MALAYSIAN
TIN BULLETIN

JULY 2025
VOLUME 36 NO. 7

+603 21616171 / 21616173

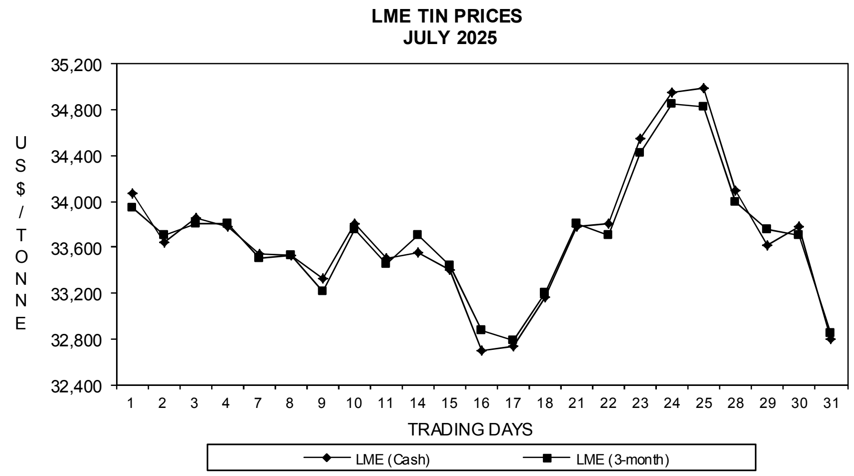
Tin Industry (Research and Development) Board
8th Floor, West Block, Wisma Golden Eagle Realty
142 C, Jalan Ampang, 50450 Kuala Lumpur

mcom@mcom.com.my

WHAT'S INSIDE

The Malaysian Tin Bulletin is published by the Secretary of the Tin Industry (Research and Development) Board, Ministry of Natural Resources and Environmental Sustainability. The Bulletin is prepared from information obtained from official or other sources believed to be reliable and accurate. The Tin Board, however, cannot accept any liability for any error or omission therein.

JULY TIN MARKET REVIEW



London Metal Exchange (LME)

Tin metal trading on the LME in July was generally mixed. Cash tin was traded within a price range of US$32,700 to US$34,995 per tonne, while 3-month tin was traded between US$32,785 to US$34,855 per tonne during the month. July's average LME cash and 3-month tin prices were US$33,693 and US$33,678 per tonne, respectively.

The market kicked start the first trading week at US$34,075 per tonne for cash tin and US$33,950 per tonne for 3-month tin, higher than June's closing of US$33,845 per tonne and US$33,700 per tonne, respectively. It softened the next day before making an upward turnaround for the rest of the week.

Some technical correction pressured the tin price downward during the first half of the second trading week. It regained strength, thereafter, but retreated at the close of the trading week.

After inching-up at the start of the third trading week, the tin price declined to reach the month's lowest price level on 16th July for cash tin at US$32,700 per tonne, while the lowest price level for 3-month tin was recorded the following day at US$32,785 per tonne. The tin price rose to close the trading week higher after being bolstered by strong demand.

Continuing strong demand boosted the tin price higher during the fourth trading week to reach the month's highest price level on 24th July for 3-month tin at US$34,855 per tonne. The highest price level for cash tin was recorded the next day at US$34,995 per tonne. Sentiment was bullish with buyers actively participating in the market.

The final trading week saw the tin price declining throughout the week to close the July trading month at US$32,800 per tonne for cash tin and at US$32,845 per tonne for 3-month tin, lower than their respective opening price level.

NEWS ROUND-UP

Indium Tin Oxide Layer Improves Sodium Battery Performance

Researchers in China have developed a promising new design for solid-state sodium batteries using a tin-based interlayer to solve long-standing performance problems. The approach combines a newly formulated solid electrolyte with a thin layer of indium tin oxide (ITO) – a conductive material made partly from tin – that improves battery performance.

Solid-state batteries replace flammable liquid electrolytes with solid ones, making them safer and more stable. However, solid-state sodium batteries face a big hurdle: the solid electrolyte often struggles to conduct sodium ions efficiently, and the interface between the electrolyte and sodium metal can be unstable.

To overcome this, scientists developed a multi-cation doped NASICON (Na super ionic conductor) electrolyte, which is a ceramic material that allows sodium ions to move through it. By adding zinc, magnesium, and scandium into its structure, they boosted the material's ionic conductivity by 10 times to 4.24 milliSiemens per centimeter.

But it's the addition of ITO that really stands out. Applied as an ultrathin layer between the electrolyte and sodium metal, ITO smooths the contact surface and helps sodium spread evenly, preventing dangerous growths called dendrites that can short-circuit a battery. Due to the ITO coating, the battery could operate reliably for over 1700 hours at high currents, with no signs of failure.

ITO is already widely used in modern technologies. It's the transparent, conductive layer found in most touchscreens, LED displays, and many types of solar cells.

This study adds solid-state sodium batteries to ITO's growing list of applications, demonstrating how tin is enabling innovation across multiple sectors of the clean technology landscape.

Bisie Mine Performance Stable after Resuming Operation

Alphamin Resources, a Mauritius-based tin miner, saw production from its Bisie mine in eastern DR Congo declined marginally to 4,106 tonnes in the second quarter.

Production fell 3.8 per cent from the first quarter due to the 28-day mining halt from mid-March to mid-April following the advance of non-state armed groups in the direction of the mine. It was, however, an increase of 2.0 per cent from the second quarter of 2024. This second quarter 2025 production was below the company's production target of 5,000 tonnes.

The grade of tin processed fell from 3.55 per cent Sn in the first quarter to 3.16 per cent, while plant recovery increased above the company's 75 per cent target to 77 per cent.

Sales rose 18.7 per cent to 4,587 tonnes tin-in-concentrate as the company cleared the sales backlog from the first quarter.

The average tin price achieved remained almost unchanged at $32,512 per tonne, yielding estimated earnings before interest, taxes, depreciation and amortisation (EBITDA) of $75 million.

Estimated all-in sustaining costs (AISC) rose 6.1 per cent, year-on-year, to $16,500, which the company attributed to the operations stop and restart. Operating costs included fixed expenses and payroll as well as the costs associated with care and maintenance during the suspension and mining restart.

The company also updated its exploration programs by expanding the Mpama North and Mpama South resources and Bisie life of mine, and prospecting for new deposits locally. Drilling at Bisie intercepted visible tin below the current resources.

Mining to Restart Soon at Myanmar's Wa Region

Myanmar's Wa region mining operations is about to restart soon as mining companies pay for mining permits under the new licensing regime.

The much-anticipated restart to mining operations in the autonomous region in northern Myanmar had been delayed after the authorities increased licensing fees. Companies had originally been reluctant to pay the increased fees, which might act as a hindrance to smaller producers re-entering the market.

The International Tin Association (ITA) understands that companies which have now paid the licensing fee have been issued mining permits and are allowed to restart extraction operations. However, progress will likely be slowed by necessary maintenance given the long mining suspension.

Recovering Tin from End-of-life Solar Panels

Researchers in Kunming, China have developed an environmentally friendly method to recover valuable metals, including tin, from photovoltaic (PV) ribbon waste, a rapidly growing component of end-of-life solar panels. Their two-step physical process separates copper, tin and lead without using corrosive chemicals or generating harmful waste.

Tin use in PV solar ribbon has grown to more than 45,000 tonnes per annum over the last decade. The ribbons are slender copper strips coated with tin–lead solder that link solar cells and conduct electrical current. As global solar panel installations increase, the volume of PV waste is expected to surge, posing both an environmental challenge and a resource recovery opportunity for tin.

PV ribbons typically contain around 80 per cent copper, 8 per cent tin, and 5 per cent lead by weight. Recycling just one tonne of this material can recover up to US$3,376 in tin value and US$7,900 in copper.

Traditionally, metal recovery from PV ribbons relies on hydrometallurgical techniques involving strong acids and complex chemical steps, which are costly and produce secondary waste. In contrast, researchers in Kunming have developed a cleaner route using only heat and vacuum.

First, they melted the Sn–Pb solder from the copper substrate at 723 K (~450°C), yielding clean copper strips and a Sn–Pb alloy with minimal contamination. Next, they applied vacuum distillation at 1423 K (~1,150°C) under low pressure (50 ± 10 Pa) to selectively evaporate and collect ultra-pure lead. Crucially, tin remained in the residue, effectively separated due to its much lower vapor pressure. This left behind a tin-rich alloy alongside copper ready for further processing or reuse.

By exploiting simple physical properties like melting point and vapor pressure, this method avoids chemicals entirely. It offers a high-efficiency, low-waste solution aligned with circular economy goals.

With tin playing a vital role in solar technology, not just in PV ribbons but also in light absorbers and electron transport layers, this study provides a cleaner, scalable path to reclaim tin from retired solar modules.

(Source: International Tin Association Ltd. UK)

LME TIN PRICES AND STOCK

Period		Cash (US$/Tonne)	3-Month (US$/Tonne)	Stock (Tonnes)
2016		17,982	17,889	3,800
2017		20,098	19,994	2,235
2018		20,168	20,086	2,165
2019		18,671	18,610	7,130
2020		17,134	17,079	1,890
2021		32,584	31,105	2,045
2022		31,384	31,122	2,880
2023		25,973	25,951	7,685
2024		30,172	30,290	4,800
2022	Jan.	41,807	41,344	2,390
	Feb.	44,118	43,820	2,245
	Mar.	44,249	43,917	2,000
	Apr.	43,122	42,644	2,010
	May	35,945	35,617	1,990
	Jun.	31,777	31,459	2,765
	Jul.	25,173	24,816	3,330
	Aug.	24,520	24,276	4,065
	Sep.	21,258	21,150	4,565
	Oct.	19,406	19,373	4,255
	Nov.	21,136	21,004	2,930
	Dec.	24,099	24,038	2,880
2023	Jan.	28,081	28,146	3,015
	Feb.	27,070	27,218	2,950
	Mar.	24,014	24,076	2,345
	Apr.	25,886	25,744	1,525
	May	25,610	25,345	1,895
	Jun.	27,263	26,318	3,490
	Jul.	28,751	28,387	5,275
	Aug.	25,995	26,211	6,370
	Sep.	25,559	25,767	7,350
	Oct.	24,618	24,878	7,355
	Nov.	24,221	24,472	8,110
	Dec.	24,606	24,851	7,685
2024	Jan.	25,211	25,443	6,605
	Feb.	26,157	26,390	5,910
	Mar.	27,446	27,581	4,570
	Apr.	31,845	31,710	4,805
	May.	33,153	33,161	4,995
	Jun.	32,229	32,465	4,770
	Jul.	32,004	32,115	4,600
	Aug.	31,512	31,560	4,630
	Sep.	31,644	31,670	4,660
	Oct.	32,217	32,332	4,670
	Nov.	29,768	29,928	4,815
	Dec.	28,878	29,127	4,800
2025	Jan.	29,618	29,793	4,295
	Feb.	31,876	31,959	3,725
	Mar.	34,026	34,080	3,050
	Apr.	32,691	32,731	2,755
	May.	32,144	32,218	2,680
	Jun.	32,475	32,513	2,175
	Jul.	33,693	33,678	1,945
2025	1	34,075	33,950	2,220
JUL.	2	33,645	33,700	2,215
	3	33,850	33,800	2,165
	4	33,775	33,800	2,110
	7	33,535	33,505	2,085
	8	33,525	33,525	1,985
	9	33,325	33,210	2,060
	10	33,800	33,750	2,015
	11	33,500	33,450	1,970
	14	33,555	33,700	2,095
	15	33,400	33,440	1,980
	16	32,700	32,875	2,035
	17	32,735	32,785	2,035
	18	33,160	33,205	1,935
	21	33,775	33,800	1,885
	22	33,800	33,705	1,715
	23	34,550	34,425	1,690
	24	34,955	34,855	1,690
	25	34,995	34,830	1,740
	28	34,100	34,000	1,820
	29	33,610	33,750	1,855
	30	33,785	33,700	1,945
	31	32,800	32,845	1,945

Sources : London Metal Exchange
www.westmetall.com

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

YEAR	AGGREGATE			Dredging			Open Cast			Panning			Amg Rtmt / Min Pro Plnt		
	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	10	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	3,520	20	2,037	-	-	-	3,298	19	1,840	138	-	-	80	10	197
2023	3,780	23	2,496	-	-	-	3,591	23	2,210	152	-	-	24	16	286
2024**	5,460	22	2,409	-	-	-	5,184	22	2,139	158	-	-	118	18	270
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.	290	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.	292	12	1,358	-	-	-	276.2	12	1,138	11.0	-	-	4.7	11	220
Nov.	270	13	1,844	-	-	-	255.6	13	1,624	9.0	-	-	5.7	11	220
Dec.	294	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
2023															
Jan.	327	20	2,026	-	-	-	314.5	20	1,841	11.2	-	-	1.5	9	185
Feb.	301	16	1,998	-	-	-	284.7	16	1,813	15.6	-	-	0.9	9	185
Mar.	316	15	2,043	-	-	-	300.6	15	1,859	14.9	-	-	0.3	9	184
Apr.	297	17	2,070	-	-	-	282.2	17	1,887	14.7	-	-	0.3	9	183
May	315	20	2,106	-	-	-	296.4	20	1,897	17.8	-	-	1.1	14	209
Jun.	304	18	2,136	-	-	-	286.3	18	1,921	16.2	-	-	1.7	14	215
Jul.	316	18	2,135	-	-	-	300.3	18	1,922	14.7	-	-	0.6	14	213
Aug.	309	19	2,141	-	-	-	291.5	19	1,924	14.7	-	-	2.4	14	217
Sep.	290	20	2,134	-	-	-	276.1	20	1,921	11.1	-	-	2.6	15	213
Oct.	355	20	2,424	-	-	-	339.0	20	2,184	10.7	-	-	4.8	16	240
Nov.	312	20	2,426	-	-	-	305.3	20	2,186	5.4	-	-	0.9	16	240
Dec.	326	23	2,496	-	-	-	313.8	23	2,210	5.3	-	-	7.1	16	286
2024**															
Jan.	433	24	2,492	-	-	-	405.7	24	2,217	15.2	-	-	12.1	16	275
Feb.	415	24	2,476	-	-	-	393.0	24	2,202	11.0	-	-	11.0	16	274
Mar.	501	24	2,480	-	-	-	475.0	24	2,217	13.0	-	-	13.0	16	263
Apr.	479	24	2,486	-	-	-	457.0	24	2,223	15.0	-	-	7.0	16	263
May	519	24	2,494	-	-	-	492.0	24	2,224	18.0	-	-	9.0	16	270
Jun.	507	24	2,494	-	-	-	484.0	24	2,224	11.0	-	-	12.0	16	270
Jul.	577	25	2,685	-	-	-	542.0	25	2,415	31.0	-	-	4.0	16	270
Aug.	495	21	2,675	-	-	-	467.0	21	2,405	12.0	-	-	16.0	18	270
Sep.	381	20	2,643	-	-	-	362.0	20	2,373	9.0	-	-	10.0	18	270
Oct.	401	21	2,660	-	-	-	380.0	21	2,390	13.0	-	-	8.0	18	270
Nov.	377	22	2,410	-	-	-	369.0	22	2,140	5.0	-	-	3.0	17	270
Dec.	375	22	2,409	-	-	-	357.0	22	2,139	5.0	-	-	13.0	18	270
2025**															
Jan.	368	23	2,408	-	-	-	352.9	23	2,138	3.7	-	-	11.7	18	270
Feb.	355	23	2,408	-	-	-	330.0	23	2,138	12.0	-	-	13.0	18	270

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	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	3,520	18,043	19,442	1,152	19,299
2023	3,780	19,598	20,797	1,161	20,834
2024*	5,460	9,099	16,373	2,420	16,526
2021					
Jan.	278	28	1,639	145	1,770
Feb.	257	29	1,847	70	1,765
Mar.	290	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	292	16	1,349	98	1,165
Nov.	270	10	1,086	91	1,172
Dec	294	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
2023					
Jan.	327	1,482	1,780	94	1,388
Feb.	301	1,715	1,561	118	2,015
Mar.	316	1,920	2,054	113	2,138
Apr.	297	1,374	1,513	89	1,651
May	315	1,617	1,848	103	1,730
Jun.	304	1,416	1,453	87	1,724
Jul.	316	2,096	1,912	75	1,557
Aug.	309	1,485	1,664	57	1,778
Sep.	290	1,854	1,591	73	1,535
Oct	355	1,631	2,076	132	2,062
Nov.	312	1,879	2,013	109	1,823
Dec.	326	1,129	1,332	110	1,433
2024*					
Jan.	433	922	1,273	137	1,612
Feb.	415	609	1,389	169	1,418
Mar.	501	688	2,852	116	1,543
Apr.	479	706	1,351	210	1,112
May	519	903	1,171	154	1,500
Jun.	507	888	1,203	201	1,032
Jul.	577	711	1,520	164	1,465
Aug.	495	822	1,576	223	1,763
Sep.	381	1,020	1,387	280	1,337
Oct	401	517	369	289	1,318
Nov.	377	763	1,298	215	1,183
Dec.	375	550	984	260	1,243
2025*					
Jan.	368	502	1,225	228	1,017
Feb.	355	627	902	251	1,181
Mar.	n.y.a	573	1,345	187	1,191
Apr.	n.y.a	796	580	707	792
May	n.y.a	551	1,040	453	1,053
Jun.	n.y.a	941	1,148	294	1,187

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	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
2023	1,161	555	485	5	116
2024	2,420	698	492	4	1,226
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.	94	60	31	0	3
Feb.	118	68	40	1.5	8
Mar.	113	79	29	0.1	5
Apr.	89	41	39	1.0	8
May.	103	50	38	1.1	14
Jun.	87	55	30	0.1	2
Jul.	75	20	48	0.1	7
Aug.	57	20	27	0.1	10
Sep.	73	27	42	0.2	4
Oct.	132	55	56	0.1	21
Nov.	109	40	52	0.1	17
Dec.	110	40	53	0.1	17
2024					
Jan.	137	61	49	0.2	27
Feb.	169	79	42	0.2	48
Mar.	116	59	35	0.1	22
Apr.	210	74	41	0.1	95
May.	154	50	34	2.3	68
Jun.	201	50	26	0.1	125
Jul.	164	44	44	0.2	76
Aug.	223	24	40	0.3	159
Sep.	280	89	37	0.3	154
Oct.	289	57	43	0.3	189
Nov.	215	45	54	0.1	116
Dec.	260	66	47	0.1	147
2025					
Jan.	228	40	49	0.0	139
Feb.	251	50	42	0.3	159
Mar.	187	45	55	0.1	87
Apr.	707	48	62	0.1	597
May.	453	40	72	0.1	341
Jun.	294	55	53	0.1	186
Jul.	n.y.a	n.y.a	67	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.

n.y.a : Not yet available.

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