

MALAYSIAN TIN BULLETIN

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APRIL TIN MARKET REVIEW

Kuala Lumpur Tin Market (KLTM)

Again, no trade was recorded during the month of April on the KLTM since no refined tin metal was offered for sale on the local physical tin market. The market was closed on the 21st and 24th April in conjunction with the Hari Raya Aidilfitri holidays.

London Metal Exchange (LME)

Tin metal trading on the LME in April was generally mixed. The market, however, saw strong demand and tight supply during the month.

LME cash tin was traded within a wide price range of US\$23,940 to US\$27,660 per tonne, while three-month tin was traded between US\$23,900 to US\$27,650 per tonne during the month. April's average LME cash and three-month tin prices were US\$25,886 and US\$25,744 per tonne, respectively.

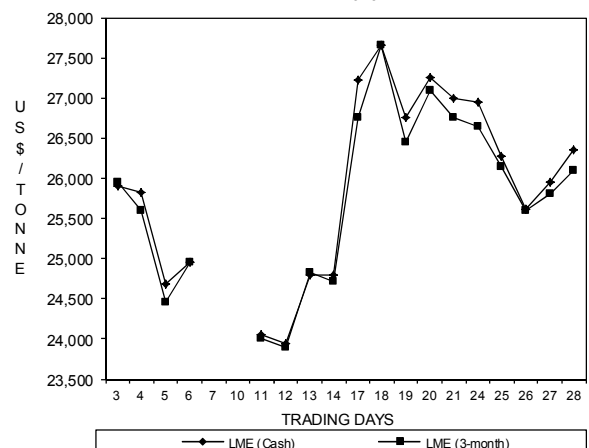
Tin trading began the first trading week at US\$25,900 per tonne for cash tin and US\$25,950 per tonne for three-month tin. It softened the next two days but reversed the downtrend before the market closed for Good Friday at end of the trading week.

The market was closed again at the opening of the second trading week in conjunction with the Easter Monday holiday. When trading resumed the following day, it declined to record its lowest price level for the month at US\$23,940 per tonne for cash tin and US\$23,900 per tonne for three-month tin, which were both recorded on 12th April. Bolstered by encouraging demand, the market rebounded afterwards to end the trading week higher.

Continuing strong demand boosted the tin price during the early days of the third trading week to reach its highest price level for the month at US\$27,660 per tonne for cash tin and US\$27,650 per tonne for three-month tin. They were both recorded on 18th April. Thereafter, it zigzagged downward to end the trading week slightly easier.

The tin price continued to ease towards middle of the final trading week as demand softened. Following some technical corrections, it rebounded somewhat to close the April trading month at US\$26,350 per tonne for cash tin and at US\$26,100 per tonne for three-month tin, higher than their respective opening prices.

**LME TIN PRICES
APRIL 2023**



NEWS HIGHLIGHT

Tin Spooked by Threat of Supply Disruption

Tin prices leapt higher on Monday on news of a possible production halt in Myanmar, the world's third-largest producer of the soldering metal. London Metal Exchange three-month tin jumped by 11% to hit a two-month high of US\$27,705 (RM122,913) per tonne and was last trading at US\$27,180 (RM120,584). It took its lead from the Shanghai Futures Exchange (ShFE), which was already seeing record levels of trading activity before the latest turmoil.

The unexpected threat to supply comes in the form of a statement from the Central Economic Planning Committee of the Wa State, Myanmar's most powerful ethnic armed group that controls the tin-mining area on the border with China. All mining and processing activities will be "suspended" from the start of August to preserve the remaining resource, according to a document seen by Reuters.

It seems a strange move, given tin is such an important source of revenue for the self-declared Wa State, and there may well be more to the announcement than meets the eye. But it serves to highlight the importance of one of the most inaccessible parts of South-East Asia to the global tin supply chain. China's tin smelters are particularly exposed even though they have been trying to cut their dependence on Myanmar ore.

Myanmar's Tin Rush

Myanmar was a significant producer of tin before World War II but the industry had all but vanished by the end of the last century. The first anyone knew of a significant new tin find was in 2013, when large quantities of ore and concentrates from Myanmar started turning up in China's import figures. Imports from Myanmar grew from 30,000 tonnes in 2012 to 89,000 tonnes in 2013 and mushroomed to almost 500,000 tonnes in 2016.

The mid-decade peak coincided with a sharp drop in implied value, suggesting the movement of lower-grade stockpiled metal. The raw materials import flow has since stabilised at around 150,000 to 200,000 tonnes a year. What began as small-scale and artisanal mining quickly became mechanised and semi-formalised as the United Wa State Army (UWSA) took control of the core Man Maw mining area.

The International Tin Association visited the site in 2016 and estimated it was operating close to its 50,000-tonne-per-year contained metal capacity, albeit with significant potential for new finds. The United States Geological Survey estimates production last year fell to 31,000 tonnes from 36,900 tonnes in 2021, still making the country the world's third-largest supplier after China and Indonesia. It's a controversial one, too, given the UWSA was put on the United States sanctions list in 2003 for alleged narcotics trafficking.

The Myanmar tin boom occurred at the right time for China's tin smelters, many of which were struggling to bring on new

mining capacity as Beijing steadily tightened environmental controls on the mining sector. But the risks of becoming overly dependent on its neighbour became apparent when Covid-19 restrictions massively disrupted both Myanmar's mining output and the flow of raw materials over the border. China's smelters have been busy tracking down new potential sources of tin.

The ratio of Myanmar imports has fallen from nearly 100% of total ore and concentrates imports over the middle of the last decade to 77% in 2022. Last year's imports included 23,500 tonnes from the Democratic Republic of Congo, 11,500 tonnes from Australia and 3,000 tonnes from Nigeria as well as smaller amounts from Laos, Vietnam, Thailand, Malaysia and Russia. However, it's doubtful that supply from alternative sources could be ramped up fast enough or at sufficient scale to offset the loss, even temporary, of material from Myanmar.

Insecurity of Supply

The speed of Monday's price action says as much about market positioning as it does about the immediate supply impact. The Shanghai tin market has recently seen extremely elevated levels of trading activity, with both turnover and open interest hitting fresh life-of-contract highs in March. Last month's volumes of 5.34 million tonnes were 14 times greater than last year's global production of 380,000 tonnes.

Shifts in ShFE market open interest suggest tin's new speculative friends have been trading from the short side, or they were until Monday, when open interest surged again into the price rally. The bearish stance made sense given a significant easing in soldering demand from a slowing consumer electronics sector and the build in visible inventory in China.

ShFE-registered stocks have risen by 65% since the start of January to 9,056 tonnes, their highest level since 2017. That will provide plenty of short-term cushion for Chinese buyers as they and everyone else wait to see if the Wa State is serious about suspending production.

However, the threat alone underscores the fragility of tin supply at a time when Indonesia, the largest exporter of the metal in refined form, is mulling an export ban to stimulate the build-out of downstream processing capacity. The tin production sector has been chronically under-invested for many years and has ridden its luck on small-scale miners finding the big deposits, as was the case in Myanmar in the 2010s and Brazil in the 1990s.

A failure to diversify supply has left tin's fortunes at least partly dependent on the shadowy UWSA and its opaque policy-making processes. This is probably not going to be the last time tin gets spooked by unexpected news from Myanmar.

(Source: *The Star*, 19 April 2023)

NEWS ROUND-UP

Penouta Achieved Record Production after Transitioning to Open-pit

Tin production at Penouta, the EU's largest active tin mine, reached a record high in 2022 after successfully transitioning to open-pit mining. The mine is located in north-western Spain.

Penouta has been in operation since 2018. Project owners, Strategic Minerals Europe (SME), were processing material at the B1 tailings pond before switching to open-pit mining early last year.

The company's spokesman said "With the successful transition to open pit mining... along with other operational improvements, we had a record year in terms of the production and quality of concentrates". SME achieved record tin concentrate production of 455 tonnes in 2022, an increase of 84 per cent from 2021 pre-open-pit mining figures.

With an increase in concentrate grades to 70.4 per cent, tin-in-concentrate production is estimated to have doubled, year-on-year, reaching around 325 tonnes.

The increase in production comes despite hindered operations throughout the year from bad weather conditions in the summer and a malfunctioning primary mill in the final quarter. SME has since completed a significant overhaul of its primary mill in March 2023, believing the upgrade will renew the equipment's useful lifetime and therefore increase production.

The company's spokesman added "While adverse weather conditions and macroeconomic headwinds made 2022 a challenging year, our strong production and improving margins highlight the successful application of our strategy". SME expects to increase production further in 2023.

Alphamin Sets Record Quarter

Alphamin's latest quarter saw the company achieved record tin production, exceeding levels set in the previous year.

Tin metal production from its Bisie mine located in the Democratic Republic of Congo reached 3,187 tonnes during the first quarter. It was marginally higher than the previous record of 3,180 tonnes achieved during the second quarter of 2022.

However, there were notable variations in the quantity and quality of material processed despite similar levels of production between the two mentioned periods. The company significantly scaled back the run-of-mine volumes this quarter to increase the recovery of the higher-grade material that they processed. The average tin grade of 4.4 per cent achieved was at the highest level since 2019, whilst the 95,752 tonnes of ore processed was the lowest recorded since early 2021.

At 3,161 tonnes, tin sales were also strong for the quarter and in line with production. With the tin price also performing well, the company reported an expected earnings before interest, taxes, depreciation, and amortization (EBITDA) of US\$31.4 million, an increase of 53 per cent, quarter-on-quarter.

The company released an updated mineral resource estimation (MRE) for its developing project, Mpama South, in February this year. In its latest note, Alphamin shared an update on the progress of the project's processing plant. Whilst providing details of progress across separate areas, the plant "as a whole is 66 per cent complete" and remains on track to be commissioned in December.

Myanmar's Wa State to Suspend Tin Mining from August

Myanmar's Wa State has announced the suspension of its mining operations from 1st August 2023. International Tin Association (ITA) estimates that this would represent about 10 per cent of the world's tin concentrate supply.

The document released on 15th April 2023 by the Wa State Central Economic Planning Commission said, "in order to protect the remaining mineral resources in Wa State in a timely manner, all mining and excavation of mineral resources are suspended until mature mining conditions are in place". The document has since been confirmed by a United Wa State Army information official, as reported by Reuters.

Wa is a major tin mining district in Myanmar, and supplies a significant portion of concentrate for China, the world's largest refined tin producer. In 2022, almost two-thirds of China's imported tin-in-concentrate came from Myanmar, totalling 48,000 tonnes. About 40,000 tonnes of this came from the country's mine production, of which 70 per cent is estimated to have come from Wa State. An additional 8,000 tonnes came from Wa government stockpiles during the record tin prices in early 2022.

Significant Tin Production Growth at Renison

Metals X Limited has reported a significant increase in ore mined, tin production and operational challenges during the first quarter of 2023 at its Renison operation, located on the west coast of Tasmania. The Renison tin operation is a 50:50 joint venture between Metals X Limited and Yunnan Tin Group.

The Renison operation reported an increase in total ore mined and tin production during the quarter, with total ore mined increasing by 14.1 per cent from 186,291 tonnes during the fourth quarter of 2022 to 212,578 tonnes during the first quarter of 2023. Similarly, total tin produced increased by just under 3 per cent from 1,925 tonnes to 1,981 tonnes during the same period.

However, the quarterly report also highlighted the decrease in the recovery rate at the mill from 75.2 per cent during the fourth quarter of 2022 to 74.2 per cent during the first quar-

ter of 2023. The grade of ore processed also decreased from 1.63 per cent to 1.57 per cent during the same period with high talc and sulphur grades impacted the overall recovery rate, although the grade of ore mined increased from 1.23 per cent to 1.41 per cent.

Meanwhile, the amount of tin-in-concentrate shipped to MSC and Thaisarco during the first quarter of 2023 decreased to 824 tonnes from 1,209 tonnes. Metals X stated that it was pleased with the increased mined ore and tin production but acknowledged that challenges such as the drop in mill recovery and decline in shipments to its key customers were areas of concern. The company added that it would be implementing measures to address these issues, including reviewing its mining and processing methods.

(Source: International Tin Association Ltd. UK)

KLTM & LME TIN PRICES

Period	KLTM				LME	
	Average Price * (US\$/Tonne)	Exchange Rates	Average Daily Turnover (Tonnes)	Total Turnover (Tonnes)	Cash (US\$/Tonne)	3-Month (US\$/Tonne)
2016	17,528		47	11,568	17,982	17,889
2017	20,029		37	8,890	20,098	19,994
2018	20,151		37	9,075	20,168	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
2022	41,007		5	21	31,384	31,122
2020	Jan.		19	406	17,056	17,057
	Feb.		18	354	16,457	16,456
	Mar.		20	236	15,321	15,307
	Apr.	C L O S E D			15,039	14,949
	May		17	268	15,410	15,231
	Jun.		18	374	16,806	16,627
	Jul.		16	358	17,452	17,375
	Aug.		18	343	17,672	17,649
	Sep.		21	444	17,946	17,962
	Oct.		18	383	18,154	18,152
	Nov.		20	413	18,568	18,539
	Dec.		23	509	19,727	19,643
2021	Jan.		17	314	21,955	21,596
	Feb.		25	456	26,717	24,415
	Mar.		21	494	27,396	25,079
	Apr.		16	327	28,427	26,568
	May		17	298	32,524	29,736
	Jun.		12	61	32,678	30,829
	Jul.	C L O S E D			34,183	33,010
	Aug.	C L O S E D			35,205	34,352
	Sep.	C L O S E D			35,048	34,109
	Oct.	C L O S E D			37,962	36,567
	Nov.	C L O S E D			39,333	38,042
	Dec.		5	5	39,574	38,956
2022	Jan.		5	21	41,807	41,344
	Feb.	NO TRANSACTION			44,118	43,820
	Mar.	NO TRANSACTION			44,249	43,917
	Apr.	NO TRANSACTION			43,122	42,644
	May	NO TRANSACTION			35,945	35,617
	Jun.	NO TRANSACTION			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.	NO TRANSACTION			19,406	19,373
	Nov.	NO TRANSACTION			21,136	21,004
	Dec.	NO TRANSACTION			24,099	24,038
2023	Jan.	NO TRANSACTION			28,081	28,146
	Feb.	NO TRANSACTION			27,070	27,218
	Mar.	NO TRANSACTION			24,014	24,076
	Apr.	NO TRANSACTION			25,886	25,744
2023 APR	3	NO TRANSACTION			25,900	25,950
	4	NO TRANSACTION			25,825	25,600
	5	NO TRANSACTION			24,675	24,450
	6	NO TRANSACTION			24,950	24,950
	7	NO TRANSACTION			CLOSED	
	10	NO TRANSACTION			CLOSED	
	11	NO TRANSACTION			24,050	24,000
	12	NO TRANSACTION			23,940	23,900
	13	NO TRANSACTION			24,795	24,825
	14	NO TRANSACTION			24,800	24,715
	17	NO TRANSACTION			27,225	26,755
	18	NO TRANSACTION			27,660	27,650
	19	NO TRANSACTION			26,750	26,450
	20	NO TRANSACTION			27,250	27,100
	21	NO TRANSACTION			27,000	26,750
	24	NO TRANSACTION			26,950	26,650
	25	NO TRANSACTION			26,270	26,150
	26	NO TRANSACTION			25,610	25,600
	27	NO TRANSACTION			25,950	25,800
	28	NO TRANSACTION			26,350	26,100

Sources : The Kuala Lumpur Tin Market
London Metal Exchange

Note : As from 1 February 2001, KLTM price is quoted in U.S. Dollar

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

WORLD REFINED TIN STOCKS (Tonnes)

Period	LME Stock	COUNTRY STOCKS							Total Country Stocks	Total Commercial Stocks	US Strategic Stockpile
		Germany	U.K	Indonesia*	Japan	Malaysia*	Brazil*	U.S.A			
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	2,165	2,130	955	2,587	1,469	439	3,600	5,610	16,790	27,226	4,020
2019	7,130	2,130	955	8,600	1,806	400	3,600	5,920	23,217	35,678	4,020
2020	1,890	2,130	955	8,600	1,473	271	3,600	5,100	22,129	29,464	4,020
2021	2,045	2,130	955	8,600	1,545	377	3,600	4,530	21,737	25,142	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	2,130	955	8,594	1,834	439	3,600	5,580	23,132	31,451	4,020
May.	2,810	2,130	955	8,600	1,849	439	3,600	5,510	23,083	34,096	4,020
Jun.	6,045	2,130	955	8,600	2,520	209	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.	6,620	2,130	955	8,600	2,013	919	3,600	5,510	23,017	34,215	4,020
Oct.	6,020	2,130	955	8,600	2,100	400	3,600	5,510	23,104	33,684	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.	5,375	2,130	955	8,600	1,761	268	3,600	4,780	22,094	31,171	4,020
May.	2,455	2,130	955	8,600	1,850	268	3,600	5,090	22,183	28,129	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.	5,040	2,130	955	8,600	1,520	268	3,600	5,080	22,143	30,811	4,020
Sep.	5,550	2,130	955	8,600	1,663	432	3,600	5,100	22,480	31,518	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											
Jan.	820	2,130	955	8,600	1,570	271	3,600	5,240	22,366	29,477	4,020
Feb.	1,745	2,130	955	8,600	1,578	271	3,600	5,910	23,044	33,151	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	755	2,130	955	8,600	1,573	181	3,600	4,550	21,589	28,232	4,020
Jun.	2,015	2,130	955	8,600	1,573	181	3,600	4,500	21,539	27,012	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.	1,235	2,130	955	8,600	1,518	265	3,600	4,440	21,508	24,344	4,020
Oct.	670	2,130	955	8,600	1,518	265	3,600	4,510	21,508	23,287	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.	2,245	2,130	955	8,600	1,550	181	3,600	5,060	22,076	27,342	4,020
Mar.	2,000	2,130	955	8,600	1,535	181	3,600	4,940	21,941	26,552	4,020
Apr.	2,010	2,130	955	8,600	1,551	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.	2,765	2,130	955	8,600	1,616	681	3,600	4,770	22,352	28,868	4,020
Jul.	3,330	2,130	955	8,600	1,572	230	3,600	4,740	21,827	29,267	4,020
Aug.	4,065	2,130	955	8,600	1,572	230	3,600	4,700	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.	4,255	2,130	955	8,600	1,572	230	3,600	4,770	21,857	28,643	4,020
Nov.	2,930	2,130	955	8,600	1,572	230	3,600	4,740	21,827	28,900	4,020
Dec.	2,880	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

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	AGGREGATE			Dredging			Gravel Pump			Open Cast			Under Ground			Panning			Avg Rtmt / Min Pro Plnt		
	Prod.	Units*	Emp.	Prod.	Units	Emp.	Prod.	Units	Emp.	Prod.	Units	Emp.	Prod.	Units	Emp.	Prod.	Units	Emp.	Prod.	Units	Emp.
2016	4,158	14	1,406	-	-	-	-	-	-	3,388	14	1,130	-	-	-	293	-	-	442	18	276
2017	3,894	16	1,286	-	1	36	-	-	-	3,104	16	1,058	-	-	-	406	-	-	390	16	228
2018	3,868	12	1,295	-	-	-	-	-	-	3,184	12	1,075	-	-	-	424	-	-	260	11	220
2019	3,611	13	1,387	-	-	-	-	-	-	3,103	13	1,201	-	-	-	244	-	-	264	11	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
2022**	3,517	19	2,037	-	-	-	-	-	-	3,298	19	1,840	-	-	-	138	-	-	80	10	197
2019																					
Jan.	325	11	1,242	-	-	-	-	-	-	272.0	11	1,025	-	-	-	28.7	-	-	24.8	11	217
Feb.	278	12	1,262	-	-	-	-	-	-	243.3	12	1,070	-	-	-	22.1	-	-	12.5	11	192
Mar.	324	13	1,289	-	-	-	-	-	-	286.0	13	1,097	-	-	-	18.4	-	-	20.0	11	192
Apr.	301	13	1,290	-	-	-	-	-	-	250.1	13	1,098	-	-	-	16.1	-	-	34.6	11	192
May	282	12	1,283	-	-	-	-	-	-	240.2	12	1,091	-	-	-	22.2	-	-	19.4	11	192
Jun	213	12	1,254	-	-	-	-	-	-	181.9	12	1,067	-	-	-	15.3	-	-	15.7	11	187
July	263	12	1,282	-	-	-	-	-	-	227.1	12	1,095	-	-	-	15.9	-	-	20.4	11	187
Aug.	299	10	1,396	-	-	-	-	-	-	260.2	10	1,209	-	-	-	20.0	-	-	19.1	11	187
Sep.	320	10	1,281	-	-	-	-	-	-	280.6	10	1,094	-	-	-	20.5	-	-	19.4	11	187
Oct.	312	12	1,441	-	-	-	-	-	-	262.6	12	1,255	-	-	-	15.4	-	-	33.5	11	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.	289	12	1,434	-	-	-	-	-	-	273.0	12	1,248	-	-	-	11.4	-	-	3.6	11	186
Feb.	266	12	1,387	-	-	-	-	-	-	234.0	12	1,201	-	-	-	20.1	-	-	11.4	12	186
Mar.	162	13	1,550	-	-	-	-	-	-	143.9	13	1,364	-	-	-	13.2	-	-	4.6	12	186
Apr.	36	13	1,410	-	-	-	-	-	-	34.2	13	1,224	-	-	-	1.8	-	-	-	12	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	272	12	1,411	-	-	-	-	-	-	258.4	12	1,225	-	-	-	9.0	-	-	4.2	11	186
Aug.	277	13	1,567	-	-	-	-	-	-	263.7	13	1,381	-	-	-	9.2	-	-	3.8	11	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.	272	14	1,573	-	-	-	-	-	-	257.1	14	1,387	-	-	-	6.0	-	-	8.4	11	186
Dec.	272	10	1,534	-	-	-	-	-	-	261.4	10	1,348	-	-	-	7.1	-	-	3.3	11	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.	297	10	1,550	-	-	-	-	-	-	271.9	10	1,364	-	-	-	12.9	-	-	5.0	11	186
Apr.	294	11	1,551	-	-	-	-	-	-	277.7	11	1,365	-	-	-	11.0	-	-	5.5	11	186
May	262	11	1,508	-	-	-	-	-	-	244.5	11	1,322	-	-	-	11.3	-	-	5.8	11	186
Jun.	44	10	1,450	-	-	-	-	-	-	40.1	10	1,264	-	-	-	0.0	-	-	4.2	11	186
Jul.	204	10	1,450	-	-	-	-	-	-	199.2	10	1,264	-	-	-	1.0	-	-	3.7	11	186
Aug.	233	9	1,547	-	-	-	-	-	-	218.1	9	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	12	1,358	-	-	-	-	-	-	276.2	12	1,138	-	-	-	11.0	-	-	4.7	11	220
Nov.	287	13	1,844	-	-	-	-	-	-	255.6	13	1,624	-	-	-	9.0	-	-	5.7	11	220
Dec.	295	13	1,844	-	-	-	-	-	-	276.2	13	1,624	-	-	-	8.1	-	-	9.4	11	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.	273	12	1,834	-	-	-	-	-	-	251.0	12	1,649	-	-	-	12.1	-	-	10.4	10	185
May	276	15	1,849	-	-	-	-	-	-	262.5	15	1,658	-	-	-	12.0	-	-	1.4	10	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.	338	19	1,896	-	-	-	-	-	-	314.6	19	1,699	-	-	-	18.3	-	-	4.7	10	197
Sep.	325	16	1,940	-	-	-	-	-	-	304.6	16	1,744	-	-	-	16.5	-	-	4.1	10	196
Oct.	322	18	1,919	-	-	-	-	-	-	310.5	18	1,722	-	-	-	7.3	-	-	4.4	10	197
Nov.	271	17	1,929	-	-	-	-	-	-	258.1	17	1,732	-	-	-	10.0	-	-	2.6	10	197
Dec.	331	19	2,037	-	-	-	-	-	-	322.1	19	1,840	-	-	-	7.8	-	-	1.5	10	197

Source : Department of Mineral and Geoscience Malaysia

** : Preliminary.

- : Nil

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	4,158	30,536	26,849	2,238	27,470
2017	3,894	29,866	27,211	2,707	27,147
2018	3,868	27,450	27,115	1,964	27,342
2019	3,611	25,644	24,387	1,441	24,418
2020	2,963	22,288	22,367	1,512	22,597
2021	3,013	322	16,634	1,156	16,441
2022*	3,517	18,043	19,442	1,152	19,299
2019					
Jan.	325	2,169	1,887	125	2,205
Feb.	278	1,700	1,912	99	1,694
Mar.	324	2,263	2,169	134	2,195
Apr.	301	2,090	2,145	125	2,097
May.	282	1,842	1,836	145	1,891
Jun.	213	2,393	1,536	129	1,630
Jul.	263	2,393	2,491	144	2,347
Aug.	299	2,381	2,476	122	2,257
Sep.	320	1,998	2,234	111	1,886
Oct.	312	2,506	1,478	111	1,790
Nov.	323	2,147	2,137	105	2,086
Dec.	356	1,762	2,086	91	2,340
2020					
Jan.	289	2,136	2,314	93	2,180
Feb.	266	1,449	1,880	119	2,226
Mar.	162	1,105	1,228	71	1,191
Apr.	36	1,198	1,110	75	933
May.	252	2,187	1,344	99	1,516
Jun.	278	1,927	1,926	190	1,644
Jul.	272	1,972	1,819	150	2,240
Aug.	277	2,785	2,672	151	2,290
Sep.	292	2,398	2,057	138	2,198
Oct.	295	1,565	2,078	146	2,126
Nov.	272	1,536	1,974	125	2,108
Dec.	272	2,030	1,965	155	1,945
2021					
Jan.	278	28	1,639	145	1,770
Feb.	257	29	1,847	70	1,765
Mar.	297	46	2,041	113	1,982
Apr.	294	47	1,680	115	1,836
May.	262	26	1,861	91	1,638
Jun.	44	0	695	86	894
Jul.	204	21	973	84	507
Aug.	233	19	1,115	86	1,085
Sep.	262	59	1,221	85	1,599
Oct.	301	16	1,349	98	1,165
Nov.	287	10	1,086	91	1,172
Dec.	295	21	1,127	92	1,028
2022*					
Jan.	234	1,173	1,332	106	1,305
Feb.	252	1,162	1,160	108	1,017
Mar.	306	1,258	1,653	89	1,659
Apr.	273	1,511	1,417	117	1,431
May	276	1,660	1,143	82	1,333
Jun.	285	1,729	1,730	76	1,481
Jul.	303	1,475	1,886	100	1,494
Aug.	338	1,397	2,211	94	2,402
Sep.	325	1,313	1,592	83	1,948
Oct.	322	1,842	1,692	82	1,431
Nov.	271	1,454	1,702	117	1,622
Dec.	331	2,069	1,924	98	2,176

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

MALAYSIA'S DOMESTIC TIN CONSUMPTION (In Tonnes)

PERIOD	TOTAL CONSUMPTION	SOLDER *	TINPLATE	PEWTER	OTHERS *
2016	2,238	1,314	750	86	88
2017	2,707	1,348	737	63	559
2018	1,964	1,019	759	39	147
2019	1,441	695	639	19	88
2020	1,512	738	626	8	140
2021	1,156	395	710	6	45
2022	1,152	400	639	9	104
2019					
Jan.	125	66	51	1	7
Feb.	99	60	35	0	4
Mar.	134	69	56	1	8
Apr.	125	51	64	2	8
May	145	70	62	1	12
Jun.	129	66	56	1	6
Jul.	144	91	47	3	3
Aug.	122	60	51	1	10
Sep.	111	41	60	3	7
Oct.	111	41	59	3	8
Nov.	105	45	52	1	7
Dec.	91	35	46	2	8
2020					
Jan.	93	40	48	0	5
Feb.	119	62	52	0	5
Mar.	71	22	45	0	4
Apr.	75	19	53	0	3
May	99	49	44	0	6
Jun.	190	74	67	3	46
Jul.	150	84	55	3	8
Aug.	151	49	65	0	37
Sep.	138	85	46	0	7
Oct.	146	77	59	0	10
Nov.	125	78	40	2	5
Dec.	155	99	52	0	4
2021					
Jan.	145	73	66	1	5
Feb.	70	30	37	0	3
Mar.	113	40	68	0	5
Apr.	115	39	68	1	7
May	91	40	46	0	5
Jun.	86	29	50	0	7
Jul.	84	20	64	0	0
Aug.	86	25	57	0	4
Sep.	85	30	53	2	0
Oct.	98	29	69	0	0
Nov.	91	20	69	2	0
Dec.	92	20	63	0	9
2022					
Jan.	106	27	56	0	23
Feb.	108	35	69	1	3
Mar.	89	24	58	1	6
Apr.	117	39	67	1	10
May	82	24	54	0	4
Jun.	76	20	50	0	6
Jul.	100	25	62	2	11
Aug.	94	30	54	0	10
Sep.	83	40	35	1	7
Oct.	82	30	41	1	10
Nov.	117	57	50	1	9
Dec.	98	49	43	1	5
2023					
Jan.	n.y.a	n.y.a	31	n.y.a	n.y.a
Feb.	n.y.a	n.y.a	40	n.y.a	n.y.a
Mar.	n.y.a	n.y.a	29	n.y.a	n.y.a

Sources : Department of Mineral and Geoscience Malaysia

Malaysia Smelting Corporation Bhd

Perstima Bhd

* : The figures include high-grade tin (99.9% Sn) imported for consumption.

n.y.a : not yet available

Note : Local 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 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	48	56	60	108	108	108	9	9	9	9	9	9	9	9	9	9	9
Spain	7	23	32	147	74	49	2	2	2	2	2	2	10	10	10	10	10
Russia	1,140	702	1,200	2,264	2,538	2,920	244	250	182	237	237	238	200	200	200	200	200
United Kingdom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AFRICA																	
Burundi	51	123	126	143	121	127	47	50	50	50	50	50	-	11	-	-	-
DR Congo	4,128	7,145	9,000	6,250	13,508	15,000	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,047	1,000	1,000
Egypt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Namibia	-	-	-	9	242	499	45	53	50	50	52	50	50	50	50	50	49
Nigeria	3,827	5,964	8,784	7,020	5,848	6,900	500	500	500	500	500	500	1,200	1,200	518	500	500
Rwanda	2,621	3,508	2,400	2,223	1,692	2,122	150	150	150	150	150	150	200	200	200	200	200
South Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zimbabwe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tanzania	104	68	6	18	1,600	1,200	100	100	100	100	100	100	100	100	100	100	100
Uganda	-	66	53	50	-	-	-	-	-	-	-	-	-	-	-	-	-
ASIA																	
China	153,100	163,000	157,500	142,900	161,300	152,200	10,500	10,500	10,500	11,000	13,800	6,600	7,000	7,000	6,200	13,700	9,200
Indonesia	60,000	60,000	84,000	86,400	65,400	60,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Kazakhstan	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Laos	1,308	779	566	1,156	1,237	1,415	249	157	200	337	54	50	117	312	195	200	200
Malaysia	4,123	3,967	3,999	4,080	3,183	3,180	265	265	265	265	265	265	265	265	265	265	265
Mongolia	36	50	60	110	120	120	10	10	10	10	10	10	10	10	10	10	10
Myanmar	47,435	58,883	45,900	33,750	29,100	29,544	1,800	1,800	4,300	1,900	800	800	3,500	3,500	2,600	2,500	2,000
Thailand	124	705	720	720	720	720	60	60	60	60	60	60	60	60	60	60	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
AMERICA																	
Bolivia	17,614	17,973	17,259	17,194	14,710	19,462	1,700	1,700	1,700	1,500	1,500	1,500	1,500	1,500	1,400	1,400	1,400
Brazil	25,500	18,000	18,000	18,000	15,000	17,168	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Peru	18,789	17,790	18,601	19,683	20,647	26,995	2,410	2,043	2,366	2,373	2,406	2,287	2,675	1,920	2,263	2,454	2,368
U.S.A.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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
							Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
EUROPE																	
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	767	593	614	669	40	27	68	47	70	46	72	69	47	50	75
Spain	1,495	1,605	1,652	1,563	1,898	1,715	160	100	200	200	148	150	128	150	80	80	200
Sweden	6,492	5,457	6,020	5,835	5,343	6,105	600	530	549	550	517	541	500	500	296	300	700
Switzerland	47	69	45	60	44	46	1	10	10	10	13	10	1	5	10	10	5
United Kingdom	979	936	961	262	102	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
AFRICA																	
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	1,047	957	633	604	326	340	59	24	36	44	34	35	35	30	49	50	50
Other Africa	720	720	720	720	530	480	40	0	40	40	40	40	40	40	10	40	40
ASIA																	
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	130	130	130	130	130	130	130	130	130	130
India	9,088	9,861	11,365	10,615	9,734	10,566	912	900	910	900	694	934	1,812	1,211	1,423	1,400	1,000
Indonesia	1,200	1,200	1,200	1,200	1,200	1,200	100	100	100	100	100	100	100	100	100	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	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
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