

Molten Metals sees opportunity in bringing antimony projects back into production

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[Molten Metals Corp.](#) (CSE: MOLT) is a relative [newcomer](#) to the world of antimony (Sb) and tin (Sn). Formed by Christopher Ecclestone in 2021 to look at near term production of lesser-known battery material antimony, the focus of the company is to look at previously operating mines to develop [non-Chinese sources of material](#).

Molten Metals' first target was the historic [West Gore antimony/gold mine](#) in Nova Scotia, Canada, that produced antimony and gold from the 1880s to 1917. From 1915 to 1917 operations were expanded, and over 35,000 tons of ore were milled yielding 7,761 tons of concentrate at 46% antimony. The total amount of gold obtained from the deposit up to 1917 was 6,861 oz. According to reports, high grade material (46% Sb) was shipped to England but lower grade material was kept on site, which would be readily available with no mining cost. The mine site is located one hour by road north of the provincial capital, Halifax.

Molten Metals' second move was to incorporate a company in Slovakia, Slovak Antimony Corporation. Slovakia was the key source of antimony for the Soviet Union. They have purchased a processing plant in July in Eastern Slovakia. It is planned to process material from the tailings from their Tienesgrund project. Samples from this project show antimony levels of 39.4% and 9.69 g/t of Au.

I am a strong believer in looking at ex-producing mines or mine

tailings as new sources of raw material. Typically, they have infrastructure and possibly tailings that were processed using old technology which can be economically recovered with today's improved processes.

The largest applications for metallic antimony are in alloys with lead and [tin](#), which have improved properties for [solders](#), [bullets](#), and [plain bearings](#). It improves the rigidity of lead-alloy plates in [lead-acid batteries](#). [Antimony trioxide](#) is a prominent additive for [halogen-containing flame retardants](#). Antimony is used as a [dopant](#) in [semiconductor devices](#). It is increasingly important as an essential element in high-capacity molten metal batteries. Antimony production in 2016 was 130,000 tonnes with China producing 100,000 tonnes. A recent report from the USGS shows that total global production of antimony fell to 110,000 tonnes in 2021, and Chinese production dropped to 60,000 tonnes, with Russia in second at 25,000 tonnes and Tajikistan at 13,000 tonnes. Some of the reduction in China was due to COVID production problems and China's focus on environmental issues. As a result, antimony prices rose from an average of \$2.67 per pound versus \$6.65 per pound in October of last year.

A growing fear is that China can use rare earths as a weapon against the USA by throttling back or even banning rare earth exports to the USA. However, I believe there would be a more direct and immediate impact on American industry if China curtails shipments other key minerals like antimony, which would result in problems for the manufacturing of bullets and electronics plus lead-acid batteries. The USA buys components and assemblies with rare earths in them but not much of key rare earth oxides/carbonates. However, antimony goes directly into manufacturing companies like East Penn, which is the world's largest lead-acid battery producer. It is not hard to imagine the consequences of a sudden reduction in bullet manufacturing

and batteries for new vehicles.

On the corporate side, Molten Metals [recently announced](#) additions to their advisory board. An impressive group has been assembled including Donald Sadoway, an inventor of the liquid metal battery for large scale stationary storage and Professor Emeritus in the Department of Materials Science and Engineering, Massachusetts Institute of Technology (“MIT”). Also on the board is Anthony Balmmeis who is active in both private and public companies and David Henderson who is very familiar with opaque markets and critical materials over his 35-year career. The fourth member is Alon Davidov, an Angel investor in several companies in the construction-tech, FMCG, natural resources and media industries.

There is much to applaud in Molten Metals’ enlightened approach to pursuing opportunities in some of the less-followed elements. I am sure there are other opportunities out there in tailings and old mines which traditionally have been shunned by the markets just waiting to be recognized for their potential.