

MALAYSIAN TIN PRODUCTS

QUARTERLY 2018

NEWSLETTER



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OCTOBER - DECEMBER 2018



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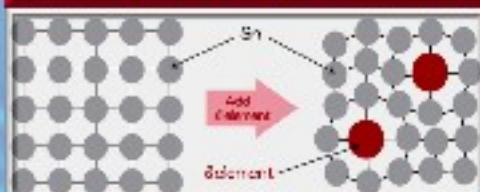


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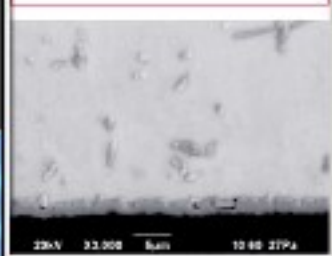


B-ELEMENT PLAYS AN IMPORTANT ROLE TO PREVENT DISLOCATION AND GRAIN BOUNDARY SLIDING.

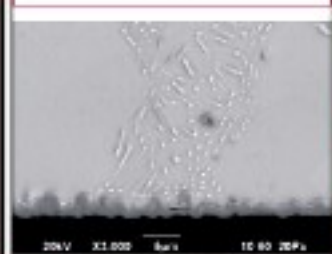
Tensile Strength Test



SN100CV



SAC305



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The Malaysian Tin Products Newsletter

October — December 2018

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Inside this issue:

President's Note	4
Economic News	6
Electrical & Electronic Industry News	6
Members' News	8
Data / Statistics	13
Association Members	18

Letters to the Editor are welcomed. We appreciate your feedback to further improve our editorial content. Please address your letters to:

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President's Note

Dear Members,

The year 2018 has been a challenging one for all Malaysian economic sectors, including the mineral-based manufacturing industry, due to uncertainties in the global economy. The trade war between the world's two biggest economies, the United States and China, has been on-going for some time with efforts for reconciliation being still uncertain. This uncertainty has impacted global trade disrupting the whole global supply chain and hurting major as well as emerging economies.

Most economists have predicted that global economic growth in 2019 and 2020 would be sluggish. In fact, the International Monetary Fund (IMF) in October, had cut its global growth forecast for both 2018 and 2019 to 3.7%, down from 3.9% that was projected in July 2018.

In early November 2018, the Ministry of Finance (MOF) released its 2018/19 Economic Report which forecast that Malaysia's GDP growth would be 4.8% for 2018, with a slight increase to 4.9% in 2019, supported by strong domestic demand. The Report also stated that the private sector expenditure in the services and manufacturing sectors would remain as the key driver of the country's economic growth. This would cushion the effects of a lower public sector spending by the Federal Government in 2018 and 2019, following the initiatives taken to review and reprioritise Government spending.

On 2 November 2018, for the first time in Malaysia's history, the much awaited Budget 2019 was presented at the Parliament by the Finance Minister of the new Government, YB Lim Guan Eng. The Budget was comprehensive and inclusive focused on addressing the country's debt and rejuvenating the national economy. In the Budget, the Federal Government had allocated generous grants and incentives, mainly towards the adoption of new technologies, human capital development, promoting entrepreneurship, innovation and R&D in preparation for the Industrial Revolution 4.0.

As the year 2018 comes to an end, let us together prepare for any eventualities expected in the new year ahead. And to conclude this edition's brief note, may I, on behalf of the Management Committee and its various Sub-Committees, wish Merry Christmas to all our Christian friends and colleagues, and a Happy and Prosperous New Year to all.

With warmest regards,

Mat Tena'ain Abu Bakar

President



With Best Compliments

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SDN BHD**

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Economic News

Economy may Grow 5.2pc This Year

The Leading Index (LI), which monitors Malaysia's economic performance in four to six months ahead, has signalled an economic slowdown in the country, says MIDF Research. The LI had been registering negative growth in the recent months after some gap in between since its last negative growth in December 2016, it said.

In August, LI was at 0.9 per cent year-on-year, suggesting the economic growth was likely to ease in December to February next year. "In contrast, Bursa Malaysia's benchmark FTSE Bursa Malaysia KLCI (FBM KLCI) had grown 3.6 per cent year-on-year in August, which shows that the economy has been in the expansion cycle for almost a decade since 2009...this increases the possibility of an economic slowdown in upcoming months. "However, on monthly basis, LI

rose 0.3 per cent while the FBM KLCI declined 0.3 per cent," said MIDF Research.

During the first half, the research house said Malaysia's real gross domestic product growth averaged at 4.9 per cent compared with 5.7 per cent a year ago. "Based on the current developments and indicators, we predict Malaysia's economy to expand by 5.2 per cent this year (5.9 per cent last year). The slowdown is expected to particularly due to the moderating performance of external trade sectors. Nevertheless, a stable labour market, continued wage growth and moderating inflation will support the domestic economy," added MIDF.

Source: New Straits Times, 27 October 2018

Electrical & Electronic Industry News

Leveraging on the Electrical and Electronics Industry

Unlocking greater productivity within Malaysia's industrial sectors is one of the national strategies to drive continuous economic growth and expansion. In line with this, the Malaysia Productivity Blueprint launched in May 2017 has identified nine priority subsectors with high potential growth. In particular, the electrical and electronics (E&E) industry, where the International Trade and Industry Ministry has been at the forefront of generating private public partnerships to drive productivity enhancement initiatives within the sector.

In an effort to boost the E&E sector's contribution to the national economy, the Electrical & Electronics Productivity Nexus (EENP) was formed in 2017. As chairman of the EENP, I helmed the PPP, which involves a cross-section of industry players, government ministries and agencies to provide support for four key strategic pillars, which are crucial to drive the growth and expansion in the E&E industry.

The key strategic pillars are: enhancing value-added, nurturing talent development, acceleration the adoption of Industry 4.0 and strengthening local small and medium enterprises (SMEs) development. To recap, the local E&E sector started back in the 1970s, when Tun Dr Lim Chong Eu introduced the Free Trade Zone (FTZ) in Penang. The first eight manufacturing companies was set up on the island in 1972 by multinational

companies (MNCs) given attractive incentives by the FTZ. Since then, the thriving sector has also spread nationwide.

In the era of the Digital Age, one cannot underestimate the importance of the E&E sector. The sector provides the opportunity for innovations of the Digital Age, and has always been changing the way we work, learn, live and play.

According to the 2018 Malaysian American Electronics Industry (MAEI) Survey Report, the E&E sector has enabled Malaysia to successfully positioned itself into the global supply chain of electronic manufacturing services, outsourced semiconductor assembly and testing as well as in research, design and development.

Representing 36.7% of Malaysia's total exports in 2017, the industry is expected to flourish even further and by 2020, is expected to generate a gross national income impact of RM53.4bil and create 157,000 jobs. It has also attracted the highest foreign investments at RM8.2bil or 84.5% in 2017.

Of the 31 American companies in the E&E industry tracked by the report, it was revealed that collectively, these companies currently employ over 80,000 people, a 16% increase from 2014. Nineteen of the 31 companies are also fully localised, where 99% of employees are Malaysians. These companies employ

over 16,500 skilled engineers; 2,000 of these jobs require a Master's degree or higher, and 5,700 are dedicated to research, design and development.

In 2017 alone, these American companies spent over RM3.8bil on research and development (R&D), with four of these companies having located their global R&D centres in Malaysia.

Megatrends Driving New Growth

Several megatrends which are driving new growth in the E&E sector also presents valuable opportunities for Malaysia. The advent of Industry 4.0 has heralded the use of artificial intelligence, machine learning and the Internet of Things (IoT) in our daily lives. In fact, the digital lifestyle and digital economy which defines the New Millennium has resulted in the explosive growth of e-commerce, e-mobility and e-healthcare.

To a degree, the local E&E industry has been able to leverage on these megatrends which offers greater demand for state-of-the-art hardware, along with diversification into the area of design and development (D&D), shared services covering human resource, finance and information technology as well as supply chain management for regional and global logistics hubs.

Bearing this in mind, EEPN has set a vision for the local E&E sector to be a global state-of-the-art hub for advanced technology and high value-added activities. However, it has to be borne in mind that many other countries also present Malaysia with stiff competition in this area.

Therefore, the EEPN aims to address the greater urgency for the local E&E sector to move further up the value chain and be globally competitive. To achieve this, Malaysia must try to attract more MNCs and large local companies to set up D&D centres in the country as well as to assist local SMEs to grow in this area.

There is also a general perception that the E&E industry is labour intensive, but many fail to realise that it is also highly automated, with the manufacturing sector relying on state-of-the-art technology. Therefore, in moving up the value chain, Malaysia needs to take into account the rise in automation of manufacturing processes, which requires greater software skills among workers.

Despite having pervasive skills in many areas of manufacturing, supply chain management and business development, the local E&E sector need to further develop its capabilities in areas such as R&D and business development. This need cuts across all industrial segments in Malaysia which utilises E&E components, such as automation, industrial electronics, semiconductors, electronics manufacturing services, storage, light emitting diode, solar and IoT.

Ultimately, in order to make the most of opportunities within the sector, Malaysia needs to be globally competitive. The current scenario sees the local sector contending with greater competition, especially with neighbouring countries such as Vietnam, China and Thailand, which are also leveraging on the E&E sector to stimulate economic growth.

While the road ahead has its fair share of challenges, the key challenges persist especially in the form of talent with a lack of highly skilled engineers in the E&E sector. The EEPN has also identified the need to further develop the ecosystem, and encourage the growth of local SMEs, which can take on the engineering challenges associated with D&D within the E&E sector. Datuk Seri Wong Siew Hai is the chairman of EEPN. He is also the chairman of the Malaysian American Electronics Industry and honorary governor of American Malaysian Chamber of Commerce.

Source: The Star, 24 October 2018

Members' News

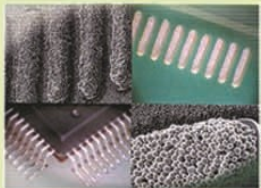
Perstima Shares Rise on New Manufacturing Plant

Shares of Perusahaan Sadur Timah Malaysia (Perstima) Bhd went up over 5% in early trade Thursday after the company announced plan to set up manufacturing plant in the Philippines. Perstima, the second top gainer, rose 5.59%, or 26 sen to RM4.91. Over the past one year, its shares have gained 12.16%. It is currently trading at a P/E Ratio of 11.37 times.

The group plans to set up a new plant for the manufacturing of tinplate and tin-free steel in the Philippines. It said the plant was subjected to the approval of the local authorities in the Philippines. Perstima said it has conducted a feasibility study on the market in the Philippines and found that there is currently no existing tinplate and tin-free steel manufacturer there.

Source: The Star, 1 November 2018

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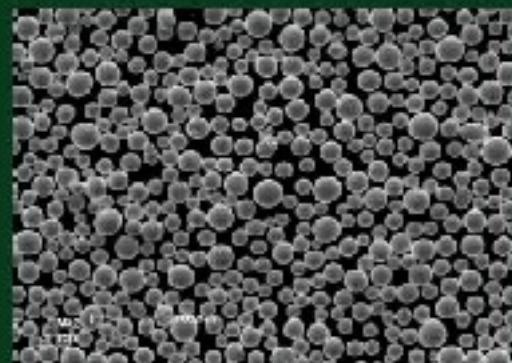
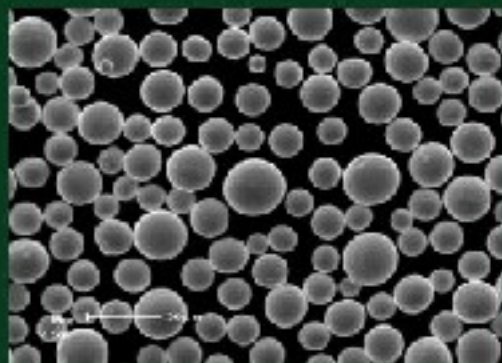
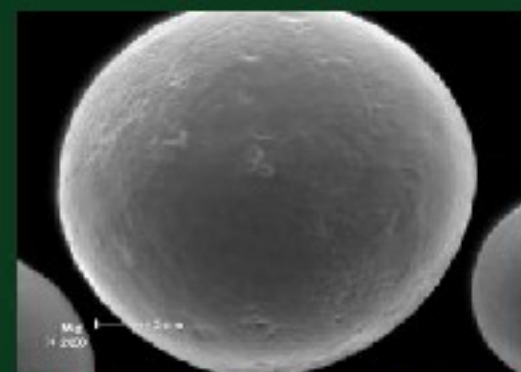
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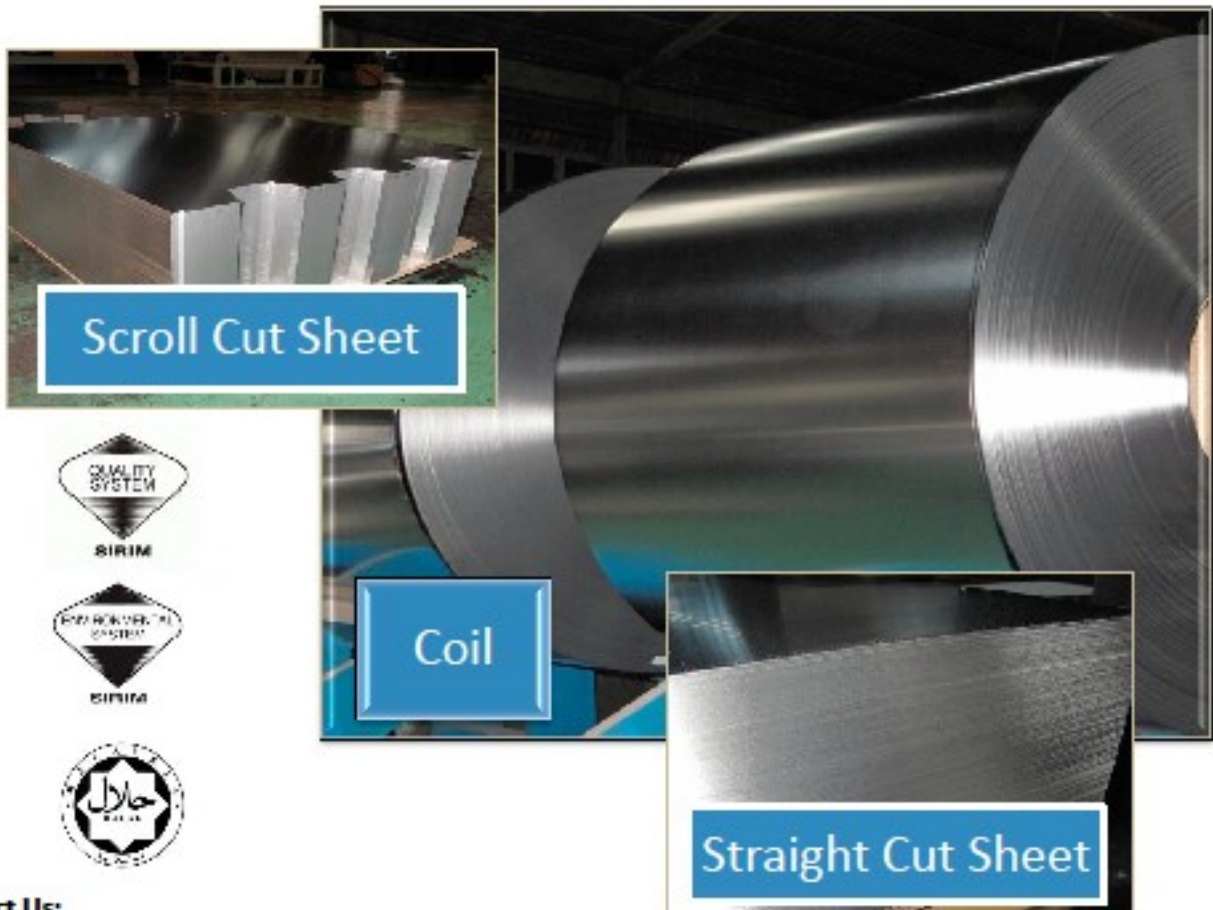
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Data / Statistics

Tin

MALAYSIAN TIN STATISTICS					
(In Tonnes)					
Period	Production of Tin-In-Concentrates	Imports of Tin-In-Concentrates	Refined Tin Production	Local Consumption	Exports of Tin Metal
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	1,872	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
2015					
Jan	286	2,959	1,928	120	2,451
Feb	276	2,119	2,342	123	2,747
Mar	334	2,566	3,051	205	2,968
Apr	314	2,082	2,417	85	5,294
May	353	2,772	2,712	159	3,964
Jun	344	2,880	2,824	158	2,628
Jul	362	2,748	2,854	157	3,748
Aug	346	2,294	2,672	158	4,867
Sep	360	2,749	2,549	182	2,494
Oct	382	2,884	2,066	166	2,755
Nov	371	2,722	2,382	176	2,056
Dec	397	3,190	2,463	211	2,347
2016					
Jan	357	2,667	2,550	167	2,172
Feb	304	2,273	2,939	205	2,779
Mar	377	1,697	2,611	213	3,153
Apr	361	2,333	2,381	233	2,849
May	349	1,984	2,529	236	2,563
Jun	342	2,101	1,951	151	2,029
Jul	311	2,054	1,873	116	1,720
Aug	303	2,293	2,159	200	2,238
Sep	335	1,823	1,865	204	1,730
Oct	347	1,948	1,920	173	1,766
Nov	359	2,267	1,977	154	2,149
Dec	378	2,172	2,094	186	1,834
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	339	2,598	2,572	218	2,326
Jun	308	2,446	2,121	258	1,732
Jul	333	3,154	2,605	320	2,768
Aug	329	2,428	2,812	178	3,106
Sep	314	2,565	2,149	179	2,275
Oct	323	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	292	2,494	2,219	192	2,162
Jul	342	2,620	2,571	162	2,687
Aug	393	n.y.a	n.y.a	n.y.a	n.y.a
Sep	280	n.y.a	n.y.a	n.y.a	n.y.a
Oct	319	n.y.a	n.y.a	n.y.a	n.y.a

* : preliminary

n.y.a. : not yet available

Sources : Department of Statistics, Malaysia

Department of Minerals and Geoscience, Malaysia

Malaysia Smelting Corporation Bhd

DOMESTIC TIN CONSUMPTION (In Tonnes)					
Period	Total Consumption	Solder (*)	Tinplate	Pewter	Others (*)
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
2015					
Jan	120	67	47	2	4
Feb	123	78	38	5	2
Mar	205	128	63	6	8
Apr	85	33	37	11	4
May	159	108	35	4	12
Jun	158	105	51	0	2
Jul	157	99	31	14	13
Aug	158	82	66	2	8
Sep	182	101	66	4	11
Oct	166	90	55	13	8
Nov	176	102	65	4	5
Dec	211	140	54	12	5
2016					
Jan	167	97	63	3	4
Feb	205	140	46	12	7
Mar	213	144	63	3	3
Apr	233	150	62	15	6
May	236	117	69	14	36
Jun	151	82	59	3	7
Jul	116	44	58	11	3
Aug	200	133	59	6	2
Sep	204	152	45	3	4
Oct	173	79	73	13	8
Nov	154	83	67	0	4
Dec	186	93	86	3	4
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
Jul	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	n.y.a	132	n.y.a	1	7

Sources : Department of Minerals and Geoscience, Malaysia
Malaysia Smelting Corporation Bhd

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

** : Preliminary.

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 available.

WORLD STOCKS OF REFINED TIN			
(In Tonnes at Period End)			
Period End	LME Stocks	Country Stocks	US Strategic Stockpile
2011	12,095	19,327	4,020
2012	12,800	20,947	4,020
2013	9,660	17,312	4,020
2014	12,135	22,132	4,020
2015	6,140	9,956	4,020
2016	3,800	18,600	4,020
2017	2,235	19,245	4,020
2015			
Jan	11,840	22,119	4,020
Feb	10,875	22,119	4,020
Mar	9,930	9,685	4,020
Apr	9,070	9,754	4,020
May	7,315	9,851	4,020
Jun	7,635	10,265	4,020
Jul	6,640	10,301	4,020
Aug	6,730	10,323	4,020
Sep	4,800	10,340	4,020
Oct	5,015	10,475	4,020
Nov	5,180	10,427	4,020
Dec	6,140	9,956	4,020
2016			
Jan	5,470	10,049	4,020
Feb	3,655	10,299	4,020
Mar	4,810	21,114	4,020
Apr	5,690	20,279	4,020
May	7,235	21,057	4,020
Jun	5,985	18,443	4,020
Jul	5,540	18,427	4,020
Aug	4,460	18,218	4,020
Sep	3,510	18,391	4,020
Oct	2,895	18,391	4,020
Nov	3,185	18,500	4,020
Dec	3,800	18,600	4,020
2017			
Jan	5,800	18,902	4,020
Feb	5,560	18,769	4,020
Mar	3,510	18,227	4,020
Apr	2,865	18,189	4,020
May	1,910	18,469	4,020
Jun	1,690	19,336	4,020
Jul	1,985	19,374	4,020
Aug	1,910	19,436	4,020
Sep	2,070	18,814	4,020
Oct	2,095	18,818	4,020
Nov	2,395	18,983	4,020
Dec	2,235	19,245	4,020
2018*			
Jan	1,955	19,318	4,020
Feb	1,720	19,318	4,020
Mar	2,060	19,087	4,020
Apr	2,225	19,025	4,020
May	2,420	15,387	4,020
Jun	3,130	14,304	4,020
Jul	2,970	n.y.a	n.y.a

Sources : Metal Bulletin / World Bureau of Metal Statistics

n.y.a : not yet available

KLTM & LME TIN PRICES				
	KLTM			LME CASH
	Average Price (*)		Total Turnover	Average Price
	(USD / Tonne)	(RM / Kg)		(USD/Tonne)
2011	26,235	80.03	11,387	26,113
2012	21,193	65.38	10,206	21,114
2013	22,322	70.30	9,530	22,316
2014	21,737	71.19	10,822	21,916
2015	16,015	62.45	12,679	16,084
2016	17,528	72.75	11,568	17,982
2017	20,029	86.12	8,890	20,098
2018	20,151	80.99	9,075	20,168
2015				
Jan	19,449	69.72	1,165	19,463
Feb	18,295	65.70	946	18,292
Mar	17,527	64.49	1,011	17,460
Apr	16,084	58.54	836	15,986
May	15,884	57.26	980	15,827
Jun	15,172	56.72	1,038	15,015
Jul	14,884	56.60	1,220	14,962
Aug	15,221	61.74	1,017	15,229
Sep	15,150	65.41	1,059	15,481
Oct	15,763	67.34	894	15,848
Nov	14,694	63.19	1,139	14,743
Dec	14,629	62.62	1,374	14,702
2016				
Jan	13,745	59.62	1,269	13,777
Feb	15,324	64.19	1,294	15,654
Mar	16,848	68.60	1,334	16,996
Apr	17,029	66.42	1,050	17,068
May	16,908	68.35	817	16,757
Jun	16,909	69.06	956	16,985
Jul	17,786	71.44	758	17,845
Aug	18,373	74.03	824	18,413
Sep	19,466	80.08	849	19,590
Oct	20,003	83.60	755	20,182
Nov	21,001	91.17	897	21,235
Dec	21,011	93.77	765	21,286
2017				
Jan	20,801	92.92	722	20,750
Feb	19,548	86.99	658	19,492
Mar	19,762	87.80	744	19,832
Apr	19,885	87.59	687	19,991
May	20,104	86.84	744	20,231
Jun	19,707	84.39	625	19,702
Jul	20,178	86.64	711	20,273
Aug	20,438	87.67	774	20,570
Sep	20,729	87.39	722	20,855
Oct	20,450	86.58	780	20,469
Nov	19,477	81.46	923	19,575
Dec	19,353	78.93	800	19,440
2018				
Jan	20,415	80.77	973	20,711
Feb	21,558	84.37	756	21,694
Mar	21,049	82.15	933	21,214
Apr	21,151	82.22	744	21,340
May	20,740	82.36	710	20,900
Jun	20,616	82.43	907	20,663
Jul	19,687	79.80	857	19,700
Aug	19,299	78.99	642	19,281
Sep	18,905	78.29	736	18,999
Oct	19,048	79.18	762	19,129
Nov	19,133	80.09	536	19,139
Dec	19,208	80.17	519	19,243

Sources : Kuala Lumpur Tin Market/ Malaysia Smelting Corporation Bhd

Note : As from 1 February 2001, KLTM price is quoted in US Dollar

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

Malaysian Ringgit to US Dollar exchange rate was unpegged on 22.8.2005

LEAD

LME PRICES & STOCKS		
	Cash Settlement (US\$/Tonne)	Stocks Period End (Tonnes)
2013	2,142.26	234,246
2014	2,099.08	209,883
2015	1,786.50	183,608
2016	1,870.75	186,363
2017	2,317.54	164,329
2015		
Jan	1,829.17	214,850
Feb	1,804.68	214,700
Mar	1,784.98	232,900
Apr	1,999.80	171,575
May	2,003.84	160,150
Jun	1,836.34	174,000
Jul	1,762.35	218,775
Aug	1,692.90	186,800
Sep	1,682.05	162,425
Oct	1,724.57	147,225
Nov	1,615.98	128,250
Dec	1,701.29	191,650
2016		
Jan	1,646.95	188,125
Feb	1,771.57	211,475
Mar	1,808.02	155,975
Apr	1,728.67	174,325
May	1,714.43	185,375
Jun	1,713.91	185,150
Jul	1,834.88	187,075
Aug	1,838.89	187,275
Sep	1,942.02	190,250
Oct	2,039.93	188,700
Nov	2,178.84	187,725
Dec	2,230.83	194,900
2017		
Jan	2,236.69	189,050
Feb	2,321.73	189,600
Mar	2,277.30	184,275
Apr	2,231.31	169,425
May	2,131.67	180,275
Jun	2,131.18	164,150
Jul	2,266.40	152,800
Aug	2,357.32	148,425
Sep	2,377.29	157,475
Oct	2,506.30	149,250
Nov	2,464.41	145,000
Dec	2,508.82	142,225
2018		
Jan	2,589.77	133,250
Feb	2,580.83	125,225
Mar	2,397.00	129,100
Apr	2,357.38	130,775
May	2,363.88	133,475
Jun	2,440.74	131,775
Jul	2,212.91	127,025
Aug	2,064.86	122,925
Sep	2,028.23	115,700
Oct	1,985.15	113,550
Nov	1,940.16	105,125
Dec	1,965.47	107,375

COPPER

LME PRICES & STOCKS		
	Cash Settlement (US\$/Tonne)	Stocks Period End (Tonnes)
2013	7,325.73	533,323
2014	6,859.69	196,483
2015	5,501.69	303,719
2016	4,863.23	235,752
2017	6,162.77	254,817
Jan	5,815.83	250,025
Feb	5,702.08	297,200
Mar	5,925.84	332,125
Apr	6,028.48	339,625
May	6,300.61	320,950
Jun	5,833.61	323,450
Jul	5,456.91	346,525
Aug	5,088.93	367,650
Sep	5,208.09	320,400
Oct	5,222.61	267,850
Nov	4,808.24	243,025
Dec	4,629.00	235,800
Jan	4,462.75	239,400
Feb	4,595.48	193,475
Mar	4,947.55	143,400
Apr	4,851.12	154,675
May	4,708.35	154,350
Jun	4,630.64	189,125
Jul	4,855.79	210,075
Aug	4,758.20	304,775
Sep	4,707.18	371,775
Oct	4,732.14	319,475
Nov	5,443.25	236,675
Dec	5,666.25	311,825
Jan	5,737.43	260,850
Feb	5,941.55	200,725
Mar	5,821.52	283,900
Apr	5,697.67	253,675
May	5,591.50	308,000
Jun	5,699.48	278,275
Jul	5,978.60	295,525
Aug	6,478.18	223,500
Sep	6,583.19	295,500
Oct	6,797.39	273,675
Nov	6,825.57	183,525
Dec	6,801.16	200,650
Jan	7,080.30	304,675
Feb	7,001.80	328,000
Mar	6,795.76	383,025
Apr	6,838.55	325,525
May	6,821.76	317,950
Jun	6,954.79	289,875
Jul	6,248.18	251,950
Aug	6,039.75	262,475
Sep	6,020.03	199,125
Oct	6,215.89	136,675
Nov	6,193.00	134,200
Dec	6,094.21	132,175

SILVER

LONDON SPOT PRICES	
	London Spot (US Cents / Troy Oz)
2013	2,382.92
2014	1,907.83
2015	1,544.83
2016	1,709.67
2017	1,705.33
Jan	1,710.00
Feb	1,684.00
Mar	1,622.00
Apr	1,632.00
May	1,380.00
Jun	1,610.00
Jul	1,507.00
Aug	1,494.00
Sep	1,472.00
Oct	1,571.00
Nov	1,451.00
Dec	1,405.00
Jan	1,402.00
Feb	1,507.00
Mar	1,542.00
Apr	1,626.00
May	1,689.00
Jun	1,718.00
Jul	1,993.00
Aug	1,964.00
Sep	1,928.00
Oct	1,767.00
Nov	1,742.00
Dec	1,638.00
Jan	1,681.00
Feb	1,787.00
Mar	1,759.00
Apr	1,804.00
May	1,676.00
Jun	1,696.00
Jul	1,614.00
Aug	1,691.00
Sep	1,745.00
Oct	1,694.00
Nov	1,701.00
Dec	1,616.00
Jan	1,717.00
Feb	1,666.00
Mar	1,647.00
Apr	1,661.00
May	1,647.00
Jun	1,652.00
Jul	1,571.00
Aug	1,501.00
Sep	1,426.00
Oct	1,458.00
Nov	1,437.00
Dec	1,470.00

Source : London Metal Exchange
The Silver Institute

Association Members

Currently, the Association comprises one associate and 15 ordinary members covering the three main sectors of Malaysia's tin-based products manufacturing industry, namely the tinplate, solder and pewter sectors as listed below:

ORDINARY MEMBERS:

TINPLATE

Perusahaan Sadur Timah Malaysia Bhd (PERSTIMA)

SOLDER

Henkel (M) Sdn Bhd
Metahub Industries Sdn Bhd
Nihon Superior (M) Sdn Bhd
RedRing Solder (M) Sdn Bhd
Selayang Metal Industries Sdn Bhd
Selayang Solder Sdn Bhd
Senju (M) Sdn Bhd
Shen Mao Solder (M) Sdn Bhd
Premium Metal Sdn Bhd

PEWTER

Oriental Pewter Sdn Bhd
Present & Artifact Sdn Bhd
Royal Selangor International Sdn Bhd
Selwin Pewter Sdn Bhd
Tumasek Pewter Sdn Bhd

ASSOCIATE MEMBER:

Malaysia Smelting Corporation Bhd

MSC – A Global Integrated Tin Mining and Smelting Group

The MSC Group is currently one of the world's leading integrated producers of tin metal and tin based products and a global leader in custom tin smelting since 1887.

The Malaysia Smelting Corporation Berhad ("MSC" or "the Company") and its subsidiaries ("MSC Group" or "the Group") is currently one of the world's leading integrated producers of tin metal and tin based products and a global leader in custom tin smelting since 1887. In 2017, the Group produced 27,172 tonnes of tin metal thus maintaining its position as the third largest supplier of tin metal in the world. MSC is listed both on the Main Market of Bursa Malaysia since 15 December 1994 and the Main Board of Singapore Exchange ("SGX-ST") since 27 January 2011. MSC is a subsidiary of The Straits Trading Company Limited ("STC") of Singapore.

With the Group's core expertise and solid foundation over a century of smelting excellence to its credit, the Group's smelting facility in Butterworth operates one of the most low cost smelting plants in the world, converting primary, secondary and often complex tin bearing ores into high purity tin metal for industrial application. The plant has a production capacity of approximately 40,000 tonnes of refined tin a year and still uses reverberatory furnace technology. But this may change as the plant is preparing to introduce modern smelting technology using Top Submerged Lance ("TSL") furnace.

This will significantly increase the plant's smelting capacity and drive operating cost down. The refining

flowsheet has undergone major changes and is currently capable of processing crude metal with a myriad of impurities.

In the mid-90's the Group started a tin marketing and trading arm under the smelting division. The downstream unit provides the Group with hedging, pricing and marketing linkages to the Kuala Lumpur Tin Market ("KLTM")/London Metal Exchange ("LME") as well as the end-user markets worldwide. MSC Straits refined tin brand which is registered at KLTM and LME is accepted worldwide and has purity ranging from the standard Grade A (99.85% Sn) to the premium grade electrolytic tin (99.99% Sn).

In November 2004, MSC expanded upstream in mining through the acquisition of Rahman Hydraulic Tin Sdn. Bhd. ("RHT"), Malaysia's long established and currently the largest operating open-pit hard rock tin mine. Since the takeover, extensive exploration works and improvements of milling/concentrator circuits and recovery operations have been undertaken and today RHT is a sustainable and significant tin producer in Malaysia.

The Group's 40% equity interest in Redring Solder (M) Sdn. Bhd. ("Redring Solder") provides vertical integration to its tin smelting business and an entry into a profitable downstream solder manufacturing

business with significant growth potential. Redring Solder's principal activities are the manufacture and sale of solder products for jointing and semi-conductor applications in the electrical and electronics industries.

GROWTH STRATEGY

The Group's niche expertise in tin is continually being strengthened in all areas over the entire global tin supply chain covering geology, mining, mineral processing, smelting, marketing, resource management and financing.

MSC will pursue its growth strategy on its core business in tin through strategic acquisitions and organic growth where its core expertise, skills and capabilities can add value and make a difference particularly in increasing operating efficiencies, innovating products and services as well as forging global commercial and marketing networks to ensure its continued leadership position in the industry.

Investment opportunities will continue to be evaluated and the Group may in future decide to invest in selective projects that meet its investment criteria. Main emphasis will be on opportunities in regions where the country risks could be effectively managed and that the mines could be developed and operated with relatively lower cost structure.



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MSC
Malaysia Smelting Corporation Berhad
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