

Copper discovery rates at decade lows

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Copper > Copper-news - Paul Harris

Despite an increasing amount spent on exploration copper discoveries have fallen away, according to Kevin Murphy, senior research analyst at S&P Global Market Intelligence.

Exploration spend over the past 10 years totalled US\$25.8 billion, well above the \$15.4 billion allocated from 1990 to 2008. Yet, that spend yielded 102.4 million tonnes of copper in 21 major discoveries, compared with 992.5Mt in 199 discoveries in the preceding 19 years.

"Even after adjusting for copper in recently identified deposits that we expect eventually to surpass our major discovery threshold, and the addition of further copper at recent major discoveries, we forecast copper in discoveries to remain historically low," he said.

Worryingly, in a break from the past, the amount of copper discovered annually no longer trends in line with the amount spent on exploration. Murphy partly attributes that to a shift in focus within the exploration sector as since the 1990s, the industry has almost halved its share of copper budgets devoted to grassroots exploration.

"The juniors, who have historically been considered the grassroots exploration specialists, have increasingly focused on expanding known deposits, while producers have progressively concentrated on exploration at their existing operations," he said.

What explorers view as a truism—that one has a better chance of finding a big deposit near a big deposit—Murphy believes is false. "Although some new major discoveries have been found at late-stage projects and existing mining camps, the probability of finding new major discoveries at such projects is lower than at riskier, early-stage prospects," he said.

For William Tankard, principal analyst global copper mine costs at Wood Mackenzie in London, a key shift is that the major diversified miners are ramping up their exploration programmes both around existing tier one assets and in new regions.

"The really big players [Anglo American, Rio Tinto, BHP] that are now talking up grassroots exploration is not something I can recall in quite a while. A lot of the greenfield projects out there have significant hurdles to overcome. When you look at the infrastructure needs of a lot of these projects, this very quickly explains itself," he told Mining Journal.

With an acknowledged shortage of new copper projects coming into production in a tightening market, with one or two exceptions, there has been relatively little merger and acquisition (M&A) activity in the copper mining space. Tankard thinks it is only a matter of time before this changes.

"We are in a period of uncertainty right now, but it is clear that copper supply will have to develop meaningfully in the next 10 years. With grassroots exploration, you are not going to be bringing that production online within a decade timeframe so if you want to do something sooner, many will have to go out and buy a project, but we will need to see a market and copper price that is better than now for widespread M&A," he said.

However, a market where investors still expect producers to maintain capital discipline and deleveraged balance sheets, is acting as a brake on such pursuits. "A critical question around making the decision to engage in M&A is whether the market will reward the pursuit; some mid-sized deals in 2018 were not received favourably by shareholders," said Tankard.

Adding to copper market uncertainty is an unexpected recent increase in inventories in copper warehouses. London Metal Exchange copper inventories increased to 337,700 tonnes in April, an increase of 36% over March and with inventories up 85% since the start of the year, according to US researcher JE Gross published in its The Copper Journal. Total copper inventories are up 36.8% so far this year, some 129,274t.

"Typically, May 1st refers to and celebrates the arrival of spring.

"The alternative interpretation is Mayday, which is recognized as an international distress call," said John Gross commenting on the significant increases of metal going into warehouses, adding, "the sheer size of 'deliveries' [is] causing shock and awe".

Latin America

Murphy believes Latin America will continue to have a corner on world copper supply as more than half the copper discovered since 1990 has been in Latin America. The region accounted for 42% of global copper production in 2018 and continues to be the primary location for copper exploration. It attracted more than one-third of copper budgets over the past two decades, mostly focused on Chile and Peru, which account for 80% of the copper discovered in Latin America and 45% of the global total since 1990.

"The longer-term pipeline is, however, at risk from the reduced discovery rates," Murphy said.

"Our research suggests that an asset takes about 20 years to advance from discovery to production. This implies that the reduced discovery rates of the past decade will limit the pool of projects that could come online in 15 to 20 years when many major copper mines are currently scheduled to be producing much less than they presently are and a host of smaller producers will have closed."