

Red Sky at Morning, Copper Warning

written by Melissa (Mel) Sanderson | November 11, 2025

As we know from daily press releases, Western nations are laser-focused on the ways and means by which to escape from Chinese dominance in the critical minerals space. The current deplorable situation should not have come as a surprise, given that the US, in particular, yielded the mining sector to China back in the 1980s and essentially never looked back. Meanwhile, China continued publishing its succession of Five-Year Plans, outlining (at least in general terms) its plans to secure a hegemonic position in critical minerals – including elements such as cobalt and rare earths. In those same intervening decades, technology evolved in ways that made elements once relegated to the wastebins of mining sites into today's critical minerals.

The blame-game is as pointless as Washington's current wishful thinking that this situation, decades in the making, can be fixed in two years.

That said, the US and the West in general have an opportunity to mitigate (albeit not avoid) an even more potentially devastating development.

Not for nothing has the USGS just added copper to the [critical minerals list](#). Quiet alarm bells have been ringing for the last decade and have finally been heard. Best current projections on supply and demand indicate copper enters deficit as early as 2030-2035. Balance that against a current 20 year average construction time for new mines and you see the urgency. Considering that copper is essentially in everything, this would be a critical matter indeed. And once again, the West is running

behind China.

The causes for the deficit lie both in supply and demand. On the supply side, Western miners have been exceptionally lax in bringing new copper mines to market, due to a mix of impediments that range from regulatory (think **Resolution Copper Mining LLC**, a joint venture between **Rio Tinto Group (NYSE: RIO | LSE: RIO)** and **BHP Group Limited (NYSE: BHP | ASX: BHP)**, which has been in permitting hell for 20 years due to a dispute with the San Carlos Apache) to political (**Rio Tinto Group (NYSE: RIO | LSE: RIO)**'s **Oyu Tolgoi** project in Mongolia, which ran afoul of government changes and social issues).

At the same time, the 'easy pickings' in safe jurisdictions were pretty much gone and appetite for riskier countries was markedly low, again due to many factors including: rise of active terrorism in some African countries, lack of infrastructure (especially energy) also in Africa and some Latin American countries, and corruption in both of these jurisdictions. Rising social tensions and demands for more benefits for countries (not just local communities) have also contributed significantly to the cost of new mines. Last but far from least, investors have shied away from the mining sector, deterred by the above factors and a general lack of understanding of the fundamentally vital role the industry plays in enabling everyday life.

On the demand side, meanwhile, the growth curve is more and more arrow-straight toward the sky as artificial intelligence centers, robotics, space technologies, drones, semiconductors, green energy equipment (wind turbines, cars), medical equipment (copper is naturally anti-microbial) and even 'simple' construction projects are taking off around the world.

The largest copper producing countries in the world are Chile, the Democratic Republic of the Congo, Peru, China, Indonesia,

Zambia, and the U.S. These countries host the world's top-ten mega-mines, costing on average US\$5-10 billion to bring into production. These costs have also resulted in a concentration of the Western mining industry, with **BHP Group Limited (NYSE: BHP | ASX: BHP)**, **Rio Tinto Group (LSE/NYSE/ASX: RIO)**, **Freeport-McMoRan Inc. (NYSE: FCX)**, **Corporación Nacional del Cobre de Chile (state-owned)**, and **Glencore plc (LSE: GLEN)** the names of note.

Some of these megamines (such as Morenci in Arizona) are still in production thanks to technological advances which have made mining declining grades profitable. But even the biggest mine has a life, which is what makes continuous investment vital – and lacking. While Western miners have been scrutinizing quarterly reports, applauding the latest record highs for the red metal and trying to squeeze more out of their existing properties, China has been buying land, planning new mines, expanding their existing mines – and building smelters. Just as is the case with rare earths, China refines about 90% of the copper produced in the world. It has about 60-65 smelters, while the US has 3.

All of which is to say that the USGS has valid reasons for putting copper on the critical minerals list. The industry itself began lobbying for inclusion back in 2018, so it has taken a while to get here. And if the US doesn't take this seriously, in another 5-10 years we could find ourselves behind the same eight-ball as we are today, scrambling to overcome a dominant Chinese position that today is difficult but not inevitable.