

# **Tin industry update**

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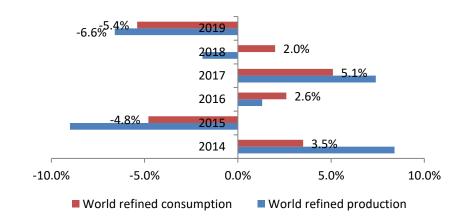
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World tin production has been relatively stable over the past three years (CY2016 to CY2018). Refined tin production has been between 330-365 thousand tonnes per annum and mine production between 270-318 thousand tonnes per annum. Secondary refined tin production has been around 50-70 thousand tonnes

# Chart 1: Growth rate for world supply/demand balances in Refined Tin



Source: International Tin Association (ITA)

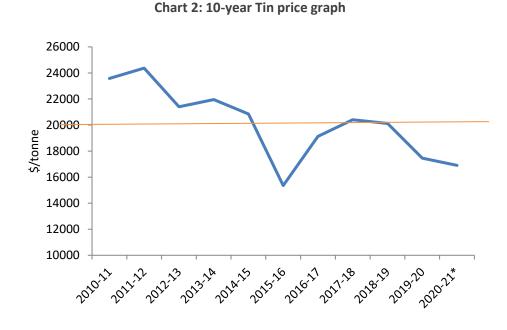
However, demand for tin fell for the first time in CY 2019 since CY 2015 ending the stability in demand-supply balance in tin market. The sixteenth annual survey carried out by the International Tin Association (ITA) estimated a contraction in tin use of -5.4% to 359,200 tonnes in CY 2019. Macro-economic factors like trade war between the USA and China, and between Japan and Korea slowed down demand for tin and had an associated knock-on effect on the prices of tin. Lower demand put pressure on prices, which fell nearly 7.5% y-o-y in CY2019. Falling realisations made smelters cut down on production.

China and Korea are the world's largest primary semiconductor manufacturers, hence significant users of tin. China is the largest producer and consumer of Tin in the world. China, Indonesia and Peru provide about 80% of global tin mine production. Other minor producers are Bolivia (5%), Brazil (3%) and Malaysia (1%). The estimated world mine production of tin in CY 2019 stood at 310,000 tonnes, registering a fall of 3% y-o-y mainly due to 5.6% fall in China's production. Chinese smelters suspended operations as tin prices started to tumble due to the Coronavirus pandemic. Consequently, refined metal production also fell by 6.6% to 334.4 thousand tonnes in CY19. Mine supply is expected to have further fallen affected by the pandemic as many suspensions related to COVID-19 were in place during H1 2020.

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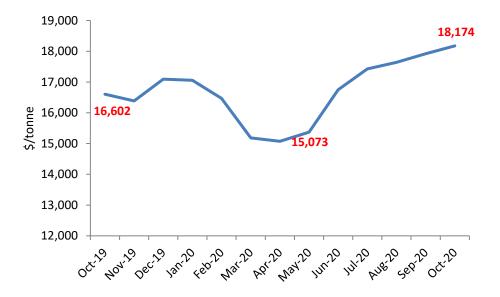
### **Impact on Prices:**



Source: CMIE, note: FY22 prices are for period (April-October 2020)

Since CY2011, LME Tin prices have historically only trended below \$ 20,000 during FY15-17and then from FY20 onwards. Slowdown in Chinese economy during 2015 and 2016 impacted demand for tin and prices fell to 5-year low to average \$ 15,353 in FY15-16. Prices recovered the following year to average \$ 19,123 per tonne in FY2017. US-China trade war and technology tensions between China-Japan and Korea again pressurised prices lower in FY19 this was followed by the outbreak of Covid-19 pandemic which sent prices to multi-year lows in March and April 2020.





Source: CMIE

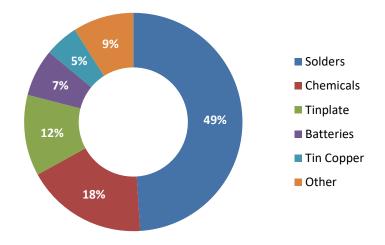


After falling to its lowest level in more than five years in March 2020, Tin prices have rebounded by a sharp 45% on the back of recovery in top consumer China however it continues to remain below \$ 20,000 per tonne as on October 2020. Tin prices averaged \$ 18,714.2 per tonne in October 2020 up 45.4% from \$ 15,072.6 per tonne in March 2020. Falling inventory of Tin at the LME as China stocks up on the metal due to a recovery in demand for electronic goods is supporting Tin prices. Tin stocks at the LME have come down to 4.6 thousand tonnes in October 2020 from 7.5 thousand tonnes in February and 6.2 thousand tonnes in October 2019.

# Sector-wise usage of Tin:

Globally, almost half of the tin produced goes into solder which is used mainly for joining pipes or electrical/electronic circuits in the electronics industry. The weakness in tin price in 2019 could largely be attributed to lower demand, most notably from the solder sector. The global Semiconductor Industry Association (SIA) said that global semiconductor sales (used as a barometer for solder demand) stood at \$ 412.1 billion in 2019, a 12.2% decrease compared to 2018.

Tin use in chemicals declined 3.4% in 2019 after reporting 3% y-o-y growth in 2018. Tinplate use continued a long-term trend of being static or in



decline, falling by 6.7% in 2019. Lead-acid battery increased by 2% in 2019. Tin use in copper alloys and other metal product markets declined 6% in 2019.

## India:

At just 21.2 tonnes of tin concentrates production in FY19, India is minor player in the world market. During April-Feb FY20 15 tonnes of tin concentrate were produced as against 19.4 tonnes in the corresponding year-ago period. India mainly imports tin due to lower domestic availability. One public sector and three private sector mines reported production in FY19. Only one company located in Chhattisgarh produces refined Tin. About 7,436 kg (7.4 tonnes) of tin metal was produced in FY19 as against production of 13,741 kg in the preceding year.

In India the main consumers of tin are the tin plate Industry and Solder Industry. The domestic tin plate market is categorised broadly into three basic packaging market segments-edible oil/vanaspati & cashew, processed food and non-processed food. The consumption in IT Industry and in food/ beverages Packaging Industry has increased in the recent years.

There were negligible exports of tin ores & concentrates during both the year FY18 and FY19. Export of tin & alloys including scrap declined by 14% to 858 tonnes in FY19 as compared to 996 tonnes in the preceding year. Out of total exports in FY19, tin & alloys was only 539 tonnes (63%), tin & alloys (worked) at 318 tonnes (37%) and tin waste & scrap were negligible. Exports of tin & alloys were mainly to Republic of Korea, (45%), UAE (27%), UK (7%), Nepal & Taiwan, (3% each) and Sri Lanka,(2% each).



The imports of tin ores & concentrates in FY19 were at 6 tonnes and as compared to 57 tonnes in the previous year and were solely from Tanzania (100%). Imports of tin & alloys including scrap were at 11,262 tonnes in FY19 from 12,201 tonnes recorded in the previous year. Imports of tin and alloys were mainly from Indonesia (53%), Singapore (26%) and Malaysia (14%) and China (4%). In FY19, imports of tin & alloys were at 10,908 tonnes in FY19 as compared to 11,987 tonnes last year.

# **Outlook:**

The International Tin Association (ITA) estimated a tin use contraction of -5.4% to 359,200 tonnes in CY 2019 with a further contraction in tin demand of -5.9% forecasted for 2020, primarily attributed to the COVID-19 pandemic. However, markets are now recovering well, especially in China. During January-October 2020, import of tin concentrates in China rose by 174.4 % y-o-y to 14,904 tonnes (gross weight) in January-October 2020. China only exported 468 tonnes refined tin in the first ten months of the year, down by 31.4% y-o-y.

A stronger than expected recovery in China witnessed during Q3 and Q4 of 2020 may lift tin usage and tin consumption may rebound in 2021.

Domestic tin requirements are expected to continue to be met primarily through imports. Growth of food processing, packaging Industry in India could spur growth of tin consumption in the country.

In the longer term, industrial revolution 4.0 comprising of internet of things, robotics and artificial intelligence may spark demand tin needed for electronics devices.

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