220
Jan. Feb. Mar.	325 278 324	11 12 13	1,242 1,262 1,289	-	-	= =	=	= =	-	272.0 243.3 286.0	11 12 13	1,025 1,070 1,097	-	=	=	28.7 22.1 18.4	-	=	24.8 12.5 20.0	11 11 11	217 192 192
Apr.	301	13	1,290	-	-	-	-	-	-	250.1	13	1,098	-	-	-	16.1	-	-	34.6	11	192
May	282 213	12 12	1,283 1,254	-	-	-	-	-	-	240.2 181.9	12 12	1,091 1,067	-	-	-	22.2 15.3	-	-	19.4 15.7	11 11	192 187
Jun July	263	12	1,234	=	-	=	-	-	-	227.1	12	1,007	=	-	-	15.9	=	-	20.4	11	187
Aug.	299	10	1,396	=.	-	=	-	-	-	260.2	10	1,209	-	-	-	20.0	-	-	19.1	11	187
Sep. Oct.	320 312	10 12	1,281 1,441	-	-	-	-	-	-	280.6 262.6	10 12	1,094 1,255	-	-	-	20.5 15.4	-	-	19.4 33.5	11 11	187 186
Nov.	323	12	1,391	-	-	-	-	-	-	276.4	12	1,205	-	-	-	18.1	=	_	28.1	11	186
Dec.	356	12	1,387	-	-	-	-	-	-	309.4	12	1,201	-	-	-	31.1	-	-	15.7	11	186
2020 Jan. Feb.	289 266	12 12	1,434 1,387	-	- -	-	-	- -	- -	273.0 234.0	12 12	1,248 1,201	-	- -	- -	11.4 20.1	- -	-	3.6 11.4	11 12	186 186
Mar. Apr.	162 36	13 13	1,550 1,410	-	-	-	-	_	-	143.9 34.2	13 13	1,364 1,224	-	-	-	13.2 1.8	-	_	4.6	12 12	186 186
May	252	13	1,401	-	-	-	-	-	-	233.4	13	1,215	-	-	-	15.5	-	-	3.2	11	186
Jun	278	12	1,391	-	-	-	-	-	-	261.4	12	1,205	-	-	-	12.0	-	-	4.4	11	186
July Aug.	272 277	12 13	1,411 1,567	-	-	-	-	_	-	258.4 263.7	12 13	1,225 1,381	-	-	_	9.0 9.2	-	-	4.2 3.8	11 11	186 186
Sep.	292	14	1,572	-	-	-	-	-	-	274.5	14	1,386	-	-	-	11.7	-	-	5.8	11	186
Oct.	295	13	1,562	=	-	-	-	-	-	283.7	13	1,376	-	-	-	6.9	=	-	4.1	11	186
Nov. Dec.	272 272	14 10	1,573 1,534	_	-	-	-	-	-	257.1 261.4	14 10	1,387 1,348	-	-	-	6.0 7.1	-	_	8.4 3.3	11 11	186 186
			,																		
2021 Jan.	278	10	1,539	-	_	-	-	-	-	252.1	10	1,353	-	-	-	19.0	-	-	6.5	11	186
Feb.	257	11	1,541	=	-	-	-	-	-	238.9	11	1,355	-	-	-	12.5	=	-	5.5	11	186
Mar. Apr.	297 294	10 11	1,550 1,551	-	-	-	-	_	-	271.9 277.7	10 11	1,364 1,365	-	-	-	12.9 11.0	-	_	5.0 5.5	11 11	186 186
May.	262	11	1,508	-	-	-	-	-	-	244.5	11	1,322	-	-	-	11.3	-	-	5.8	11	186
Jun.	44 204	10 10	1,450 1,450	-	-	-	-	-	-	40.1 199.2	10 10	1,264	-	-	-	0.0	-	-	4.2 3.7	11 11	186 186
Jul. Aug.	233	9	1,547	=	-	=	-	-	-	218.1	9	1,264 1,361	-	-	-	11.4	-	-	3.7	11	186
Sep.	262	10	1,794	-	-	-	-	-	-	245.4	10	1,608	-	-	-	11.4	-	-	4.8	11	186
Oct.	301 287	12 13	1,358	-	-	-	-	-	-	276.2	12 13	1,138	-	-	-	11.0 9.0	-	-	4.7 5.7	11 11	220
Nov. Dec.	295	13	1,844 1,844	-	-	-	_	-	-	255.6 276.2	13	1,624 1,624	_	-	_	8.1	-	_	9.4	11	220 220
			· .																-		
2022** Jan.	234	13	1,743	_	_	_	_	_	_	218.6	13	1,557		_	_	7.9	_	_	7.2	11	186
Feb.	252	12	1,736	-	-	-	-	-	-	234.2	12	1,550	-	-	-	6.5	=	-	10.9	11	186
Mar.	306	12	2,302	-	-	=	-	-	-	272.9	12	2,117	-	-	-	11.4	=	-	21.8	11	185
Apr. May	273 276	12 15	1,834 1,849	_	-	-	-	-	-	251.0 262.5	12 15	1,649 1,658	-	-	-	12.1 12.0	-	-	10.4 1.4	10 10	185 191
Jun.	285	15	1,869	_	-	_	-	_	-	265.8	15	1,678	-	-	_	16.0	-	_	3.7	10	191
Jul.	303	19	1,877	-	-	-	-	-	-	283.5	19	1,689	=-	-	-	12.3	-	-	7.5	10	188
Aug. Sep.	338 325	19 16	1,896 1,940	-	-	=	-	-	-	314.6 304.6	19 16	1,699 1,744	=	-	-	18.3 16.5	=	-	4.7 4.1	10 10	197 196
Oct.	322	18	1,940	-	-	-	-	-	-	310.5	18	1,722	-	-	-	7.3	-	-	4.1	10	197
Nov.	271	17	1,929	-	-	-	-	-	-	258.1	17	1,732	-	-	-	10.0	-	-	2.6	10	197
<u> </u>	<u> </u>			<u> </u>			<u> </u>			<u> </u>									L		

Source : Department of Mineral and Geoscience Malaysia

** : Preliminary.

Note : * Aggregate number of mines does not include Retreatment units / 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*	4,158 3,894 3,868 3,611 2,963 3,013 n.y.a	30,536 29,866 27,450 25,644 22,288 322 18,043	26,849 27,211 27,115 24,387 22,367 16,634 19,442	2,238 2,707 1,964 1,441 1,512 1,156 1,152	27,470 27,147 27,342 24,418 22,597 16,441 19,299
2019 Jan. Feb. Mar. Apr. May. Jun. Jul. Aug. Sep. Oct. Nov. Dec.	325 278 324 301 282 213 263 299 320 312 323 356	2,169 1,700 2,263 2,090 1,842 2,393 2,393 2,381 1,998 2,506 2,147 1,762	1,887 1,912 2,169 2,145 1,836 1,536 2,491 2,476 2,234 1,478 2,137 2,086	125 99 134 125 145 129 144 122 111 111 105 91	2,205 1,694 2,195 2,097 1,891 1,630 2,347 2,257 1,886 1,790 2,086 2,340
2020 Jan. Feb. Mar. Apr. May. Jun. Jul. Aug. Sep. Oct. Nov. Dec	289 266 162 36 252 278 272 277 292 295 272 272	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 21	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 n.y.a	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

Sources

: Department of Statistics, Malaysia Department of Mineral and Geoscience Malaysia Malaysia Smelting Corporation Bhd. : Preliminary

: Not yet available n.y.a

MALAYSIA'S DOMESTIC TIN CONSUMPTION (In Tonnes)

PERIOD	TOTAL CONSUMPTION	SOLDER *	TINPLATE	PEWTER	OTHERS *
2016 2017 2018 2019 2020 2021 2021	2,238 2,707 1,964 1,441 1,512 1,156 1,152	1,314 1,348 1,019 695 738 395 400	750 737 759 639 626 710 639	86 63 39 19 8 6	88 559 147 88 140 45 104
2019 Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sep. Oct. Nov. Dec.	125 99 134 125 145 129 144 122 111 111 105	66 60 69 51 70 66 91 60 41 41 45 35	51 35 56 64 62 56 47 51 60 59 52 46	1 0 1 2 1 1 3 1 3 3 1 2	7 4 8 8 12 6 3 10 7 8 7
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 3 0 0	5 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 2	5 3 5 7 5 7 0 4 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	0 1 1 1 0 0 2 0 1 1 1	23 3 6 10 4 6 11 10 7 10 9 5

: Department of Mineral and Geoscience Malaysia Sources

Malaysia Smelting Corporation Bhd

Perstima Bhd

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

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

WORLD MINE PRODUCTION

(In Tonnes)

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

- : Nil

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	1,914	1,443	2,015	99	175	175	175	180	180	180	180	170	170	170
Slovakia	465	645 1605	767 1652	593 1562	614	669 1 715	40 160	27 100	68	47 200	70 140	46 150	72 120	69 150	47 90	50 90	75 200
Spain	1,495 6,492	1,605 5 457	1,652 6,020	1,563 5,835	1,898	1,715 6,105	160	100 530	200 549	200	148 517	150 541	128 500	150 500	80 206	80 300	200 700
Sweden Switzerland	6,492 47	5,457 69	6,020 45	5,835	5,343 44	6, 105 46	600 1	530 10	549 10	550 10	517 13	10	5UU 1	500	296 10	300 10	/00
United Kingdom	979	936	45 961	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	70	40	40	40	40	40	40	40	40
AFRICA	107	110	225	17.4	120	101	20	15	15	15	10	10	_	-	10	10	10
Egypt	107	119	225	174	139	181	20	15	15	15	10	10	5	5	10	10	10
Morocco	21	15	22	20	22	27	3	0	2	5	6	4	0	0	0	0	0
Nigeria	300	623	1,436	1,322	240	240	20	20	20	20	20	20	20	20	20	20	20
South Africa Other Africa	1,047 720	957 720	633 720	604 720	326 530	340 480	59 40	24 0	36 40	44 40	34 40	35 40	35 40	30 40	49 10	50 40	50 40
	720	720	720	720	530	480	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 4 7	10 100	20.065	10.670	F 20.4	15 000	17.620	10.710	10.657
China	191,415	183,391	174,183	177,891	216,152	191,061	13,800	13,487	16,747	18,109	20,865	10,670	5,284	15,088	17,620	18,719	18,657
Hong Kong	1,800	1,800	3,300	3,600	480	1,359	130 912	130	130 910	130	130	130	130	130	130	130	130
India Indonesia	9,088 1,200	9,861 1,200	11,365 1,200	10,615 1,200	9,734 1,200	10,566 1,200	100	900 100	100	900 100	694 100	934 100	1,812 100	1,211 100	1,423 100	1,400 100	1,000 100
Iran	987	1,200	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	20,130	20,303	1,323	50	50	1,7 54	0,000	45	20	130	50	1,051	2,102
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
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

Source : World Bureau of Metal Statistics