



Thursday 15th March, 2018

Recent Mining.com Article

Hot Chili Limited (ASX code: HCH) is pleased to provide a copy of a Mining.com media article “**These charts show just why copper price fundamentals are so strong**” published on the 14th of March 2018

The article comments on one of the central factors underpinning bullish fundamentals for the copper market- that Steady copper supply is dependent on a few giant deposits that were discovered many generations ago and have been mined for decades.

In particular it highlights that ten mines globally produce 400,000 tpa of copper, and a further ten mines produce 200,000 tpa of copper. Only two new mines (Cobre Panama and Quellaveco) are expected to be the only new entrants in the Top 20 largest copper mines developed over the next decade where production above 200ktpa guarantees entry.

The capital intensive nature of building new large copper mines and the limited pipeline for new meaningful copper developments boads well for Hot Chili.

The Company’s Productora copper development is currently one of the lowest capital intensity large-scale copper developments globally and is the second largest copper development being advanced by an ASX-listed company. Current Pre-feasibility reserves underpin forecast annual production of 66kt copper and 25koz gold over its first eight years.

The Company is currently pursuing both high grade and mine life growth to lift metal production and increase margins in advance of commencing a Definitive feasibility study on an expanded production basis.

The article is attached below.

For more information please contact:
Christian Easterday
Managing Director

Phone: +61 8 9315 9009
Email: christian@hotchili.net.au

or visit Hot Chili’s website at www.hotchili.net.au



These charts show just why copper price fundamentals are so strong

Mining.com

First Published 14th March 2018

Author: [Frik Els](#)



Chuquicamata 1920



Chuquicamata 1990

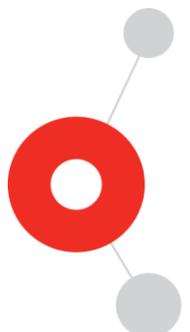
Image: Codelco via Flickr

When Richard Adkerson, boss of Freeport-McMoRan, presented to the BMO Capital Markets conference in Florida last month he showed a slide headlined *World class copper discoveries are extremely rare*.

Adkerson said the Phoenix-based company has been putting these graphs in [investor slide decks](#) "for years".

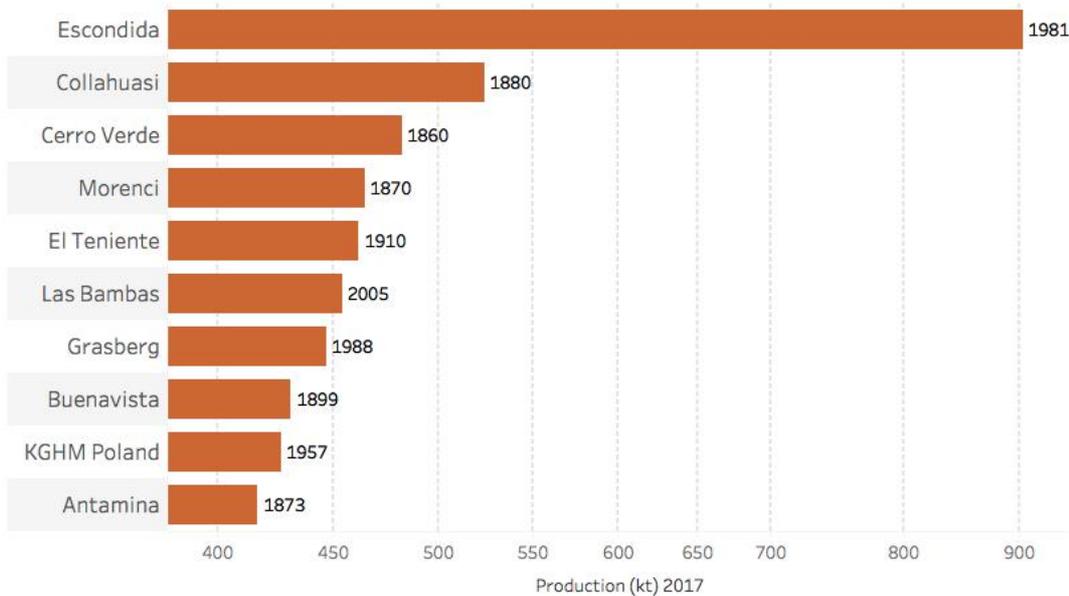
Only one project – Oyu Tolgoi's underground expansion – will crack the top ten in the coming decade

Apart from showcasing the fact that the world's largest copper producer owns three of them, the graphs also highlight one of the central factors underpinning bullish fundamentals for the copper market.





TOP 10 COPPER MINES – 2017 PRODUCTION



Source: Company reports, MiningIntelligence, Wood Mackenzie. Notes: Annual copper production 2017 except Codelco's El Teniente and KGHM Poland operations = first 9 months 2017 annualized. KGHM Poland consists of Rudna, Polkowice-Sieroszowice and Lubin mines. Reserves as at end-2017 except KGHM, Codelco mines at end-2016. Grasberg reserves include Block Cave under development and undeveloped Kucing Liar deposits.

Steady copper supply is dependent on a few giant deposits that were discovered many generations ago and have been mined for decades – the median age for 2017's top ten copper mines in terms of production is 95 years.

Even when you measure the age of these mines starting at the commercial production date (for instance, 2016 for Las Bambas) or when current operations started (for example, 2001 for Antamina), the average is more than four decades.

The ten largest mines constitute nearly 25% of annual world production and last year a strike at Escondida, disruptions at Grasberg and protests at Las Bambas meant almost 7% of world production went offline at the same time. That six of the top producers and largest deposits are located in Peru and Chile also adds a twist to the supply picture.

At today's copper price the reserves of the top 10 deposits are valued at more than \$1.4 trillion. Based on the average copper price over the course of 2017, these mines earned more than \$30 billion last year from the orange red metal alone.

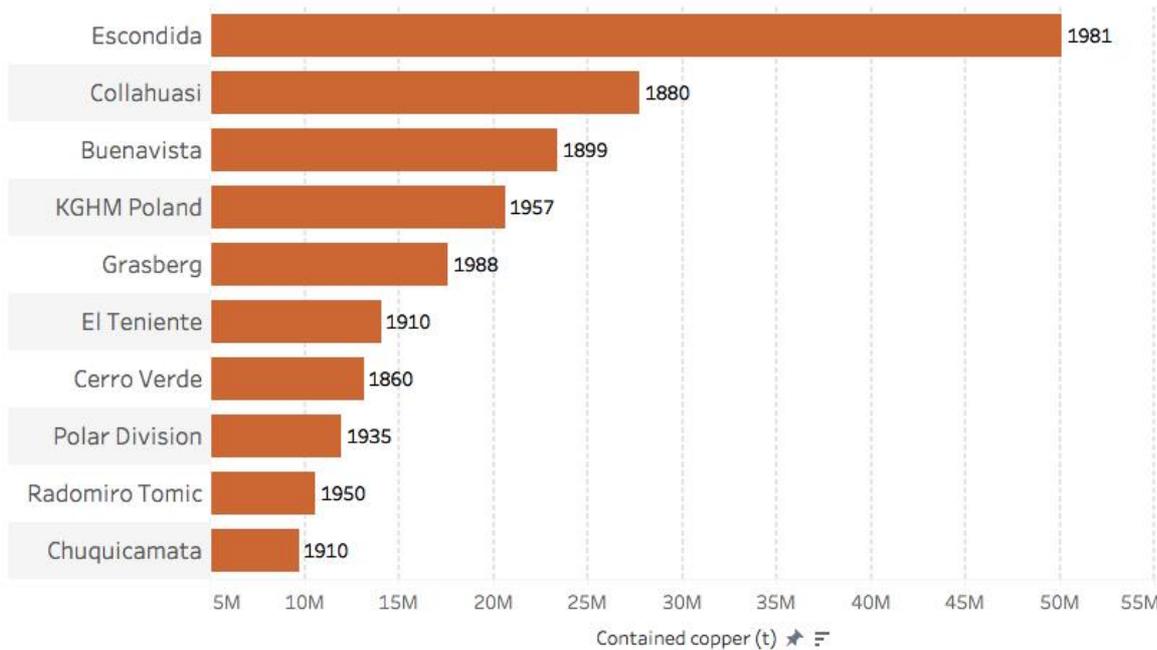
The 400,000 tonne club

With the cut-off for 2017 at 400ktpa, only one project – Oyu Tolgoi's underground expansion – will crack the top ten in the coming decade. The Mongolian mine is expected to reach peak production of 560ktpa by 2025 after a \$5.3 billion investment from Rio Tinto.





TOP 10 COPPER MINES – 2017 RESERVES



Source: Company reports, MiningIntelligence, Wood Mackenzie. Notes: Annual copper production 2017 except Codelco's El Teniente and KGHM Poland operations = first 9 months 2017 annualized. KGHM Poland consists of Rudna, Polkowice-Sieroszowice and Lubin mines. Reserves as at end-2017 except KGHM, Codelco mines at end-2016. Grasberg reserves include Block Cave under development and undeveloped Kucing Liar deposits.

Capacity at First Quantum's \$6 billion Cobre Panama project which is scheduled for commissioning during 2018, was recently expanded, but the target is still 350ktpa placing it outside the top 10.

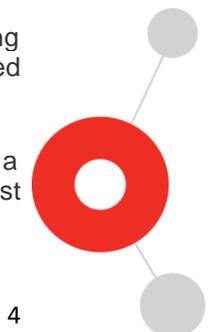
Another major copper mine Quellaveco in Peru is set to go into production next decade, but output at the Anglo American project tops out at 225ktpa.

NuevaUnion, a Goldcorp-Teck joint venture in Chile is expected to average production of 190ktpa when it enters productions some time next decade.

Cobre Panama and Quellaveco are likely to be the only new entrants in the Top 20 largest copper mines over the next decade where production above 200ktpa guarantees entry.

The Sarcheshmeh copper complex boasts reserves of 8.9m tonnes of copper and is also being expanded, but the mine's annual output will remain below 300ktpa according to Iran's state-owned company in a [2015 investor presentation](#).

Russia's Udokan boasts reserves of 15m tonnes of contained metal. It has the potential to be a 400kt-plus annual operation, but doubts about the viability of the project in the country's east remain.



Hot Chili Limited ACN 130 955 725
First Floor, 768 Canning Highway, Applecross, Western Australia 6153
PO Box 1725, Applecross, Western Australia 6953
P: +61 8 9315 9009 **F:** +61 8 9315 5004
www.hotchili.net.au



Qualifying Statements

Forward Looking Statements

The Announcement contains “forward-looking statements”. All statements other than those of historical facts included in the Announcement are forward-looking statements including estimates of Mineral Resources. However, forward-looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to, copper and other metals price volatility, currency fluctuations, increased production costs and variances in ore grade ore recovery rates from those assumed in mining plans, as well as political and operational risks and governmental regulation and judicial outcomes. The Company does not undertake any obligation to release publicly any revisions to any “forward-looking statement” to reflect events or circumstances after the date of the Announcement, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws. All persons should consider seeking appropriate professional advice in reviewing the Announcement and all other information with respect to the Company and evaluating the business, financial performance and operations of the Company. Neither the provision of the Announcement nor any information contained in the Announcement or subsequently communicated to any person in connection with the Announcement is, or should be taken as, constituting the giving of investment advice to any person.

