



# 2019

Annual Report

**MSC**

Malaysia Smelting Corporation Berhad

(197801006055 (43072-A))

## our VISION

To be a successful world-class organisation in its integrated core businesses of mining, smelting, manufacturing and global marketing for tin and tin-based products delivering sustainable shareholder value through quality operations.

## our MISSION

Whether in the upstream or downstream sectors of the world tin industry, the name MSC will be synonymous with creativity, value, service and quality.

MSC Group will be a creative organisation, caring about its employees and its customers.

- We will provide the highest levels of service to all the Group's suppliers and customers by participating and contributing solutions and values in all stages of the world tin supply chain - mining, smelting, refining, recycling, products transformation, engineering and marketing;
- We will respond quickly and sensitively to the changing needs of the Group's suppliers and customers; and
- We aim to nurture an atmosphere of continuous self-development by emphasising on training and development while adhering to the highest standard of integrity.

MSC Group's growth strategy is to leverage on its core competencies to focus on organic growth as well as on strategic acquisitions that will broaden the Group's core businesses and strengthen its global leadership position in both upstream and downstream sectors of the world tin industry.

## our CORE VALUES



**INTELLECTUAL,  
HONESTY AND  
INTEGRITY**



**ADDING VALUE  
THROUGH INNOVATION  
AND CONTINUOUS  
IMPROVEMENT**



**GLOBAL PERSPECTIVE  
AND COMPETITIVE  
SPIRIT**



**RESPECT FOR THE  
ENVIRONMENT AND THE  
HEALTH AND SAFETY OF  
ITS EMPLOYEES**



**CREATING  
SUSTAINABLE  
SHAREHOLDER VALUE  
THROUGH QUALITY  
OPERATIONS**

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# EMBRACING A VIBRANT WORK CULTURE



We believe that our people shape our success, which is why we make every effort to ensure that they are equipped with the right resources and a conducive workplace to enable them to develop holistically.

## 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. Malaysia Smelting Corporation Berhad ("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.

## CORPORATE PROFILE

# A GLOBAL INTEGRATED TIN MINING AND SMELTING GROUP

The MSC Group is currently one of the world's leading integrated producer of tin metal and tin-based products and a global leader in custom tin smelting since 1887. In 2019, the Group produced 25,752 tonnes of tin metal making it the third largest supplier of tin metal in the world. The Group's smelting facility in Butterworth operates one of the largest smelting plants in the world converting primary, secondary and often complex tin bearing ores into high purity tin metal for industrial application. MSC Straits Refined tin brand is registered at LME (London Metal Exchange) and KLTM (Kuala Lumpur Tin Market). The brand 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 largest operating open-pit tin mine. Since the takeover, extensive work has been carried out covering mining, pit operation and improvement to the milling/concentrator circuits. This has transformed RHT to become a sustainable and significant tin producer, incorporating international best mining and energy efficiency practices.

The MSC Group will soon be joining a handful of tin smelters in the world who have already started using the Top Submerged Lance (TSL) technology for tin smelting. The ISASMELT furnace located at its Port Klang smelter is being refurbished in preparation to carry out tin smelting. The migration from Reverberatory furnace to ISASMELT furnace is expected to increase processing efficiency and throughput. The ISASMELT furnace will also be fitted with a waste heat recovery system to power some of its plant and equipment. Besides this, power generated from the solar panels mounted on the smelter roof is further testimony of the Group's vision to continuously harness power from renewable sources to reduce its carbon footprint. The new smelter's location is equally strategic due to its proximity to the port and LME warehouse.

The Group will continue to focus its growth strategy on its core business through organic growth where its core expertise'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 and marketing.

MSC will pursue its growth strategy on its core business in tin through strategic acquisitions and organic growth where its core expertise can add value particularly in increasing operating efficiencies, innovating products and services to ensure its continued leadership position in the industry.

# CORPORATE INFORMATION

## BOARD OF DIRECTORS

①

**Ms. Chew Gek Khim PJC**  
*Chairman, Non-Independent  
Non-Executive Chairman*

③

**Dato' Robert Teo Keng Tuan**  
*Independent Non-Executive Director*

⑤

**Datuk Kamaruddin Bin Taib**  
*Independent Non-Executive Director*

②

**Mr. Chia Chee Ming, Timothy**  
*Senior Independent Director*

④

**Mr. John Mathew A/L Mathai**  
*Independent Non-Executive Director*

⑥

**Dato' Dr. Ir. Patrick Yong Mian Thong**  
*Executive Director*

## AUDIT & RISK MANAGEMENT COMMITTEE

- Dato' Robert Teo Keng Tuan  
*(Chairman)*
- Ms. Chew Gek Khim
- Mr. Chia Chee Ming, Timothy

## NOMINATING & REMUNERATION COMMITTEE

- Mr. Chia Chee Ming, Timothy  
*(Chairman)*
- Ms. Chew Gek Khim
- Mr. John Mathew A/L Mathai

## COMPANY SECRETARY

- Ms. Wong Youn Kim  
SSM PC No. 201908000410  
(MAICSA 7018778)

## KEY PERSONNEL

- Dato' Dr. Ir. Patrick Yong Mian Thong  
*(Group Chief Executive Officer/  
Executive Director)*
- Mr. Nicolas Chen Seong Lee  
*(Deputy Chief Executive Officer  
(Administration))*
- Mr. Lam Hoi Khong  
*(Group Chief Financial Officer)*
- Ir. Raveentiran A/L Krishnan  
*(Group Chief Operating Officer,  
Smelting)*
- En. Madzlan Bin Zam  
*(Executive Director & Senior General  
Manager, Rahman Hydraulic Tin Sdn.  
Bhd.)*
- Mr. Yoon Choon Kong  
*(Group Internal Auditor)*

## STOCK EXCHANGE LISTING

Bursa Malaysia Securities Berhad  
Singapore Exchange Securities Trading  
Limited

## REGISTERED & CORPORATE OFFICE

Lot 6, 8 & 9, Jalan Perigi Nanas 6/1  
Pulau Indah Industrial Park  
West Port, Port Klang  
42920 Pulau Indah, Selangor, Malaysia  
Tel: (603) 3102 3083  
Fax: (603) 3102 3080

## SALES & TRADING DIVISION

Unit 15-12, Level 15,  
West Wing, Q Sentral  
2A, Jalan Stesen 2, KL Sentral  
50470 Kuala Lumpur, Malaysia  
Tel: (603) 2276 6260  
Fax: (603) 2276 6245

## BUTTERWORTH SMELTER

27 Jalan Pantai  
12000 Butterworth  
Penang, Malaysia  
Tel: (604) 333 3500  
Fax: (604) 331 7405 / 332 6499

Website: [www.msmelt.com](http://www.msmelt.com)  
Email: [msc@msmelt.com](mailto:msc@msmelt.com)

## SHARE REGISTRARS

### • MALAYSIA

Boardroom Share Registrars Sdn. Bhd.  
(Formerly known as Symphony Share  
Registrars Sdn. Bhd.)  
11th Floor, Menara Symphony  
No. 5, Jalan Prof. Khoo Kay Kim  
Seksyen 13, 46200 Petaling Jaya  
Selangor, Malaysia  
Tel No.: (603) 7890 4700  
Fax No.: (603) 7890 4670

### • SINGAPORE

Tricor Barbinder Share Registrar Services  
(A division of Tricor Singapore Pte. Ltd.)  
80 Robinson Road  
#02-00, Singapore 068898  
Tel: (65) 6236 3333  
Fax: (65) 6236 3405

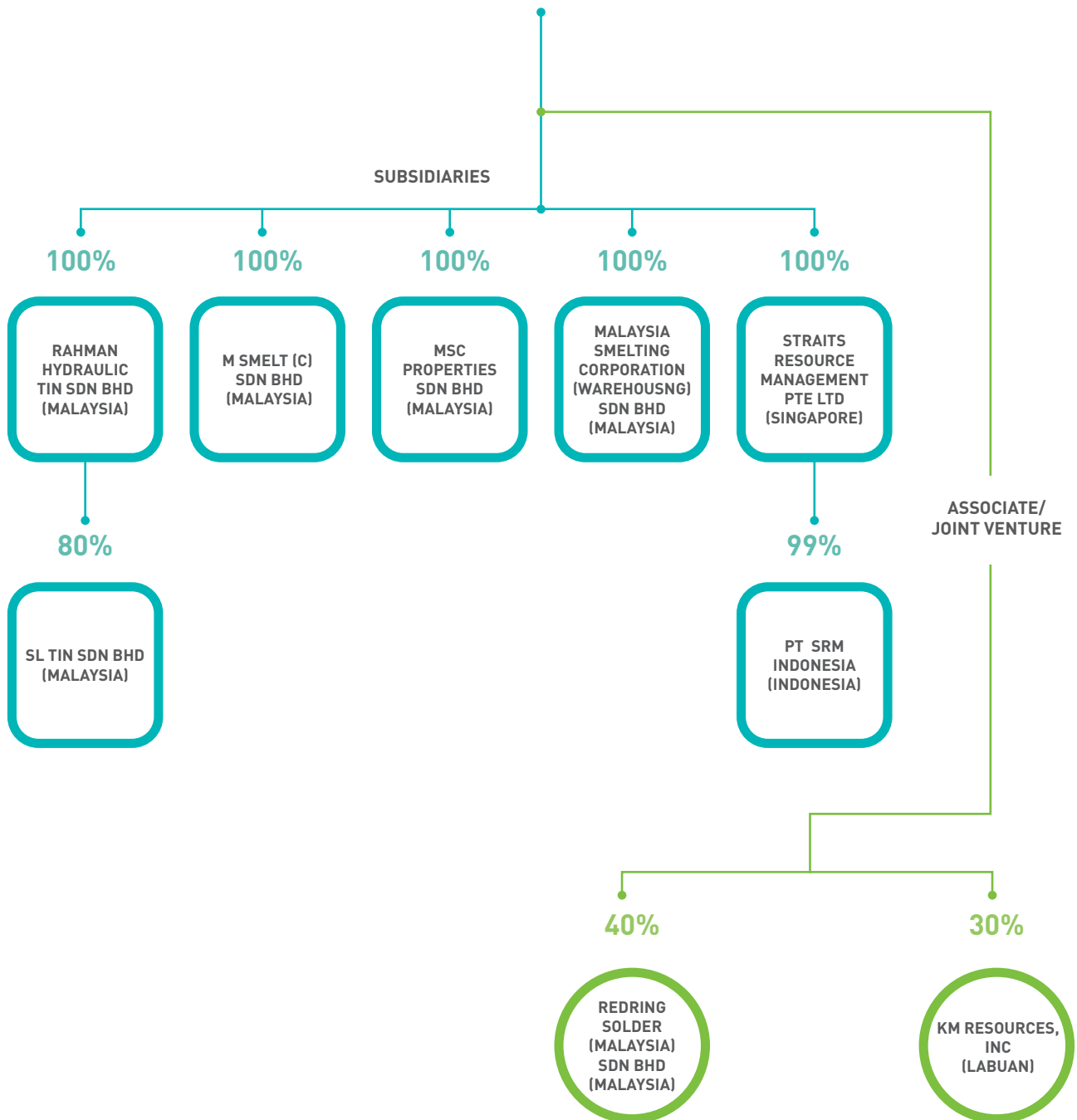
## AUDITORS

Ernst & Young PLT  
Level 23A Menara Milenium  
Jalan Damanlela  
Pusat Bandar Damansara  
50490 Kuala Lumpur, Malaysia  
Tel: (603) 7495 8000  
Fax: (603) 2095 5332

## PRINCIPAL BANKERS

OCBC Bank (Malaysia) Berhad  
Hong Leong Bank Berhad  
Malayan Banking Berhad  
HSBC Bank Malaysia Berhad  
Standard Chartered Bank Malaysia Berhad  
CIMB Bank Berhad

# CORPORATE STRUCTURE



## KEY FINANCIAL HIGHLIGHTS

		Year ended 31 December				
		2019	2018	2017	2016	2015
Revenue	(RM Mil)	<b>983.6</b>	1,280.9	1,436.2	1,477.9	1,464.9
Profit before tax	(RM Mil)	<b>44.7</b>	49.8	28.2	49.5	3.2
Income tax expense	(RM Mil)	<b>(14.0)</b>	(15.5)	(12.1)	(15.2)	(8.0)
Profit/(Loss) attributable to the owners of the Company	(RM Mil)	<b>30.7</b>	34.3	16.1	34.3	(4.8)
Total assets	(RM Mil)	<b>824.3</b>	842.9	874.4	794.6	807.0
Net current assets	(RM Mil)	<b>203.5</b>	158.9	76.9	114.0	32.5
Equity attributable to the owners of the Company	(RM Mil)	<b>368.9</b>	348.0	290.8	279.1	241.0
Earnings/(Loss) per share	(sen)	<b>8</b>	9	4 <sup>(1)</sup>	9 <sup>(1)</sup>	(1) <sup>(1)</sup>
Dividend per share	(sen)	<b>2<sup>(2)</sup></b>	2 <sup>(5)</sup>	1 <sup>(1), (4)</sup>	2 <sup>(1), (3)</sup>	–
Net assets per share attributable to the owners of the Company	(sen)	<b>92</b>	87	73 <sup>(1)</sup>	70 <sup>(1)</sup>	60 <sup>(1)</sup>
Pre-tax profit on average equity attributable to the owners of the Company	(%)	<b>12</b>	16	10	19	1

<sup>(1)</sup> The figures have been adjusted to reflect the share split and bonus issue exercises completed on 15 August 2018 for comparative purposes.

<sup>(2)</sup> Subject to the approval of the members at the forthcoming Annual General Meeting.

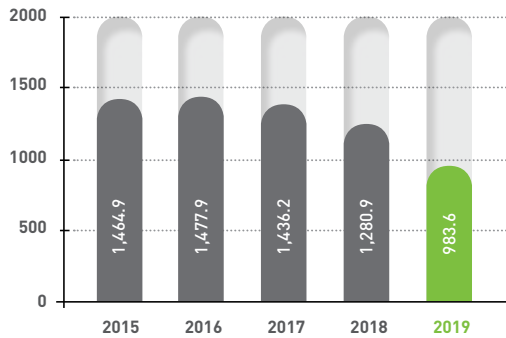
<sup>(3)</sup> The dividend was paid on 11 July 2017.

<sup>(4)</sup> The dividend was paid on 9 July 2018.

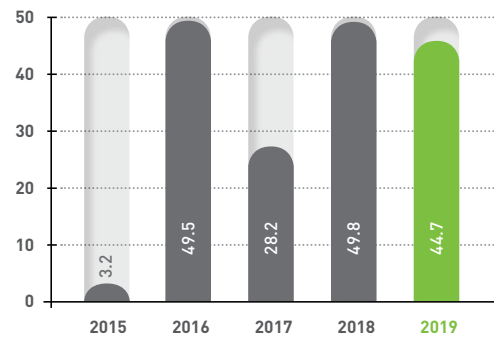
<sup>(5)</sup> The dividend was paid on 28 June 2019.

## KEY FINANCIAL HIGHLIGHTS

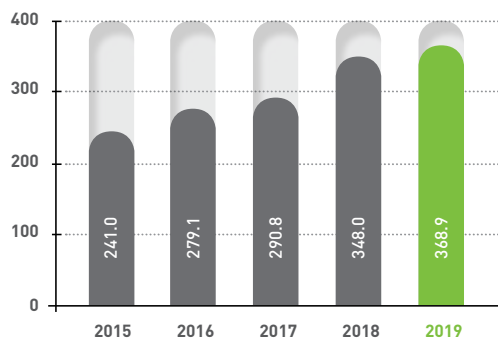
REVENUE (RM MIL)



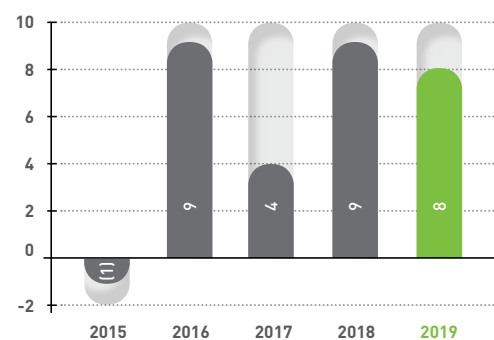
PROFIT BEFORE TAX (RM MIL)



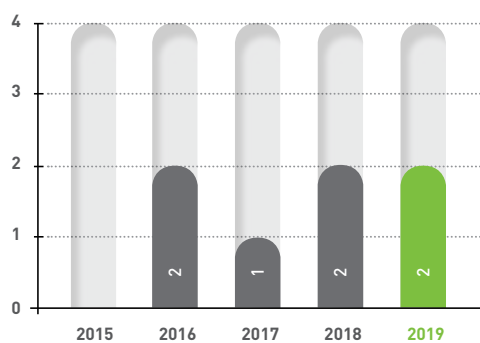
EQUITY ATTRIBUTABLE TO THE OWNERS OF THE COMPANY (RM MIL)



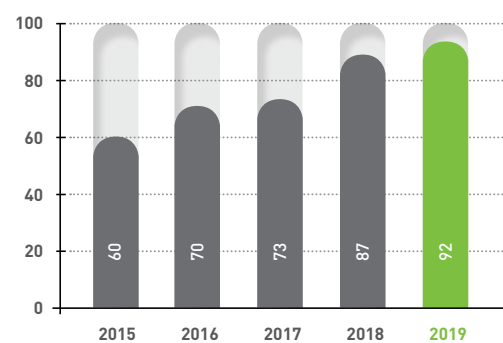
EARNINGS/(LOSS) PER SHARE (SEN)



DIVIDEND PER SHARE (SEN)



NET ASSETS PER SHARE ATTRIBUTABLE TO THE OWNERS OF THE COMPANY (SEN)





## PROFILE OF DIRECTORS



**MS. CHEW GEK  
KHIM** PJG  
Non-Independent Non-  
Executive Chairman

**Age:** 58  
**Gender:** Female  
**Nationality:** Singaporean

- LL.B (Hons), National University of Singapore

Ms. Chew Gek Khim was appointed to the Board of the Company as a Non-Independent Non-Executive Director on 18 March 2016. She assumed the role as Chairman of the Company on 11 May 2016. She was appointed as a member of the Nominating & Remuneration Committee and Audit & Risk Management Committee of the Company on 20 May 2016 and 30 May 2018 respectively.

Ms. Chew is a lawyer by training. She has been Chairman of The Straits Trading Company Limited since 24 April 2008, first as Non-Executive and Non-Independent Chairman and then as Executive Chairman since 1 November 2009.

She is also Executive Chairman of Tecity Group, which she joined in 1987. She is a Non-Executive Chairman of ARA Trust Management (Suntec) Limited and sits on the Boards of ARA Asset Management Holdings Pte. Ltd. and Singapore Exchange Limited.

Ms. Chew is Deputy Executive Chairman of Tan Chin Tuan Foundation in Singapore. She is a Member of the Honour (Singapore) Ltd, S. Rajaratnam School of International Studies, Board of Governors and National University of Singapore Board of Trustees. She was the Chairman of the National Environment Agency Board of Singapore from 2008 to 2015.

Ms. Chew was awarded the Chevalier de l'Ordre National du Merite in 2010, the Singapore Businessman of the Year 2014 in 2015 and the Meritorious Service Medal at the National Day Award in 2016.

Ms. Chew does not hold any other directorship in other public companies and listed issuers in Malaysia.

**MR. CHIA CHEE  
MING, TIMOTHY**  
Senior Independent  
Director

**Age:** 70  
**Gender:** Male  
**Nationality:** Singaporean

- Bachelor of Science cum laude, majoring in Management, Fairleigh Dickinson University, United States of America



Mr. Chia Chee Ming, Timothy was appointed as an Independent Non-Executive Director of the Company on 19 May 2016. He has been re-designated as Senior Independent Director of the Company with effect from 24 February 2017. He was appointed as the Chairman of the Nominating & Remuneration Committee and a member of the Audit & Risk Management Committee of the Company on 20 May 2016 and 30 May 2018 respectively.

Mr. Chia is Chairman of Hup Soon Global Corporation Private Limited and recently on 1 January 2020, he was appointed as Chairman of Innoven Capital Pte Ltd. He also sits on the boards of several other private and public companies, including The Straits Trading Company Limited and Banyan Tree Holdings Ltd as their Lead Independent Director, Fraser and Neave Limited, Singapore Power Limited, Vertex Venture Holdings Ltd., Ceylon Guardian Investment Trust PLC, Ceylon Investment PLC and Thai Beverage Public Company Limited. He is a Member of the Advisory Council and Co-Chair (Singapore) of the ASEAN Business Club and a Member of the Advisory Board of the Asian Civilisations Museum. Mr Chia is a Trustee of the Singapore Indian Development Association (SINDA).

Mr. Chia was the former Chairman – Asia for Coutts & Co Ltd., the private banking arm of the Royal Bank of Scotland Group. From 1986 to 2004, he was a director of PAMA Group where he was responsible for private equity investments and served as President from 1995 to 2004. He was previously a director of SP PowerAssets Limited, PowerGas Limited, InnoTek Limited, and a senior advisor to EQT Funds Management Ltd. Mr. Chia was also a Member of the Board of Trustees of the Singapore Management University before stepping down in January 2019.

Mr. Chia does not hold any other directorship in other public companies and listed issuers in Malaysia.

## PROFILE OF DIRECTORS



### DATO' ROBERT TEO KENG TUAN

Independent Non-Executive Director

**Age:** 70  
**Gender:** Male  
**Nationality:** Malaysian

- Member of the Malaysian Institute of Accountants
- Fellow member of the Institute of Chartered Accountants in England and Wales
- Member of the Malaysian Institute of Certified Public Accountants
- Associate of the Chartered Institute of Taxation, England

Dato' Robert Teo Keng Tuan was appointed as an Independent Non-Executive Director of the Company on 17 May 2017. He was appointed as the Chairman of the Audit & Risk Management Committee of the Company on the same date.

He is a Chartered Accountant by profession. Dato' Robert Teo is the Managing Partner of RSM Malaysia, a professional public accounting firm, which is a member firm of RSM International with its executive office located in London, England. He has approximately forty (40) years experience in the fields of corporate taxation, accounting, audit assurance and corporate restructuring exercises. He has also undertaken Special Administrator appointments by Pengurusan Danaharta Nasional Berhad for certain public listed companies and is also involved in the restructuring of corporations including some of which are listed on the Bursa Malaysia Securities Berhad.

Dato' Robert Teo's specialised industry knowledge lies in the property, construction and housing development sector with a focus on tax planning.

Dato' Robert Teo currently sits on the board of Symphony Life Berhad, Malaysian-German Chamber of Commerce & Industry and Malaysian Spanish Chamber of Commerce & Industry.

He is also a member of Executive Committee of Malaysia Australia Business Council, member of Executive Committee of Italy Malaysia Business Association and Board of Trustee of Malaysia Nature Society.

### MR. JOHN MATHEW A/L MATHAI

Independent Non-Executive Director

**Age:** 57  
**Gender:** Male  
**Nationality:** Malaysian



- LL.B (Hons), University of Malaya
- Advocate & Solicitor of the High Court of Malaya

Mr. John Mathew A/L Mathai was appointed to the Board of the Company as an Independent Non-Executive Director on 23 March 2016. He was also appointed as a member of both the Nominating & Remuneration Committee of the Company on 4 April 2016.

He is an Advocate & Solicitor of the High Court of Malaya and has been in legal practice since February 1987. He is presently a partner of Messrs. Christopher & Lee Ong, Kuala Lumpur and heads the Dispute Resolution Practice of the firm. He is also a Notary Public.

Mr. John Mathew does not hold any other directorship in other public companies and listed issuers in Malaysia.

## PROFILE OF DIRECTORS



**DATUK  
KAMARUDDIN TAIB**  
Independent Non-Executive Director

**Age:** 62  
**Gender:** Male  
**Nationality:** Malaysian

- Bachelor of Science in Mathematics, University of Salford, United Kingdom

Datuk Kamaruddin Taib was appointed as an Independent Non-Executive Director of the Company on 16 November 2018.

He has significant experience in investment banking, corporate finance, mergers and acquisitions. His career started in 1980 with a leading merchant bank in Malaysia. Subsequently, he served as a director of several private companies, companies listed on Bursa Malaysia Securities Berhad and companies listed on the Stock Exchange of India as well as listed on Nasdaq (U.S.A.).

Datuk Kamaruddin is currently the Independent Non-Executive Chairman of GHL Systems Berhad and HSBC Amanah Malaysia Berhad. He is also an Independent Non-Executive Director of Great Eastern General Insurance (Malaysia) Berhad, RAM Holdings Berhad, Fraser & Neave Holdings Berhad, FIDE FORUM (Financial Institutions Directors Education FORUM) and DNV GL Malaysia Sdn Bhd. part of the Global DNV GL Group, which is a leading technical assurance company providing specialised services for the Oil and Gas Industry. He has been with the DNV GL Group since 1995, and retired as its Executive Chairman in June 2017.



**DATO' DR. IR.  
PATRICK YONG  
MIAN THONG**  
Non-Independent Executive Director/  
Group Chief Executive Officer

**Age:** 67  
**Gender:** Male  
**Nationality:** Malaysian

- Bachelor of Science (Honours) Degree in Electrical and Electronics Engineering, CNA A, United Kingdom  
- PhD (Electrical Engineering), United States of America  
- Registered Professional Engineer Malaysia  
- Member of the Institution of Engineers Malaysia

Dato' Dr. Ir. Patrick Yong Mian Thong was appointed to as a Chief Executive Officer of the Company on 7 October 2016. Subsequently, he was appointed to the Board of the Company as a Non-Independent Executive Director on 1 June 2018 and re-designated as Group Chief Executive Officer on 1 January 2019.

He started his career as an engineer with the National Electricity Board of Malaysia ("LLN"), as a condition of his scholarship contract. In 1989, Dato' Dr. Ir. Patrick Yong left LLN to pursue his career as a consultant in the field of electrical engineering.

Dato' Dr. Ir. Patrick Yong founded Sulfarid Technologies in 2004 and was its Managing Director. The Company was subsequently acquired by the Hup Soon Global Corporation Group in November 2007 and renamed Borid Technologies.

Throughout his line of work, Dato' Dr. Ir. Patrick Yong established his proficiency in electrical distribution systems and pursued research in the field of efficiency in energy conversion leading to a PhD in Electrical Engineering.

He was the Chief Operating Officer of Tai Kwang Yokohama Industries Berhad from 2007 to 2010 and was subsequently appointed as the Chief Executive Officer of Yokohama Industries Berhad from 2010 to 2015, managing a secondary lead smelter and SLI battery manufacturing.

Dato' Dr. Ir. Patrick Yong does not hold any other directorship in other public companies and listed issuers in Malaysia.

### 1. Family Relationship with Directors and/or Major Shareholders

Save for the following, none of the Directors of MSC has any family relationship with other Directors and/or major shareholders of the Company: Ms. Chew Gek Khim is the Executive Chairman of STC, the major shareholder of the Company which owns 54.85% of the equity of the Company. Her mother is Dr. Tan Kheng Lian, a substantial shareholder of STC.

### 2. Conflict of Interest

None of the directors have any conflict of interest with the Company.

### 3. Conviction for Offences (other than traffic offences)

None of the Directors had any conviction for offences (other than traffic offences, if any) within the past five (5) years or been imposed of any public sanction or penalty by the relevant regulatory bodies during the financial year ended 31 December 2019.

### 4. Attendance at Board Meetings

Details of the Directors' attendance at the Board meetings are set out in the Corporate Governance Overview Statement on page 53 of this Annual Report.

### 5. Details of Securities Holdings

Details of securities holdings in the Company are set out in the Analysis of Shareholdings on page 204 of this Annual Report. None of the directors hold any securities in the Company's subsidiaries.

## PROFILE OF KEY PERSONNEL



**NICOLAS CHEN SEONG LEE**  
Deputy Chief Executive Officer (Administration)

**Age:** 47  
**Gender:** Male  
**Nationality:** Malaysian

- LL.B (Hons), University of London

Mr. Nicolas Chen Seong Lee started his career in the tax division of Arthur Andersen & Co., Kuala Lumpur, in 1997. In 2000, he joined the Structured Finance, Corporate Banking division of Affin Merchant Bank. He returned to tax practice in 2002 until 2010 with KPMG Tax Services Sdn. Bhd.. In KPMG, he was primarily undertaking tax advisory and tax planning assignments covering a broad range of Malaysian and overseas tax, corporate and legal issues. From 2010 to 2017, he managed an agro based company involved in farming and exporting a Malaysian produced fruit and downstream products.

Mr. Nicolas Chen joined MSC on 1 November 2017 as General Manager (Special Projects) of CEO's Office before being redesignated as Deputy Chief Executive Officer (Administration). His primary responsibility is to assist the Group Chief Executive Officer on matters covering legal, corporate, tax, human resource and administration for the MSC Group.

As at 19 June 2020, Mr Nicolas Chen holds 214,300 shares in the Company.



**LAM HOI KHONG**  
Group Chief Financial Officer

**Age:** 49  
**Gender:** Male  
**Nationality:** Malaysian

- Bachelor of Business Degree majoring in Accountancy from the University of Southern Queensland, Australia  
- Chartered Accountant (CA), Malaysian Institute of Accountants  
- Member of the CPA Australia

Mr. Lam Hoi Khong was appointed as the Group Chief Financial Officer of the Company on 7 January 2019. He currently oversees the accounting, business support, financial planning and analysis, treasury, investor relations, and tax functions at MSC.

He has more than 25 years of working experience in the areas of finance and accounting, corporate finance, auditing and taxation. He spent his early formative years at PricewaterhouseCoopers before assuming commercial roles as Finance Manager and Financial Controller with a local automotive group and an international group based in Africa respectively, over a period of 7 years from 1997 to 2003.

Following that, Mr. Lam was attached to Petaling Tin Berhad ("PTB"), a property development company listed on the Main Board of Bursa Malaysia Securities Berhad for a period of over 13 years. He joined PTB as General Manager of Finance and Administration in 2003 and was promoted to the role of Chief Financial Officer in 2007 which he held until January 2017.

Prior to joining MSC, Mr. Lam was the Group Chief Financial Officer of Tien Wah Press Holdings Berhad ("TWPH") from February 2017 until November 2018. He was responsible to spearhead the Finance, Corporate and Risk Management functions, and providing strategic directions on commercial aspects of the businesses of TWPH.

## PROFILE OF KEY PERSONNEL



**IR. RAVEENTIRAN  
A/L KRISHNAN**  
Group Chief Operating  
Officer, Smelting

**Age:** 57  
**Gender:** Male  
**Nationality:** Malaysian

- Bachelor of Chemical Engineering (Chemical & Process), Universiti Kebangsaan Malaysia
- Registered Professional Engineer Malaysia
- Member of the Institution of Engineers Malaysia

Ir. Raveentiran A/L Krishnan has been with MSC for more than 30 years. He started his career with MSC as a Trainee Metallurgist in November 1988. He then held various positions within the Company including Safety & Environment Engineer and Research & Development Manager. He also spent 4 years in PT Koba Tin, an integrated mining and tin smelting company located in Bangka, Indonesia the then subsidiary of MSC as the Head of Metallurgy Department. He was involved in the tin smelter expansion during his tenure at PT Koba Tin.

He assumed the position of Production Manager in 2005 upon his return from Indonesia and later as the Works Manager in 2007.

Ir. Raveentiran assumed his current position in 2014. He is responsible for the Company's tin smelting business in Butterworth, Penang. His primary role is to ensure that the smelter remains at the forefront as the world's largest and most cost-effective custom tin smelter. This includes improving the smelter's sustainable sourcing of feed materials through net-working with global tin ore suppliers and major miners. Equally important is improvement to operational efficiency through innovation and introduction of new smelting and refining technologies to give the smelter the flexibility to handle a wide range of tin bearing feed materials.

As at 19 June 2020, Ir. Raveentiran holds 32,000 shares in the Company.



**EN. MADZLAN BIN  
ZAM**  
Executive Director  
& Senior General  
Manager, Rahman  
Hydraulic Tin Sdn. Bhd.

**Age:** 61  
**Gender:** Male  
**Nationality:** Malaysian

- Bachelor of Science (Honours) Degree in Geology, Universiti Kebangsaan Malaysia
- Registered Professional Geologist, Board of Geologists Malaysia
- Member of Ikatan Ahli Geologi, Indonesia (IAGI)
- Member of the Australasian Institute of Mining and Metallurgy
- Member of the Institute of Geology Malaysia
- Member of the Geological Society of Malaysia
- Member of the Malaysian Chamber of Mines

En. Madzlan Bin Zam joined MSC in 2002 and was assigned as Manager Geology at PT Koba Tin in Indonesia between 2002 and 2011, and later held the President Director's post for PT MSC Indonesia and PT SRM Indonesia. During his tenor at PT Koba Tin, he passed the examination as the Pengawas Operasional Utama at the mine, which qualifies him to be the Mine Manager in Indonesia.

He was subsequently appointed as Head of Geology & Exploration of MSC in 2011 and was promoted to Head of Resources & Investments of the Company in May 2015. In 2017, he assumed his current position as the Senior General Manager of Rahman Hydraulic Tin Sdn. Bhd. ("RHT"), a wholly-owned subsidiary of MSC and responsible to oversee the complete operation of RHT and its tin mine at Klian Intan, Perak. At present, he sits on the board of RHT and SL Tin Sdn. Bhd., a subsidiary of RHT.

Prior to that, he had worked with Malaysia Mining Corporation Berhad between 1981 and 2002 as a Mining Geologist responsible in monitoring tin production from the dredges. He was incharged in tin and gold exploration and mining development projects in Malaysia as well as overseas i.e. Indonesia, Australia, New Zealand, Lao People Democratic Republic, Thailand, Myanmar, Kyrgyz Republic, Europe and Democratic Republic of Congo.

En. Madzlan has vast experiences and knowledge in both primary and alluvial tin, gold, base metals and coal; and was also in charge of managing a tin mine in Indonesia. He has experiences working with consultants recognized by the World Bank for the Bankable Feasibility Study of the Taldy-Bulak Gold Project, Kyrgyz Republic.

## PROFILE OF KEY PERSONNEL



**MR. YOON CHOON KONG**  
Group Internal Auditor

**Age:** 65  
**Gender:** Male  
**Nationality:** Malaysian

- *Diploma in Management, Malaysian Institute of Management*
- *Associate Life Member of the Institute of Internal Auditors Malaysia (IIA)*
- *Certified Lead Auditor, National Registration Scheme for Lead Assessors of Quality Systems (UK)*

Mr. Yoon Choon Kong, the Group Internal Auditor of MSC, started his career as an auditor at Messrs Sam Ah Chow & Co, Certified Public Accountants. He had joined The Straits Trading Company Limited ("STC"), currently the holding company of MSC, back in 1978 as an Accounting Officer. In 1985 he was promoted to the position of Accountant at MSC and served in that capacity up to 1995 before assuming his present position as the Group Internal Auditor for MSC. Since 2018, he also concurrently holds the portfolio of General Manager, Special Project.

Between 2006 and 2010, Mr. Yoon also headed the Internal Audit function at STC in Singapore, as Vice President, Group Internal Audit.

He has been with the STC/MSC Group for more than 40 years.

### None of the key personnel:

1. Hold any directorship in public companies and listed issuers;
2. Has any family relationship with any Director and/or major shareholder of the Company;
3. Has any conflict of interest with the Company; and
4. Had any conviction for offences (other than traffic offences, if any) within the past five (5) years or been imposed of any public sanction or penalty by the relevant regulatory bodies during the financial year ended 31 December 2019.

# STATEMENT BY THE CHAIRMAN

*Dear Shareholders,*

**On behalf of the Board of Directors (“Board”), it is my pleasure to present the Annual Report and Audited Financial Statements of Malaysia Smelting Corporation Berhad (“MSC” or “the Group”) for the financial year ended 31 December 2019 (“FY2019”).**



**FY2019 NET PROFIT OF  
RM30.7  
MILLION**

## REVIEW OF PERFORMANCE

2019 was a challenging year as we saw prolonged trade tensions between China and the United States (“US”) affecting consumer and business sentiments worldwide. Tin uptake was also impacted as demand for solder, the largest global share of tin use, declined on the back of weakening global manufacturing and supply chain issues.

According to the International Tin Association (“ITA”), total refined tin produced in 2019 amounted to approximately 334,400 tonnes, which is 10% lower than 372,000 tonnes in 2018. During the year, tin prices averaged 7% lower to USD18,616/tonne from USD20,067/tonne a year ago.

Amid a difficult macroeconomic environment, MSC delivered a net profit of RM30.7 million for FY2019, driven by stronger earnings of the tin mining division.

To reward our shareholders, the Board has recommended a First and Final Single-Tier dividend of 2 sen per share, with a total dividend payable of RM8.0 million for FY2019. This represents a dividend payout ratio of 26% of FY2019 net profit, consistent with previous years’ dividend payments.

## STATEMENT BY THE CHAIRMAN

We remain steadfast in our commitment to enhance value for our shareholders through consistent dividend payouts. Whilst we do not have a formal dividend policy, we strive to continually reward shareholders, after taking into account the Group's working capital needs, financial position and expansion plans moving forward.

### BUILDING RESILIENCE

In early 2020, we saw the spread of the Novel Coronavirus ("Covid-19") pandemic further disrupting major industries and the global economy, as governments worldwide continued to impose strict containment measures. In an effort to curb the spread, countries implemented border controls and lockdowns to restrict movement, resulting in further slowdown of overall trade and economic activities.

The tin industry was also not spared from the effects of Covid-19 as tin mines around the world temporarily closed to comply with these restrictions, in order to protect the health of workers and the larger community. Similarly, in Malaysia, a Movement Control Order ("MCO") was enforced on 18 March 2020, which led to the interim closure of many government and private premises, halting the Group's tin mining and smelting activities. The Group's smelting and mining operations recommenced on a staggered basis upon approval by the Ministry of International Trade and Industry ("MITI") on 4 April 2020 and 18 April 2020 respectively, with 50% of production capacity. On 28 April 2020, during the Conditional MCO ("CMCO"), both the smelting and mining operations resumed full operations at 100% production capacity.

Cognizant of the present challenges, we expect our production and performance to be affected for the first half of 2020. Despite these external headwinds, the long-term outlook for tin still remains intact.

Tin has been in the spotlight in recent times as research into its role in the new energy revolution has revealed much potential. With its positive electrochemical qualities, tin is a versatile base metal making it suitable for various energy-related applications. On the back of new discoveries on the usages of this unique metal, we foresee an increasing demand for tin in the long term.

We are confident that our fundamental strength as a leading integrated tin player will enable us to remain resilient in these challenging times. To ensure we maintain our competitive edge, we strive to continually adapt to the rapidly changing business environment



with a focus on continuous efficiency and technological advancement.

Our plan to move the Group's smelting operations to a new and modern plant in Pulau Indah is making good progress and slated for completion by end of 2020. The new state-of-the-art facility is equipped with the revolutionary Top Submerged Lance Furnace ("TSL") smelting technology, which will significantly enhance our recovery yields and production capacity by 50%. At the same time, we also expect to achieve improved cost efficiencies with lower spending on labour, due to less manpower needed to operate the furnace. We will also stand to benefit from the strategic location of the Pulau Indah plant which is in close proximity to Westport and the London Metal Exchange warehouses.

The impending relocation of smelting operations to Pulau Indah will also free up the Butterworth land covering 13.9 acres for other developments. At the moment, we are partnering with MSC's parent company, The Straits Trading Company Limited ("STC") and exploring options to unlock the value of the land and maximize returns for both



## STATEMENT BY THE CHAIRMAN

parties. STC owns the neighbouring land in Butterworth spanning 26.2 acres. On a combined basis, the land amounts to a sizeable 40.1 acres.

Situated in a prime location with excellent connectivity with a short drive to Penang Sentral, an integrated transportation hub for railway, ferry and bus services for the state of Penang, the land boasts a panoramic view of Penang island. These factors make the Butterworth land an attractive proposition for investment and development purposes.

With our ongoing initiatives, we are confident of reinforcing our position as a leader in the tin industry and continuing to deliver value to our shareholders.

### SUSTAINABILITY MATTERS

One of the Group's strategic goals is to become an environmentally friendly tin producer. As a responsible corporate entity, we embrace and embed sustainable practices in both our tin mining and tin smelting operations.

In FY2019, we invested over RM4.9 million in environmental management and monitoring across the Group. Our sustainability initiatives revolve on implementing the best practices for managing resources in relation to water, energy and waste materials.

We continue to invest in the development of our people during the year to ensure we have the right capabilities to support and realise our goals. Training programmes are conducted during the year to encourage our employees to explore and fulfil their professional aspirations within the Group.

Our commitment to sustainability extends beyond our operations to the nearby communities where we operate. As a responsible corporate entity, we strive to give back to the community through various means such as charitable donations and employment of local workers, to name a few.

Our sustainability initiatives are further elaborated in the Group's Sustainability Statement on pages 29 to 46 of this Annual Report.

### ACKNOWLEDGEMENT

On behalf of the Board, I would like to convey my gratitude to the management team and employees for their continued loyalty and commitment as we work towards propelling the Group forward.

My appreciation also extends to our customers, suppliers, bankers, business partners and relevant authorities for their cooperation and support over the years. I would like to thank my fellow directors for their sound advice and support throughout the year.

Last but not least, thank you to our shareholders who have been with us throughout these years, staying on this journey as we steer the Group towards further success.

**CHEW GEK KHIM PJG**

*Non-Independent Non-Executive Chairman*

19 June 2020



DIVIDEND  
PAYOUT FY2019

**26% OF  
NET  
PROFIT**



INVESTED  
**RM4.9  
MILLION**  
IN ENVIRONMENTAL  
MANAGEMENT AND  
MONITORING

# MANAGEMENT DISCUSSION & ANALYSIS

## OVERVIEW

**Established in 1902, Malaysia Smelting Corporation Berhad (“MSC” or “the Group”) is one of the leading integrated tin producers in the world. MSC’s core operations comprise of both upstream and downstream activities in the tin value chain through (i) the international tin smelting operations, and (ii) the local tin mining business.**



WE OWN AND OPERATE

**MALAYSIA'S  
LARGEST**

**HARD ROCK OPEN-PIT TIN  
MINE IN PENGKALAN HULU,  
PERAK**

Our upstream tin mining operations are carried out by the Group’s tin mining subsidiary, Rahman Hydraulic Tin Sdn. Bhd. (“RHT”). We own and operate Malaysia’s largest hard rock open-pit tin mine located at Pengkalan Hulu in the state of Perak. Tin ore is extracted from the earth, then processed into tin-in concentrates to be utilised as raw materials to support our smelting operations.

We source our smelting feed intake locally as well as from overseas. At the moment, less than 10% of the smelter’s input is from our own mines and we intend to increase this by expanding our daily production output and tin exploration activities.

Meanwhile, our tin smelting activities are performed at our smelting facility in Butterworth, Penang, converting tin-bearing ores into high-purity refined tin metal. The Butterworth smelter has been operational since 1902 using the ageing reverberatory furnaces. In a bid to enhance our smelting performance, we are currently in the midst of relocating the Group’s full smelting operations from Butterworth to a new location in Pulau Indah, Port Klang.

## MANAGEMENT DISCUSSION & ANALYSIS

In 2019, we remained focused on implementing our strategic plans to strengthen MSC Group amid a demanding operating backdrop. Our aim is to enhance our position as a leading integrated tin producer as we continue to build a solid foundation with increasing efficiencies while shrinking our carbon footprint.

### OPERATIONAL HIGHLIGHTS

#### Local Tin Mining Operations

For 2019, RHT's production volume of tin-in concentrates was stable at approximately 2,288 tonnes. We aim to increase our daily mining output as we undertake exploration activities of new tin mine deposits to ensure a sustainable supply of feed intake.

Our drilling initiatives have led to a discovery of new tin ore bodies at the adjoining Western side of the RHT mine ("Western resources"). As at 1 January 2020, our estimated tin ore resources, comprising both current and new Western resources, are tabulated below:

Resources Class	Resources Volume (m <sup>3</sup> )	Grade (KgSn/m <sup>3</sup> )	Contained Tin (tonnes Sn)
Measured	2,648,577	3.31	8,769
Indicated	3,935,655	3.64	14,326
Inferred	13,856,838	1.94	26,916
Total	20,441,070	2.45	50,011

*Estimated Tin Resources as at 1 January 2020*



RHT tin mine  
in Klian Intan



PRODUCTION  
VOLUME OF TIN-IN  
CONCENTRATES AT  
APPROXIMATELY

**2,288  
TONNES**

Our current and new Western resources would be mined as a single mining operation, due to the close proximity of both locations. Hence, we are working on designing a new enlarged pit, covering an area of approximately 63.4 hectares ("ha") from 44.6 ha previously, to mine the combined resources in an economically viable way.

To expand the present mineable resources, we plan to perform an infill drilling program at the immediate northwest of RHT's mine pit to confirm the level of resources and if economically viable, to include the resources in the mine pit design.

## MANAGEMENT DISCUSSION & ANALYSIS

At the same time, we are delighted to share that during the year, RHT had received approval from the State Government of Perak (“Perak Government”) for the issuance of new mining leases for several parcels of lands, covering more than 700 ha in Klian Intan, Perak. Under these new mining leases, RHT enjoys an extended mining period of up to 11 November 2034, representing an additional 4 years from RHT’s previous leases expiring on 28 September 2030. This is expected to enhance our overall mining productivity and contribute positively to the Group’s long-term earnings.

Over in Sungai Lembing, Pahang, the infrastructure work of mine facilities is already completed at the mining lease, enabling SL Tin Sdn. Bhd. (“SL Tin”), the Group’s 80%-owned subsidiary to commence mining and commercial production in the near term. Sungai Lembing was known to be the richest producer of tin in the country and its mines were once considered the the deepest in the world before the closure in mid-1980s.



In addition to our efforts above, we are also exploring potential joint venture mining arrangements to expand our mining activities.

### International Tin Smelting Business

In 2019, MSC produced 25,752 tonnes of tin metal, maintaining our position as the world’s third largest refined tin producer. Over the course of the year, we remained steadfast in our efforts to enhance the productivity of our smelting operations for sustainable growth.

We are pleased to update that the relocation to Pulau Indah smelter is progressing well with full smelting activities expected to commence within the year. Nonetheless, we will still be operating both plants concurrently until stability is achieved at the new Pulau Indah facility. Production at Butterworth will gradually phase out once the tin smelting operations at Pulau Indah is running smoothly and problem-free.

We remain committed towards greater operational and costs efficiencies in FY2019. The new Pulau Indah plant houses a cutting-edge extractive technology using the Top Submerged Lance (“TSL”) furnace, which employs single-stage smelting as compared to the multi-stage smelting performed by the ageing reverberatory furnaces in Butterworth. With the transition, we can free up the tin build up caught in intermediates, hence further enhancing the Group’s extractive yields.

Our new Pulau Indah smelter is designed to be one of the lowest-cost smelting facilities in the world. The TSL furnace can treat a larger volume of feed intake with higher intense reaction rates and enables us to scale up production capacity by 50% from 40,000 tonnes per year using oxygen enrichment without incurring additional capital expenditure.



## MANAGEMENT DISCUSSION & ANALYSIS

Furthermore, this new facility is anticipated to shrink our carbon footprint and emission of greenhouse gases with its single-stage smelting process and use of natural gas as fuel. At the same time, we have installed solar photovoltaic panels on our facilities' rooftops to harness solar energy to produce power, in addition to the waste heat recovery function.

Located at a mature industrial area in Port Klang, the new smelter is strategically situated within the proximity of Westport and London Metal Exchange warehouses. This bodes well for us in managing our transportation and distribution costs moving forward.

The transition is also expected to bring down the Group's manpower costs as the new smelting process requires less number of workers to manage it.

Due to the reduction in manpower, the Group is undertaking an internal restructuring exercise involving approximately 550 employees at the Butterworth facility, following the plant relocation. While we provide the opportunity for employees to relocate to Pulau Indah and upskill their capabilities, we are also offering a Voluntary Separation Scheme ("VSS") for employees who choose not to relocate.

We are pleased to share that our testing sessions at the Pulau Indah smelter have been successful as we have recently produced tin using the TSL furnace. To recap, the TSL furnace was previously used for smelting lead. We are the first in the world to retrofit and convert a lead smelter for the purpose of smelting tin.

Overall, we are confident that our ongoing measures will put MSC in a better position to face any unexpected challenges while capturing arising opportunities moving forward.



## MANAGEMENT DISCUSSION & ANALYSIS

### FINANCIAL PERFORMANCE REVIEW

In 2019, the operating landscape for the tin industry remained challenging as the world experienced an economic slowdown arising from prolonged geopolitical tensions with volatile currency movements. Against this backdrop, tin demand continued to be affected, leading to a build-up in inventories and lower tin prices.

Despite the demanding operating landscape, MSC remained resilient to deliver a solid set of results for FY2019. Below is a snapshot of the Group's key performance and average tin market prices:

Operating snapshot	2019	2018
Group's revenue (RM million)	983.6	1,280.9
Group's profit before tax (RM million)	44.7	49.8
International Tin Smelter		
Production of refined tin	25,752 tonnes	27,085 tonnes
Profit/(Loss) before tax (RM million)	(38.7)	13.1
Tin Mine		
Production of tin-in-concentrates	2,288 tonnes	2,355 tonnes
Profit before tax (RM million)	88.5	38.1
Tin price		
Average tin market price (USD per tonne)	18,616	20,067

The Group recorded a total turnover of RM983.6 million in FY2019, against RM1,280.9 million in FY2018, on the back of lower sales of refined tin and less favourable tin prices. According to the Kuala Lumpur Tin Market, average tin prices in 2019 was 7% lower at USD18,616/tonne.

In tandem with the lower revenue base, the Group's profit before tax ("PBT") stood at RM44.7 million, against RM49.8 million in the previous year.

Meanwhile, the Group's share of results of associate and joint venture amounted to a net loss of RM4.1 million in FY2019, after taking into account adjustments of RM1.6 million arising from a restatement of its investment properties located overseas to depreciated cost, in line with the Group's policy.

For the year under review, the Group posted a net profit of RM30.7 million, against RM34.3 million in FY2018.

The tin mining operations was the main earnings driver in FY2019 as net profit increased two-fold to RM66.7 million from RM25.3 million in FY2018, mainly due to a one-off reversal for provision of RM48.4 million for tribute payments no longer required.

Meanwhile, the Group's tin smelting division was impacted by the slowing global tin demand and prices, resulting in an inventory write down of RM31.1 million during the year. At the same time, we recorded a provision for a VSS exercise of RM15.0 million in relation to the internal restructuring exercise at the Butterworth plant. On the back of these one-off non-recurring items, the smelting business posted a net loss of RM30.8 million in FY2019.

There was also a duplication of overhead expenses with the running of two smelting facilities in Butterworth and Pulau Indah in parallel, with only the Butterworth plant generating revenue. We expect the smelting division's financial performance to improve once we phase out production at Butterworth.

## MANAGEMENT DISCUSSION & ANALYSIS

### SOLID FINANCIAL POSITION

Total assets for MSC amounted to RM824.3 million as at 31 December 2019, compared to RM842.9 million as at 31 December 2018. In tandem with lower revenue, trade receivables was lower at RM13.7 million in FY2019 and is largely within MSC's normal trade credit terms of up to 90 days. We continue to remain vigilant and closely monitor our collection of receivables.

During the year, the Group generated a positive net operating cash flow of RM46.4 million, and had a cash and bank balance totalling RM35.7 million as at 31 December 2019. Inventories stood at RM467.4 million.

Our capital management approach involves maintaining a prudent debt level to ensure optimal returns to shareholders, while maintaining flexibility to carry out our day-to-day operations. In FY2019, total borrowings decreased 9.2% to RM266.2 million from RM293.0 million as at end-2018 due to the repayment of short-term borrowings, mainly bankers' acceptances. This translated to a gearing ratio of 0.7 times as at 31 December 2019.

At the same time, MSC's shareholders' equity rose to RM368.9 million as at end-2019 from RM348.0 million a year ago, on the back of higher retained earnings of RM164.5 million. Net assets per share grew to 92 sen from 87 sen in the previous year.

Overall, our balance sheet is on a solid footing with sufficient financial resources to support our operations and ongoing initiatives in the ensuing year.

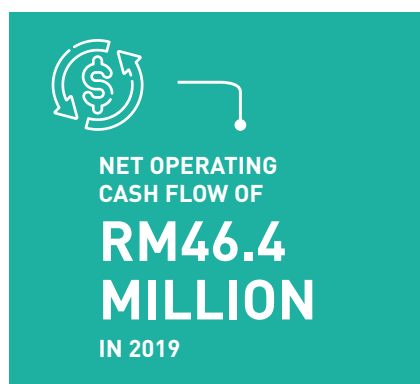
### DIVIDEND

The Board has proposed a First and Final Single-Tier dividend of 2 sen per share in respect of FY2019, amounting to a total dividend payable of RM8.0 million. This is subject to shareholders' approval at the forthcoming Annual General Meeting. The Board views that the proposed dividend strikes a delicate balance between rewarding our shareholders while retaining funds to sustain the Group's growth.

### FORGING AHEAD

We foresee the tin market to remain soft in the near-to-mid term with growing uncertainties arising from the prolonged geopolitical tensions and outbreak of the Novel Coronavirus ("Covid-19"). The spread of Covid-19 pandemic worldwide may further disrupt the global supply chain for the remaining of 2020. The full implications of Covid-19 will depend on the duration and severity of the outbreak.

Despite the global economic slowdown, we believe the fundamentals for the global tin industry remain robust with tin playing a key role in the growing energy storage and electric vehicles sectors, in addition to other well-known applications such as solder.



## MANAGEMENT DISCUSSION & ANALYSIS



We remain positive on the long-term outlook of tin driven by diversification of applications in new technologies. We foresee tin application in lithium-ion batteries for electric vehicles to stimulate demand growth as the market is still developing. According to the International Tin Association (“ITA”), two research studies were conducted showing that lithium ions move at a much faster pace when tin was added to the mix. These findings demonstrate that tin plays an important part in the advancement of technologies.

Meanwhile, tin supply is anticipated to remain suppressed at the current tin price levels, exacerbated by the temporary closure of many tin mines worldwide due to strict containment measures implemented. Meanwhile, more governments are also imposing stricter policies in relation to trade and environmental aspects, which also led to more production cuts.

Internally, we are working towards setting up a Research and Development (“R&D”) centre at the new Pulau Indah plant, with the aim of expanding the usage of tin with detailed study and analysis of the base metal.

As we move to Pulau Indah, the land in Butterworth will be freed up for development opportunities. Together with our parent company, the Straits Trading Company Ltd (“STC”), we will explore options on unlocking value of the Butterworth land spanning a combined 40.1 acres of land.

In conclusion, our initiatives in 2019 to strengthen MSC’s core operations will continue in 2020 as we navigate through these demanding times. For our smelting division, we look forward to enhanced smelting performance while driving costs down upon the relocation of full smelting operations to the new Pulau Indah plant.

For our tin mining arm, we expect our tin mining productivity to improve with our ongoing tin mine exploration and expansion efforts. These undertakings are consistent with the Group’s areas of growth and ensure we have a competitive edge for the future. With our plans set in motion, we are confident of forging a resilient path towards sustained success while meeting the future demand for tin.



## MANAGEMENT DISCUSSION & ANALYSIS

### ANTICIPATED RISKS

#### *Political, economic and regulatory risk*

Our operations and financial condition are exposed to risks arising from the developments in the economic, political and regulatory environment on a domestic and global level. These could adversely impact the profitability and business prospects of the Group. Nonetheless, we remain vigilant and continue to adopt effective measures, such as prudent management, to mitigate these factors.

#### *Volatility in tin price*

The market price for tin is volatile and not within the Group's control. Various factors such as tin supply and demand conditions, as well as government and trade policies, affect the movement of tin prices. Significant changes in tin prices may have a material impact on the Group's financial performance. To minimise this risk, we have entered into forward commodity contracts to act as a hedge against adverse price movements. In addition, we also monitor the tin prices closely and constantly review our hedging policies.

#### *Foreign currency rates fluctuations*

Our operations are exposed to risks of foreign currency fluctuations as the Group has transactions and borrowings denominated in foreign currencies, primarily in US Dollar and Singapore Dollar. Nevertheless, we deem our exposure as minimal as we benefit from some natural hedge in our operations with most of our purchases are demoninated in US Dollar. To further reduce the residual risks, we also enter into forward currency contracts to hedge our foreign currencies.



### ACKNOWLEDGEMENTS

I would like to extend my heartfelt gratitude to my fellow management team members and all of MSC's employees for remaining resilient and steadfastly working towards the Group's goals during these challenging times.

My sincere gratitude also goes out to our stakeholders, including our shareholders, bankers, customers, suppliers, bankers, business associates and various regulatory authorities for their enduring confidence and support to the Group.

Last but not least, I would like to convey my appreciation towards our Board of Directors who were instrumental in guiding us with their wise counsel during the year.

#### **DATO' DR. IR. PATRICK YONG MIAN THONG**

*Group Chief Executive Officer*

*19 June 2020*

## TIN STATISTICS

### Deliveries of Refined Tin from MSC

(Tonnes Refined Tin by reported destination)

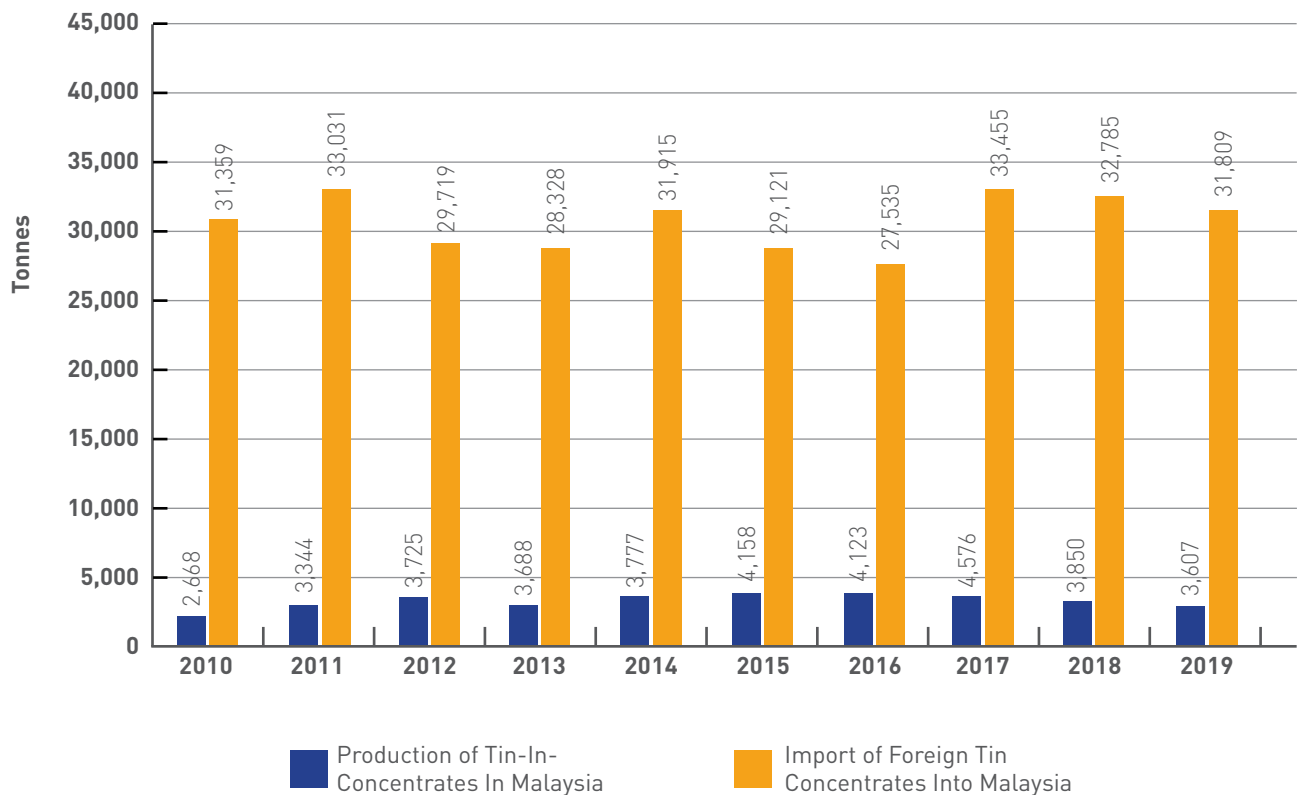
Destination	2014	2015	2016	2017	2018	2019
Africa	242	270	145	693	300	<b>375</b>
Australia & New Zealand	–	–	–	–	–	<b>50</b>
China	316	587	866	848	784	<b>400</b>
EEC	2,479	1,756	2,112	1,931	2,332	<b>2,954</b>
India, Pakistan & Bangladesh	4,459	2,286	2,686	3,832	890	<b>462</b>
Japan	3,348	3,763	3,517	3,881	3,821	<b>3,812</b>
Middle East	266	313	265	503	668	<b>717</b>
Taiwan	1,394	1,034	1,075	1,025	1,071	<b>1,239</b>
Korea	7,780	6,725	5,824	1,947	889	<b>1,695</b>
Rest of Asia Pacific	240	273	15	76	1,667	<b>1,684</b>
Singapore	100	45	–	–	–	–
South America	325	215	–	–	–	–
USA	5,165	5,125	4,100	5,151	7,923	<b>5,195</b>
	<b>26,114</b>	<b>22,392</b>	<b>20,605</b>	<b>19,887</b>	<b>20,345</b>	<b>18,583</b>
Malaysia						
For domestic consumption*	9,037	7,572	6,375	7,263	6,996	<b>7,090</b>
	<b>35,151</b>	<b>29,964</b>	<b>26,980</b>	<b>27,150</b>	<b>27,341</b>	<b>25,673</b>

\* Include tin deliveries to LME warehouses in Pasir Gudang and Port Klang

## TIN STATISTICS

YEAR	PRODUCTION OF TIN - IN - CONCENTRATES IN MALAYSIA (TONNES)	IMPORT OF FOREIGN TIN CONCENTRATES INTO MALAYSIA (TONNES)
2010	2,668	31,359
2011	3,344	33,031
2012	3,725	29,719
2013	3,688	28,328
2014	3,777	31,915
2015	4,158	29,121
2016	4,123	27,535
2017	4,576	33,455
2018	3,850	32,785
2019	3,607	31,809

**Production of Tin-In-Concentrates in Malaysia  
and Import of Foreign Tin Concentrates into Malaysia**

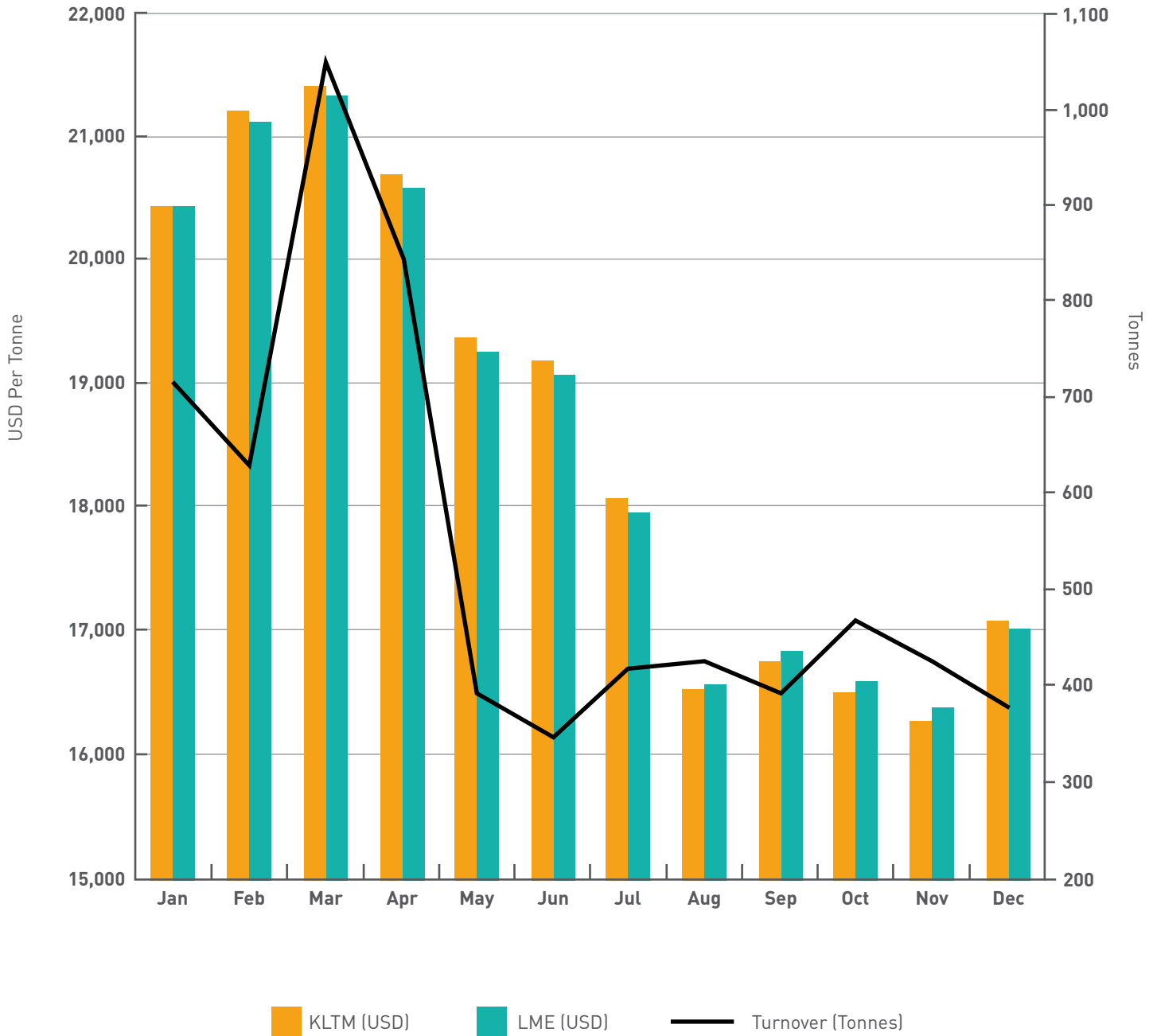


## TIN STATISTICS

	KLTM PRICES HIGHEST USD PER TONNE	KLTM PRICES LOWEST USD PER TONNE	KLTM PRICES AVERAGE USD PER TONNE	KLTM TURNOVER (TONNES)	LME 3-MONTH BUYING AVERAGE USD PER TONNE
2010	27,000	15,395	18,859	15,599	20,400
2011	33,300	18,560	26,177	11,387	26,100
2012	25,500	17,300	21,163	10,206	21,100
2013	25,150	19,150	22,318	9,530	22,308
2014	23,680	18,300	21,895	10,826	21,889
2015	19,950	13,700	16,050	12,679	16,018
2016	22,000	13,250	17,926	11,568	17,861
2017	21,100	18,900	20,027	8,890	19,970
2018	21,900	18,450	20,071	9,077	20,063
2019	21,760	15,700	18,594	6,445	18,582
<b>2019</b>					
JANUARY	20,970	19,550	20,360	719	20,349
FEBRUARY	21,760	20,980	21,256	628	21,141
MARCH	21,730	21,090	21,340	1,046	21,328
APRIL	21,450	19,710	20,566	833	20,525
MAY	19,700	18,850	19,397	388	19,295
JUNE	19,230	18,800	19,066	344	19,046
JULY	18,870	17,470	18,068	416	17,967
AUGUST	17,425	15,700	16,524	422	16,542
SEPTEMBER	17,300	16,120	16,751	392	16,806
OCTOBER	16,850	16,000	16,494	464	16,599
NOVEMBER	16,600	15,950	16,275	417	16,355
DECEMBER	17,400	16,400	17,037	376	17,032

# TIN STATISTICS

KLTM & LME Average Price (USD Per Tonne) & Total Turnover (Tonnes)



# SUSTAINABILITY STATEMENT 2019

**Sustainability is one of the pillars that make up Malaysia Smelting Corporation Berhad's ("MSC" or "MSC Group" or "the Group") corporate philosophy and core values. It serves as guidance for the actions we take as an organisation.**

We are constantly looking for ways to innovate to become more productive and responsible in how we conduct our operations. As a leading integrated tin player, we aim to create economic and social benefits for our stakeholders while minimising impact on the surrounding environment.

We are pleased to present MSC's third Sustainability Statement ("Statement"), outlining our approach to sustainability in the economic, environmental and social contexts. We intend to share updates on our sustainability efforts and performance, including the progress as well as challenges we faced during the reporting period, in this report.



**1,269**  
Employees



**RM 4.9 million**  
Invested in environmental management and monitoring



**~ RM 400,000**  
Total community-investment expenditures



**RM 56.7 million**  
Paid in Salaries and Benefits



**15%**  
Energy derived from renewable sources



**79%**  
of Workforce are Locals



**14%**  
of Workforce are Female



**~ RM 225, 000**  
Invested in staff training and development



**52% reduction**  
In Lost Time injury Frequency Rate

## ABOUT THIS REPORT

The scope of this report focuses on the operations of MSC Group involved in tin mining activities in Klian Intan, Perak, and our tin smelting operations at Butterworth, Penang and Pulau Indah, Port Klang.

It covers data which have been compiled internally from 1 January 2019 to 31 December 2019, unless otherwise stated. While the report is defined officially by the 31 December 2019 end date, key developments in early 2020 have also been included for additional context.

This Statement is prepared in accordance with the Main Market Listing Requirements ("MMLR") of Bursa Malaysia Securities Berhad ("Bursa") and guided by Bursa's Sustainability Reporting Guide – 2nd Edition.

### SUSTAINABILITY REPORTING FRAMEWORK AND CYCLE



**REPORTING PERIOD**  
1 January 2019 -  
31 December 2019



**REPORTING GUIDE**

- Main Market Listing Requirements
- Bursa Malaysia Securities Sustainability Reporting Guide (2nd Edition)



**REPORTING CYCLE**  
Annual

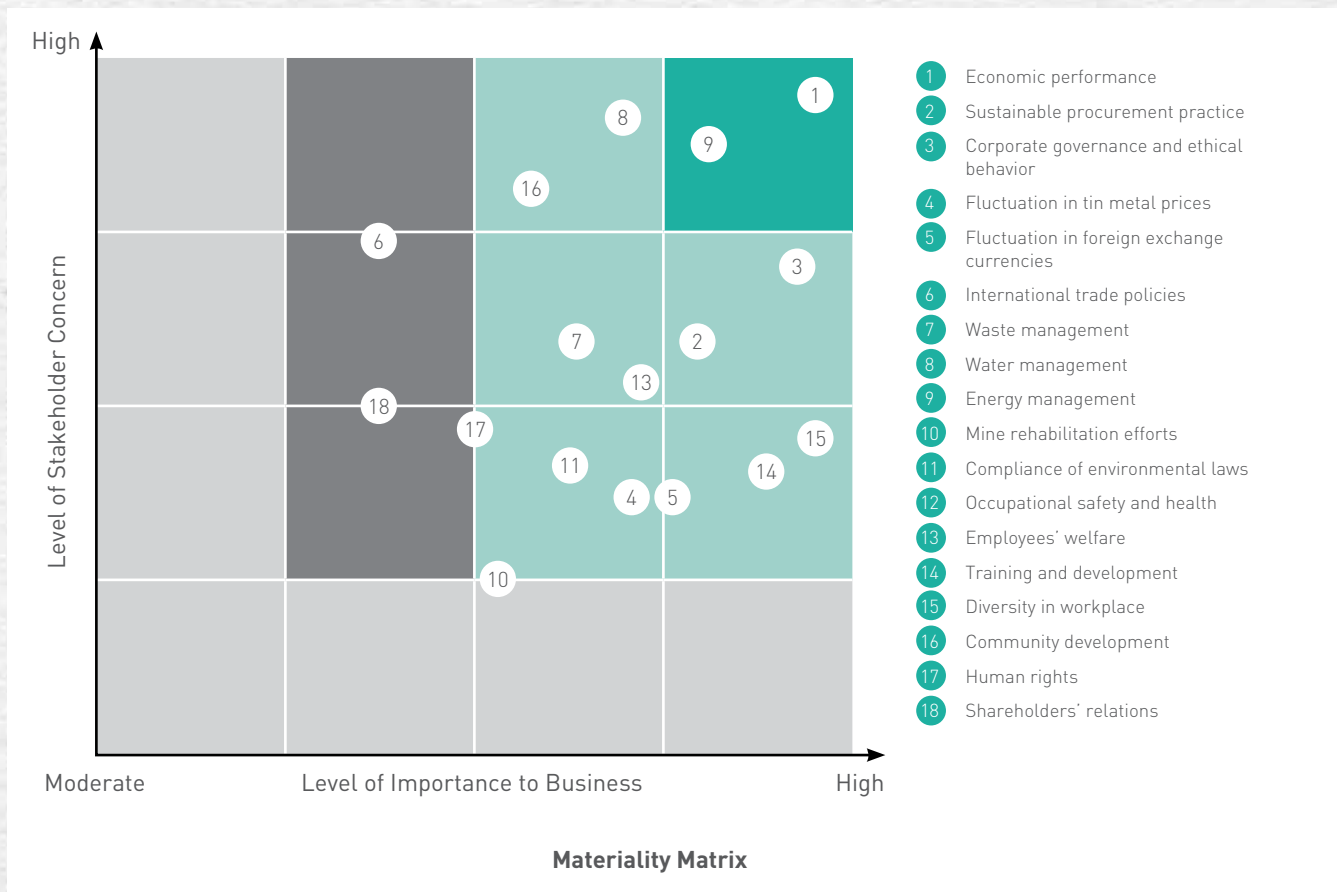
# SUSTAINABILITY STATEMENT 2019

## MATERIALIY ASSESSMENT

Our 2019 Sustainability Statement focuses on topics that are of great interest and material to our business and stakeholders. Our materiality study follows a structured process, with internal stakeholders, comprising of key management personnel, consulted during the course of the assessment.

A proposed list of material topics in relation to economic, environmental and social aspects were identified based on the input and feedback from our internal sources. The assessment involved ranking each of the shortlisted topic according to their importance, to determine the material topics.

Based on the outcome of the study this year, the Group has concluded that most of the material topics identified in 2018 still remain relevant. The results were mapped out on a Materiality Matrix, as shown below.



## STAKEHOLDER ENGAGEMENT

At MSC, we recognise the importance of consistent engagement with our stakeholders in order to ensure the effectiveness of our actions and the contributions we make to society. We connect with a wide array of stakeholders through various channels, both formally and informally on topics which are of importance to them. The table below lists our key stakeholders, their interests, how we connect with them and the outcome of engagement in 2019.

## SUSTAINABILITY STATEMENT 2019

Stakeholders	Engagement Methods	Key Concerns	Outcome of Engagement
<b>Investors / Shareholders</b>	<ul style="list-style-type: none"> <li>- Annual General Meeting</li> <li>- Bursa announcements</li> <li>- Investor briefings and meetings</li> <li>- Press releases</li> <li>- Corporate website</li> </ul>	<ul style="list-style-type: none"> <li>• Business continuity</li> <li>• Shareholders' return</li> <li>• Good corporate governance</li> <li>• Good corporate governance</li> <li>• Legal compliance</li> </ul>	Improved understanding of MSC's business operations and financial performance.
<b>Customers</b>	<ul style="list-style-type: none"> <li>- Regular updates</li> <li>- Engagement survey</li> <li>- Meetings</li> <li>- Site visits</li> <li>- Networking conferences</li> </ul>	<ul style="list-style-type: none"> <li>• Product quality</li> <li>• Good corporate governance</li> <li>• Ethical business conduct</li> </ul>	Improved insight on MSC's policies and business operations; better understanding of clients' needs; keeping abreast with the changes in the tin industry in terms of supply and demand, tin technology and applications, among others.
<b>Employees</b>	<ul style="list-style-type: none"> <li>- Engagement sessions with management</li> <li>- Human Resource programmes such as staff training and development</li> <li>- Social events such as Annual Dinner and Family Days</li> <li>- Sport and recreational activities</li> <li>- Townhall sessions</li> </ul>	<ul style="list-style-type: none"> <li>• Professional development opportunities</li> <li>• Workplace satisfaction</li> <li>• Freedom of association and collective bargaining</li> <li>• Occupational health and safety</li> </ul>	Increased awareness of MSC's policies, core values and culture; improved staff morale and work environment.
<b>Local communities</b>	<ul style="list-style-type: none"> <li>- Meet-ups with community</li> <li>- Community events</li> <li>- Charitable activities</li> <li>- Informative briefings</li> </ul>	<ul style="list-style-type: none"> <li>• Contribution towards local economy</li> <li>• Hiring of local labour</li> <li>• Social and environmental matters</li> </ul>	Improved rapport with community; develop shared initiatives and activities.
<b>Government agencies</b> <i>(Department of Environment, Department of Safety and Health, Department of Mineral and Geoscience, Atomic Energy Licensing Board)</i>	<ul style="list-style-type: none"> <li>- On-site inspections</li> <li>- Incident reports</li> <li>- Regular reports</li> <li>- Regular meetings</li> <li>- Events</li> <li>- Annual Report</li> </ul>	<ul style="list-style-type: none"> <li>• Compliance with legal obligations on economic, social and environmental aspects</li> <li>• Value generation</li> </ul>	Compliance with regulations
<b>Industry associations</b> <i>(International Tin Association)</i>	<ul style="list-style-type: none"> <li>- Open dialogues</li> <li>- Industry events</li> <li>- Interviews</li> <li>- Task force</li> </ul>	<ul style="list-style-type: none"> <li>• Outlook of tin industry</li> <li>• Environmental impact</li> <li>• Conflict-free operations</li> </ul>	Keeping abreast with the changes in the tin industry in terms of supply and demand, tin technology and applications, among others.
<b>Non-governmental organisations</b>	<ul style="list-style-type: none"> <li>- Site visits</li> <li>- Meetings</li> <li>- Events</li> </ul>	<ul style="list-style-type: none"> <li>• Advocacy for community and environmental interests</li> </ul>	Improved understanding of NGO's concerns and issues on the tin industry; increase NGO's awareness of MSC's policies, sustainable practices and operations.



# SUSTAINABILITY STATEMENT 2019

## GOVERNANCE

At MSC, we firmly uphold the principles of ethical conduct in carrying out our day-to-day operations. Our values are reinforced through effective governance, strong leadership and corporate policies at MSC.

### Sustainability Governance Structure

Sound corporate governance is essential for us to achieve operational excellence. Our Board of Directors ("BOD") is the most senior authority within the Group. They are responsible for guiding and overseeing the advancement of sustainability initiatives across the organisation, with the participation of key members from the Senior Management team.

The BOD is supported by the Group's Senior Management team, which is led by our Group Chief Executive Officer ("GCEO"), Dato' Dr. Ir. Patrick Yong Mian Thong. They are responsible for the development and implementation of sustainability initiatives Groupwide.

### Ethical Business Practices

We implement our core values through the Group's internal systems and corporate policies. All our employees are expected to adhere to MSC's Code of Ethics and related policies. This is to ensure that the best industry practices are implemented throughout the Group as we reinforce our commitment to act with integrity.

#### Code of Ethics

The Group's Code of Ethics ("Code") is established to provide clear guidelines and expectations in the conduct of work and dealings with stakeholders. All aspects of the Group's business conducts are covered including confidentiality of information, dealings in securities, conflict of interest, gifts, bribes and dishonest conducts, among others. Our employees and business partners are required to act responsibly in compliance with the Code. More information can be found on the company's website at [www.msmelt.com](http://www.msmelt.com).

#### Whistle-blowing Policy

A whistle-blowing policy has been established to encourage employees or external parties to disclose any suspected misconduct, should there be any, without fear of victimisation, harassment, discrimination or intimidation. We are responsible to protect the confidentiality of all matters raised by the Whistler-blower by treating them in a confidential and sensitive manner.

### Social and Environmental License to Operate

As we grow as an organisation, we endeavour to maintain our social and environmental license to operate. This underlines our responsibility to operate ethically in a legitimate, accountable as well as socially and environmentally acceptable way.

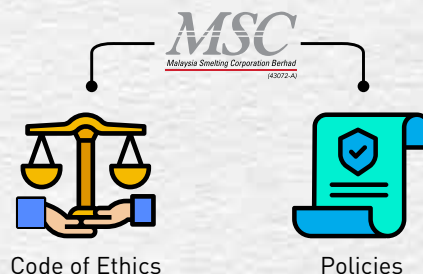
Socially, we are committed to building a solid foundation and rapport with the local communities through regular engagement with members of the community, understanding and responding to their concerns, as we strive to deliver sustainable value in line with ethical business practices. We are also responsible for implementing effective environmental management initiatives in compliance with regulations.

All mining operations are covered under the Mineral Development Act 1994, while RHT has the responsibility of obtaining the Operational Mining Scheme to be approved by the Department of Minerals and Geoscience ("DMG") every year.

### Conflict-Free Smelter

Being a leading integrated tin mining and smelting group means collaborating with our many partners to achieve the goal of creating shared value. Our ability to procure high quality goods and services in a cost-efficient and conflict-free manner is essential to the Group's sustainability.

We are committed to upholding the highest standards when it comes to procuring our goods and services. To this end, we have put in place certain conditions which are to be adhered to by our suppliers, including maintaining a Responsible Minerals Sourcing Policy.



## SUSTAINABILITY STATEMENT 2019

For our tin smelting operations, we source our feed materials of primary tin concentrates, crude tin and secondary tin from various sources globally, including Conflict-Affected and High-Risk Areas (“CAHRA”) such as Democratic Republic of Congo (“DRC”) and its neighbouring countries.

As such, we take necessary steps to ensure we are not engaging in illegal minerals trade and are conducting our business ethically in compliance with requirements of the international community.

In 2019, MSC has once again been certified as a RMAP-compliant smelter as we completed the annual Conflict-Free Smelter audit. More information on our efforts can be found in MSC’s Responsible Minerals Sourcing (“RMS”) Audit Report for 2019, on pages 47 to 48 of this Annual Report.

It is important for MSC to work with peers across our supply chain in efforts to eradicate minerals which are linked to armed groups and participate in initiatives addressing matters relating to CAHRA countries.

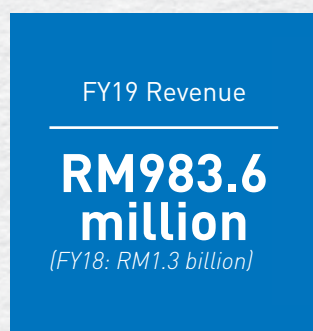
As a leading member of the International Tin Association (“ITA”), we are continuously working to enhance the ITRI Tin Supply Chain Initiative (“iTSCi”) traceability and due diligence system to increase transparency of the mineral supply chain and promote progressive improvement of the mining areas. iTSCi is a collaboration between the international tin industry, which is represented by ITA, and the Tantalum-Niobium International Study Centre, of which MSC is also a member.

### ECONOMIC IMPACT

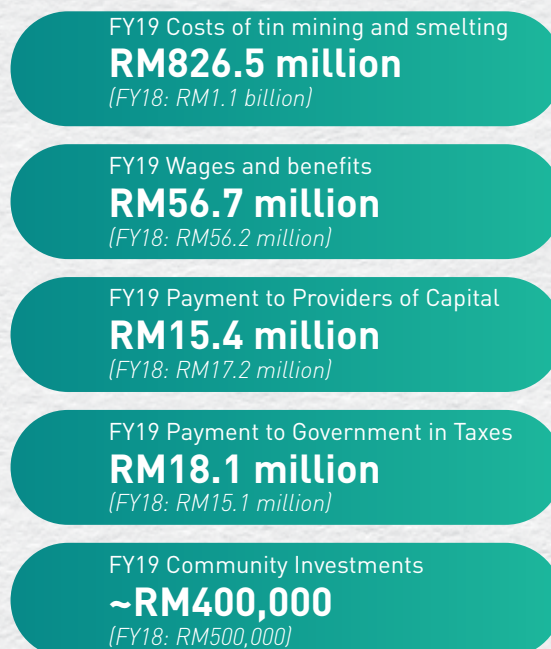
#### Economic Contribution

The economic performance of MSC is an important driver in our pursuit of sustainability. As a business, we generate a wide range of economic benefits distributed to the broader society. We pride ourselves of the greater value that we create for our stakeholders; our employees through wages and benefits, our shareholders through financial returns, as well as the government and local communities through tax payments and community investments.

#### ECONOMIC VALUE GENERATED



#### ECONOMIC VALUE DISTRIBUTED



#### MSC’s Economic Contribution in 2019

## SUSTAINABILITY STATEMENT 2019

### Enhancing Productivity for Sustainability

In order to achieve steady growth over the long-term, strategic initiatives are carried out at both our tin mining and smelting divisions.

#### **Tin Mining**

We operate the largest hard-rock open pit tin mine in Malaysia. As we move forward, our efforts on enhancing our tin resources at the mine and increasing our overall mining productivity remain.

We are pleased to share that during the year, RHT has received new mining leases which extend the mining period by an additional 4 years to 11 November 2034.

In addition, RHT had leased two parcels of land located adjacent to RHT's existing mining leases in Klian Intan, measuring 100 acres and 323 acres. This land will be utilised for waste dumping activities and further tin ore extradiation from the discards. As a result, we expect improvement in overall mining productivity as this would free up space within the existing mining areas.

During the year, we have also installed Global Positioning System ("GPS") tracking system in the dump trucks carrying waste materials around our mine pit. The GPS system allows real time monitoring of movements and speed of the truck, by controllers who are stationed at the fleet management control room. Previously, the number of trips from the pit to the processing plants and waste dump were recorded manually. This initiative has resulted in enhanced manpower productivity and safety at our mines.

We have also installed a new tracking system to monitor the performance of the rod mills and balls at RHT's processing plants, to ensure all rod mills and ball mills are running at optimum capacities. This system also allows real-time monitoring from the control room.



RHT tin mine in Klian Intan

#### **Tin Smelting**

Meanwhile, we continue to undertake innovative efforts to enhance our long-term performance in our tin smelting business. We are looking forward to the completion of the relocation of our smelting operations from our existing tin smelting facility in Butterworth, Penang to a new plant in Pulau Indah, Port Klang. The Group's Butterworth smelter has been in use since 1902 using dated reverberatory furnaces.

The new Pulau Indah facility is equipped with advanced smelting technology using the Top Submerged Lance ("TSL") furnace, resulting in a more efficient single-stage smelting process. This will lead to reduced operating costs and over-reliance on intensive labour, as the process requires less manpower. The technology upgrade will significantly enhance our extractive yields in a more environmentally friendly manner, reducing our carbon footprint.

More initiatives related to our tin mining and smelting activities can be found in the Management Discussion and Analysis section on pages 17 to 24.



Top Submerged Lance Furnace

## SUSTAINABILITY STATEMENT 2019

### Memberships and Associations

Involvement with memberships and industry associations allows MSC to be updated on relevant and important matters such as regulatory updates, market and sustainability trends and sharing of industry best practices, to name a few. In 2019, MSC was a member in the following industry associations:

- Malaysia Chamber of Mines (MCOM)
- Federation of Malaysian Manufacturing (FMM)
- International Tin Association (ITA)
- Tantalum and Niobium International Study Center (TIC)

### ENVIRONMENTAL IMPACT

Environmental responsibility is a critical component of MSC's sustainable growth agenda. To mitigate the impact of our operations to our surroundings, we apply precautionary measures by integrating various environmental controls within our operations. We closely monitor our environmental performance and seek to continuously improve our approach to handling these material matters.

In 2019, MSC Group invested over RM4.9 million in environmental management and monitoring efforts. We pursue and utilise best practices and tools to reduce our carbon and water footprint, while effectively managing our waste materials at the mines.

#### **Progressive Mine Rehabilitation**

We are committed to the protection of the environment throughout all phases of mining, from exploration to post-closure. We recognise that a successful mine closure is important to the surrounding environment and communities. As such, we integrate mine closure plans from the very start of the mining process to mitigate the impact of our operations with the institution of a Mine Rehabilitation Plan ("MRP").

We have successfully rehabilitated over 32 hectares of our mined-out area to date. This includes the 4 hectares under the collaboration between RHT and Forest Research Institute, Malaysia ("FRIM") on Afforestation and Reforestation on mined-out areas. This project commenced in 2011 as a 5-year plan, but has since been extended for another 4 years up to 2020.

Post-closure, the results from the FRIM study on suitable planting methods and tree species will be adopted. To this end, RHT has its own plant nursery in preparation for the eventual mine closure. The aim of this nursery is to have continuous supply of mature and quality seedlings for the progressive rehabilitation works in a more cost-effective manner as compared to sourcing from other nurseries. Most of the seedlings at our plant nursery are high in value timber tree types.

Apart from that, we also continuously perform greening works on the slopes of the tailing bunds, riverbanks and mined-out area by planting trees and hydroseeding to avoid any erosion and sedimentation into the streams.

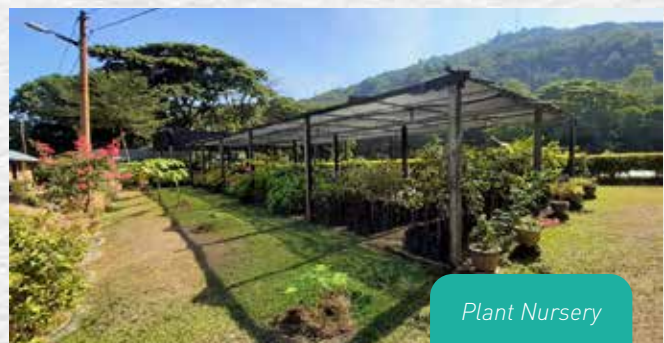


## RM 4.9 million

Invested in environmental management  
and monitoring



Afforestation at  
RHT Tin Mine



Plant Nursery

# SUSTAINABILITY STATEMENT 2019

## Water Management

Water is an important resource in our operations as our tin mining processes are dependent on this resource. It also has an immediate impact on nearby communities, which can affect local drinking water and agriculture. As such, we continue to strive for efficient water management and usage throughout our supply chain to reduce our impact on the environment.

### Water Withdrawal and Recycling

At our mine, we seek to minimise water withdrawal from natural sources through water recycling, wherever possible. We have a closed-circuit water circulation system, where 100% of the water discharged from the ore processing plant will flow to a series of tailing ponds. Here, the water will be recycled by pumping back clear water from the last tailing pond to the water storage pond, where the water will be redirected to the plants for re-use.



In 2019, our mining activities consumed approximately 10.4 billion gallons of recycled water. Nonetheless, we also experience water seepages and evapotranspiration leading to water loss. To make up for this, approximately 518.0 million gallons of fresh water was pumped from Sungai Kijang to our tailing ponds this year.



**10.4 billion**  
gallons of recycled water

### Water Quality Management and Treatment

Being in the mining industry, we are responsible for mine water and continuous water quality monitoring and treatment to ensure conformance to regulatory requirements set by the Department of Mineral and Geoscience ("DMG").

Water management at RHT involves discharging clean water in compliance with regulatory requirements. To observe any environmental impact, our mining operations have effective water quality monitoring systems in place, as displayed below:

- Daily pH monitoring is carried out at the river exits of Kijang Dam and Kepayang Dam at our mining site, twice a day. The results are then submitted to the DMG at the end of day.
- Daily pH monitoring is conducted along 13 sampling points along Sg. Kijang and 4 water ponds within our mines.
- Weekly pH reading at 23 sampling points from 9 rivers surrounding our mines.

We also perform water sampling exercises at several points along the surrounding rivers:

- Fortnightly water sampling at both exit of Kijang and Kepayang Dam at our mining site. The samples are then analysed by DMG's laboratory for pH reading and heavy metals.

## SUSTAINABILITY STATEMENT 2019

- Monthly water sampling at 12 sampling points and analysed by private Skim Akreditasi Makmal Malaysia ("SAMM") accredited laboratory for similar parameters as DMG's laboratory.
- Regional water sampling is also conducted covering 100km river stretch from Pengkalan Hulu town to Gerik. The water samples are then analysed by the SAMM-accredited laboratory.

We treat the mine water before exiting our mines to the surrounding rivers. To this end, lime dosing operations are undertaken at multiple stations at our mine as part of the water treatment method to neutralise the acidity of the discharge and to suspend heavy metals in the water exiting our mining leases, ensuring compliance with the water quality standard prescribed in Mineral Development (Effluent) Regulations 2016 under Mineral Development Act 1994.

Despite our environmental controls in place, there were contamination claims at one of the nearby rivers of our operations, Sungai Rui, by the Perak Water Board ("LAP"). Following these allegations, we approached and managed the situation by carrying out several initiatives, centred on raising awareness on the Group's operations and environmental management efforts, which include:



Mine Effluent Treatment with Hydrated Lime

- Presentation and clarification to the authorities, including the Perak Chief Minister and State EXCO, of facts and figures based on local geological setting, mineralogy, mining operations, environmental management and our findings on other possible contribution to the incidence;
- Organised a mine visit for Perak EXCO and other government agencies such as LAP, DMG, DOE, and Department of Irrigation and Drainage ("DID") to educate the group on mining operations and environmental controls in place;
- Collaborated with the Information Department of Pengkalan Hulu to educate and raise awareness

among the locals; and

- Organised a mine visit for members of media to educate the public on our operations and sustainability efforts.

At the same time, we conducted a study involving regional water and soil sampling along the river system in Hulu Perak. 73 water and soil samples were taken from 18 rivers involving over 100km stretch. All samples were sent to a private SAMM accredited laboratory for analysis with the aim of strengthening our precautionary measures.

To further enhance our water treatment process, we engaged professional geochemical consultants from Universitas Gadjah Mada, Yogyakarta, Indonesia to perform detailed analysis on the arsenic behaviours and its treatment.

As part of the MRP, a River Rehabilitation Plan has been prepared and communicated to the DID to propose the best rehabilitation method at Sg. Kijang and Sg. Keparang. Meanwhile, we have also established an Erosion and Sediment Control Plan to mitigate erosion and excessive sedimentation into the nearby rivers.

Moving forward, we remain fully committed to sustainable water management to ensure responsible use of this resource and avoid any potential contamination occurrences in the future.



Mine Visit by Authorities

## SUSTAINABILITY STATEMENT 2019

### Waste Management

As a tin mining and smelting group, we produce a significant amount of waste in the form of both hazardous and non-hazardous waste. The various types of waste materials generated require different methods of disposal.

Our mining activities involve the extraction, processing and refining of tin ores. These actions generate by-products such as tailings, overburden and wastewater effluent, among others. As such, proper management of these waste materials is important to minimise the associated risks to the localities and enforces our commitment to operate in a sustainable manner.

We perform drilling and blasting on the tin ore and overburden as well as ripping and dozing of certain ore materials, as part of our mining process. The ore materials will then be transported out of the mine pit to the processing plants using hydraulic excavators and dump trucks. Meanwhile, the overburden is deposited at the Southern Waste Dump located at the foothill of Gunung Paku.

We generated a total of 1.4 million m<sup>3</sup> of loose volume of tailings from our mining activities this year, as compared to 1.5 million m<sup>3</sup> in 2018, mainly due to a reduction in production of tin concentrates. Overburden volume deposited at the Southern Waste Dump amounted to 1.0 million m<sup>3</sup> in 2019.

As we expand our mining operations, we are planning to further increase the retaining capacity of our existing tailing ponds. At the moment, a geotechnical design analysis is currently underway with expected completion in 2020.

We are also in the midst of constructing an additional dumping area for our waste materials at the two parcels of leased land adjacent to the existing mining leases, measuring 100 acres and 323 acres, respectively. To ensure the environmental safety of the future waste dump area, we have engaged



consultants to undertake a geotechnical study on waste dump design and drainage.

### Scheduled Waste Management

All scheduled waste materials generated from our operations are handled appropriately in terms of generation, storage, transportation and treatment, in accordance with the Environmental Quality (Scheduled Wastes) Regulations 2005 of the Environmental Quality Act 1974. The waste materials are collected by a licensed waste contractor who has been authorised by the DOE. All works carried out are monitored by a Competent Person in Scheduled Waste Management ("CePSWaM") registered under DOE.

The types of scheduled waste materials generated by our mining operations are presented below, as prescribed in the Environmental Quality (Scheduled Wastes) Regulations 2005:

- SW102 - Waste of lead acid batteries in whole or crushed form
- SW305 - Spent lubricating oil
- SW306 - Spent hydraulic oil
- SW409 - Disposed contaminated containers
- SW410 - Contaminated filters

To date, RHT has complied with all regulations and procedures prescribed in the law, in this regard.

### Energy

Our mining and smelting activities require a substantial amount of energy. We endeavour to meet the energy needs of our operations while maximising energy efficiency and minimising the subsequent greenhouse gas emissions.

To this end, we have employed an Efficient Electrical Energy Management Policy across the Group. The Policy underlines our commitment to minimise the Group's energy usage, when and where possible, as we strive to enhance productivity and cost-effectiveness with reduced energy wastage.

## SUSTAINABILITY STATEMENT 2019

### Effective Monitoring

Energy used at our operations is primarily in the form of electricity powered by the national grid as well as renewable sources such as solar and hydro, in addition to fuels such as diesel and natural gas. Energy is consumed mainly for on-site power generation, our tin smelting and mining processes, as well as for transportation purposes.

At our mine in Klian Intan, we monitor energy consumption by tracking the daily energy usage with an Energy Meter and logging the operation hours of the pumping station, while our Butterworth smelter is equipped with an energy consumption monitoring system for the main substation, high-load equipment and switch house.

The data collected will then be documented and reviewed by authorised personnel in the Electrical Maintenance Department for verification and approval of the records. These records of the Group's energy consumption and intensity will also be submitted to Malaysia's Energy Commission as required by the Electricity Law and Regulations.

In 2019, the Group's total electricity consumption increased marginally to 34.0 GWh from 33.2 GWh in 2018, as we continued to run both smelting facilities at Butterworth and Pulau Indah in parallel.



**34.0 GWh**  
energy consumed

In tandem with the increase in energy consumption, energy intensity in 2019 also increased by 11%.

### Enhancing Energy Efficiency

Improving the Group's energy efficiency remains a top priority as it is an effective way to reduce costs and emissions. In this regard, we are continuously reviewing our practices and processes of our operations.

At our Butterworth plant, we continued our energy efficiency initiatives by upgrading to LED lighting. Further optimisation of energy is expected once the Pulau Indah smelter is fully operational with the usage of the cutting-edge TSL furnace, which smelts tin in a single-stage process, as opposed to the current multi-stage procedure at our Butterworth plant.

At our mine, our cost savings measures include conducting our water pumping activities at the mine during off-peak hours to take advantage of the lower electricity tariffs. A dedicated Registered Energy Manager is also stationed at our mines to advise on energy-related matters. The Energy Manager is also responsible to submit a report to the Energy Commission on a monthly basis for monitoring.

Meanwhile, we endeavour to utilise renewable sources, whenever possible, to reduce our reliance on fossil fuel to generate power.



Solar PV Panels at  
Pulau Indah Plant



## SUSTAINABILITY STATEMENT 2019



**15.0%**

energy consumed is generated  
by renewable sources

At Pulau Indah, we have installed solar photovoltaic panels on the roof tops of several structures at the facility, including the smelting plant, administrative building and car park. With a combined installed capacity of 1.26 MWp, we expect to reduce carbon discharge by approximately 1,121 tonnes per year. At the same time, we are also working on thermal energy to generate power at the Pulau Indah facility by installing a waste heat recovery system. These initiatives are projected to result in further cost and electricity savings with an increased usage of renewable sources in the energy mix.

At Klian Intan, our mining activities are also powered by a 1.0 MW mini hydro power station, utilising water to generate power. It is noteworthy to mention that we are one of the few mining companies which utilises water for electricity. This additional energy source represents a more viable alternative to the diesel-driven generation sets, while reducing our dependency on the national grid for power. In 2019, 15.0% of the Group's total energy consumption was powered by renewable sources.

### SOCIAL IMPACT

#### Our People

We place great emphasis on our most important resource – our people. We understand that our success is built upon a safe, skilled and motivated workforce which carries out its work in accordance with the Group's standards and policies. It is our duty as a responsible and fair employer to provide a conducive working environment that foster personal and collective growth.

MSC has a strong commitment to our employees as we endeavour to strengthen the culture of respect and transparency within the Group. This is reflected in the Group's Labour Policy, which defines the labour and human rights standards to which all our employees are entitled to.

#### HUMAN DIGNITY AND EQUALITY

- To commit to protecting employees' rights to have their dignity respected
- To ensure working conditions will not infringe on employees' dignity
- To condemn harassment in any form, and an act of harassment is a non-compliance against our Code of Conduct
- Freedom and security of the employee will be respected by the Group

#### NON- DISCRIMINATION

- To condemn unfair discrimination on the basis of race, gender, sex, marital status, ethnic or social origin, sexual orientation, age, religion and political opinion
- To develop and provide training for employees enabling them to perform in line with the Group's values and principles

#### FAIR LABOUR PRACTICES

- To condemn the use of forced labour in employment
- To adhere to recognised practices and principles regarding the employment of young persons imposed by local legislation
- No workers of age under 16 shall be employed
- Termination of employees' services will conform to requirements of lawfulness and fairness

#### MSC Group's Labour Policy

## SUSTAINABILITY STATEMENT 2019

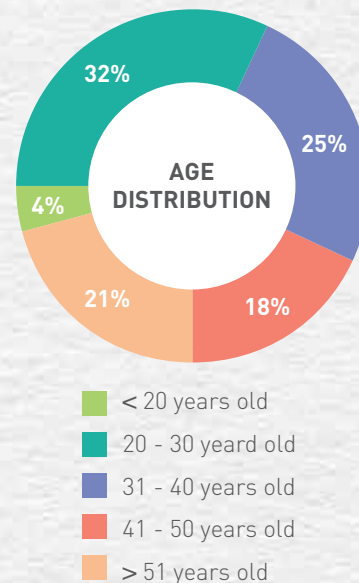
Fair employment practices are adopted Groupwide as we conform to labour laws which respect and protect human rights. These rights are communicated in the Group's Code of Ethics and the Employee Handbook.

### Diversity and Inclusion

At MSC, we believe that diversity within the workforce enhances our competitive position. We are committed to provide equal opportunities across the Group as we believe that our people should be treated and evaluated based only on work performance.

In 2019, MSC has a total workforce of 1,269 employees, as compared to 1,101 employees last year as we intensified our hiring activities due to the ongoing relocation of our smelting operations from Butterworth to the new Pulau Indah facility.

The Group's workforce composition demonstrates our efforts in promoting diversity and equality in the workplace.



### GENDER DISTRIBUTION



**MALE**



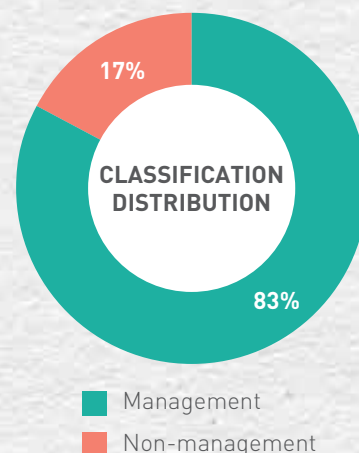
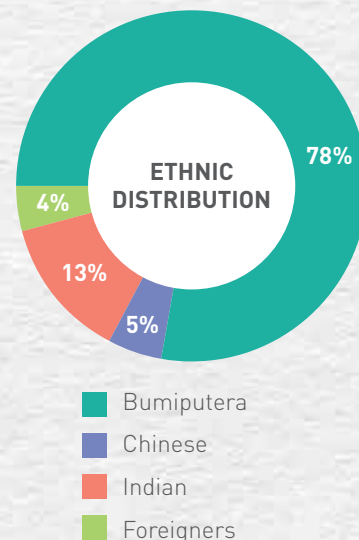
**FEMALE**

Mining and smelting have traditionally been a male-dominated industry. Due to this, we have encountered challenges in attracting and retaining female talent. In 2019, 14% of our workforce is made up of female employees. We aim to increase this number going forward as we proactively work towards creating more opportunities for women in the workplace as well as policies that accommodate the needs of our female employees.

As an integrated tin player, 83% of our workforce are non-managerial employees comprising of workers operating the mines and smelter.

We also strive to strike a balance in our workforce as we infuse younger talent into the Group. In 2019, over 60% of our workforce are below 40 years old.

Following the impending relocation of MSC's smelting operations to Pulau Indah from Butterworth, we are undertaking an internal restructuring exercise as we realign job scopes within the Group. In February 2020, we have offered a Voluntary Separation Scheme to approximately 550 employees working at the Butterworth smelter.



## SUSTAINABILITY STATEMENT 2019

### **Career Development Opportunities**

Training and development of our employees is critical for the sustainability and growth of the Group. We firmly believe in investing in our talent and creating the right environment for knowledge and skills development.

In 2019, we invested approximately RM225,000 in learning and development initiatives, which were implemented across the Group, clocking approximately 22,500 of training hours. The reduction in training hours in 2019 was mainly due to lower training sessions conducted as we anticipate the transition to the Pulau Indah smelter.

We averaged 18 hours of training per employee in 2019, with sessions ranging from technical training to building soft skills and leadership competencies. Our programmes are tailored accordingly to equip our employees with the relevant skillsets to meet specific job requirements, as they prepare to take on more responsibilities within the Group.

Ensuring we are properly rewarding and recognising high-performance is important to us. Employee performance reviews are conducted annually at the supervisory, management and executive level. Following the assessment, top talents will be rewarded in monetary terms and awarded promotions for further career advancement. We continue to benchmark our rewards and remuneration packages to the market to ensure fair compensation for our employees.

At the same time, employees also enjoy on-the-job benefits such as annual leaves, health and medical coverage, statutory contributions to retirement funds as well as financial and housing assistance, to name a few.

### **Employees' Wellbeing**

Apart from providing a safe working environment, we endeavour to instil a spirit of camaraderie through recreational and leisure activities among our employees.

In 2019, we continued our employee engagement initiatives such as hosting Annual Dinner and sports tournaments, to serve as a platform for social interaction and foster closer relationships among employees.



**RM 225,000**  
invested in staff development



## SUSTAINABILITY STATEMENT 2019



Annual Dinner



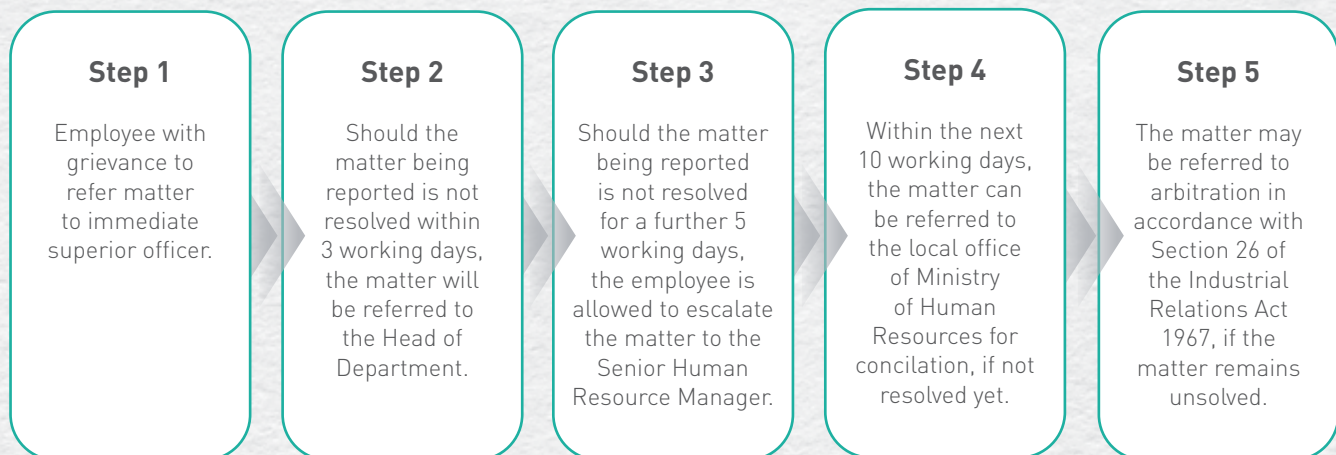
Football League

### Freedom of Association and Collective Bargaining

We support the right to freedom of association and collective bargaining at all our operations. Our approach focuses on employee representation based on transparency and constructive dialogue with the unions. We engage with union leaders on various matters such as labour laws, negotiation of terms and conditions of employment, policies and procedures, to name a few.

As at end-2019, 50% of our mining employees are members of the National Mining Workers' Union of Peninsular Malaysia, while 67% of smelting employees are members of the National Union of Industrial Mineral Smelting Workers. This figure represents our non-managerial employees working at the smelter and mine sites, who are covered under collective bargaining agreements.

A Grievance System is also implemented for employees to inform on any grievances:



Grievance System

### Occupational Safety and Health

At MSC, we endeavour to create a culture of safety and health at the workplace and our operating sites. Mining and smelting activities are associated with a variety of safety and health hazards, of which if not managed properly, may have significant consequences to our employees and the business as a whole. As such, the safety and health of our workforce is our highest priority across the Group.

# SUSTAINABILITY STATEMENT 2019

## Occupational Safety and Health Policy

We have developed an Occupational Safety and Health (“OSH”) Policy, which ensures our compliance with relevant health and safety laws and regulations, including the Occupational Safety and Health Act 1994. It also acts as a guidance in advancing the standards of our OSH systems. Through our OSH Policy, we have defined our commitment to mitigate safety and health risks in our operations:

- To provide safe working conditions and teach safe work practices;
- To provide control measures for hazards in the workplace;
- To promote the concept of safety and health within the Group and develop a sense of awareness amongst employees;
- To maintain local and internal standards in safety and health; and
- To ultimately eliminate all incidents that could lead to injury and occupational illnesses.

We implement our OSH Policy across the Group through our dedicated OSH Committees at our corporate office, smelter and mines. They are responsible for overseeing all safety-related matters and committed to reviewing the OSH Policy on a periodical basis for effectiveness and suitability.

At the moment, the OSH Committee is made up of 59 key members across our operations.

There is also an Emergency Response Team (“ERT”) at our operating sites who are trained and equipped to respond to emergencies. Currently, the ERT comprise of 30 employees at our smelting facility and 40 at our mines.

## Occupational Safety and Health Initiatives

Going beyond regulatory requirements, our safety measures also include operational training and inspection, as well as knowledge sharing sessions. Employees undergo training on a regular basis, centred on raising our workforce’s awareness and competency with the aim of enhancing our emergency preparedness.



Safety Meeting

In 2019, we increased our safety-related training programmes to 29 from 24 in 2018. The training sessions conducted revolved on topics such as road traffic safety and chemical handling and spillage control, among others.

The Group’s safety performance is also monitored by the OSH Committee and evaluated on a periodical basis to ensure we are operating at an optimal level. In 2019, we experienced a total of Lost Time Injuries of 33 cases, a decline from 67 in the previous year. This translated to a Lost Time Injury Frequency Rate (“LTIFR”) of 7.8, as compared to 16.1 incidences per million manhours worked in 2018.

This improvement can be attributed to our continuous efforts Groupwide as shown in the diagram below.



Conduct safety briefings to visitors to educate on potential hazards



Equip employees with proper Personal Protection Equipment (“PPE”)



Develop processes to analyse risks and effectiveness of controls



**52% reduction**  
In Lost Time injury Frequency Rate



Develop an emergency response plan



Develop procedures to promote safety practices within operating sites



OSH Committee to conduct regular health and safety audits

## SUSTAINABILITY STATEMENT 2019

We believe that all occupational injuries and work-related illnesses are preventable. Hence, our target at MSC Group is to prevent incidences as well as disruption at the workplace. Nonetheless, we regret to inform that there was one road fatality in 2019, where one of our plant supervisors on a motorcycle was fatally injured in an accident with a lorry carrying tin ore material at our RHT mine.

Following this incident, we performed thorough investigation and implemented additional safeguards to strengthen our OSH initiatives and eliminate repeat incidents. These include the following efforts, but not limited to:

- Elected a certified Occupational Safety and Health Officer by the Department of Occupational Safety and Health (“DOSH”) to oversee all OSH matters at the mines;
- Enhanced in-house training programmes for motorcyclists and truck drivers;
- Deployed new technologies such as a GPS in trucks, for real-time tracking and monitoring of the driving speed at the mines;
- The inception of a Safety and Health Committee for Contractors with monthly meetings;
- Conduct “Contractor Mega Toolbox Meeting” at the start of every month for contractors who handle heavy machineries; and
- Increased the number of dump trucks to carry tailings, which have bigger capacity and slower speed as compared to smaller lorries.

Through these initiatives, we intend to further equip our employees with the proper safety tools and training for continual safety awareness to prepare them for any potential occurrences.

### Empowering Communities

As one of the leading tin mining and smelting groups, we recognise our duty as a responsible corporate citizen. We aim to achieve sustained growth by creating shared value for our stakeholders, including the nearby communities of where we operate.



Safety Briefing



Dump Truck



**RM 400,000**

Investment in  
Community Outreach Initiatives

During the year, we continued to reach out by participating and contributing in various initiatives focused on job creation, community outreach and charitable donations. Approximately RM400,000 was contributed in 2019 to local authorities as well as welfare establishments and communities.

Our community engagement efforts are aimed at adding value in the forms of skills development and financial contribution, among others.

### Spurring Socio-Economic Growth

We recognise the role our operations serve as catalyst for social and economic development in our local communities. Hence, our operations support a variety of initiatives which spur socio-economic growth of the communities.

We are aware that our procurement processes have a major impact on the surrounding communities of where we operate. In 2019, the Group engaged with approximately 60 local business partners to procure goods and services, representing 18% of our total business partners. Our goal is to increase local procurement, where feasible, as it stimulates the local economy and elevates the community’s socio-economic status.

# SUSTAINABILITY STATEMENT 2019



School Visit to Tin Mine

Apart from that, we also encourage the hiring of locals workers at our operations, where practical, to ensure the economic benefit of employment remains in the locality. At our Butterworth smelter, over 89% of workers comprise of locals from the nearby towns, such as Butterworth, Penaga, Kulim, Bukit Mertajam and Kepala Batas. For our mining operations in Klian Intan, local employees represent 83% of our workforce, originating from Klian Intan, Baling, Pengkalan Hulu and Gerik. Collectively, local employees make up 79% of the Group's total workforce.

### Educational Initiatives

We are aware that education is fundamental to sustainable development. In 2019, we invested approximately RM91,000 on educational initiatives. We have yet again opened our doors and offered industrial training opportunities to students and undergraduates from various local educational institutions. Our goal is to equip our youth with the proper tools while developing human resource capacity for our specialised industry.

Additionally, we also provide financial assistance to deserving employees and their dependents in pursuit of further education. We have introduced an Educational Award Scheme to reward our employees' children based on merit

for the national examinations. At the same time, we also organise educational visits for primary and secondary school students to the RHT mine to expose them to the workings of our industry.



Donation to Fire Victims of Sungai Lembing



Blood Donation Drive at Butterworth

### Corporate Social Responsibility

We encourage volunteerism among our employees. During the year, our employees continued to demonstrate strong interest in various Corporate Social Responsibility ("CSR") related events for the nearby communities they work with.

Following the fire tragedy that hit Sungai Lembing, Pahang in October 2019, we had extended our support to the affected families through a donation check worth RM50,000, to assist them in rebuilding their homes and livelihoods.

At MSC's Butterworth facility, a Blood Donation Drive was organised during the year. Approximately 63 pints of blood was collected during the one-day drive, which received encouraging response from employees.

## RESPONSIBLE MINERALS SOURCING (RMS) AUDIT REPORT 2019

Malaysia Smelting Corporation Berhad (“MSC”), a public listed company in Malaysia and Singapore – is a tin producer with mining and smelting operations stretching back to early 1900s. MSC is currently the third largest supplier of tin metal in the world. MSC is fully committed to meeting OECD Due Diligence Guidance, Regulation (EU) 2017/821 of the European Parliament and the U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act, by conforming to the iTSCi (ITA Tin Supply Chain Initiative) and Responsible Minerals Assurance Process (RMAP). MSC is taking proactive measures to ensuring and promoting responsible, sustainable and conflict free practices in its mineral sourcing practices and supply chain.

MSC’s engagement with iTSCi and RMAP promotes regulatory clarity in sourcing areas which leads to greater disclosure and transparency of responsible and sustainable minerals sourcing and supply chain, not only in Conflict-Affected and High-Risk Areas (CAHRAs) but throughout the globe. The successful implementation of the programs and the involvement of more responsible stakeholders are vital for the socio-economic growth of the communities of the sourcing countries. MSC will continue to work with all parties who share its vision on a responsible and sustainable minerals sourcing program by engaging, supporting and educating all actors in the supply chain to be responsible in sourcing and processing the minerals.



*A local miner in Central Africa draining water from a tin ore bag*

MSC has a comprehensive due diligence program with Responsible Minerals Sourcing (RMS) embedded in its sourcing policy to ensure responsible and sustainable mineral sourcing and supply chain in its operation. The cornerstone of MSC’s RMS policy is to view all business activities in terms of its impact on global conflict issues, local society and environment, partnering with international initiatives, stakeholders and government to achieve a responsible and sustainable tin operation and industry. MSC’s personnel conducted on-site due diligence at CAHRA countries to ensure sourcing processes from these countries are conflict free. These site visits cum due diligence process are very important to MSC to ensure that all suppliers are adhering to the latest RMAP requirements in sourcing tin ore prior to shipping to MSC.



*MSC personnel entering one of the tin mine tunnels in Vietnam*

MSC personnel visited mining sites as part of the due diligence process and touched base with major tin ore suppliers especially from the CAHRAs ensuring that they are sourcing minerals responsibly and adhering to the latest RMAP’s requirements.

MSC personnel also visited the Alphamine Bisie tin mine project in North Kivu, DRC – the first large scale mining operation in the eastern DRC which is also one of the largest and most significant tin deposits in the world.



## RESPONSIBLE MINERALS SOURCING (RMS) AUDIT REPORT 2019

MSC maintains a Responsible Minerals Sourcing (RMS) Policy, available on its website, pursuant to which the company;

1. Prevent the extraction and trade of minerals from becoming a source of conflict, human rights abuses, and insecurity.
2. Cultivate transparent mineral supply chains and sustainable corporate engagement in the mineral sourcing activities, thereby supporting the economy of the region and the local communities that depend on the trade for their livelihood.
3. Promote sustainable development of the tin industries in the region through investments in industrial scale exploration, mining, mineral processing and smelting of tin and associated minerals.



*MSC personnel inside the mining tunnel at the Alphamin mine*



*Trucks were ready to deliver tin ore to Port of Loading*



*RMAP audit in 2019*

The RMAP audit was conducted in MSC from June 19th – 21st, 2019 and MSC's next audit has been scheduled for March 2020. MSC is committed to sustainability and social responsibilities by sourcing from conflict free sources and exercise due diligence in accordance with the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from all over the world especially CAHRAs. MSC will continue to support RMAP and iTSCi programs to reach out to all stakeholders and actors in mineral sourcing activities to promote greater transparency and due diligence in tin supply chain. As a certified RMAP Smelter since 2011, MSC will continue to subscribe to the RMAP and iTSCi due diligence programs and to remain conflict free by adhering to the requirements and also meeting OECD's expectations on sustainability and social responsibility in CAHRAs going forward.