

## Bernstein: copper price has to go higher for new mines to come on

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Copper > Research

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***Copper prices going substantially higher is the only way new production will be built given the limited opportunity for technological and geological factors to increase supply, a report by Bernstein Research concludes.***

"To put it simply, both technological and geological advances in copper mining are increasingly difficult, meaning that price becomes the principal motivating force," it said.

Bernstein reviewed data including new mine builds and discoveries to determine average timelines between discovery and first economic study, first study to approval and approval to first production and concluded they were increasing.

The average copper project developed in the 2000s took 36 years to get from discovery to first study, five years to get from first study to approval and four years to get from approval to first production. A typical project in the next four years will see these increase to 38 years, nine and four, respectively.

"The current pipeline is no different to that of the last 20 years - in fact, things have gotten worse. On average, projects are having to exploit older discoveries; go through longer periods of study pre-approval and have slightly longer construction phases. ... The only method by which we will grow the copper supply base - and consequently facilitate urbanisation, electrification and decarbonisation - is if the copper price increases," Bernstein said.

Many of the projects in the pipeline were discovered long ago, leading Bernstein to conclude it "is difficult for there to be any medium-term 'surprises' in the copper supply side, as the process of project approval is so lengthy and, often, predictable".

"Except in the very short term, the current crop of copper projects doesn't give us much cause for concern in terms of oversupply; at least not at the prevailing copper price. Historically, construction decisions have relied heavily on the spot price environment and today's bottom-of-the-cycle levels do not lend themselves to a sudden surge in construction. Based on the behaviour of mining companies over the last couple of decades, we are still convinced of structural copper deficits in the medium-term," it said.

The exception to this was the "super-cycle" in the 2000s due to the financial gains occasioned by copper prices reaching US\$10,000/t, providing miners with capital to develop projects and allowing more marginal projects to be developed. "Had copper prices not hit these levels, we are certain mined output would have fallen dramatically over the period. The case is very similar today," it said.