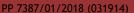
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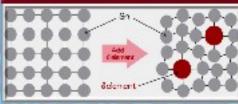
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### The Malaysian Tin Products Newsletter

July — September 2018

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### President's Note



Several economic reforms have been undertaken by the newly elected Government since its unexpected victory at the recent 14<sup>th</sup> General Election. These reforms are crucial to spur and accelerate investments and economic growth as well as being part of a debt management reduction programme of the country's huge debt of some RM1.1 trillion. With the reintroduction of the Sales and Services Tax (SST) to replace the Goods and Services Tax (GST), the new Government is now forced to step-up savings to cover the shortfall from the SST revenue of some RM20 billion.



YAB Tun Dr Mahathir Mohamad, since being appointed the Prime Minister of Malaysia, has been actively making working visits to several countries, namely Indonesia, Japan, Brunei, China, United Kingdom (UK) and the United States (US) to promote investments into Malaysia, and to seek assistance in the country's economic recovery.

The uncertainties brought about by the change in Malaysia's new Government coupled with the trade war between the world's two largest economies, the US and China, had affected Malaysia's economic performance. For the second quarter of 2018, it slowed down to 4.5 per cent from 5.4 per cent recorded in the first quarter of 2018. Accordingly, the 2018 growth forecast has been revised downwards to 5.0 per cent compared to the earlier estimates of between 5.5 to 6.0 per cent. Economic activities in the construction sector declined with the review of several mega projects, such as the Mass Rapid Transit (MRT) 2 and Light Rail Transit (LRT) 3 as well as the uncertainty to either continue or halt the East Coast Railway Line (ECRL) project. Growth in the agriculture sector was affected by lower production due to adverse weather conditions. The mining sector too contracted due to supply disruptions.

The tension in the trade war between the US and China exacerbated with the US placing punitive tariffs on some US\$200 billion worth of Chinese imports. China retaliated by putting reciprocal tariffs on US\$60 billion of US goods, on top of duties already imposed on each other's imports of some US\$50 billion. Several economists believe that this would affect China in the long run, as it's exports to the US account for some 19 per cent of its total exports, whilst the US exports to China represented only 8 per cent of its total. However, some industry players felt that the trade war could benefit Malaysia's economy as China would transit their goods here before exporting to the US to escape the high duty.

Before concluding my brief note for this edition, I wish to urge all Association members to brace themselves for the challenges ahead arising from these global economic uncertainties. May I also take the opportunity to wish all Association members, a 'Happy 61<sup>st</sup> Malaysia's Independence Day' as well as a 'Happy 55<sup>th</sup> Malaysia's Day'. Let us all hope and pray for a brighter and prosperous future ahead for Malaysia.

With warmest regards,

Mat Tena'ain Abu Bakar

President

# With Best Compliments

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#### **Economic News**

#### Malaysia Economy Slowing Down

Bank Negara has lowered Malaysia's economic growth forecast for 2018 to 5% from its earlier estimate of 5.5%-6%. For those in the loop, the move is largely unsurprising. After all, the country's economy has expanded below the 5.5%-level over the last two consecutive quarters. In fact, Malaysia's gross domestic product (GDP) growth has been decelerating since the third quarter of 2017, when the economy grew by 6.2% year-on-year (y-o-y).

The softer growth, given the fall in government development expenditure in the second quarter and the lacklustre performance of liquefied natural gas (LNG) and crude palm oil, meant that the earlier estimates could not be met. Furthermore, global purchasing manager indices and export volumes have been moderating.

In the second quarter of 2018 (2Q18), GDP growth came in at 4.5%, which was below the Bloomberg consensus of 5.2%. In comparison, GDP growth was 5.8% in the corresponding quarter of 2017 and 5.4% in 1Q18.

"Private sector activity continued to be the primary driver of growth as both private consumption and investment expanded strongly during the quarter. Growth in the mining sector contracted due mainly to unplanned supply outages, while the agriculture sector was affected by production constraints and adverse weather conditions. Nevertheless, major economic sectors, notably the services and manufacturing, remained supportive of growth," says the central bank in a statement.

On the demand side, growth was largely supported by the increase in private consumption (8%), private investment (6.1%) and public consumption (3.1%). However, public investments contracted 9.8% y-o-y, which also marks the third consecutive guarter of decline.

Bank Negara is working on a mid-term strategic plan, to further sustain the country's economic growth moving forward. Governor Datuk Nor Shamsiah Mohd Yunus hints that the plan could include the introduction of new forms of taxes to raise higher revenue for the government. This is mainly to address the shortfall in revenue, following the removal of the goods and services tax (GST).

The central bank's forecast of 5% for the year dismisses any notion of the country slipping into a contraction in the fourth quarter. Despite the moderation in GDP growth, Shamsiah expects the country's growth to be sustained, supported mainly by private sector activity.

Earlier this month, Bank Islam Malaysia chief economist Mohd Afzanizam Abdul Rashid has warned about Malaysia sinking into its first recession in 10 years by end-2018 or next year. Citing the current bond yield curve, Afzanizam believes that the next economic downturn is oncoming and urged the government to cut taxes, aside from easing the monetary policy.

A country is considered to be in a technical recession if the economy recorded two consecutive quarters of negative GDP growth. The negative growth is calculated by looking at the quarter-on-quarter change in GDP. The last time Malaysia registered a technical recession was in the fourth quarter of 2008 (-3.5%) and the first quarter of 2009 (-7.8%), amid the 2008 recession.

Institute for Democracy and Economic Affairs senior fellow Carmelo Ferlito also warned about a potential recession,

adding that it would be a property market-driven crisis. Concurring with Shamsiah, Malaysian Institute of Economic Research senior research fellow S. Nambiar does not think Malaysia will slip into a recession. However, he indicated that a slowdown in economic expansion is likely.

"There are some factors that are not conducive for growth. For example, the switch from the GST to the sales and services tax (SST). This might mean some costs for the small and medium enterprises, aside from the fact that the SST might not bring in the kind of revenue that the GST brought in. The cut back in projects and infrastructure investments might also mean a reduction in multiplier effects. Besides, some of the contingent liabilities might crystalise into the government's balance sheets and increase the debt level. All of these are part of the necessary costs of restructuring the economy," Nambiar tells StarBizWeek, adding that Malaysia's economy could grow by 4.8%-5% this year.

AmBank Group chief economist Anthony Dass also believes that a slowdown in economic growth will take place, rather than a contraction leading to a recession. "Looking at 2018 full-year GDP outlook, our projection for Malaysia's GDP is 4.8%-5% while for 2019 is 4.2%-4.4%, on the back of a global growth of 3.7% for 2018 and 3.6% for 2019," he says. Anthony adds that the possibility of a recession will driven more by "external noises as opposed to domestic issues".

The key threat is a full-blown US-China trade war. "A full-blown trade war added with emerging market debt crisis that becomes contagion may hit household and business sentiments. As a result, it may risk sparking household debt crisis and a strong correction to the property prices, forcing the bubble to burst," says Anthony.

In an earlier report by The Star, Alliance Bank Malaysia Bhd chief economist Manokaran Mottain cautioned that the country could fall into a recession within the next two years if the trade war goes full-blown in 2019. In providing support to the slowing economy, Nambiar foresees the government introducing a slew of fiscal measures including new ways to raise tax revenue.

"That said, I believe the government will be careful not to throw the burden of the new revenue-raising measures on the bottom 40% population or those earning less than RM4,360 per month. In reviving the industrial and services sectors, I would also expect the government to switch into a more pro-active mode towards the close of the year or starting next year," he says.

In a note, AllianceDBS Research points out that fiscal reforms such as the removal of GST and the standardisation of minimum wage across the country will likely provide favourable domestic demand conditions that will support private consumption growth towards the end of the year. "However, the boost in private consumption growth is likely to be insufficient to keep GDP growth above the 5% level. The moderation in manufacturing sector's production and possibly a drop within the construction sector due to the cancellation or postponement of mega projects will keep GDP growth subdued," says the research house, which lowered its 2018 GDP forecast to 4.8% y-o-y from 5.6% previously. Moving forward, Anthony expects the country's public investment to be weak due to lower capital spending by public corporations.

Source: The Star, 18 August 2018

# **Electrical & Electronic Industry News**

Opti...Mi...stic on Semiconductor
Mi Equipment Positive on the Sector Despite US-China
Trade War

Despite the growing uncertainties in the global economy, especially given the escalating trade war between China and the US, Mi Equipment Holdings Bhd remains optimistic on the prospects of the semiconductor industry. As Mi Equipment group CEO and executive director Oh Kuang Eng sees it, the encouraging outlook of the global semiconductor will continue to be driven by the growing demand for electronics products, which in turn, supports the demand for semiconductors and related equipment.

"The global supply chain structure for the semiconductor industry is very entrenched and cannot be easily changed in the short-term due to capex invested and the lengthy prequalification process," Oh explains. "Furthermore, consumer demand for electronic gadgets is inelastic. Consumers will continue to buy gadgets and they can easily switch between brands," he says in an email to StarBizWeek.

On that note, Oh says he does not expect the rising global trade tensions to have any material impact on Mi Equipment in the short term. "The impact (of global trade war) may be felt more immediately by commodities, raw materials or agricultural players who are directly affected by the tariffs," he reckons.

"However, if the policies sustain for the medium term, new investments in the semiconductor industry may be geographically restructured. If that happens, Malaysia may be a beneficiary," he points out. Mi Equipment derives the bulk of its revenue from overseas market. For instance, last year, foreign markets accounted for 83% of its revenue, with about64% of sales coming from Northern Asia.

The Penang-based group is principally involved in the design, development, manufacture and sale of wafer-level-chip-scale-packaging (WLCSP) sorting machines, with inspection and testing capabilities. These machines are used by companies in the semiconductor industry. Besides that, Mi Equipment is also involved in the provision of maintenance services and technical support for WLCSP sorting machines, as well as the sale of related spare parts and components. Mi Equipment is set to unveil its new 10-year roadmap to chart its growth by the end of this year.

Concerning the new roadmap of the company for the next decade from 2019 to 2028, Oh reckons that it is important to put forth a strategy to direct the group towards its long-term goals. "We strongly believe that planning is key to keep our focus and achieve our desired outcome," he explains. At present, Oh is the single-largest shareholder in Mi Equipment, with a 68% stake.

#### **Bullish Stock**

Mi Equipment's shares have been on a tear since making its debut on the local bourse on June 20. From an initial offering price (IPO) of RM1.42, the counter has since more than doubled in recent weeks. This easily puts it as one of the best-performing stocks in recent days.

Mi Equipment, which is the first company to be listed on the Main Market of Bursa Malaysia this year, saw its shares close 22 sen down at RM3.10 on Thursday. That offers an upside of about 12.6% to the revised target price of Affin Hwang Capital, the only brokerage that covers Mi Equipment currently. Last week, Affin Hwang Capital raised its 12-month target price for Mi Equipment to RM3.49 from RM2.57 previously, while reaffirming its "buy" recommendation on the counter.

Affin Hwang Capital said the new target price was based on its revised earnings estimates for the company from financial year ending Dec 31, 2018, to 2020, as well as a higher price-earning multiple of 20 times the estimated earnings for 2019, compared with 17 times previously. "We remain positive on Mi Equipment as a proxy to growth in the adoption of wafer level packaging," the brokerage explains in its recent report.

Affin Hwang Capital notes the successful delivery of Mi Equipment's Li- and Si-series of sorting machines in the second quarter of this year represents a significant breakthrough for the company. "We had initially thought that most of Mi Equipment's newer products were primarily at the development stage and built for its customers for demo purposes only," it points out. The brokerage posits that the quicker-than-expected penetration into these new market segments - the fan out wafer level packaging equipment segment (Li-series) and testing equipment segment (Si-series) - represents goods news to Mi Equipment, as it will enable the group to grow its order-book backlog for these new equipment.

In addition, Mi Equipment will be able to make full use of its new Bayan Lepas factory capacity, once it comes on stream in the first quarter of 2019. "This should at the same time quash concerns over under-utilisation at its new plant," it says. Following the earlier-than-expected release of Mi Equipment's Li- and Si-series of sorting machines in the previous quarter, the group is now setting its hope for the commercialisation of its Ai-series machines next by the fourth quarter of this year.

According to Oh, the Ai series is currently undergoing customers' qualification process. "The Ai series, which is bonding machine, will further enhance our positioning in the assembly and packaging equipment segment," he says. "With our new machine series coming into the market, and the bigger capacity in 2019 with our new Bayan Lepas factory targeted to be operational in the early second quarter of next year, we expect to increase our market share in the near future," he adds.

At present, there is no close local competitor for Mi Equipment, as the company is one of the largest WLP players domestically, and possibly one of the largest in the Southeast Asia from a sales volume perspective. On a global front, Mi Equipment's competitors comprise advanced semiconductor equipment makers such as ASM, Muhlbauer and Ueno Seiki. Be that as it may, Mi Equipment boasts four out of five largest outsourced semiconductor assembly and test companies (OSATs) globally as its key customers.

For the first half of 2018, Mi Equipment posted a net profit of RM23.12mil, or 6.21 sen per share, on revenue of RM87.77mil. In its filings with Bursa Malaysia last month, the group noted that the strong US dollar has worked in its favour. Thus far, Mi Equipment has declared a first interim dividend of three sen per share for 2018.

The group has proposed dividend policy of paying out at least 20% of its annual audited profit after tax attributable to the shareholders of the company. Between 2014 and 2017, Mi Equipment's revenue registered a compounded annual growth rate (CAGR) of 32.6% from RM74.3mil to RM173.3mil. The group's net profit, on the other hand, grew at a CAGR of 47.7% from RM18.4mil in 2014 to RM59.3mil last year, with profit margin widening from 24.8% in 2014 to 34.2% in 2017.

Source: The Star, 22 September 2018

#### Members' News

#### **Renewed Interest in Perstima**

Perstima, the market leader in the Malaysian tinplate market, is seeing renewed investor interest on prospects of an earnings recovery. This is following a margin rebound in its first quarter of financial year 2019 (FY19). The stock, which has been steadily rising since early last month, hit a high of RM5.22 last Thursday. Two days before that, the company announced a three-fold increase in net profit to RM12.14mil for the quarter ended June 30 as compared with the same period last year.

Traders said going by Perstima's recent quarterly results, the company has more pricing power and was able to pass on additional costs to its customers. "Notwithstanding that a challenging environment is still expected, Perstima appears to be staging a recovery. "It also has a large cash reserve, giving it enough room to brace out any potential headwinds and still pay out dividends," said a trader. The company manufactures tinplate for the domestic and export markets, with Vietnam being a key growth area.

Alliance DBS Research, the sole brokerage covering Perstima, has revised upward its earnings estimates for the company by 20%-58% for the coming two financial years. In a report early last week, it said it arrived at this estimate after imputing a higher gross profit margin assumption of 7% for both FY19 and FY20 versus its previous assumption of 4.9% and 6%, respectively. Gross profit margin for first quarter of FY19 was 7.9% as compared to 3.2% in the first quarter of FY18.

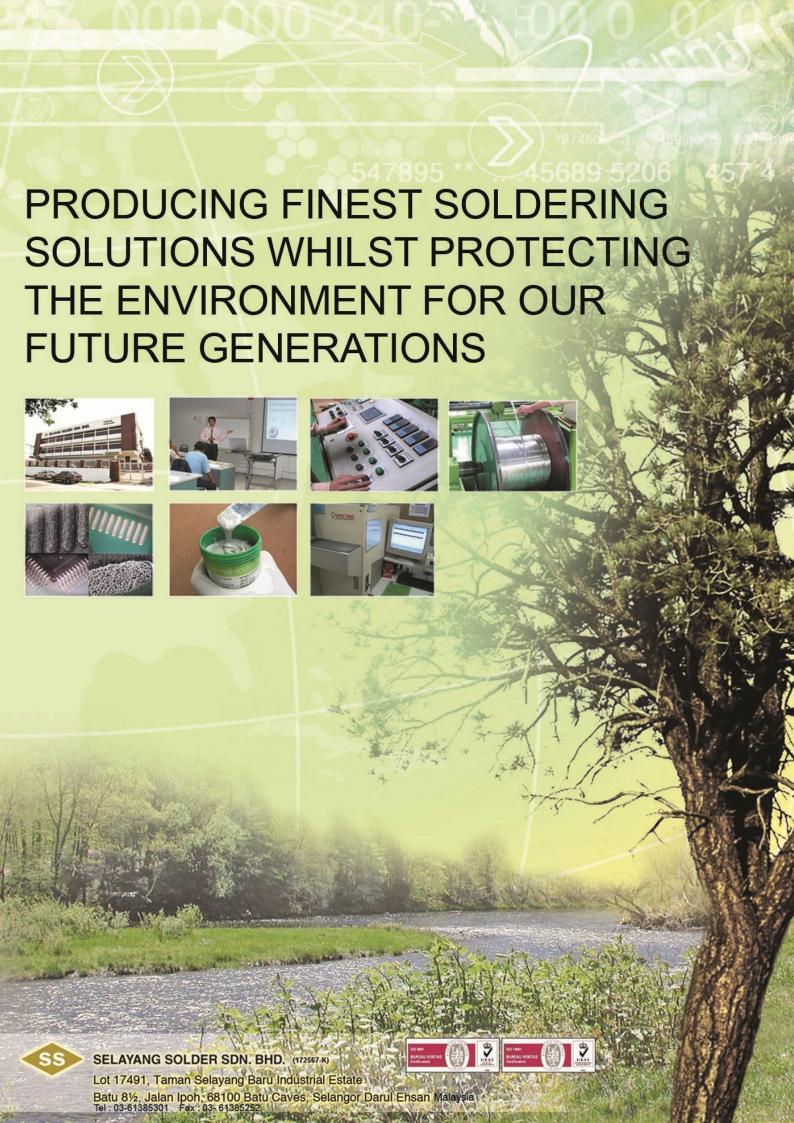
According to Alliance DBS Research, the strong recovery in its margin implied that the intense competition arising from China's exports of tinplates to Malaysia is subsiding. This should improve its earnings prospects substantially, given that the Malaysian market still contributed over 60% of the group's revenue, it added. For FY18, revenue contribution from Vietnam stood at 31%.

Perstima, in a note accompanying its quarterly results, said it expected the operating environment to remain challenging and competitive due to a higher presence of imports from overseas and the volatility of the ringgit against US dollar.

In recent years, the company faced rising competition from China's tinplate exports to Malaysia. To expand and defend its dominant market share position, Perstima strived to price its products that are mainly used for consumer-related can products competitively. But this came at the expense of margins.

On a brighter note, its balance sheet has been strong and remained in a net cash position since FY10. Cash as at end-June stood at RM134.95mil, while borrowings were RM30.9mil. Its shares closed last week two sen lower on profit taking to RM5.20, giving it a market cap of RM516mil. With its share price having surpassed Alliance DBS' target price of RM5, it is now over to the company to deliver the anticipated earnings.

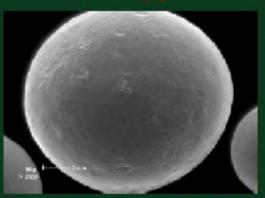
Source: The Star, 6 August 2018

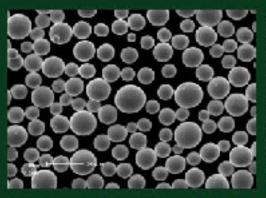


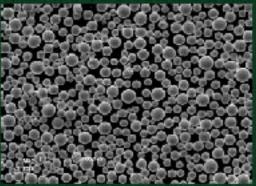


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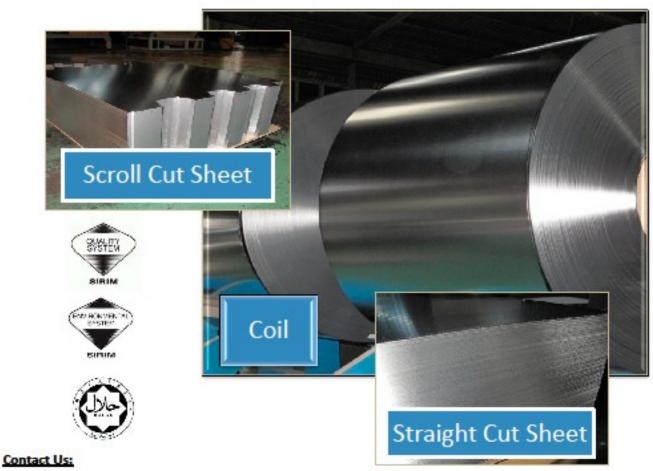
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### Data / Statistics

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 Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	286 276 334 314 353 344 362 346 360 382 371 397	2,959 2,119 2,566 2,082 2,772 2,880 2,748 2,294 2,749 2,884 2,722 3,190	1,928 2,342 3,051 2,417 2,712 2,824 2,854 2,672 2,549 2,066 2,382 2,463	120 123 205 85 159 158 157 158 182 166 176 211	2,451 2,747 2,968 5,294 3,964 2,628 3,748 4,867 2,494 2,755 2,056 2,347		
2016 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	357	2,667	2,550	167	2,172		
	304	2,273	2,939	205	2,779		
	377	1,697	2,611	213	3,153		
	361	2,333	2,381	233	2,849		
	349	1,984	2,529	236	2,563		
	342	2,101	1,951	151	2,029		
	311	2,054	1,873	116	1,720		
	303	2,293	2,159	200	2,238		
	335	1,823	1,865	204	1,730		
	347	1,948	1,920	173	1,766		
	359	2,267	1,977	154	2,149		
	378	2,172	2,094	186	1,834		
2017* Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	351	2,377	1,683	171	1,530		
	316	2,033	2,167	203	2,635		
	306	1,723	2,044	322	2,091		
	275	2,441	1,832	263	1,777		
	339	2,598	2,572	218	2,326		
	308	2,446	2,172	258	1,732		
	333	3,154	1,2605	320	2,768		
	329	2,428	2,812	178	3,106		
	314	2,565	2,149	179	2,275		
	323	2,775	2,256	225	2,116		
	368	2,740	2,478	204	2,510		
	338	2,586	2,492	166	2,281		
2018* Jan Feb Mar Apr May Jun Jul Aug	n.y.a	2,424	2,060	171	1,950		
	n.y.a	2,046	2,214	190	2,009		
	n.y.a	2,488	2,340	158	2,584		
	n.y.a	2,430	2,111	192	2,401		
	n.y.a	2,895	2,343	171	2,435		
	n.y.a	2,494	2,219	192	2,162		
	n.y.a	2,620	2,571	162	2,687		
	n.y.a	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 2012 2013 2014 2015 2016 2017	2,341 2,083 1,835 1,581 1,900 2,238 2,707	1,458 1,333 1,078 922 1,133 1,314 1,348	665 573 561 520 608 750 737	108 104 100 82 77 86 63	110 73 96 57 82 88 559	
2015 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	120 123 205 85 159 158 157 158 182 166 176 211	67 78 128 33 108 105 99 82 101 90 102 140	47 38 63 37 35 51 31 66 66 55 65	2 5 6 11 4 0 14 2 4 13 4	4 2 8 4 12 2 13 8 11 8 5	
2016 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	167 205 213 233 236 151 116 200 204 173 154 186	97 140 144 150 117 82 44 133 152 79 83 93	63 46 63 62 69 59 58 59 45 73 67 86	3 12 3 15 14 3 11 6 3 13 0	4 7 3 6 36 7 3 2 4 8 4	
2017 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	171 203 322 263 218 258 320 178 179 225 204 166	102 133 139 100 150 108 143 79 101 104 95 94	54 64 76 72 61 61 76 62 40 68 49 54	12 2 13 2 3 12 1 2 1 4 1	3 4 94 89 4 77 100 35 37 49 59 8	
2018** Jan Feb Mar Apr May Jun Jul Aug	171 190 158 192 171 192 162 n.y.a	101 133 93 103 106 116 99	57 54 49 78 56 61 60 n.y.a	3 1 13 1 1 1 13 0	10 2 3 10 8 2 3 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				
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)	(Tonnes)	(USD/Tonne)		
2011 2012 2013 2014	26,235 21,193 22,322 21,737	80.03 65.38 70.30 71.19	11,387 10,206 9,530 10,822	26,113 21,114 22,316 21,916		
2015 2016 2017 2015	16,015 17,528 20,029	62.45 72.75 86.12	12,679 11,568 8,890	16,084 17,982 20,098		
Jan Feb Mar Apr May Jun Jul Aug Sep	19,449 18,295 17,527 16,084 15,884 15,172 14,884 15,221 15,150	69.72 65.70 64.49 58.54 57.26 56.72 56.60 61.74 65.41	1,165 946 1,011 836 980 1,038 1,220 1,017 1,059	19,463 18,292 17,460 15,986 15,827 15,015 14,962 15,229		
Oct Nov Dec 2016	15,763 14,694 14,629	67.34 63.19 62.62	894 1,139 1,374	15,848 14,743 14,702		
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	13,745 15,324 16,848 17,029 16,908 16,909 17,786 18,373 19,466 20,003 21,001 21,011	59.62 64.19 68.60 66.42 68.35 69.06 71.44 74.03 80.08 83.60 91.17 93.77	1,269 1,294 1,334 1,050 817 956 758 824 849 755 897 765	13,777 15,654 16,996 17,068 16,757 16,985 17,845 18,413 19,590 20,182 21,235 21,286		
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	20,801 19,548 19,762 19,885 20,104 19,707 20,178 20,438 20,729 20,450 19,477 19,353	92.92 86.99 87.80 87.59 86.84 84.39 86.64 87.67 87.39 86.58 81.46 78.93	722 658 744 687 744 625 711 774 722 780 923 800	20,750 19,492 19,832 19,991 20,231 19,702 20,273 20,570 20,855 20,469 19,575 19,440		
2018 Jan Feb Mar Apr May Jun Jul Aug Sep	20,415 21,558 21,049 21,151 20,740 20,616 19,687 19,299 18,905	80.77 84.37 82.15 82.22 82.36 82.43 79.79 78.99 78.29	973 756 933 744 710 907 857 642 736	20,711 21,694 21,214 21,340 20,900 20,663 19,700 19,281 18,999		

Sources: Kuala Lumpur Tin Market/ Malaysia Smelting Corporation Bhd Note

Malaysian Ringgit to US Dollar exchange rate was unpeged on 22.8.2005

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.

LME	PRICES & ST	ocks	LME	PRICES & STO	ocks	LONDON S	SPOT PRICES
	Cash Settlement (US\$/Tonne)	Stocks Period End (Tonnes)		Cash Settlement (US\$/Tonne)	Stocks Period End (Tonnes)		London Spot (US Cents / Troy Oz)
2013 2014 2015 2016 2017	2,142.26 2,099.08 1,786.50 1,870.75 2,317.54	234,246 209,883 183,608 186,363 164,329	2013 2014 2015 2016 2017	7,325.73 6,859.69 5,501.69 4,863.23 6,162.77	533,323 196,483 303,719 235,752 254,817	2013 2014 2015 2016 2017	2,382.92 1,907.83 1,544.83 1,709.67 1,705.33
2015 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	1,829.17 1,804.68 1,784.98 1,999.80 2,003.84 1,836.34 1,762.35 1,692.90 1,682.05 1,724.57 1,615.98 1,701.29	214,850 214,700 232,900 171,575 160,150 174,000 218,775 186,800 162,425 147,225 128,250 191,650	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	5,815.83 5,702.08 5,925.84 6,028.48 6,300.61 5,833.61 5,456.91 5,088.93 5,208.09 5,222.61 4,808.24 4,629.00	250,025 297,200 332,125 339,625 320,950 323,450 346,525 367,650 320,400 267,850 243,025 235,800	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	1,710.00 1,684.00 1,622.00 1,632.00 1,380.00 1,610.00 1,507.00 1,494.00 1,472.00 1,571.00 1,451.00 1,405.00
2016 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	1,646.95 1,771.57 1,808.02 1,728.67 1,714.43 1,713.91 1,834.88 1,838.89 1,942.02 2,039.93 2,178.84 2,230.83	188,125 211,475 155,975 174,325 185,375 185,150 187,075 187,275 190,250 188,700 187,725 194,900	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	4,462.75 4,595.48 4,947.55 4,851.12 4,708.35 4,630.64 4,855.79 4,758.20 4,707.18 4,732.14 5,443.25 5,666.25	239,400 193,475 143,400 154,675 154,350 189,125 210,075 304,775 371,775 319,475 236,675 311,825	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	1,402.00 1,507.00 1,542.00 1,626.00 1,689.00 1,718.00 1,993.00 1,964.00 1,928.00 1,767.00 1,742.00 1,638.00
2017 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	2,236.69 2,321.73 2,277.30 2,231.31 2,131.67 2,131.18 2,266.40 2,357.32 2,377.29 2,506.30 2,464.41 2,508.82	189,050 189,600 184,275 169,425 180,275 164,150 152,800 148,425 157,475 149,250 145,000 142,225	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	5,737.43 5,941.55 5,821.52 5,697.67 5,591.50 5,699.48 5,978.60 6,478.18 6,583.19 6,797.39 6,825.57 6,801.16	260,850 200,725 283,900 253,675 308,000 278,275 295,525 223,500 295,500 273,675 183,525 200,650	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	1,681.00 1,787.00 1,759.00 1,804.00 1,676.00 1,696.00 1,614.00 1,691.00 1,745.00 1,694.00 1,701.00 1,616.00
2018 Jan Feb Mar Apr May Jun Jul Aug Sep	2,589.77 2,580.83 2,397.00 2,357.38 2,363.88 2,440.74 2,212.91 2,064.86 2,028.23	133,250 125,225 129,100 130,775 133,475 131,775 127,025 122,925 115,700	Jan Feb Mar Apr May Jun Jul Aug Sep	7,080.30 7,001.80 6,795.76 6,838.55 6,821.76 6,954.79 6,248.18 6,039.75 6,020.03	304,675 328,000 383,025 325,525 317,950 289,875 251,950 262,475 199,125	Jan Feb Mar Apr May Jun Jul Aug Sep	1,717.00 1,666.00 1,647.00 1,661.00 1,647.00 1,652.00 1,571.00 1,501.00 1,426.00

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. Redning 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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# The Game Changer LOCTITE GC 10

### First-Ever Temperature Stable Solder Paste

Henkel has developed the first-ever temperature stable no-clean solder paste. LOCTITE GC 10 is stable at room and elevated temperatures for extended periods of time, providing benefits throughout the logistics and supply chains, while still offering exceptional printability and reflow performance.



Improved stability



Improved printing



Improved paste managemen



Improved reflow



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Cost saving



For more information, contact 1-800-562-8483 or visit us online at soldergamechanger.com and henkel-adhesives.com/electronics

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