



FEBRUARY TIN MARKET REVIEW

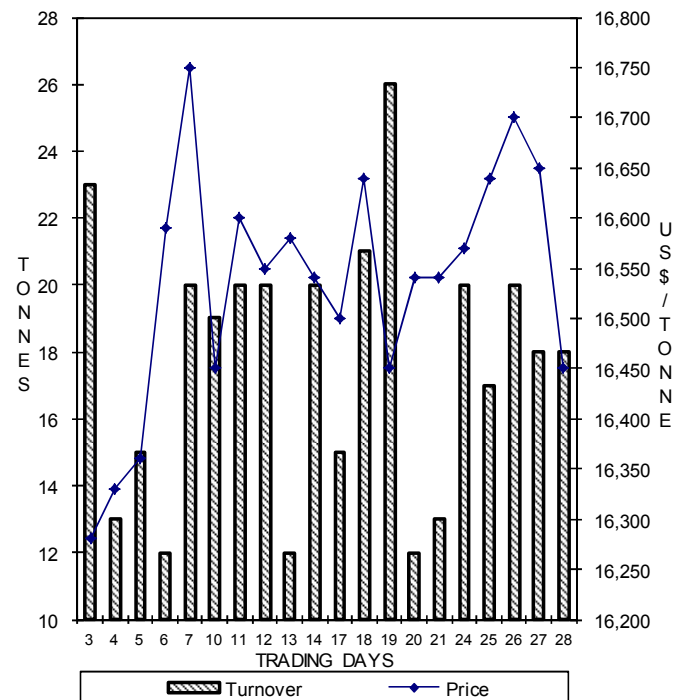
Kuala Lumpur Tin Market (KLTM)

Tin trading on the KLTM during the month of February was mostly upbeat. Strong demand and tight supply were factors that contributed to the upward momentum.

The local physical tin market opened the first trading week at US\$16,280 per tonne, its lowest price level for the month, but much higher than the January's closing of US\$16,020 per tonne. Thereafter, it strengthened substantially towards end of the trading week to record the month's highest price level at US\$16,750 per tonne on 7th February as demand soared. The strong demand came particularly from overseas interests. Sentiment was bullish with traders actively participating in the market.

The tin price declined at the opening of the second trading week due to technical correction. Buying interest was lack lustre during this period while sellers took advantage of the earlier higher prices. It rebounded the subsequent day before being traded range bound towards end of the trading week as traders adopted a wait and see attitude.

**KLTM PRICES
FEBRUARY 2020**



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With market sentiment remaining largely uncertain, the tin price continued to be traded range bound throughout the third trading week.

The tin price strengthened during the early days of the final trading week. According to a trader, the incline was influenced by strong tin prices on the London Metal Exchange (LME). However, it softened towards end of the trading month.

Trading on the KLTM for the month of February was conducted over 20 days. The average tin price recorded for the month was US\$16,536 per tonne, lower than January's average of US\$17,014 per tonne.

The total trading volume for the month slid to 354 tonnes from 406 tonnes the preceding month. February's average trading volume was 18 tonnes, lower than the January's average of 19 tonnes. The month's highest daily trading volume was 26 tonnes recorded on 19th February, while the lowest was 12 tonnes recorded on 6th, 13th and 20th February 2020. ♦

London Metal Exchange (LME)

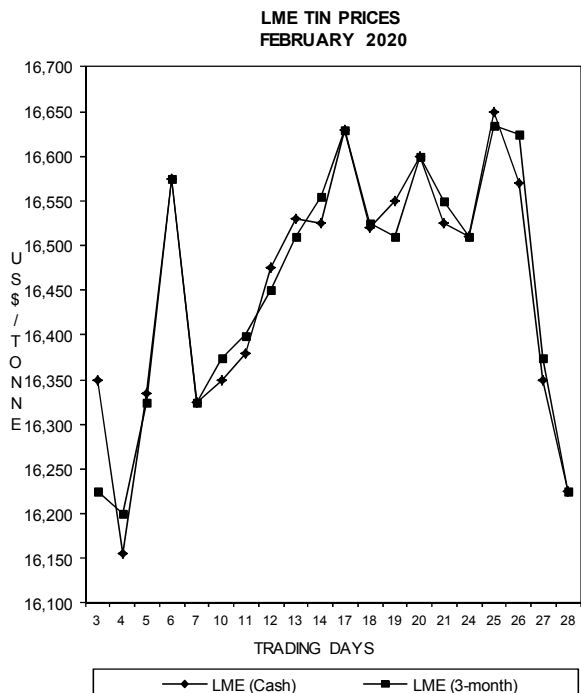
Tin trading on the LME during the month of February was again in line with the movement in the trading of other base metals on the Exchange. It was traded on a generally strong note.

Tin prices opened the trading month at US\$16,350 per tonne for cash tin and US\$16,225 per tonne for 3-month tin. They slid the subsequent day to record the month's lowest price level at US\$16,155 and US\$16,200 per tonne for cash and 3-month tin, respectively, both recorded on 4th February. Thereafter, they strengthened for two consecutive days before retreating to end the trading week on a lower note.

Backed by strong demand, the market strengthened throughout the second trading week. Buyers were more confident in participating in the market while sellers stayed on the sideline during the period. The strong demand came particularly from overseas interests resulting from the weakening US dollar.

Tin prices were traded range bound during the third trading week as market sentiment remained largely uncertain, in-line with the flat momentum of other base metals traded on the LME.

During the final trading week, tin prices rose during mid-week to record the month's highest level for cash and 3-month tin at US\$16,650 and US\$16,635 per tonne, respectively, both recorded on 25th Feb-



ruary. Thereafter, they softened to close the trading month both at US\$16,225 per tonne. Trading then was dominated by sellers, taking advantage of the earlier higher prices.

The average LME cash tin price recorded in February was US\$16,457 per tonne, whilst the average 3-month tin price was US\$16,456 per tonne.

NEWS HIGHLIGHTS

MSC Aims to Begin Smelting Ops at New Pulau Indah Plant Soon

Tin miner and metal producer Malaysia Smelting Corp Bhd (MSC) said the relocation to its new smelting facility in Pulau Indah, Port Klang, is progressing well and expects full smelting operations to commence in the near term. Group chief executive officer Dato' Dr Patrick Yong said the relocation would enable the company to establish a more solid foundation for growth amid an increasingly challenging operating landscape, including uncertain macroeconomic conditions and volatile tin price movements.

"The technology upgrade will significantly enhance the group's extractive yields in a more cost efficient and environment friendly manner. The new plant uses natural gas as fuel and follows a more comprehensive single stage continuous smelting process,

leading to a minimisation in MSC's carbon footprint," he said in a statement yesterday.

Even with the Pulau Indah facility in full operations, the company's plant in Butterworth would remain in service to ensure problem-free production, he added. The Pulau Indah plant would employ cutting-edge top submerged lance (TSL) technology to reduce costs and over-reliance on intensive labour, said MSC, adding that the overall process efficiency would also be achieved with the TSL single-stage smelting compared to the dated reverberatory furnaces employed at its Butterworth plant.

It will be utilising renewable energy via its installed rooftop solar panels and will be tapping waste heat from the furnaces, thus recycling energy from oper-

ating thermal wastage and in line with the group's aim to become a more sustainable tin player. The set-up at the Pulau Indah plant will enable a scale-up in production capacity of 50 per cent from 40,000 tonnes per year currently.

"As we commence operations in Pulau Indah and eventually phase out production in Butterworth, we anticipate a gradual improvement in our financial performance," said Yong. Following the migration, the company would be well-positioned to benefit from the rising demand for tin with lower operational costs, he said. "We will continuously review our strategies to ensure that the group stays resilient against external headwinds and explore new areas of growth with the aim of further establishing the

company as a leading integrated tin player," he added.

The impending move to Pulau Indah will also involve an internal restructuring exercise affecting some 550 employees at the Butterworth smelter. While MSC provides employees the opportunity to relocate from Butterworth to Pulau Indah and upskill their capabilities to operate more advanced technologies, there will be a reduction in manpower as the new modern plant requires fewer workers. Hence, MSC will be undertaking a voluntary separation scheme that would allow employees to opt out while receiving a fair and equitable compensation package.

(Source: *New Straits Times*, 8 February 2020)

Pulau Indah Smelter to Replace MSC's Butterworth Ops

The countdown to phase out the operation of Malaysia Smelting Corp Bhd's (MSC) 118-year old iconic tin smelting plant in Butterworth has officially started. According to group CEO and executive director Dato' Patrick Yong, MSC plans to commence operation of its new international smelting plant in Pulau Indah, Klang by year-end.

"We are in the final phase of relocating the existing equipment and others from Butterworth. Even then, MSC will still be operating both plants in parallel until we are absolutely certain with the stability and efficiency of the new plant in Pulau Indah. This is prior to winding down the old smelter. This is to ensure the reliability and security of supply to our existing customers," Yong says.

MSC is a global tin mining and smelting group as well as the world's third largest tin supplier. Yong tells *StarBizWeek* that the new smelting plant is best described as an engineering challenge for the group. Equipped with cutting-edge extractive technology employing a top submerged lance (TSL) furnace, the Pulau Indah facility will see significant improvement in smelting efficiency and production rates. MSC's total investment cost for the Pulau Indah facility is about RM150mil, of which RM50mil is for the plant purchase and RM100mil for refurbishment and up-grading works.

"Even as we speak, MSC is installing equipment for photovoltaic generation and planning a waste heat recovery plant to recover thermal energy from the flue gas of our furnace. The first phase of solar generation has been approved by Tenaga Nasional Bhd in a net energy metering arrangement and is in use. Although this may be slightly capital-cost heavy, the resultant energy savings will bring about the return-on-investment (ROI) within the next two to three years. Furthermore, this will also place MSC as the smelter with one of the lowest carbon footprints in the world," explains Yong.

As an integrated tin producer, MSC's core operations comprise both upstream and midstream activities of the tin value chain through the group's international tin smelting business, and local tin mining operations under its fully-owned subsidiary Rahman Hydraulic Tin Sdn Bhd (RHT) in Perak. Yong also notes that MSC is currently the largest toll smelter in the world and "we also smelt our own Malaysian mined tin. By moving to Pulau Indah plant with the new TSL furnace, the group's smelting capacity will be enhanced thus making room for further potential smelting ability."

"Therefore, it is obvious that we want to increase our base load to bring about higher fixed cost efficiency. This can be achieved by the revival of domestic tin mining as promoted by the government and it is only natural that MSC spearhead this thrust," he adds.

He points out that the world supply of tin ore is still lagging behind demand as indicated by the worldwide growth in secondary extraction of tin tailings. "So naturally, we would expect that the role played by toll smelters will have higher relevance."

Monetising options

Meanwhile, MSC is looking forward to unlock the value of its existing 13.9 acres old smelting plant site in Butterworth together with the adjacent 26.2 acres owned by its parent company, Straits Trading Company Ltd (STC). This includes redevelopment into mixed property and residential development projects.

"However, MSC will not be doing the development ourselves, but we have entered into an agreement for STC to take over the project as the latter would have the know-how and experience for such a venture. I believe the master plan for the entire development has been approved as "mixed development" and initial work has already started on the ground."

On whether MSC will be keen to diversify into property-related businesses, he is quick to add that “The fundamental and primary business of MSC as an integrated smelter and miner has not changed at all. The availability of the 13.9 acres is a result of the relocation and not relocating to make way for development, although it fits in nicely and serves well when we monetise the land together with STC.”

As a matter of fact, the Department of Environment has always encouraged smelters to be moved to designated industrial areas as the city goes through a natural development phase for domestic and commercial growth. “MSC has been fortunate to have found a brownfield opportunity (Pulau Indah plant) in the form of a lead smelter, already installed with the latest TSL technology furnace. This would take the group up to a few notches in smelting technology, efficiency and lower greenhouse gas emissions.

“This brownfield project also cuts short the development time as compared with a greenfield project, which will take more than double the time and much higher in cost too. Freeing the land for development is a welcomed accelerated business “by-product”, even though the intention did exist in our mind into the future,” Yong further explains.

In addition, the question of joint-ventures and various options of development have been left to STC to decide following whatever is best for business as both parties are in the same boat. “A visit to the site now will reveal that construction of a tower block is already well on the way,” he says.

At the moment, Yong maintains that MSC will focus on tin-related business activities which is its forte.

Upstream expansion

“The upstream expansion and attention in the higher profit sectors of the tin supply chain will remain as our direction forward. This is also very much in tandem with our country’s direction in tin mining. MSC through RHT will be expanding mining activities both in the primary and secondary extractions of the metal. Our second open cast mine in Sungai Lembing, Pahang has started operations and we are also conducting exploration in a couple of potential sites around the Klian Intan resource in Perak.”

On the current tin price trend and the industry being a “resurgent sector”, he points out that tin mining is very “energy hungry” and the cost of mining will prevent tin price from falling below the global average mining cost, which I believe is around US\$15,000 per tonne, for hard rock mining.

“If the unlikely happens that tin price dips below this level, it would be likely that the demand and supply reaction will kick in to support tin price. The upper range as predicted by the International Tin Association is an encouraging “US\$25,000”.

Therefore, it will not be too difficult to guess where the betting man is putting his money. “In my opinion, tin is not at all a sunset industry as some quarters have painted it to be,” Yong concludes.

(Source: The Star, 15 February 2020)

NEWS ROUND UP

PT Timah is World’s Largest Tin Producer

Indonesia’s PT Timah has this year replaced Yunnan Tin Co. as the world’s largest refined tin producer.

According to the International Tin Association’s annual data for 2019, the world’s refined tin production declined by almost 7 per cent to some 334,400 tonnes compared to the same period in 2018. Just ten major smelters together produced over 75 per cent of the total. PT Timah’s group produced 14 per cent more refined tin last year compared to 2018 due to the significant increase in the company’s concentrate production.

PT Timah doubled its concentrate production after the enforcement of export regulations reduced com-

petition. Many of the country’s private smelters closed or curtailed operation resulting from the changes.

Refined tin production in China declined by nearly 11 per cent following its smelters enforcing their announced production cuts. Production at Yunnan Tin, which is now the world’s second largest tin producer, declined by over 7 per cent. Production at Yunnan Chengfeng, the world’s 5th largest, declined by nearly 17 per cent while production at Guangxi China Tin, the world’s 9th largest, declined by nearly 11 per cent.

Production from South America in 2019 was reported to have risen largely due to increases at Minsur's Peruvian operations and EM Vinto. According to Minsur, higher mine grades and increased recoveries at its Peruvian Pisco smelter raised the company's output.

Meanwhile, production from Europe, as a whole, increased by 2 per cent. Output from Metallo was stable. The company is still waiting for the outcome of the EU probe into its merger with copper recycler Aurubis.

JFE Steel Consolidating its Tinplate Lines

Japan's JFE Steel will be closing one of its tinplate lines by March 2020 with production being consolidated into its operations in the Fukuyama district.

The company will shut several of its plants in the Keihin and Chiba districts of Japan in its effort to increase competitiveness. JFE Steel will shut its tin mill in Chiba, where it produces electrolytic tinplate. The tinplate line is expected to be closed before March 2020. The rest of the company's tin mill lines

will close by the beginning of fiscal year 2022.

However, JFE plans to continue tinplate production. Its Fukuyama plant has been producing most of the company's tin mill products. The company plans to merge its Chiba line into this same plant.

Bisie's Updated Mine Report Published

Alphamin Resources, the owner and operator of Bisie mine in the DRC, has published a new NI 43-101 report on 20 February which details out the exploration, mining and processing plans for the site. The report also includes an altered Life of Mine profile and changes to the Mineral Reserves and Resources at Bisie.

Bisie came into being at end of 2019 and targeted to be one of the largest tin mines in the world. However, Alphamin had to change the mining method when the mine was just about to start, which as a result, its cost and mineral resources estimates become no longer accurate.

Bisie's last Mineral Resource Estimate (MRE) was made in mid-2016, way before the mine started operation. Due to the changes to the mining method and after some 10 months of operations, the updated MRE is significantly changed. The new MRE indicates a decline in the total mineral resources and contained tin, with the latter declining by over 4 per cent. However, nearly a quarter of the 10,000 tonne change is attributed to mine depletion. The remaining 7,700 tonne revision is the result of a reinterpretation of artisanal mining at the site. No additional exploration has been undertaken at Bisie, and there is no change to the cut-off grade.

The new mining method has largely affected the company's tin reserves due to the altered mining economics. It uses open stoping with hydraulic backfill (OSHB), which dilutes the mined tin less than the previous sub-level caving (SLC) method. This has reduced waste tonnages at Bisie, lowering their costs. However, since OSHB needs more pillar support, this has reduced the tin reserves by some 25,000 tonnes, while mining has reduced tin reserves by just over 9,000 tonnes.

The new report, which includes a new Life of Mine profile, details out the annual mined tin content for the mine's 14-year life. The new plan allows for higher mined head grades, less waste and improved cashflows. On average, Bisie is expected to produce more than 11,500 tonnes of tin annually, placing it as one of the world's top 10 tin mines.

Meanwhile, Alphamin has also announced that it would start a drilling programme at its Mpama South prospect, which is also part of the Bisie complex. It is located just 1.5 km south of Mpama North where mining has already begun. The company further plans to start underground drilling at Mpama North sometime in 2021 to extend its current tin resources.

(Source: International Tin Association Ltd. UK)

TIN STATISTICS

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)	
2010	20,061		62	15,599	20,406	20,430	
2011	26,235		47	11,387	26,113	26,128	
2012	21,193		42	10,206	21,114	21,125	
2013	22,322		39	9,530	22,316	22,328	
2014	21,737		44	10,822	21,916	21,909	
2015	16,015		52	12,679	16,084	16,046	
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	
2018	Jan.	20,415	46	973	20,711	20,602	
	Feb.	21,558	42	756	21,694	21,549	
	Mar.	21,049	42	933	21,214	21,123	
	Apr.	21,151	35	744	21,340	21,167	
	May	20,740	39	710	20,900	20,794	
	Jun.	20,616	45	907	20,663	20,577	
	Jul.	19,687	39	857	19,700	19,610	
	Aug.	19,299	31	642	19,281	19,224	
	Sep.	18,905	43	736	18,999	18,951	
	Oct.	19,048	33	762	19,129	19,092	
	Nov.	19,133	27	536	19,139	19,123	
	Dec.	19,208	26	519	19,243	19,219	
2019	Jan.	20,417	34	719	20,480	20,372	
	Feb.	21,268	37	628	21,268	21,172	
	Mar.	21,317	50	1,046	21,444	21,359	
	Apr.	20,528	38	833	20,684	20,560	
	May	19,394	19	388	19,531	19,326	
	Jun.	19,065	19	344	19,177	19,076	
	Jul.	18,074	19	416	17,991	17,983	
	Aug.	16,532	20	422	16,577	16,567	
	Sep.	16,730	22	392	16,840	16,834	
	Oct.	16,562	21	464	16,603	16,627	
	Nov.	16,624	20	417	16,369	16,386	
	Dec.	16,883	18	376	17,093	17,063	
2020	Jan.	17,014	19	406	17,056	17,057	
	Feb.	16,536	18	354	16,457	16,456	
2020	Feb.						
	3	16,280	4.1112	66,930	23	16,350	16,225
	4	16,330	4.1180	67,247	13	16,155	16,200
	5	16,360	4.1210	67,420	15	16,335	16,325
	6	16,590	4.1215	68,376	12	16,575	16,575
	7	16,750	4.1342	69,248	20	16,325	16,325
	10	16,450	4.1450	68,185	19	16,350	16,375
	11	16,600	4.1430	68,774	20	16,380	16,400
	12	16,550	4.1330	68,401	20	16,475	16,450
	13	16,580	4.1420	68,674	12	16,530	16,510
	14	16,540	4.1415	68,500	20	16,525	16,555
	17	16,500	4.1379	68,275	15	16,630	16,630
	18	16,640	4.1499	69,054	21	16,520	16,525
	19	16,450	4.1585	68,407	26	16,550	16,510
	20	16,540	4.1825	69,179	12	16,600	16,600
	21	16,540	4.1923	69,341	13	16,525	16,550
	24	16,570	4.2224	69,965	20	16,510	16,510
	25	16,640	4.2230	70,271	17	16,650	16,635
	26	16,700	4.2405	70,816	20	16,570	16,625
	27	16,650	4.2203	70,268	18	16,350	16,375
	28	16,450	4.2192	69,406	18	16,225	16,225

Sources : The Kuala Lumpur Tin Market
Metal Bulletin

Note : As from 1 February 2001, KLTM price is quoted in U.S. Dollar
As from July 2018 onwards, we will no longer publish the New York Spot Tin prices since the Metal Bulletin, which has been our primary source of the New York Spot Tin prices has now stopped publishing them.

* 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			
2010	16,375	2,129	955	3,234	1,139	1,300	3,600	7,090	19,447	35,822	4,020
2011	12,095	2,129	955	3,265	1,278	1,300	3,600	6,800	19,327	31,422	4,020
2012	12,800	2,129	955	4,163	1,380	1,300	3,600	7,420	20,947	33,747	4,020
2013	9,660	2,129	955	1,192*	1,456	1,300	3,600	6,680	17,312	26,972	4,020
2014	12,135	2,129	955	6,266	1,324	888*	3,600	6,970	22,132	34,267	4,020
2015	6,140	2,129	955	5,838	1,349	730*	3,600	7,520	9,956	14,439	4,020
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	2587*	1,469	439*	3600*	5,610	16,790	27,226	4,020
2019	7,110	2,130	955	8600*	2,022	400*	3600*	5,510	23,217	35,678	4,020
2017											
Jan.	5,800	2,129	955	3435*	1,416	356*	3600*	6,470	18,902	27,908	4,020
Feb.	5,560	2,129	955	3435*	1,283	356*	3600*	6,470	18,769	26,743	4,020
Mar.	3,510	2,129	955	3435*	1,282	356*	3600*	6,470	18,227	23,760	4,020
Apr.	2,865	2,129	955	3435*	1,244	356*	3600*	6,470	18,189	23,260	4,020
May.	1,910	2,129	955	3868*	1,196	241*	3600*	6,480	18,469	24,179	4,020
Jun.	1,690	2,130	955	3870*	1,311	930*	3600*	6,540	19,336	26,068	4,020
Jul.	1,985	2,130	955	3870*	1,349	930*	3600*	6,540	19,374	29,663	4,020
Aug.	1,910	2,130	955	3870*	1,411	930*	3600*	6,540	19,436	31,539	4,020
Sep.	2,070	2,130	955	3870*	1,393	346*	3600*	6,520	18,814	30,595	4,020
Oct.	2,095	2,130	955	3870*	1,393	350*	3600*	6,560	18,818	30,637	4,020
Nov.	2,395	2,130	955	3870*	1,348	350*	3600*	6,730	18,983	29,610	4,020
Dec.	2,235	2,130	955	3870*	1,360	600*	3600*	6,730	19,245	26,395	4,020
2018											
Jan.	1,955	2,130	955	3956*	1,347	600*	3600*	6,730	19,318	25,885	4,020
Feb.	1,720	2,130	955	3956*	1,384	600*	3600*	6,730	19,318	26,506	4,020
Mar.	2,060	2,130	955	3956*	1,384	732*	3600*	6,330	19,087	25,753	4,020
Apr.	2,225	2,130	955	3956*	1,222	732*	3600*	6,430	19,025	26,735	4,020
May.	2,420	2,130	955	3956*	1,184	732*	0	6,430	15,387	24,661	4,020
Jun.	3,130	2,130	955	3198*	1,184	407*	0	6,430	14,304	25,151	4,020
Jul.	2,970	2,130	955	3246*	1,134	407*	3600*	6,400	17,872	27,857	4,020
Aug.	2,940	2,130	955	3246*	1,093	407*	3600*	6,310	17,741	26,728	4,020
Sep.	2,865	2,130	955	3246*	1,414	677*	3600*	6,310	18,332	27,715	4,020
Oct.	3,085	2,130	955	3246*	1,414	677*	3600*	6,310	15,332	25,139	4,020
Nov.	3,045	2,130	955	3246*	1,510	677*	3600*	5,610	17,728	29,299	4,020
Dec.	2,165	2,130	955	2587*	1,469	439*	3600*	5,610	16,790	27,226	4,020
2019											
Jan.	1,845	2,130	955	2587*	1,578	439*	3600*	5,150	16,439	26,524	4,020
Feb.	1,325	2,130	955	2587*	1,578	439*	3600*	5,150	16,552	26,111	4,020
Mar.	950	2,130	955	8594*	1,765	439*	3600*	4,850	22,333	31,458	4,020
Apr.	890	2,130	955	8594*	1,834	439*	3600*	5,580	23,132	31,451	4,020
May.	2,810	2,130	955	8600*	1,849	439*	3600*	5,510	23,083	34,096	4,020
Jun.	6,045	2,130	955	8600*	2,520	209*	3600*	5,510	23,524	37,961	4,020
Jul.	4,640	2,130	955	8600*	2,520	209*	3600*	5,510	23,524	34,583	4,020
Aug.	6,830	2,130	955	8600*	2,445	209*	3600*	5,510	23,449	35,355	4,020
Sep.	6,620	2,130	955	8600*	2,013	919*	3600*	5,510	23,017	34,215	4,020
Oct.	6,020	2,130	955	8600*	2,100	400*	3600*	5,510	23,104	33,684	4,020
Nov.	6,235	2,130	955	8600*	2,022	400*	3600*	5,510	23,217	33,116	4,020
Dec.	7,110	2,130	955	8600*	2,022	400*	3600*	5,510	23,217	35,678	4,020
2020											
Jan.	6,630	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

* : at producer
n.y.a : not yet available
Sources : Metal Bulletin
World Bureau of Metal Statistics

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			Among Retreatment		
	Prod.	Units*	Emp.	Prod.	Units	Emp.	Prod.	Units	Emp.	Prod.	Units	Emp.	Prod.	Units	Emp.	Prod.	Units	Emp.	Prod.	Units	Emp.
2010	2,668	12	1,352	54	2	44	6	1	26	2,051	9	849	-	-	-	283	-	-	274	25	433
2011	3,343	13	1,433	22	1	9	-	-	-	2,567	12	1,009	-	-	-	394	-	-	360	23	415
2012	3,725	13	1,464	-	-	-	-	-	-	2,788	13	987	-	-	-	289	-	-	650	23	477
2013	3,697	16	1,532	-	1	20	-	-	-	2,700	15	1,025	-	-	-	325	-	-	663	20	487
2014	3,777	18	1,538	2	1	20	-	-	-	2,912	18	1,090	-	-	-	379	-	-	484	19	448
2015	4,125	18	1,519	-	-	-	-	-	-	3,572	18	1,151	-	-	-	313	-	-	276	18	368
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**	3,597	12	1,387	-	-	-	-	-	-	3,090	12	1,201	-	-	-	244	-	-	263	11	186
2017																					
Jan.	351	14	1,298	-	-	-	-	-	-	272.8	14	1,030	-	-	-	29.6	-	-	48.3	18	268
Feb.	316	14	1,308	-	1	36	-	-	-	251.8	13	990	-	-	-	28.3	-	-	36.0	18	282
Mar.	306	14	1,200	-	1	36	-	-	-	248.9	13	929	-	-	-	24.4	-	-	32.3	16	235
Apr.	275	13	1,220	-	-	-	-	-	-	227.9	13	985	-	-	-	30.6	-	-	16.3	16	235
May	338	16	1,330	-	-	-	-	-	-	268.1	16	1,095	-	-	-	33.6	-	-	37.7	16	235
Jun	306	17	1,301	-	-	-	-	-	-	272.0	17	1,069	-	-	-	30.7	-	-	5.5	16	232
July	333	18	1,350	-	1	36	-	-	-	273.4	17	1,083	-	-	-	34.2	-	-	25.7	16	231
Aug.	328	19	1,391	-	1	36	-	-	-	262.7	18	1,122	-	-	-	36.8	-	-	29.2	16	233
Sep.	313	16	1,316	-	-	-	-	-	-	248.6	16	1,083	-	-	-	36.5	-	-	28.9	16	233
Oct.	322	18	1,358	-	1	36	-	-	-	251.8	17	1,089	-	-	-	36.1	-	-	35.3	16	233
Nov.	368	16	1,283	-	-	-	-	-	-	271.9	16	1,050	-	-	-	43.6	-	-	53.9	16	233
Dec.	338	16	1,286	-	-	-	-	-	-	254.5	16	1,058	-	-	-	41.8	-	-	40.8	16	228
2018																					
Jan.	308	17	1,330	-	-	-	-	-	-	244.5	17	1,088	-	-	-	37.3	-	-	26.5	16	242
Feb.	297	17	1,305	-	-	-	-	-	-	233.4	17	1,063	-	-	-	36.9	-	-	26.6	16	242
Mar.	323	16	1,272	-	-	-	-	-	-	260.4	16	1,029	-	-	-	34.6	-	-	27.6	16	243
Apr.	330	17	1,271	-	-	-	-	-	-	268.5	17	1,031	-	-	-	39.6	-	-	21.8	16	240
May	336	16	1,137	-	-	-	-	-	-	260.8	16	971	-	-	-	40.1	-	-	34.9	11	166
Jun	310	15	982	-	-	-	-	-	-	256.3	15	977	-	-	-	53.3	-	-	-	10	5
July	342	15	1,218	-	-	-	-	-	-	300.9	15	1,010	-	-	-	22.3	-	-	18.8	10	208
Aug.	393	14	1,225	-	-	-	-	-	-	325.3	14	1,012	-	-	-	36.6	-	-	31.23	10	213
Sep.	280	14	1,308	-	-	-	-	-	-	244.8	14	1,085	-	-	-	30.7	-	-	4.74	10	223
Oct.	319	12	1,280	-	-	-	-	-	-	271.2	12	1,059	-	-	-	31.5	-	-	16.30	10	221
Nov.	324	12	1,309	-	-	-	-	-	-	253.5	12	1,085	-	-	-	36.0	-	-	34.00	10	224
Dec.	307	12	1,295	-	-	-	-	-	-	264.0	12	1,075	-	-	-	25.0	-	-	18.00	11	220
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

Source : Department of Mineral and Geoscience Malaysia

Note : * Aggregate number of mines does not include Retreatment units

** Preliminary

**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
2010	2,668	30,589	38,771	2,942	33,697
2011	3,343	30,031	40,281	2,341	42,302
2012	3,725	26,537	37,823	2,083	37,212
2013	3,697	30,273	32,633	1,835	36,363
2014	3,777	31,610	35,018	1,581	35,221
2015	4,125	31,965	30,260	1,900	38,319
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*	3,596	25,644	24,387	1,441	24,418
2017					
Jan.	351	2,377	1,683	171	1,530
Feb.	316	2,033	2,167	203	2,635
Mar.	306	1,723	2,044	322	2,091
Apr.	275	2,441	1,832	263	1,777
May.	338	2,598	2,572	218	2,326
Jun.	306	2,446	2,121	258	1,732
Jul.	333	3,154	2,605	320	2,768
Aug.	328	2,428	2,812	178	3,106
Sep.	313	2,565	2,149	179	2,275
Oct.	322	2,775	2,256	225	2,116
Nov.	368	2,740	2,478	204	2,510
Dec.	338	2,586	2,492	166	2,281
2018					
Jan.	308	2,424	2,060	171	1,950
Feb.	297	2,046	2,214	190	2,009
Mar.	323	2,488	2,340	158	2,584
Apr.	330	2,430	2,111	192	2,401
May.	336	2,895	2,343	171	2,435
Jun.	310	2,494	2,219	192	2,162
Jul.	342	2,609	2,571	162	2,687
Aug.	393	2,619	2,470	215	2,257
Sep.	280	1,653	2,068	149	1,899
Oct.	319	2,284	2,282	117	2,138
Nov.	324	1,844	2,563	102	2,746
Dec.	306	1,664	1,874	145	2,074
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

* : Preliminary
n.y.a : not yet available
Sources : Department of Statistics, Malaysia
Department of Mineral and Geoscience Malaysia
Malaysia Smelting Corporation Bhd.

DOMESTIC TIN CONSUMPTIONS (In Tonnes)

PERIOD	TOTAL CONSUMPTION	SOLDER *	TINPLATE	PEWTER	OTHERS *
2010	2,942	1,981	683	169	109
2011	2,341	1,458	665	108	110
2012	2,083	1,333	573	104	73
2013	1,835	1,078	561	100	96
2014	1,581	922	520	82	57
2015	1,900	1,133	608	77	82
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
2017					
Jan.	171	102	54	12	3
Feb.	203	133	64	2	4
Mar.	322	139	76	13	94
Apr.	263	100	72	2	89
May	218	150	61	3	4
Jun	258	108	61	12	77
July	320	143	76	1	100
Aug.	178	79	62	2	35
Sep.	179	101	40	1	37
Oct.	225	104	68	4	49
Nov.	204	95	49	1	59
Dec.	166	94	54	10	8
2018					
Jan.	171	101	57	3	10
Feb.	190	133	54	1	2
Mar.	158	93	49	13	3
Apr.	192	103	78	1	10
May	171	106	56	1	8
Jun.	192	116	61	13	2
Jul.	162	99	60	0	3
Aug.	215	132	75	1	7
Sep.	149	62	62	1	24
Oct.	117	23	69	1	24
Nov.	102	11	61	0	30
Dec.	145	40	77	4	24
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

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

** : Preliminary.

n.y.a : not yet available

Sources : Department of Mineral and Geoscience Malaysia
Malaysia Smelting Corporation Bhd

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 for which actual consumption data are available.

**WORLD MINE PRODUCTION(
In Tonnes)**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019
									Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
EUROPE																				
Portugal	45	24	24	84	96	48	56	60	5	5	5	5	9	9	9	9	9	9	9	9
Russia	612	600	600	240	240	1,140	702	1,200	100	100	100	100	100	100	100	100	250	250	189	188
United Kingdom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AFRICA																				
Democ.Re pCongo	4,800	2,462	5,220	4,116	2,977	4,128	7,145	9,000	800	800	800	800	800	800	500	500	500	500	500	500
Nigeria	1,800	2,400	2,590	2,425	2,100	3,827	5,964	8,784	300	300	540	540	540	540	540	500	500	500	500	500
Rwanda	4,167	3,493	3,600	4,245	2,017	2,621	3,508	2,400	200	200	250	300	300	300	200	172	179	150	130	130
South Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zimbabwe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Egypt	-	-	87	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ASIA																				
China	127,400	115,900	148,981	177,300	146,600	153,100	163,000	157,500	11,500	13,900	14,300	13,300	13,700	13,700	13,900	13,100	12,400	13,200	10,500	8,500
Indonesia	78,000	78,000	84,000	69,600	68,400	60,000	60,000	84,000	7,000	7,000	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200
Kazakhstan	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-
Laos	1,200	766	745	840	815	1,308	779	566	328	199	235	235	235	235	235	140	100	100	18	93
Malaysia	3,346	3,639	3,685	3,600	3,731	4,123	3,967	3,999	340	340	340	340	340	340	340	340	340	340	340	340
Mongolia	24	24	44	72	240	36	50	60	5	5	10	10	10	10	10	10	10	10	10	10
Myanmar	534	658	8,943	17,475	2,400	47,435	58,883	45,900	5,900	627	2,420	2,264	2,700	2,300	2,300	2,400	4,300	4,000	4,000	4,000
Thailand	252	199	119	131	45	124	705	720	60	60	60	60	60	60	60	60	60	60	60	60
Vietnam	5,400	5,400	5,400	5,400	3,600	5,520	4,560	4,560	380	380	300	300	300	300	460	460	460	460	460	460
AMERICA																				
Bolivia	20,373	19,701	16,976	19,548	20,135	17,614	17,973	17,259	1,450	1,450	1,500	1,500	1,500	1,500	1,500	1,500	1,375	1,375	1,375	1,375
Brazil	8,200	10,800	13,800	13,800	13,800	25,500	18,000	18,000	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Peru	29,022	26,097	23,661	12,105	19,511	18,789	17,790	18,601	1,582	1,622	1,841	1,607	1,762	1,800	1,700	1,760	1,800	1,800	1,609	1,600
U.S.A.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OCEANIA																				
Australia	15,400	6,014	5,888	7,042	7,056	6,635	7,217	6,871	600	600	687	700	550	549	550	575	600	600	551	550
WORLD TOTAL	300,575	276,183	324,363	349,035	315,363	351,948	370,299	379,482	32,050	29,088	32,088	30,761	31,606	31,243	31,104	30,326	31,583	32,054	28,951	27,015

