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Search for cycle-proof miner continues

A miner claiming to have a ‘cycle proof’ project, in an industry notoriously blighted by cycles, stands out as warranting a closer look.

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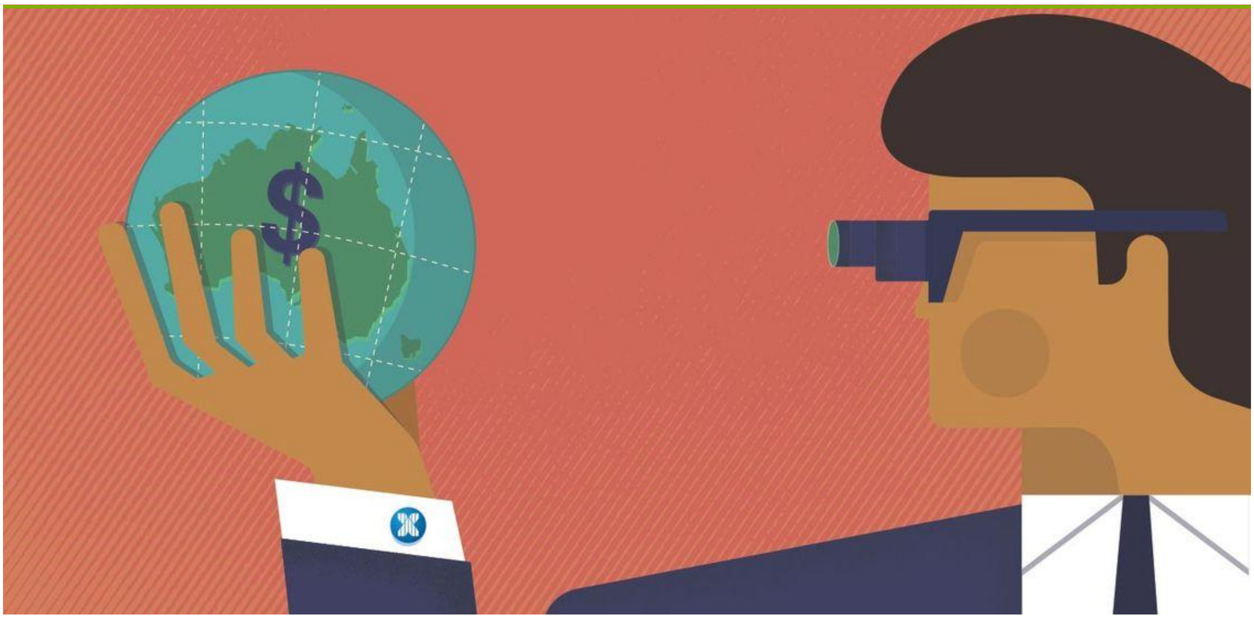

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Elementos was one of 23 ASX-listed explorers and development companies presenting to investors in a virtual conference last week.

Despite unique back stories, each chief executive had similar tales of discovery progress followed by development challenges and capital market obstacles, capped by the impediments imposed by the COVID-19 pandemic. Differentiation was hard to achieve.

Elementos director Chris Dunks broke through the early stage development stereotype by claiming provocatively that he could insulate the company from price cycles. What's more, the economic consequences of the COVID-19 pandemic were just a passing phase. Whatever happened elsewhere, demand for tin would recover quickly from a 20% decline in use, according to Dunks. "Demand for tin is always strong", he said.

Dunks, my archived notes from previous presentations tell me, is prone to overly bullish assessments of the tin market. Speaking in Melbourne in July 2017, he tried to whip up investor enthusiasm by claiming "use of tin is going to soar". It had barely budged before the coronavirus hit. He also foreshadowed a long term average tin price of $25,000/tonne, a level never threatened.

In his latest comments, Dunks highlighted the favourable impact on tin use of new technologies with the help of a chart now featured in the presentation packs of every aspiring tin miner. The illustration, first publicised by Rio Tinto in 2018 and attributable to Massachusetts Institute of Technology researchers, purports to show that tin will be the metal most impacted by changing technologies.

The methodology behind the chart does not pretend to quantify future tin demand. Companies never explain exactly what the chart measures, if anything. Unresolved ambiguity, it seems, works better than unnecessarily confusing detail.

No doubt, tin is a beneficiary of technological progress and the growing sophistication of the digital economy. Tin's exposure to technology is one reason its price swings are closely associated with the ebbs and flows of semiconductor shipments.

The exposure of tin to the strongly cyclical characteristics of the semiconductor industry makes tin prices more cyclical, not less, and goes some way to explaining the metal's current price weakness. Eighty percent of the metal price decline since early 2019 has occurred while semiconductor shipments were losing steam and before mounting evidence of COVID-19 infections outside China.

Elementos' ambition to become a tin producer dates from 2013 when it merged with the previous owner of the Cleveland tin property in Tasmania. Its game plan was to get into production through tailings treatment before venturing underground via an openpit mine.

In 2015, then chief executive Tim McManus was promising investors production before the end of 2017. In mid-2017, Dunks himself said production would start in the third quarter of 2019. Three years on, a production start remains two years away.

In July 2018, Elementos directors diverted their attention to the Oropesa property in Spain, where their priority now rests.

According to study details released last Thursday, the Oropesa property is capable of producing 2,440 tonnes a year of tin in concentrate for 14 years, although getting past year nine relies on currently inferred resources.

An upfront capital commitment of US$52.2 million by the company, currently with a US$4.9 million market capitalisation, is slated to produce after-tax cash flows of around US$220 million over the life of the mine. Realising this potential would imply an annual return of some 25-27% on invested capital.

Dunks made much of the company's decision to use a tin price of $19,750/tonne based on the average for the past 10 years, in assessing the project economics. He offered no explanation as to why 10 years was more relevant than five or 15 or one.

Happily, though, for the putative economics of the project, 10 years covers historically high tin prices achieved in 2010 and 2011 when they topped out at twice the current level. The average over the five years leading up to 2010 was a much lower US$12,540/tonne. The 2000-19 average was $14,732/tonne.

The current tin price of around $15,000/tonne is not especially low. It is the level to which the metal's price has retreated several times since 2007. Being able to operate profitably at this level would be necessary to instil confidence that cyclical conditions would not imperil production once a mine was up and running.

The Oropesa economic study suggests all-in sustaining cash costs of US$11,790/tonne are achievable. Positive cash flows appear possible while prices are at the low end of the range of outcomes over the past decade. Still, the project's life of mine operating profits would be stripped from US$281 million to just US$119 million and the internal rate of return would collapse to 6-7% if cyclically low prices persisted.

Whatever the life of mine average, the possibility of occasionally cyclically weak prices remains an impediment to development.

Fellow tin mining wannabe Kasbah Resources, on a different continent but only 500km south of Oropesa as the crow flies, has had an agonising 10 years of being close but never quite getting construction underway since a scoping study for the Achmmach tin project and through a subsequent series of feasibility studies.

The cushion between Achmmach's estimated average production costs, most recently estimated at US$11,435/tonne of metal, and the low end of the historical range of metal prices has not been sufficient to attract the needed funding.

The periodic reversion to cyclically low prices which has upset Kasbah's funding plans is also the potential Achilles heel of Elementos, whose estimated costs are higher than those of the Moroccan mine developer.

Additionally, Elementos suffers the consequences of earlier investor disappointment, having failed before to translate overly sunny scenarios into a promised investment winner.

Elementos, it turns out, is not that much different after all.

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