

MALAYSIAN TIN PRODUCTS

NEWSLETTER | QUARTERLY | OCTOBER - DECEMBER 2023



SECRETARIAT ADDRESS

The Malaysian Tin Products
Manufacturers' Association MTPMA
8th Floor, West Block, Wisma Golden Eagle Realty
142-C, Jalan Ampang, 50450 Kuala Lumpur

Tel: 603-21616171

Fax: 603-21616179

Web: www.mtpma.org.my

PRINTED BY

Marzuq Print & Trading
No. 38, Jalan SM1A
Taman Sunway Batu Caves
68100 Batu Caves
Selangor Darul Ehsan

PP 7387 / 01 / 2013 (031914)

ISSN 1511-1596



9 771511 159006

NIHON SUPERIOR (M) SDN. BHD.



SUSTAINABLE DEVELOPMENT GOALS

Nihon Superior is undertaking a range of companywide initiatives to achieve 17 goals of SDGs which will lead to a prosperous and vibrant future by 2030.

NSM committed in achieving this direction by implementing various activities and actions.

Installation of Solar Panel



Equipped with various High-Tech Testing facilities, we are committed to provide excellent technical support and services to our customer



JEOL SEM/EDX



GEN3
SOLDERABILITY
TESTER



SHIMADZU ICPS
EMISSION
SPECTROMETER



SHIMADZU
TENSILE
TESTER

PRODUCT LIST

- Solder Bar
- Flux Cored Solder Wire
- Solid Solder Wire
- Solder Paste (Printing Grade)
- Solder Paste (Dispensing Grade)
- Soldering Flux
- Solder Anode
- Solder Spheres
- Solder Preform



Manufacturer Info:

NIHON SUPERIOR (M) SDN. BHD.

Lot 17, Jalan Industri 1, Free Industrial Zone Jelapang II,
30020 Ipoh, Perak, Malaysia.

TEL : +60-(0)5-527-3792

FAX : +60-(0)5-527-3659

Sales Inquiry Info:

NIHON SUPERIOR ASIA SDN. BHD.

TEL : +60-(0)3-7932-5875

FAX : +60-(0)3-7931-5892

Mail : info@nihonsuperior.com.my

THE MALAYSIAN TIN PRODUCTS NEWSLETTER

QUARTERLY | OCTOBER - DECEMBER 2023

MANAGEMENT COMMITTEE 2023/2024

PRESIDENT

Mr C. S. Lim
Selayang Metal Industries Sdn Bhd

VICE PRESIDENT

Mr David Tan
Tumasek Pewter Sdn Bhd

HON. SECRETARY

Mr C. H. Tan
RedRing Solder (M) Sdn Bhd

TREASURER

Mr Chen Tien Yue
Royal Selangor International Sdn Bhd

COMMITTEE MEMBERS

Mr Yew Wei Aun
Selayang Solder Sdn Bhd

En. Badaruddin Jamal
Perusahaan Sadur Timah
Malaysia (PERSTIMA) Bhd

Mr Koji Tsubono
Senju (M) Sdn Bhd

Mr Yuji Kozutsumi
Nihon Superior (M) Sdn Bhd

EDITORIAL SUB-COMMITTEE 2023/2024

Mr C. S. Lim (Convenor)
Mr David Tan
Mr C. H. Tan
Mr Chen Tien Yue
Mr Yew Wei Aun
Mr Yuji Kozutsumi
En. Badaruddin Jamal
Mr Koji Tsubono
Tn Hj. Muhamad Nor Muhamad
En. Ahmad Ashraf Abd Ghafar

TABLE OF CONTENT

4

PRESIDENT'S NOTE

5

NEWS ON ECONOMY

8

NEWS ON SEMICONDUCTOR INDUSTRY

18

NEWS ON ELECTRICAL & ELECTRONICS
INDUSTRY

20

DATA / STATISTICS

26

LIST OF ASSOCIATION MEMBERS

The Malaysian Tin Products Newsletter is published quarterly by the Malaysian Tin Products Manufacturers' Association (MTPMA). The opinions and statements expressed in the Newsletter are not necessarily those of the MTPMA or the Editorial Sub-Committee and neither endorsement nor confirmation are intended or implied.

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

*The Editor
The Malaysian Tin Products Newsletter
8th Floor, West Block, Wisma Golden Eagle Realty,
142-C, Jalan Ampang
50450 Kuala Lumpur.*

PRESIDENT'S NOTE



LIM CHENG SANG
PRESIDENT
THE MALAYSIAN TIN PRODUCTS
MANUFACTURERS' ASSOCIATION
(MTPMA)

Dear Members,

As we bid farewell to the year 2023, we are grateful that in Malaysia we have managed to sail through the past twelve months with relative comfort compared to elsewhere in many parts of the world. We sympathise and empathise to those affected by the prolonged war in Ukraine, and the eruption of Israel-Hamas war, and hope that an amicable solution be found soon to end these conflicts which have not only brought misery to its people but also impacted the global economy.

In spite of the high inflation and high interest rates, the Malaysian economy continued to register growth, albeit at a more moderate pace amid a challenging external environment. Malaysia's GDP growth for the third quarter of 2023 (Q3 2023) increased to 3.3 percent, compared to 2.9 percent for the previous quarter. The growth was driven by domestic demand, supported by the services, construction and agriculture sectors while the country's exports remained weak due to mild external demand. The manufacturing sector in Q3 2023 declined due to weak demand for electrical and electronic (E & E) products, as well as lower production of refined petroleum products. The inflation rate declined to 2 percent in the said quarter compared to 2.8 percent in Q2 2023. Bank Negara Malaysia (BNM) expected inflation to continue to decline in Q4 2023.

Going forward, BNM forecasted growth to remain resilient due to strong domestic demand despite external headwinds. It further projected that the Malaysian economy would grow around 4% in 2023 and 4% - 5% in 2024. Other financial institutions, such as the International Monetary Fund (IMF) and Maybank Investment Bank (Maybank IB) also made similar projections, with Maybank IB expecting GDP growth for Q4 2023 to be between 3.7 to 4.1 percent. BNM's projection was based on several factors including the expected increase in foreign tourists arrivals, the launch of several infrastructure projects, the implementation of catalytic initiatives and actions drawn up under the 2024 Budget as well as the recovery of poorly performing economic sectors.

For the global economy, economists expect growth in 2024 to remain resilient with uneven economic momentum. Several risks and issues would shape the world economy for the year, such as the prolonged geopolitical conflicts in Europe, the sudden eruption of Israel-Hamas war since October 7, elevated trade tensions between US and China, upcoming US Presidential Election and climate change which could significantly impact the global economy, financial and commodities markets.

In the global tin market, the International Tin Association had commented that *"the LME tin price renewed stabilisation at around \$25,000 post-festive season reflects easing short selling pressure and high warrant cancellations, with a slight dip in stock levels. Despite continued positive demand indicators from the electronics and technology sectors, ample supply in China, marked by some recovery in SHFE stocks, tempers market optimism. Potential Q1 2024 tightness in China's tin feedstock looms, hinging on post-Lunar New Year operational status of tin mines in Wa State. Upcoming Indonesian elections in February are noteworthy, as they may dictate tin export policies, amid new three-year licensing challenges for local smelters."*

At the local level, despite the closure of the Kuala Lumpur Tin Market, tin product manufacturers enjoyed a stable supply of tin throughout the year, with no significant issues in labor supply and wages. Demand for tin products, particularly from the semiconductor and electroplating sectors remained consistent beginning from Q1 2023, and slightly increased by the end of Q3 2023.

Economists expected that demand for technology products in 2024 to rebound, which could help Malaysia's trade grow in 2024. However, they cautioned that possible economic slowdown in the United States and China could dent the demand growth. An increase in manufacturing exports in 2024, particularly in E&E products, which account for about 80% of Malaysia's exports, would lift trade figures going into 2024, underpinned by the demand for semiconductors.

Despite the various challenges and risks, let us continue to believe that behind these challenges lie opportunities. I would like to urge all members to keep our morale high, remain resilient and to always maintain our standards and quality on all of our products. Integrity, transparency and responsibility are crucial values in maintaining the trust of stakeholders in our industry, particularly our clients. Failure to preserve these values would cost us our productivity and tarnish the image of our businesses.

Before concluding this President's note, on behalf of the members of the Association, may I wish all of you a Happy New Year 2024. May the new year bring much hope, happiness and prosperity. Let us all pray that Malaysia's economy will continue to be resilient and thrive in the year ahead.

With warmest regards.

LIM CHENG SANG
PRESIDENT

NEWS ON ECONOMY

IMF Expects Malaysia's Real GDP to Grow 4.3pc Next Year

Malaysia's real gross domestic product (GDP) is expected to grow 4.3 per cent in 2024, up from the 4.0 per cent growth expected for 2023. This would mainly be driven by higher global export demand, particularly from the technology sector, according to the International Monetary Fund (IMF). IMF Asia Pacific regional studies division chief Shanaka (Jay) Peiris said Malaysia was a very open economy, especially in the export of electrical and electronics (E&E) products.

"We expect the global economy and export demand to gradually recover, particularly for the technology sector to pick up next year, and that will add to the 3.0 (per cent) or higher growth we have in Malaysia towards next year," he told a press conference in conjunction with the release of the IMF Regional Economic Outlook for Asia and Pacific report here yesterday. On Malaysia's inflation, he said it has been gradually slowing but the subsidy reforms tabled in the Budget 2024 would pose some risks to that. Nonetheless, Peiris reckons that the subsidy reforms would be a "one-off" event and that it would be un-

necessary for additional measures from Bank Negara Malaysia.

"It will still depend on how the inflation comes around, the impact of subsidy reforms as well as the external environment and interest rate differentials (compared with US interest rates)". He said the IMF's recommendation for Malaysia in the last report showed that the monetary policy should be restrictive enough to bring the inflation down to the 2.0 to 3.0 per cent range over the medium term.

"At the moment, we have seen interest rates raised, and that inflation has been gradually coming down right now. So in that sense, we think that a maintained restrictive stance should help bring down inflation," he said. — Bernama

Source: New Straits Times, 19 October 2023

Malaysia's Trade Declines in September Exports of Manufactured, Mining and Agriculture Goods Down

Malaysia's trade fell 12.6 per cent last month compared with a year ago amid slower global demand and uncertainties in commodity prices. According to the Investment, Trade and Industry Ministry, exports decreased 13.7 per cent and imports edged down by 11.1 per cent. "The performance was similar to Malaysia's major trading partners notably South Korea, China, Taiwan and Indonesia, which recorded negative trade growth last month and a drop in their global imports," it said in a statement. Malaysia's trade surplus last month contracted by 23 per cent year-on-year. Exports

of manufactured goods, which represented 86.5 per cent, or RM107.7 billion, of total exports, dipped 11.8 per cent year-on-year due to lower demand for petroleum, electrical and electronics and chemicals and chemical products.

However, exports of processed food and paper and pulp products grew. Exports of agriculture goods decreased by 23.1 per cent to RM8.04 billion compared with September last

> Continue to Page 6

< From Page 5

year following lower exports of palm oil and palm oil-based agriculture products. Exports of mining goods eased 28 per cent to RM7.98 billion attributed to lower exports of liquefied natural gas and crude petroleum. Trade with Asean made up 27.1 per cent, or RM60.91 billion, of total trade. "Exports to Asean major markets that recorded expansion were Vietnam and Thailand," said the ministry. Trade with the United States declined by 15.9 per cent to RM22.46

billion while trade with the European Union shrank by 3.4 per cent to RM17.57 billion. Trade, exports, imports and trade surplus in the third quarter of this year declined by 15.7 per cent, 15.2 per cent, 16.3 per cent and 9.1 per cent, respectively, compared with the same period last year.

Source: New Straits Times, 20 October 2023

Factory Activity Contracts on High Costs

Israel-Hamas War Sees Global Demand under Pressure

Manufacturing activity in Asia slumped again in October as conflict in the Middle East drove oil prices higher, costs rose and global demand remained under pressure. Most countries across the region reported pressures from cost inflation, shrinking output and new orders, according to manufacturing purchasing managers' indexes (PMI) published yesterday by S&P Global and au Jibun Bank. A private gauge of factory activity in China unexpectedly contracted, underlining fragility within the world's second-largest economy. The data are a discouraging sign for the global economy, which has seen its bid for recovery threatened by uncertainty over the Israel-Hamas war and the prospect of wider conflict in the region.

Asia - which makes much of the world's goods - has struggled to ramp up production this year amid patchy demand from major markets including the United States and Europe. PMI readings for Japan and South Korea remained mired in contraction at 48.7 and 49.8, respectively, little changed from the prior month. A reading above 50 indicates an expansion in activity, while anything below suggests contraction. "The rate of inflation was robust and the strongest seen in

the year to date amid reports of higher raw material prices, notably those linked to oil," said Usamah Bhatti, economist at S&P Global Market Intelligence, in a statement accompanying the South Korean data. Bhatti also noted that firms had mentioned unfavourable exchange rates as their currencies came under pressure, leading to higher input costs. While oil prices are beginning to cool again, war in the Middle East led to volatility over the month - just as many Asian factories had begun to enjoy cooling inflation and widening profit margins.

Crude costs may surge further this quarter if a broader conflict erupts. Elevated interest rates - or ones that climb even higher - would crimp any plans to expand manufacturing activity. Most of South-East Asia - which has typically been able to rely on the strength of its domestic markets to power growth - was in contraction in October. PMIs for Vietnam, Myanmar and Thailand deteriorated, while Malaysia was unchanged. Only Indonesia managed to expand in October from the prior month, though the rate of growth was slower. The stop-start recovery is also evident in China, where the private Caixin survey of manufacturing activity fell to 49.5 in October from 50.6 the month before. That mirrored an official gauge this week that also showed factory activity shrank in October given the stretch of public holidays in the month along with muted market demand.

> Continue to Page 7

< From Page 6

"Manufacturers were not in high spirits in October," said Wang Zhe, senior economist at Caixin Insight Group, in a statement accompanying the Caixin data that cited falling supply, employment and external demand. The economy has showed signs of bottoming out, but the foundation of recovery is not solid." There have been a couple of signs that the worst may be over for at least some parts of the region as activity and demand attempt to recover. Trade bellwether Taiwan - which has seen PMI contract for more than a year - recorded a reading of 47.6 in October. The best reading in seven months suggested that the decline in activity in the econo-

my becoming less severe. South Korea, meanwhile, posted an increase in exports of 5.1% in October from a year earlier - the first rise since late last year and an indication that there is some resilience in global demand. Manufacturers also reported improved business optimism over the coming 12 months, saying in the PMI survey that resurgent demand would stimulate new product launches and sales. - Bloomberg

Source: *The Star*, 2 November 2023

Economy Shows Positive Signs in October

Industrial Production and Retail Sales Lead the Way

Malaysia's economy has sustained positive growth during the first three quarters of 2023 and showed positive signs in October led by industrial production and retail sales, says the Statistics Department. It said the consistent performance had contributed to a 3.9% growth in the economy in the first nine months of 2023, in contrast to the 9.2% growth recorded in the corresponding period in 2022. Chief statistician Datuk Seri Mohd Uzir Mahidin said Malaysia's Industrial Production Index grew to 2.7% year-on-year (y-o-y) in October 2023, a substantial improvement from the preceeding months negative 0.5%. "This marked the most significant upswing since May 2023, predominantly driven by the robust performance in the mining sector performance in the mining sector.

"Simultaneously, the electricity and manufacturing sectors sustained their positive trends, recording increases of 5.8% and 0.9%, respectively," he said in a statement on the Malaysia Economic Statistics Review Volume 12/2023 yesterday. However, the manufacturing sector's sales value registered a 1.4% decline in October this year, influenced by a continued decrease in the petroleum, chemical, rubber

and plastic products sub-sector, which saw a drop of 9.5%. For the wholesale and retail trade sector, the monthly sales value in October 2023 reached RM142.3bil, up 6.5% y-o-y, driven by the wholesale trade sub-sector which expanded by 5.7% or RM3.4bil to RM63.3bil.

Subsequently, motor vehicles registered a growth rate of 19.1% (plus RM3bil) while the retail trade sub-sector rose 3.9% (plus RM2.3bil), he said. On inflation, Mohd Uzir said Malaysia's inflation increased by 1.8% in October 2023, marking the lowest rate since April 2021, with the index reaching 130.9 compared to 128.6 in the corresponding month of the previous year. "In November 2023, Malaysia's inflation persists in its gradual ascent, registering a slower growth of 1.5%, with the index points recorded at 130.9 compared to 129 in the corresponding month of the preceding year.

"Malaysia's Producer Price Index (PPI) slipped 0.3% in October 2023. In November 2023, the PPI recorded negative 1.5%," he added. On the trade front, Mohd Uzir said Malaysia's total trade con-

> Continue to Page 8

< From Page 7

tracted by 2.4% y-o-y to RM239.5bil in October 2023. Exports witnessed a 4.4% decline to reach RM126.2bil, while imports experienced a marginal decrease of 0.2% to RM113.3bil. Consequently, the trade surplus stood at RM12.9bil, reflecting a 30.3% decrease from the previous year, said Mohd Uzir. On the labour market, he said it exhibited a 2% annual increase in the number of employed persons, reaching 16.4 million in October 2023.

"The labour force participation rate for October 2023 stood at 70.1% marking a 0.4 percentage point increase from the 69.7% recorded in October 2022. Concurrently, the unemployment rate decreased by 0.2 percentage points to 3.4% as compared to the same month in the previous year," he added. Meanwhile, the Leading Index experienced a y-o-y decrease of 0.2% to 109.2 points from 109.4 points in the preceding year. - Bernama

Source: The Star, 30 December 2023

NEWS ON SEMICONDUCTOR INDUSTRY

Analysts Laud Big Funds' Osram Investment

GLIC's Strong Support Will Boost Foreign Investments in Malaysia

The combined RM2 billion investment by three big funds in ams Osram AG's semiconductor business in Malaysia is a "unique, strategic and smart" approach. Economists believe that the strong support from the three government-linked investment companies (GLICs) will help boost foreign direct investments (FDI) here. Such cooperation will not only make investors more confident but will also create an environment that encourages more FDI, they said. Late last week, Permodalan Nasional Bhd (PNB), the Employees' Provident Fund (EPF) and Retirement Fund Inc (KWAP) signed a sale and leaseback agreement valued at RM2 billion with Osram Opto Semiconductors Sdn Bhd on its manufacturing facility at the Kulim hi-tech park in Kedah.

Osram Opto is a wholly owned subsidiary of Austria-based ams Osram, a leader in intelligent sen-

sors and emitters. The three co-investors said the sale and leaseback transaction is expected to conclude in December, with each owning 33.3 per cent equally. Economists told Business Times investing in well-established international companies with a good track record like Osram is a smart move in a shift towards safer, high-return investments.

This will make pension funds and government investment companies financially stronger and send a strong message to international investors that Malaysia is open for business and eager to welcome FDI, said Nusantara Academy for Strategic Research senior fellow Azmi Hassan. "It is a good strategy not only to attract future FDI but for these three entities to enhance their profits in the future. In the Madani economy, this public-private partnership (PPP) places emphasis on the

> Continue to Page 9

< From Page 8

involvement of private entities, as the government alone may find it challenging to make the necessary investments."

Malaysian Institute of Economic Research economists Dr Shankaran Nambiar said it is an interesting model as institutions like the EPF need to invest and grow the funds that are at their disposal. They continually seek opportunities to generate returns on their deposited funds, making it a prudent choice to invest in well-established multinational corporations with robust business operations, he said. Osram, in particular, stands out as a reliable company, he said. "As long as pension funds and other GLICs invest in enterprises offering a low-risk premium and a relatively predictable return, such a move should be greeted with enthusiasm."

Taylor's University philosophy, politics and economics programme director Prof Ong Kian Ming said the investment signifies the government's dedication, along with the Investment, Trade and Industry Ministry to enhance FDI inflows, particularly those offering high guaranteed returns. "This approach deviates from traditional equity investments, which expose GLICs to the volatility of stock prices. Instead, it offers a more stable and predictable income stream," said Ong. The EPF has previously engaged in leasing deals involving residential and commercial properties, but this collaboration is one of the first instances in which all three GLICs have joined forces for an industrial real estate venture. The potential success of this endeavour sets a promising precedent for future opportunities in the dynamic landscape, indicating that Malaysia remains committed to exploring creative approaches to boost its FDI profile, Ong said.

Tradeview Capital chief executive officer Ng Zhu Hann said local institutional funds will inject substantial capital upfront to secure long-term leases with global companies, fostering a "win-win" scenario and bolstering the nation's FDI landscape. The innovative strategy aims to lower international investors' initial capital expenditure, enhancing Malaysia's competitiveness in attracting global names while encouraging their long-term presence in the country, he added. For this to work, trust and commitment from both institutional funds and foreign investors are crucial components of this approach, offering an alternative to traditional tax incentives and investment tax allowances schemes, said Ng. Beyond the economic benefits, the partnership is poised to create a positive ripple effect in terms of job creation, technology transfer and elevating the country's position on the global value chain.

Independent economist Julian Suresh Sundaram said the deal allows pension funds to earn higher returns while managing risks effectively, offering a 10-year exit plan and complying with Islamic finance principles. He said the deal offers a stable cash flow, lower risks and potential returns compared to bonds, making it attractive for future projects and enhancing environmental, social and corporate governance credibility.

Source: New Straits Times, 7 November 2023

JF Technology in China Firm Tie-Up

JF Technology Bhd has set up a joint-venture company in Malaysia with Shenzhen HFC Co Ltd to produce materials used in high-end semiconductor chips for artificial intelligence (AI) and electric vehicle applications. It

said Shenzhen HFC was at the forefront of utilising graphene materials in AI chips.

Source: The Star, 6 December 2023

Positive Prospects in 2024

Improved Visibility on Recovery for Tech Sector

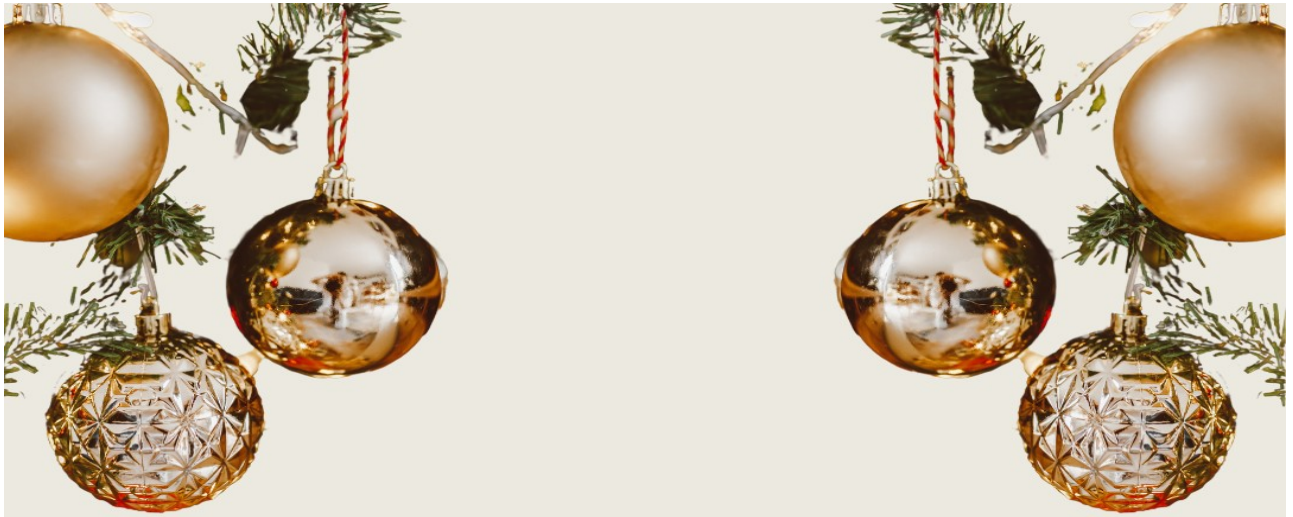
UOB Kay Hian Research (UOBKH) remains positive on the technology sector and hopeful the signs of recovery will be backed by imminent growth in 2024. In a note, the research firm said the sector's third quarter (3Q23) results were disappointing but there has been an improved visibility on recovery moving forward. "In the 3Q23 report card, both the earnings disappointment set valuation right back to mean reversion. The Bursa Malaysia Technology Index (BM Tech Index) closed lower by 37% since 2022 and at minus 3% year-to-date," it said. However, conditions are turning more bullish for the sector on a better risk-reward calculus, backed by an improving earnings outlook in 2024.

UOBKH Research said global semiconductor sales are expected to surge 13.1% year-on-year in 2024, after a sales contraction of 9.4% this year. The contraction is closing to its end and breaking out from its zero parity, which could see the cycle reversing back to positive growth trajectory imminently. "This reflects decent growth across all segments, led by memory (43.2%, after a sharp drop in 2023), followed by logic (plus 6.8%) and discrete semiconductors (plus 6.4%). In our view, this suggests sales of smartphones and smart devices are expected to rebound strongly," the research firm said. It added its empirical research on the sector's cyclicalities against the BM Tech Index also suggested the index is already on the brink of an upswing again after multiple months of consolidation.

Furthermore, equipment makers expect a strong comeback next year spearheaded by the ongoing investment cycle for medical devices and renewable energy (RE), followed by demand resumption for electric vehicles and autonomous driving in the 2Q24. "Notably, 2024 sales growth of 38% is expected to outperform global benchmarks due to the US-China trade diversion and the entrenchment of manufacturing capabilities, with RE and medical-centric equipment makers championing the order book record," it said. Despite electronic manufacturing services (EMS) companies slowing down on order loadings, UOBKH Research said the respective EMS players are on the aggressive look-out for trade diversion-related opportunities.

"Industrial EMS players, namely CAPE EMS and NationGate, are seeing promising prospects related to communication and server products, with some already in the advanced stage of commercialisation since 3Q23," it noted. The research house cautioned that even if there were downside risk in the 4Q23 especially on the small-mid cap local tech companies, the emergence of multinational players in Malaysia will result in a waterfall effect which will benefit the local ecosystem.

Source: The Star, 14 December 2023



MERRY
Christmas
and
Happy New Year

Wishing You a Merry Christmas
and a Joyful New Year

The Malaysian Tin Products Manufacturers' Association



Malaysia Urged to Develop Capacity in Semiconductor Chip Exports

The Malaysian Institute of Economic Research (MIER) said Malaysia should play a more active role in the export of semiconductor chips to benefit from global developments. It said Malaysia was well-positioned to be a hub for the production and export of chips given its long and significant presence in the global semiconductor space, especially with the outflow of investments from China. "Malaysia should develop its capacity in this respect. Malaysia also has to build more resilient global supply chains," said MIER in a statement. The National Economic Outlook Conference hosted by MIER found that in order for the economy to grow, it was necessary to recognise the economic impact of technology and the outside world.

Given Malaysia's reliance on food imports, MIER proposed that the food supply chain network be improved. The discussions in digitisation also showed how important it was for small and medium enterprises (SMEs) to be future-proofed to thrive in this field. "SMEs need help because they are competing in an industry with huge telecommunications companies. Malaysia has to build an integrated ecosystem and improve country-to-country connectivity." MIER said there was no doubt that artificial intel-

ligence (AI) was a game-changing trend that Malaysia had to fully embrace. It said in order to reset the economy, AI should be pursued aggressively, with a focus on moving beyond conventional policies to create an agile framework.

"The development of the economy depends upon how successful the government is in creating a safe and secure environment for all citizens. It cannot be overemphasised that social protection must be framed not just as a policy but as a comprehensive framework." It added that there was an urgent need for the government to introduce a life-cycle-based social protection system, providing adequate coverage from "womb to tomb". MIER suggested a transition from social assistance to social insurance and a three-layered ecosystem involving private institutions, social insurance and social assistance. "We emphasise the importance of a comprehensive, integrated social protection system with the appropriate use of technology (digitisation) and inflation hedging," it said.

Source: New Straits Times, 15 December 2023

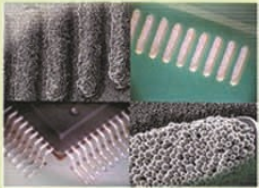
Chinese Firms Look for Assembly of High-End Chips

Malaysia is Well Placed to Secure Businesses

A growing number of Chinese semiconductor design companies are tapping Malaysian firms to assemble a portion of their high-end chips, keen to hedge risks in case the US expands sanctions on China's chip industry, sources say. The companies are asking Malaysian chip packaging firms to assemble a type of chip known as graphics processing units (GPUs), according to three people

with knowledge of the discussions. The requests only encompass assembly – which does not contravene any US restrictions – and not fabrication of the chip wafers, they said. Some contracts have already been agreed, two of the people added. The people declined to disclose the names of the companies involved or to be identified, citing confidentiality agreements.

PRODUCING FINEST SOLDERING SOLUTIONS WHILST PROTECTING THE ENVIRONMENT FOR OUR FUTURE GENERATIONS



SELYANG SOLDER SDN. BHD. (172567-K)

Lot 17491, Taman Selayang Baru Industrial Estate

Batu 8½, Jalan Ipoh, 68100 Batu Caves, Selangor Darul Ehsan Malaysia

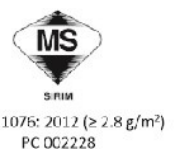
Tel : 03-61385301 Fax : 03-61385252





THE MANUFACTURE

PERUSAHAAN SADUR TIMAH MALAYSIA
(PERSTIMA) BERHAD
Reg. No. 197901005687 (49971-D)
(Incorporated in Malaysia)



www.perstima.com.my

PRODUCER OF PRIME GRADE TINPLATE & TIN FREE STEEL



MALAYSIA

Kuala Lumpur Office
Suite 27-03, 27th Floor,
Menara Keck Seng,
203 Jalan Bukit Bintang,
55100 Kuala Lumpur, Malaysia.
Tel : +60-3-21482793
Fax : +60-7-21484552

Pasir Gudang Office
PLO 255, Jalan Timah,
Kawasan Perindustrian
Pasir Gudang, 81700
Pasir Gudang, Johor, Malaysia.
Tel : +6-07-2981222 / 221

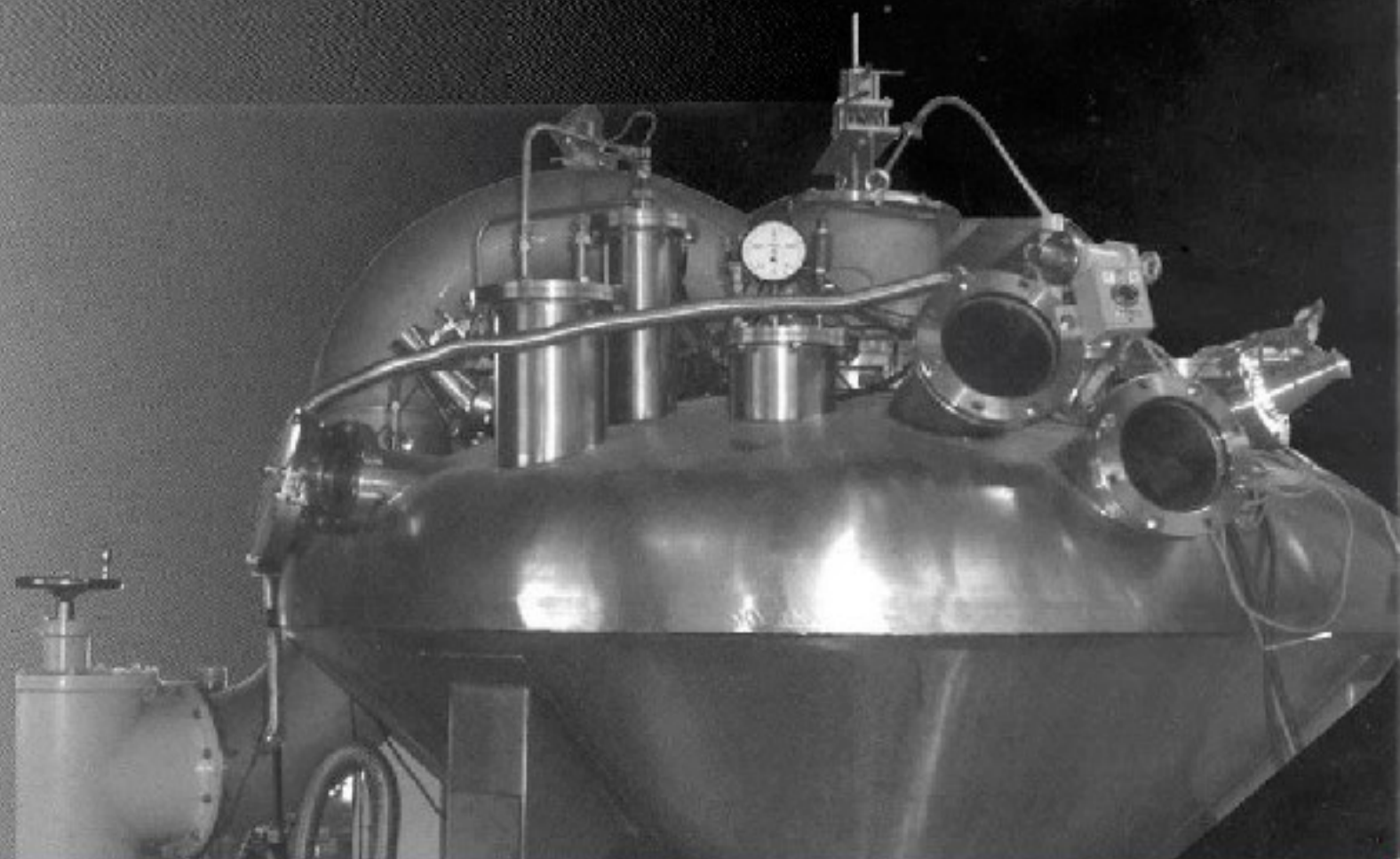


OVERSEAS

Vietnam
Perstima (Vietnam) Co., Ltd.
No. 15, VSIP Street 6,
Vietnam Singapore Industrial Park
(VSIP), Thuan An District,
Binh Duong Province, Vietnam.
Tel : +84-0650-3784090
Fax : +84-0650-3782798
Email : sales1@perstima.com.vn



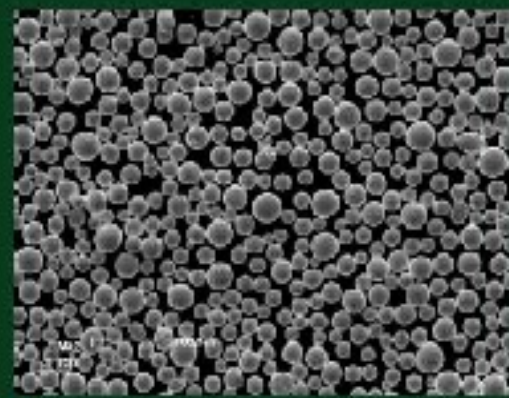
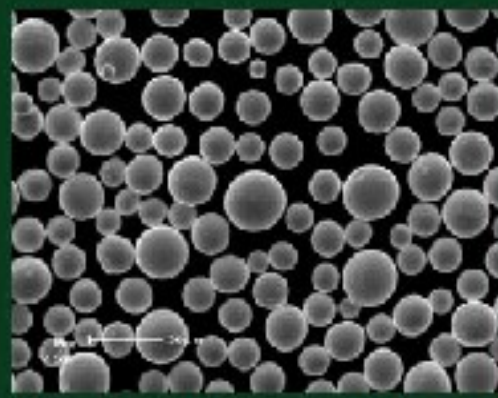
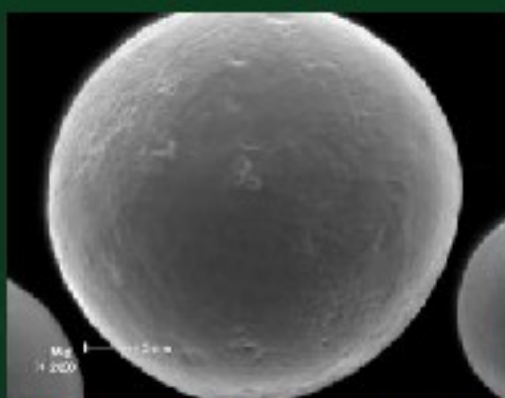
Philippines
Lot 1 Block 9 Mega Drive,
Light Industry &
Science Park IV,
Special Economic Zone,
Brgy. San Fernando,
Malvar Batangas,
4233 Philippines.
Email : mitzy.medalla@perstima.com.ph



SOLDER POWDER はんだ粉

High sphericity, good particle size distribution and very low oxygen level 高い真球度、良好な粒度分布、非常に低い酸素レベル

$O_2 < 100\text{ppm}$



All testing method as per IPC/J-STD standard and Japanese JIS standard

 **RedRingSolder**
www.redringsolder.com

Contact us:
Tel: 603-61385757
Fax: 603-61381010
Email: info@redringsolder.com

< From Page 12

Seeking to limit China's access to high-end GPUs that could fuel artificial intelligence (AI) breakthroughs or power supercomputers and military applications, Washington has increasingly placed restrictions on their sales as well as on sophisticated chip-making equipment. As those sanctions bite and an AI boom fuels demand, smaller Chinese semiconductor design firms are struggling to secure sufficient advanced packaging services at home, analysts have said. Some of the Chinese companies are interested in advanced chip packaging services, two people said. Advanced packaging of chips can significantly improve chip performance and is emerging as a critical technology in the semiconductor industry. This sometimes involves the construction of chiplets where chips are packaged tightly to work together as one powerful brain. Although not subject to US export restrictions, it's an area that can require sophisticated technology which the firms worry might one day be targeted for curbs on exports to China, the two people added.

Malaysia, a major hub in the semiconductor supply chain, is seen as well placed to grab further business as Chinese chip firms diversify outside of China for assembling needs. Unisem, majority owned by China's Huatian Technology, and other Malaysian chip packaging companies have seen increased business and inquiries from Chinese clients, said one source who was briefed on the matter. Unisem chairman John Chia declined to comment on the company's clients but said: "Due to trade sanctions and supply chain issues, many Chinese chip design houses have come to Malaysia to establish additional sources of supply outside of China to support their business in and out of China." Chinese chip design firms also see Malaysia as a good option because the country is perceived as being on good terms with China, is affordable, with an experienced workforce and sophisticated equipment, two of the sources said. Asked whether accepting orders to assemble GPUs from Chinese firms could potentially provoke US ire, Chia said Unisem's business dealings were "fully legitimate and compliant" and the company did not have the time to worry over "too many possibilities".

He noted that most of Unisem's customers in Malaysia were from the United States. The US Department of Commerce did not respond to requests for comment. Chinese companies are also interested in having their chips assembled outside China as that could also make it easier to sell their products in non-Chinese markets, said one source, an investor in two Chinese chip startups. Malaysia currently accounts for 13% of the global market for semiconductor packaging, assembly, and testing and is aiming to boost that to 15% by 2030. Chinese chip firms that have announced plans to expand in Malaysia include Xfusion, a former Huawei unit. It said in September it would partner with Malaysia's NationGate to manufacture GPU servers – servers designed for data centres and which are used in AI and high-performance computing. Shanghai-based StarFive is also building a design centre in Penang, and chip packaging and testing firm TongFu Microelectronics said last year it would expand its Malaysia facility – a venture with US chipmaker AMD.

Offering an array of incentives, Malaysia has attracted multi-billion dollar chip investments. Germany's Infineon said in August it would invest US\$5.4bil to expand its power chip plant there. US chipmaker Intel announced in 2021 that it would build a US\$7bil advanced chip packaging plant in Malaysia. Chinese companies are not just choosing Malaysia. In 2021, JCET Group, the world's third-largest chip assembly and testing company, completed an acquisition of an advanced testing facility in Singapore.

Other countries such as Vietnam and India are also seeking to expand further into chip manufacturing services. The two countries are hoping to lure clients keen to minimise US-Sino geopolitical risks. — Reuters

Source: *The Star*, 19 December 2023

NEWS ON ELECTRICAL & ELECTRONICS INDUSTRY

Standardised Battery Systems for Electric Bikes

The electric motorcycle industry has agreed to standardise both the battery swapping system and battery storage system for future products, says Liew Chin Tong. The Deputy International, Trade and Industry Minister said this decision was reached after successful discussions between the Ministry of Science, Technology and Innovation and the Motorcycle and Scooters Assemblers and Distributors Association of Malaysia. "The industry players agreed to form a consortium that will standardise the battery swapping technology for electric motorcycles to ensure the batteries will be cross-platform compatible," he said.

The Department of Standards Malaysia is now developing a national standard for the safety, functionality and environment sustainability of battery swapping technology. "The government is also open to strategic partnerships with foreign electric motorcycle players in this regard," he said. In addition

to stakeholder input, he added that the national standard would also reference existing international Organization for Standardization, International Electro-technical Commission and United Nation Regulations. "The national standard is expected to be finalised and announced by 2024," he said.

Liew was responding to Lee Chean Chung (PH-Petaling Jaya) who inquired about the government's mid-term plan for the development of battery swapping technology in Malaysia. Lee also asked about possible incentives for the public to adopt electric motorcycles with battery-swapping technology. On this, Liew said Budget 2024 had introduced a RM2,400 rebate for Malaysians earning under RM120,000 annually to purchase electric motorcycles.

Source: The Star, 1 November 2023

US Firm Enovix to Invest RM5.8bil in Malaysia

Silicon Battery Player Says Country is Business-Friendly

Enovix Corp, a United States-based advanced silicon battery firm, is making a total investment of RM5.8bil over 15 years to establish a high-volume manufacturing facility in Malaysia. The company's

investment plan was disclosed to Prime Minister Datuk Seri Anwar Ibrahim during a meeting on the sidelines of the Asia-Pacific Economic Cooperation

< From Page 18

or Apec summit in the United States. In a joint statement, Malaysian Investment Development Authority (Mida) and Enovix said the first manufacturing line, amounting to RM315mil, is set to be developed in line with the announcement made in August 2023. The manufacturing line, in collaboration between Enovix and YBS International Bhd, will be based in Penang. Enovix chief operating officer Ajay Marathe noted that the decision to choose Malaysia for its first high-volume manufacturing facility was an easy one.

This is thanks to over three decades of close collaboration with Malaysian government authorities and successful management of numerous large factories. "Malaysia's deep pool of technical talent, business-friendly environment and close proximity to our vendors and our customers' manufacturing facilities make it an ideal location for us to help develop the battery supply chain ecosystem and manufacture and scale our next-generation batteries," he added. The Investment, Trade and Industry Ministry sees the move by Enovix as a testament to Malaysia's attractiveness as a preferred investment destination in South-East Asia for advanced technology companies.

Its minister Tengku Datuk Seri Zafrul Abdul Aziz believes Enovix's investment promises significant local spillover impact, which includes the creation of substantial high-quality job opportunities for Malaysians, and the enhancement of the nation's industrial landscape. "Enovix's establishment of its hi-tech battery technology facility in Malaysia is in perfect alignment with the missions of our New Industrial Master Plan 2030," he added.

Meanwhile, Mida chief executive officer Datuk Wira Arham Abdul Rahman is pleased by Enovix's dedication to Malaysia. He acknowledged that its presence in the country will act as a catalyst for nurturing mutually advantageous partnerships with local stakeholders, especially in the battery technology industry.

"As Enovix lays down its foundations in Malaysia, we foresee its transformation into a key industry collaborator and contributor to our economic progress and development," he noted. He added that Enovix's investment in Malaysia is testament to the company's trust in the country's capabilities and workforce, and fortifies Malaysia's research and development ecosystem.

Enovix, listed on Nasdaq and headquartered in the United States, has a global presence with locations in India, South Korea and Malaysia. The company's cutting-edge battery technology finds applications in diverse sectors, including the Internet of Things, mobile, computing devices and vehicles. Currently, Enovix Malaysia Sdn Bhd is in the process of installing machinery and is anticipated to commence full operations in 2024.

Source: *The Star*, 17 November 2023

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 |
|--------|-----------------------------------|--------------------------------|------------------------|-------------------|----------------------|
| 2019 | 3,611 | 25,644 | 24,387 | 1,441 | 24,418 |
| 2020 | 2,963 | 22,288 | 22,367 | 1,512 | 22,597 |
| 2021 | 3,013 | 322 | 16,634 | 1,156 | 16,441 |
| 2022 | 3,517 | 18,043 | 19,442 | 1,152 | 19,299 |
| 2020 | 3,596 | 25,644 | 24,387 | 1,441 | 24,418 |
| Jan. | 289 | 2,136 | 2,314 | 93 | 2,180 |
| Feb. | 266 | 1,449 | 1,880 | 119 | 2,226 |
| Mar. | 162 | 1,105 | 1,228 | 71 | 1,191 |
| Apr. | 36 | 1,198 | 1,110 | 75 | 933 |
| May. | 252 | 2,187 | 1,344 | 99 | 1,516 |
| Jun. | 278 | 1,927 | 1,926 | 190 | 1,644 |
| Jul. | 272 | 1,972 | 1,819 | 150 | 2,240 |
| Aug. | 277 | 2,785 | 2,672 | 151 | 2,290 |
| Sep. | 292 | 2,398 | 2,057 | 138 | 2,198 |
| Oct. | 295 | 1,565 | 2,078 | 146 | 2,126 |
| Nov. | 272 | 1,536 | 1,974 | 125 | 2,108 |
| Dec | 272 | 2,030 | 1,965 | 155 | 1,945 |
| 2021 | | | | | |
| Jan. | 278 | 28 | 1,639 | 145 | 1,770 |
| Feb. | 257 | 29 | 1,847 | 70 | 1,765 |
| Mar. | 290 | 46 | 2,041 | 113 | 1,982 |
| Apr. | 294 | 47 | 1,680 | 115 | 1,836 |
| May. | 262 | 26 | 1,861 | 91 | 1,638 |
| Jun. | 44 | 0 | 695 | 86 | 894 |
| Jul. | 204 | 21 | 973 | 84 | 507 |
| Aug. | 233 | 19 | 1,115 | 86 | 1,085 |
| Sep. | 262 | 59 | 1,221 | 85 | 1,599 |
| Oct | 292 | 16 | 1,349 | 98 | 1,165 |
| Nov. | 270 | 10 | 1,086 | 91 | 1,172 |
| Dec | 294 | 21 | 1,127 | 92 | 1,028 |
| 2022 | | | | | |
| Jan. | 234 | 1,173 | 1,332 | 106 | 1,305 |
| Feb. | 252 | 1,162 | 1,160 | 108 | 1,017 |
| Mar. | 306 | 1,258 | 1,653 | 89 | 1,659 |
| Apr. | 273 | 1,511 | 1,417 | 117 | 1,431 |
| May | 276 | 1,660 | 1,143 | 82 | 1,333 |
| Jun. | 285 | 1,729 | 1,730 | 76 | 1,481 |
| Jul. | 303 | 1,475 | 1,886 | 100 | 1,494 |
| Aug | 338 | 1,397 | 2,211 | 94 | 2,402 |
| Sep. | 325 | 1,313 | 1,592 | 83 | 1,948 |
| Oct. | 322 | 1,842 | 1,692 | 82 | 1,431 |
| Nov. | 271 | 1,454 | 1,702 | 117 | 1,622 |
| Dec. | 331 | 2,069 | 1,924 | 98 | 2,176 |
| 2023* | | | | | |
| Jan. | 327 | 1,482 | 1,780 | 94 | 1,388 |
| Feb. | 301 | 1,715 | 1,561 | 118 | 2,015 |
| Mar. | 316 | 1,920 | 2,054 | 113 | 2,138 |
| Apr. | 297 | 1,374 | 1,513 | 89 | 1,651 |
| May | 315 | 1,617 | 1,848 | 103 | 1,730 |
| Jun. | 304 | 1,416 | 1,453 | 87 | 1,724 |
| Jul. | 316 | 2,096 | 1,912 | 75 | 1,557 |
| Aug. | 309 | 1,485 | 1,664 | 57 | 1,778 |
| Sep. | 290 | 1,837 | 1,591 | 73 | 1,535 |
| Oct. | n.y.a | 1,631 | 2,076 | 132 | 2,062 |
| Nov. | n.y.a | n.y.a | n.y.a | 109 | n.y.a |
| Dec. | n.y.a | n.y.a | n.y.a | 110 | n.y.a |

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

MALAYSIA'S DOMESTIC TIN CONSUMPTION

(In Tonnes)

| PERIOD | TOTAL CONSUMPTION | SOLDER * | TINPLATE | PEWTER | OTHERS * |
|--------|-------------------|----------|----------|--------|----------|
| 2019 | 1,441 | 695 | 639 | 19 | 88 |
| 2020 | 1,512 | 738 | 626 | 8 | 140 |
| 2021 | 1,156 | 395 | 710 | 6 | 45 |
| 2022 | 1,152 | 400 | 639 | 9 | 104 |
| 2023 | 1,161 | 555 | 485 | 5 | 116 |
| 2020 | | | | | |
| Jan. | 93 | 40 | 48 | 0 | 5 |
| Feb. | 119 | 62 | 52 | 0 | 5 |
| Mar. | 71 | 22 | 45 | 0 | 4 |
| Apr. | 75 | 19 | 53 | 0 | 3 |
| May. | 99 | 49 | 44 | 0 | 6 |
| Jun. | 190 | 74 | 67 | 3 | 46 |
| Jul. | 150 | 84 | 55 | 3 | 8 |
| Aug. | 151 | 49 | 65 | 0 | 37 |
| Sep. | 138 | 85 | 46 | 0 | 7 |
| Oct. | 146 | 77 | 59 | 0 | 10 |
| Nov. | 125 | 78 | 40 | 2 | 5 |
| Dec. | 155 | 99 | 52 | 0 | 4 |
| 2021 | | | | | |
| Jan. | 145 | 73 | 66 | 1 | 5 |
| Feb. | 70 | 30 | 37 | 0 | 3 |
| Mar. | 113 | 40 | 68 | 0 | 5 |
| Apr. | 115 | 39 | 68 | 1 | 7 |
| May | 91 | 40 | 46 | 0 | 5 |
| Jun | 86 | 29 | 50 | 0 | 7 |
| Jul. | 84 | 20 | 64 | 0 | 0 |
| Aug. | 86 | 25 | 57 | 0 | 4 |
| Sep. | 85 | 30 | 53 | 2 | 0 |
| Oct. | 98 | 29 | 69 | 0 | 0 |
| Nov. | 91 | 20 | 69 | 2 | 0 |
| Dec. | 92 | 20 | 63 | 0 | 9 |
| 2022 | | | | | |
| Jan. | 106 | 27 | 56 | 0 | 23 |
| Feb. | 108 | 35 | 69 | 1 | 3 |
| Mar. | 89 | 24 | 58 | 1 | 6 |
| Apr. | 117 | 39 | 67 | 1 | 10 |
| May. | 82 | 24 | 54 | 0 | 4 |
| Jun. | 76 | 20 | 50 | 0 | 6 |
| Jul. | 100 | 25 | 62 | 2 | 11 |
| Aug. | 94 | 30 | 54 | 0 | 10 |
| Sep. | 83 | 40 | 35 | 1 | 7 |
| Oct. | 82 | 30 | 41 | 1 | 10 |
| Nov. | 117 | 57 | 50 | 1 | 9 |
| Dec. | 98 | 49 | 43 | 1 | 5 |
| 2023 | | | | | |
| Jan. | 94 | 60 | 31 | 0 | 3 |
| Feb. | 118 | 68 | 40 | 1.5 | 8 |
| Mar. | 113 | 79 | 29 | 0.1 | 5 |
| Apr. | 89 | 41 | 39 | 1 | 8 |
| May | 103 | 50 | 38 | 1.1 | 14 |
| Jun. | 87 | 55 | 30 | 0.1 | 2 |
| Jul. | 75 | 20 | 48 | 0.1 | 7 |
| Aug. | 57 | 20 | 27 | 0.1 | 10 |
| Sep. | 73 | 27 | 42 | 0.2 | 4 |
| Oct. | 132 | 55 | 56 | 0.1 | 21 |
| Nov. | 109 | 40 | 52 | 0.1 | 17 |
| Dec. | 110 | 40 | 53 | 0.1 | 17 |

Sources : Malaysia Smelting Corporation Bhd
Perstima Bhd

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

Note : Local consumption of tin metal refers to the use of tin in a particular application.
Sales to manufacturing industries have been used as proxy for consumption except in the case of manufacture of tinplate which are actual tin consumption data.

WORLD STOCKS OF REFINED TIN

(In Tonnes)

| Period | LME Stock | Total Country Stocks | US Strategic Stockpile |
|--------|-----------|----------------------|------------------------|
| 2017 | 2,235 | 19,245 | 4,020 |
| 2018 | 2,165 | 16,790 | 4,020 |
| 2019 | 7,130 | 23,217 | 4,020 |
| 2020 | 1,890 | 22,129 | 4,020 |
| 2021 | 2,045 | 21,737 | 4,020 |
| 2022 | 2,880 | 21,827 | 4,020 |
| 2023 | 7,685 | n.y.a | n.y.a |
| 2020 | | | |
| Jan. | 6,630 | 22,546 | 4,020 |
| Feb. | 7,440 | 22,431 | 4,020 |
| Mar. | 6,205 | 22,211 | 4,020 |
| Apr. | 5,375 | 22,094 | 4,020 |
| May. | 2,455 | 22,183 | 4,020 |
| Jun. | 4,230 | 22,330 | 4,020 |
| Jul. | 3,675 | 22,268 | 4,020 |
| Aug. | 5,040 | 22,143 | 4,020 |
| Sep. | 5,550 | 22,480 | 4,020 |
| Oct. | 4,533 | 22,398 | 4,020 |
| Nov. | 3,805 | 22,290 | 4,020 |
| Dec. | 1,890 | 22,129 | 4,020 |
| 2021 | | | |
| Jan. | 820 | 22,366 | 4,020 |
| Feb. | 1,745 | 23,044 | 4,020 |
| Mar. | 1,740 | 21,579 | 4,020 |
| Apr. | 1,245 | 21,589 | 4,020 |
| May | 755 | 21,589 | 4,020 |
| Jun. | 2,015 | 21,539 | 4,020 |
| Jul. | 2,290 | 21,499 | 4,020 |
| Aug. | 1,395 | 21,487 | 4,020 |
| Sep. | 1,235 | 21,508 | 4,020 |
| Oct. | 670 | 21,508 | 4,020 |
| Nov. | 1,285 | 21,508 | 4,020 |
| Dec. | 2,045 | 21,737 | 4,020 |
| 2022 | | | |
| Jan. | 2,390 | 22,051 | 4,020 |
| Feb. | 2,245 | 22,076 | 4,020 |
| Mar. | 2,000 | 21,941 | 4,020 |
| Apr. | 2,010 | 22,267 | 4,020 |
| May | 1,990 | 22,248 | 4,020 |
| Jun. | 2,765 | 22,352 | 4,020 |
| Jul. | 3,330 | 21,827 | 4,020 |
| Aug. | 4,065 | 21,787 | 4,020 |
| Sep. | 9,440 | 21,827 | 4,020 |
| Oct | 4,255 | 21,857 | 4,020 |
| Nov | 2,930 | 21,827 | 4,020 |
| Dec | 2,880 | 21,827 | 4,020 |
| 2023 | | | |
| Jan. | 3,015 | n.y.a | 4,020 |
| Feb. | 2,950 | n.y.a | n.y.a |
| Mar. | 2,345 | n.y.a | n.y.a |
| Apr. | 1,525 | n.y.a | n.y.a |
| May. | 1,895 | n.y.a | n.y.a |
| Jun. | 3,490 | n.y.a | n.y.a |
| Jul. | 5,275 | n.y.a | n.y.a |
| Aug. | 6,370 | n.y.a | n.y.a |
| Sep. | 7,350 | n.y.a | n.y.a |
| Oct. | 7,355 | n.y.a | n.y.a |
| Nov. | 8,110 | n.y.a | n.y.a |
| Dec. | 7,685 | n.y.a | n.y.a |

Source : World Bureau of Metal Statistics

KLTM & LME TIN PRICES

| Period | KLTM | | | LME CASH |
|-------------|-------------------|-----------|----------------|---------------|
| | Average Price (*) | | Total Turnover | Average Price |
| | (USD / Tonne) | (RM / Kg) | (Tonnes) | (USD / Tonne) |
| 2017 | 20,029 | 86.12 | 8,890 | 20,098 |
| 2018 | 20,151 | 80.99 | 9,075 | 20,168 |
| 2019 | 19,168 | 79.11 | 6,445 | 18,671 |
| 2020 | 17,504 | 72.97 | 4,088 | 17,134 |
| 2021 | 26,589 | 108.88 | 1,955 | 32,584 |
| 2022 | 41,007 | 171.75 | 21 | 31,384 |
| 2023 | N.T | N.T | N.T | 25,973 |
| 2020 | | | | |
| Jan | 17,014 | 69.42 | 406 | 17,056 |
| Feb | 16,536 | 68.85 | 354 | 16,457 |
| Mar | 16,417 | 69.47 | 236 | 15,321 |
| Apr | CLOSED | CLOSED | CLOSED | 15,039 |
| May | 15,110 | 65.65 | 268 | 15,410 |
| Jun | 16,605 | 71.03 | 374 | 16,806 |
| Jul | 17,287 | 73.79 | 358 | 17,452 |
| Aug | 17,515 | 73.47 | 343 | 17,672 |
| Sep | 17,846 | 74.12 | 444 | 17,946 |
| Oct | 18,026 | 74.9 | 383 | 18,154 |
| Nov | 18,433 | 75.84 | 413 | 18,568 |
| Dec | 19,693 | 79.9 | 509 | 19,727 |
| 2021 | | | | |
| Jan | 22,085 | 89.25 | 314 | 21,955 |
| Feb | 25,965 | 105.05 | 456 | 26,717 |
| Mar | 26,162 | 107.64 | 494 | 27,396 |
| Apr | 27,106 | 111.89 | 327 | 28,427 |
| May | 31,132 | 128.61 | 298 | 32,524 |
| Jun | 31,857 | 131.49 | 61 | 32,678 |
| Jul | CLOSED | CLOSED | CLOSED | 34,183 |
| Aug | CLOSED | CLOSED | CLOSED | 35,205 |
| Sep | CLOSED | CLOSED | CLOSED | 35,048 |
| Oct | CLOSED | CLOSED | CLOSED | 37,962 |
| Nov | CLOSED | CLOSED | CLOSED | 39,333 |
| Dec | 39,500 | 166.58 | 5 | 39,574 |
| 2022 | | | | |
| Jan | 41,007 | 171.75 | 21 | 41,807 |
| Feb | N.T | N.T | N.T | 44,118 |
| Mar | N.T | N.T | N.T | 44,249 |
| Apr | N.T | N.T | N.T | 43,122 |
| May | N.T | N.T | N.T | 35,945 |
| Jun | N.T | N.T | N.T | 31,777 |
| Jul. | N.T | N.T | N.T | 25,173 |
| Aug. | N.T | N.T | N.T | 24,520 |
| Sep. | N.T | N.T | N.T | 21,258 |
| Oct. | N.T | N.T | N.T | 19,406 |
| Nov. | N.T | N.T | N.T | 21,136 |
| Dec. | N.T | N.T | N.T | 24,099 |
| 2023 | | | | |
| Jan | N.T | N.T | N.T | 28,081 |
| Feb | N.T | N.T | N.T | 27,070 |
| Mar | N.T | N.T | N.T | 24,014 |
| Apr | N.T | N.T | N.T | 25,886 |
| May | N.T | N.T | N.T | 25,610 |
| Jun | N.T | N.T | N.T | 27,263 |
| Jul. | N.T | N.T | N.T | 28,751 |
| Aug. | N.T | N.T | N.T | 25,995 |
| Sep. | N.T | N.T | N.T | 25,559 |
| Oct. | N.T | N.T | N.T | 24,618 |
| Nov. | N.T | N.T | N.T | 24,221 |
| Dec. | N.T | N.T | N.T | 24,606 |

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

N.T : No Transaction

LEAD

| LME PRICES & STOCKS | | |
|---------------------|-----------------------------------|----------------------------------|
| Period | Cash Settlement (US\$ / Tonne) | Stocks Period End (Tonnes) |
| 2019 | 1,899.25 | 66,200 |
| 2020 | 2,018.60 | 133,175 |
| 2021 | 2,304.79 | 54,375 |
| 2022 | 2,212.48 | 24,283 |
| 2023 | 2,036.39 | 130,743 |
| 2020 | | |
| Jan | 1,925.16 | 66,800 |
| Feb | 1,872.30 | 68,100 |
| Mar | 1,744.64 | 70,900 |
| Apr | 1,651.53 | 73,650 |
| May | 1,618.16 | 75,825 |
| Jun | 1,739.86 | 66,500 |
| Jul | 1,812.15 | 118,150 |
| Aug | 1,935.20 | 124,900 |
| Sep | 1,881.36 | 137,000 |
| Oct | 1,777.07 | 124,400 |
| Nov | 1,914.48 | 112,700 |
| Dec | 2,018.60 | 133,175 |
| 2021 | | |
| Jan | 2,214.93 | 96,775 |
| Feb | 2,085.75 | 94,625 |
| Mar | 1,960.76 | 119,550 |
| Apr | 2,006.33 | 110,575 |
| May | 2,185.92 | 97,325 |
| Jun | 2,188.98 | 80,250 |
| Jul | 2,336.98 | 59,750 |
| Aug | 2,428.52 | 52,250 |
| Sep | 2,257.25 | 51,000 |
| Oct | 2,339.45 | 55,000 |
| Nov | 2,347.57 | 56,775 |
| Dec | 2,304.79 | 54,375 |
| 2022 | | |
| Jan | 2,342.70 | 54,006 |
| Feb | 2,299.90 | 49,196 |
| Mar | 2,359.48 | 39,846 |
| Apr | 2,396.74 | 39,355 |
| May | 2,145.17 | 38,485 |
| Jun | 2,067.38 | 39,141 |
| Jul | 1,976.26 | 39,324 |
| Aug | 2,077.91 | 38,599 |
| Sep | 1,874.45 | 35,047 |
| Oct | 1,988.10 | 30,148 |
| Nov | 2,099.39 | 27,207 |
| Dec | 2,212.48 | 24,283 |
| 2023 | | |
| Jan | 2,208.17 | 22,052 |
| Feb | 2,098.90 | 23,170 |
| Mar | 2,114.78 | 25,477 |
| Apr | 2,149.14 | 29,454 |
| May | 2,087.50 | 33,301 |
| Jun | 2,118.36 | 38,527 |
| Jul | 2,106.88 | 47,957 |
| Aug | 2,151.73 | 55,826 |
| Sep | 2,252.86 | 63,544 |
| Oct | 2,136.39 | 101,134 |
| Nov | 2,185.07 | 135,017 |
| Dec | 2,036.39 | 130,743 |

COPPER

| LME PRICES & STOCKS | | |
|---------------------|-----------------------------------|----------------------------------|
| Period | Cash Settlement (US\$ / Tonne) | Stocks Period End (Tonnes) |
| 2019 | 6,062.43 | 144,675 |
| 2020 | 7,755.24 | 105,800 |
| 2021 | 9,550.31 | 88,725 |
| 2022 | 8,367.23 | 84,804 |
| 2023 | 8,394.11 | 174,247 |
| 2020 | | |
| Jan | 6,049.20 | 179,800 |
| Feb | 5,686.45 | 216,950 |
| Mar | 5,178.68 | 221,200 |
| Apr | 5,048.25 | 251,475 |
| May | 5,233.82 | 255,725 |
| Jun | 5,742.39 | 213,325 |
| Jul | 6,353.76 | 126,675 |
| Aug | 6,496.70 | 88,250 |
| Sep | 6,712.41 | 163,125 |
| Oct | 6,702.77 | 169,600 |
| Nov | 7,063.43 | 149,925 |
| Dec | 7,755.24 | 105,800 |
| 2021 | | |
| Jan | 7,970.50 | 74,275 |
| Feb | 8,460.25 | 74,200 |
| Mar | 9,004.98 | 143,775 |
| Apr | 9,335.55 | 137,400 |
| May | 10,183.97 | 120,700 |
| Jun | 9,612.43 | 211,975 |
| Jul | 9,433.59 | 238,650 |
| Aug | 9,357.19 | 252,725 |
| Sep | 9,324.07 | 217,175 |
| Oct | 9,778.50 | 131,300 |
| Nov | 9,765.48 | 78,625 |
| Dec | 9,550.31 | 88,725 |
| 2022 | | |
| Jan | 9,775.93 | 90,478 |
| Feb | 9,941.35 | 76,775 |
| Mar | 10,237.59 | 77,259 |
| Apr | 10,183.13 | 118,741 |
| May | 9,362.81 | 168,371 |
| Jun | 9,033.13 | 121,468 |
| Jul | 7,529.79 | 132,827 |
| Aug | 7,960.98 | 126,592 |
| Sep | 7,734.70 | 114,064 |
| Oct | 7,621.21 | 137,107 |
| Nov | 8,029.95 | 89,600 |
| Dec | 8,367.23 | 84,804 |
| 2023 | | |
| Jan | 8,999.79 | 81,888 |
| Feb | 8,955.20 | 65,944 |
| Mar | 8,835.72 | 71,398 |
| Apr | 8,814.00 | 58,283 |
| May | 8,234.28 | 83,939 |
| Jun | 8,386.23 | 87,876 |
| Jul | 8,445.26 | 61,300 |
| Aug | 8,351.77 | 88,376 |
| Sep | 8,270.86 | 143,368 |
| Oct | 7,939.66 | 179,488 |
| Nov | 8,173.95 | 178,472 |
| Dec | 8,394.11 | 174,247 |

SILVER

| LONDON SPOT PRICES | |
|--------------------|-------------------------------------|
| Period | London Spot (US Cents / Troy Oz) |
| 2019 | 1,711.00 |
| 2020 | 2,488.74 |
| 2021 | 2,246.81 |
| 2022 | 2,318.06 |
| 2023 | 2,420.87 |
| 2020 | |
| Jan | 1,796.50 |
| Feb | 1,792.20 |
| Mar | 1,491.82 |
| Apr | 1,504.55 |
| May | 1,623.24 |
| Jun | 1,771.98 |
| Jul | 2,040.50 |
| Aug | 2,686.25 |
| Sep | 2,588.61 |
| Oct | 2,429.84 |
| Nov | 2,404.33 |
| Dec | 2,488.74 |
| 2021 | |
| Jan | 2,592.84 |
| Feb | 2,734.60 |
| Mar | 2,561.35 |
| Apr | 2,564.03 |
| May | 2,746.32 |
| Jun | 2,698.16 |
| Jul | 2,575.32 |
| Aug | 2,401.64 |
| Sep | 2,330.73 |
| Oct | 2,329.64 |
| Nov | 2,419.64 |
| Dec | 2,246.81 |
| 2022 | |
| Jan | 2,312.85 |
| Feb | 2,346.50 |
| Mar | 2,524.02 |
| Apr | 2,454.11 |
| May | 2,190.55 |
| Jun | 2,149.03 |
| Jul | 1,907.62 |
| Aug | 1,975.00 |
| Sep | 1,883.57 |
| Oct | 1,936.31 |
| Nov | 2,099.89 |
| Dec | 2,318.06 |
| 2023 | |
| Jan | 2,374.81 |
| Feb | 2,200.95 |
| Mar | 2,191.65 |
| Apr | 3,757.36 |
| May | 2,419.37 |
| Jun | 2,340.84 |
| Jul | 2,404.10 |
| Aug | 2,343.86 |
| Sep | 2,323.86 |
| Oct | 2,232.16 |
| Nov | 2,338.84 |
| Dec | 2,420.87 |

Source : London Metal Exchange

STANLOY®



Specialty anodes in lead and tin

- ▶ Extruded wave anodes
- ▶ Extruded solid round anodes
- ▶ Extruded hollow round lead anodes
- ▶ Cored anodes
- ▶ 12-point extruded solid star anodes
- ▶ 12-point extruded hollow star anodes
- ▶ Extruded octagonal section anodes

Small parts in lead and tin

- ▶ Metering and security seals
- ▶ Diving weights

Pewter alloys

Chemical service

- ▶ Extruded lead coils and pipes
- ▶ Bearing / anti-friction metals

Lead acid battery components

- ▶ Battery terminals
- ▶ Lead oxides
- ▶ Lead burning sticks
- ▶ Extruded cooling coils
- ▶ Busbars
- ▶ 12-point extruded hollow star anodes
- ▶ Extruded octagonal section anodes

Radiation containment

- ▶ Radioactive isotope containers
- ▶ Lead bricks
- ▶ Radiation protection doors and mobile shields

Sailboat / yacht accessories

- ▶ Boat keels / bulbs

MATERIAL AVAILABILITY

All our casting and extruded products are produced from high purity materials and are available in the following chemical composition: -

- ▶ Pure lead of 99.97% minimum
- ▶ Antimonial lead alloys of up to 6% antimony content
- ▶ Pure tin of 99.85% and its alloys

SELAYANG METAL INDUSTRIES SDN. BHD.(64855-U)

LOT 17519A, TAMAN SELAYANG BARU INDUSTRIAL ESTATE, BATU 8 1/2 JALAN IPOH.

68100 BATU CAVES, SELANGOR DARUL EHSAN.

TEL: +603-61386724 +603-61380330 FAX: +603-61365355

EMAIL: biz@selayang-metal.com

ASSOCIATION MEMBERS

Currently, the Association comprises one associate and 13 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

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

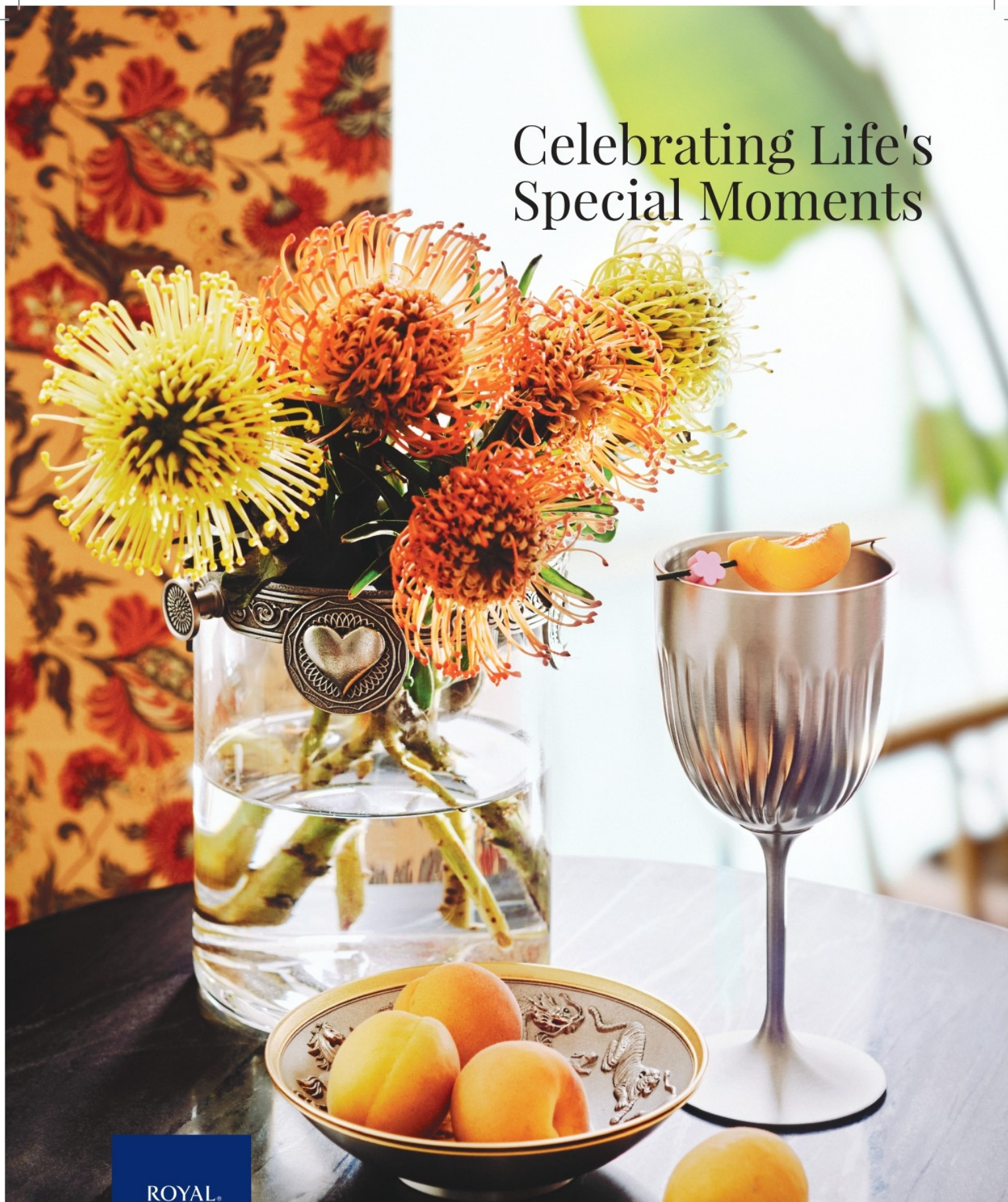
PEWTER

Oriental Pewter Sdn Bhd
Royal Selangor International Sdn Bhd
Selwin Pewter Sdn Bhd
Tumasek Pewter Sdn Bhd

ASSOCIATE MEMBERS:

Malaysia Smelting Corporation Bhd

Celebrating Life's Special Moments



ROYAL[®]
SELANGOR

Royal Selangor Visitor Centre

4, Jalan Usahawan 6, Setapak Jaya, 53300, Kuala Lumpur, Malaysia
603 4145 6000 / visitorcentre@royalselangor.com

royalselangor.com



PREMIUM METAL SDN BHD

SERVICES PROVIDED

- Collect tin scrap and secondary waste
- Re-melt into solid metal
- To refine and remove impurities
- We have facility to check and analyse element content
- To recycle and refine tin waste become tin alloy ingot for reuse purpose



TIN ALLOY INGOT AVAILABILITY

- Tin / Lead Ingot
- Tin / Copper Ingot
- Tin / Copper / Silver Ingot
- Tin / Silver Ingot



PREMIUM METAL SDN BHD

(1159072-v)

Setia Business Park II

36, Jalan Perniagaan Setia 6, Jalan Perniagaan Setia,
81100 Johor Bahru, Johor, Malaysia.

TEL: +607-5506363

EMAIL: premiummetalsdnbhd@gmail.com

