

DATE: 08 April 2019

MEDIA TITLE: Sin Chew Daily PAGE NO: 1-3

#### MSC'S PATRICK YONG: NO NUMBERS GAME BUT EFFICIENCY

Malaysia Smelting Corp Bhd (MSC) is focusing on the downstream tin smelting business and improving efficiency, while striving to expand company footprint in upstream tin mining. It opines that the tin business is not a "sunset industry" but a "sunrise industry" instead.

**SECTION:** Investment Weekly

MSC chief executive officer Patrick Yong said the usage of tin is expanding. Apart from the increasing demand for lithium battery and electric vehicles which boost tin usage, the material is also used medicine, cosmetics, additive in other metals, tin souvenir etc.

A new discovery is to add tin into batteries to improve charging and leakage, he said.

# Rising demand in lithium battery as electric vehicles become popular

"As electric vehicles will become more popular, the demand for lithium batteries will also increase."

This is why he has described tin business as a rising industry in the mining sector considering the above trend coupled with a rich tin storage in Malaysia! It is more encouraging when new tin usages and tin storage are discovered.

He said many have now turned to hybrid vehicles, which is a prelude to adopting fully electric-powered vehicles. He predicts that electric vehicles will be widely used in 2030.

With regard to battery lifespan and high cost of battery replacement which may cause users to hesitate in switching to electric vehicles, Patrick Yong said this is because the number of electric vehicles in the country is still low. Prices will drop when it becomes more popular.

He anticipates that lithium batteries will be fully charged within 10 minutes to half an hour by adding in tin element, coupled with continuous research and development. This will enable electric vehicles to run longer distance.

In fact, electric vehicles have been made available in the United Kingdom between 1950s and 1960s. Patrick Yong saw electric-powered truck transporting milk when he was studying in London in early 1970s.

The company will not develop towards the downstream tin souvenir sector, but will supply tin for welding to end users instead.

#### Striving to supply downstream









"We are currently supplying tin to London Metal Exchange (LME) as well as traders in Toyota and Mitsubishi, etc. These exchanges have huge tin inventories which play their roles. MSC will also strive to supply to the downstream."

Patrick Yong, who is aged 66, retired from Yokohama a few years ago. Nine months later, he received invitation from a substantial shareholder in MSC as well as close friend to help in turning MSC's loss into profit, in view of his relevant experience. That was when he returned to work by joining MSC.

"Both Y company and MSC run the core business in metal smelting. Y company smelts and recycles lead for battery use."

The substantial shareholder anticipating him to bring in new ideas to this company has sparked his interest to take up the challenge in this relevant sector.

Upon joining MSC, Patrick Yong realised that the facilities in existing smelting plant in Butterworth were aged over a century and caused environmental pollution. Furthermore, it was situated adjacent to a transportation hub.

A lead recycling plant in Pulau Indah was later identified. Lead smelting facilities were redesigned by adopting the latest TSL smelting technology and Isa Smelt design.

"Production cost and carbon footprint are lowered by adopting the new equipment and technology, which turned out to be more ideal production method. There are only 4-5 companies that possess the said technology worldwide."

He added that the TSL equipment had been in use for 7-8 years and required improvement as well as reprogrammed software. These would boost productivity in tin smelting.

Patrick Yong said during an interview in Pulau Indah, "Should the trial become successful, it would boost production by 50% from 40,000 tonnes per annum in Butterworth to 60,000 tonnes per annum."

He noticed that some of the management practices could only boost profit after improvement. A new board of directors was given birth following a change in standard operating procedures (SOP) and board restructure in bid to boost profit with new ideas from new brains.

The new board gained support, which in turn drove the company into profit in the tin smelting business.

Patrick Yong has expected to shift the existing tin smelting business in Butterworth to Pulau Indah within 1-2 years.









Pulau Indah is situated near the main port, hence it offers better convenience operation wise. About 90% of raw tin materials are imported from abroad for smelting in Malaysia.

The existing tin smelting facilities in Butterworth will be closed down gradually. The company is prepared to shift 75% of its tin smelting business to Pulau Indah. The plant is estimated to relocated by the end of 2020 once the Department of Environment (DOE) approves the Environmental Impact Assessment (EIA) and grants relevant approvals.

Gradual relocation would mean gradually reducing production in Butterworth while gradually increasing production in Pulau Indah. The equipment is currently being tested.

"The smelting furnace and software programme are most crucial. Then it involves the relocation of production line at higher cost. All these must go through stringent tests to eliminate possible faults."

New smelting facilities are nearly fully-automated, allowing faster process, fewer labour and are more environment-friendly.

The smelting process in Butterworth come in three stages. There will be tin residue in each stage, which reaches as much as 2% in the third stage.

"The new process will complete tin smelting at one go without leaving residue in the gap. This allows tin sales at one go and generates better cash flow."

Improved cash flow will then allow the purchase of raw materials for more tin smelting, which in turn stimulates cash flow."

#### Additional costs during transition period of plant shifting supress profit margin

The company needs to bear costs in human resources at two plants during the transition period of plant shifting. Hence, additional capital required in the second half of 2018 and 2019 financial years are expected to slightly impact earnings. Company earnings are expected to improve in 2020 financial year.

"We can only realise saving and boost efficiency once the new plant is operated in full scale and the old plant closed down. This process is unavoidable but at least our direction is determined."

Besides using supply from Tenaga Nasional Bhd (TNB), MSC will also install solar panels at the smelting plant in Pulau Indah to enable the use of self-generated electricity. It plans to use self-generated electricity during peak period in the day and TNB's supply in non-peak period.

# **Setting strategy to expand tin mining**









90% of MSC's tin smelting sources have come from abroad, whilst 5% are self-mined and 3% from local mines.

Patrick Yong said charges are imposed for tin foundry according to tin purity.

"Even though tin foundry generates lower earnings, it is more stable and does not generate losses, unless there is a miscalculation in cost."

Compared to miscalculations in cost in the past, the company has put the relevant costs back on track. On the other hand, some poor investments have also resulted in losses, but they have been terminated, whilst such losses have been written off.

MSC has suffered hundreds of million ringgit in losses in the past. Ever since Patrick Yong has come on board, the company does not anticipate for significant losses in last year as well as this year. Tin smelting business became profitable since two years ago. Apart from tin foundry, the company will also venture into more profitable activities including tin mining.

"MSC runs the largest open-air mining field in Klian Intan, Perak. The company has adopted new measures in tin mining to improve annual production to 180 tonnes per annum. This is equal to 0.5 tonne increase per day from 8.5 tonnes to 9 tonnes."

### Focus on improving fundamental benefits

MSC adopted new mining method in the second half of 2018 and anticipates the production to increase by 360 tonnes in 2019. Based on the calculation of US\$20,000 a tonne, it is estimated to release RM21,067,200 (based on 70% tin purity and 4.10 ringgit against one US dollar) in value.

Even though strong US dollar and high tin price are favourable to tin business, improvement in tin mining, fundamental performance in smelting and energy efficiency are the emphasis. The company aims to record the lowest carbon footprint among tin mining and metal smelting businesses.

"There is 30-40% of profit based on the current tin price of US\$20,000 a tonne, whilst the breakeven mark falls at US\$15,000. Foreign exchange rate will remain a decisive factor."

The tin mining business has been described as a "sunset business" in Malaysia mainly because the tin price was below production cost then, which made it impossible to carry on."

"Cost of tin mining is also increasing. Moreover, we need to reach deep inside the ground in order to obtain tin storage. It is especially a challenge when we need to penetrate hard rock formation."









Malaysia used to be the leading player in tin production and the only country capable of carrying out tin mining from hard rock formation at low cost. Mining fields in Malaysia contain 70% of tin ore compared to only 40% in Myanmar.

In view of the high level of tin storage in Malaysia, MSC plans to expand mining activities in the future. In addition, it has initiated the signing of Memorandum of Understanding (MoU) with the Perak state government.

The MoU is meant to carry out further mining and tin ore processing at two locations. Besides, the company is also in talks with the state government on a few other potential sites.

Perak state government has announced intention to promote and drive mining activities. MSC will work closely with Perak state government in reviving the past glory in tin mining.

"The potential sites are located near the existing mining field in Klian Intan to facilitate management."

## High threshold in tin mining

There is high threshold in tin mining as it requires high capital investment and a few years without revenue.

"The company has kickstarted mining activities in Limbang, Pahang. There are two other sites to the south of Klian Intan mining field run by a joint venture with Menteri Besar Perak Incorporated (MB Inc). There are also talks on some mining activities which are yet to come to any conclusion."

The production from existing mining field has increased from 8.5 tonnes to 9 tonnes per day, whilst production at the new mining field is expected to see growth in 2020. Tin mining will not only benefit investors but also offers support to ringgit as well as national revenue by earning US dollar.

The land at Rahman mining field measures close to 1,000 acres. Apart from tin storage, the land might also contain other precious metals which require technology to explore. "We will continue to improve efficiency at the mining field and identify more tin storage because the exploration of new mining fields involves high threshold and complicated technical requirements."

#### Focusing downstream to ensure stable supply

Patrick Yong said since he took over the business, he has been deep plowing through the downstream by building a positive relationship to ensure a long-term supply of tin.









He explained that due to the volatility of tin price, it isn't easy to ensure stabilization of supply; thus, inventories and appropriate support are needed.

MSC has hired many foreign workers, which there are 500 foreign workers in tin smelting and 600 workers in tin mining. The cost of human resources amounted at 15% while the cost of energy amounted at 10% to 12%.

Other than utilizing Tenaga Nasional Bhd's electricity, the group has installed solar energy panels to generate electricity in the tin smelting factory, in which could generate 300 to 400 kilowatts of electricity at the early period. The power supply is expected increase and break even in 3 years. The solar energy board will sustain for 30 years.

## Plans to generate electricity with the residual heat of furnace

Patrick Yong who holds a PHD degree in Energy Efficiency pointed out that the factory would not use TNB's electricity during peak hours to avoid draining the reserve electricity of TNB. After the transfer of tin smelting facility in Pulau Indah, the group intends to generate electricity with residual heat of the furnace.

"Rahman mining field also planned to generate electricity with the water resources nearby. By utilizing the off-peak hours with low electricity consumption at night, pump the water to the highest point and let the water flow from the high point, which created a mini power plant, it will be the first in the world."

MSC plans to introduce industry-academia collaboration to provide students who majored in geology and mineral extraction technology a place for practice.

There are many students with bachelor's degree, master or doctor's degree who comes up with theories only as they have never experienced the real practice. It will be a contribution of tin industry to education by allowing them to participate in the development and practical operation, which combines the theories and the practices.

He noted that the industry-academia collaboration hasn't started yet as he will visit and discuss with the person in charge of the relevant subjects in the university. He would also provide free trainings, whereas the company could also discover talents from the programme as well. It's expected to be a collaboration with mutual benefits.

#### Set up R&D center to seek for new knowledge and new purpose

MSC will also form strategic collaboration with universities in Northern Malaysia that provide geological extraction course or relevant subjects. The company might establish a mining university in future.

MSC plans to set up a research and development center. Other than mining, it aims to seek for new knowledge and new purpose.









Everyone wants to become a doctor or a lawyer, though Patrick Yong believed that being a mining worker could have a different life too.

Speaking of the integration with tourism, he noted that Rahman mining field is the largest outdoor mining field in the world, the long-range tunnel inside could lead one to Thailand directly. If it is to be developed as tourist attraction, the safety of it and other issues still to be discussed. "The mining field will only open to outsiders if it's for the making of a tin documentary or to record the mining process like National Geographic did."

# No numbers game but efficiency

Patrick Yong believed that management can't just create fortune and profits by playing with numbers as it needs to analyze and understand the business outcome from the practice and fundamental.

"Once the outcome is improved, this controllable factor will lead you to the right track."

He pointed out that foreign currency, fuel and cost of tin deposits are incontrollable as these are based on the supply and demand conditions, or the inventories are manipulated by few people. "My management philosophy is the outcome."

"What I am doing right now is to engage in a business with the lowest cost and outcome or cut cost through energy recycling. Outcome is the most important philosophy in my management, everything is unrealistic without outcome."

He stressed that the business will perform well if the fundamental of the company is strong.

He said that to invest in the right direction, it's better late than never.

"We don't want a 100 years company tend to decline."

There are 6 members in the board of directors, which comprised of 3 new directors; 2 directors among them are Singaporean while the remaining are Malaysians. There are merchants, lawyers and engineering among them, which is diversified and balanced.

#### Dividend declaration after the business is stabilised

The board of directors shared a same vision, which is to drive the company forward through management improvement. As financial budget was drafted on the premise to improve the outcome, the board understandingly passed the budget.

Patrick Yong revealed that the group may invest RM20 million in 2019 to complete the equipment of its factory in West Port. Moreover, the group will expect a higher amount of mining capital expenditure, which RM30 million to RM40 million will be used in the mining expenditure in 2019.









"Not all capital expenditure will come from the company's contingency fund, as it could come from the third party and the contractor."

He explained that as an owner of the mining field, the capital expenditure could be shared with the miner, which the profit could be shared based on the ratio. It will help to accelerate the growth without facing the pressures to utilize internal capital or apply for loan.

As at September 30, 2018, MSC's debt ratio is 1.15 times. The debt ratio would be 0.1 time if the means of payment such as letter of credit (serve as a guarantee for payments to the mine supplier) is excluded.

"Of course, there are higher profits and profits to be maintained, the company needs to let the shareholders know where they should invest their capital as well."

He noted that the company's investment would focus on strengthening the core businesses which are tin smelting and tin mining, with the purpose to improve business outcome.

"MSC will declare dividend to raise attraction, though there are no dividend declaration for now. The most important thing is to invest in capital expenditure, in order to boost the growth of profit and net asset value; and carry out dividend declaration at the same time. That is the company's policy."

## Requiring annual growth in profit

Patrick Yong said there could be policy in dividend payout once the business stabilised. The company is currently focusing on gaining profits.

He said observation on whether a CEO buys the company's shares will reflect public confidence towards the company to a certain extent. He has recently accumulated some shares and set target to buy in a certain percentage of company shares.

"Company profit has improved year over year after implementing the SOP."

MSC shares are 48% publicly-held whilst its mother company, Straits Trading (STC), is listed in Singapore. These have boosted investors' confidence. Moreover, the mother company and MSC practise strict audits.

Once the relocation of Butterworth plant is completed and the strategic location is used for property development, it will release larger value.

According to Patrick Yong, it is no longer appropriate to carry out tin smelting at the strategic location in Butterworth. On one hand, the company faces intense pressure from









the DOE due to high carbon footprint and on another, it is situated on a strategic site adjacent to the central transportation hub in Butterworth.

STC is the developer at the site, which owns 26.2 acres whilst MSC owns 13.9 acres, which total at about 40 acres. MoU was signed in October 2018 and both parties anticipate to launch a development master plan in mid-2019. The development timeline is expected to become clearer after 2020. "The site will be developed and managed by STC. MSC will enjoy revenue in proportion to the land area that it owns. This is a win-win situation."



