Copper is the new oil: Demand for the metal expected to soar this decade

The 2020s are expected to be the strongest phase of volume growth in global copper demand in history, as per Goldman Sachs.

Goldman Sachs has argued that the critical role copper will play in achieving the Paris climate goals cannot be understated. Without serious advancements in carbon capture and storage technology in the coming years, the entire path to net zero emissions will have to come from abatement - electrification and renewable energy.

As the most cost-effective conductive material, copper sits at the heart of capturing, storing and transporting these new sources of energy. In fact, discussions of peak oil demand overlook the fact that without a surge in the use of copper and other key metals, the substitution of renewables for oil will not happen, the report said.

It added that moving the global economy toward net zero emissions remains a core driver of the structural bull market in commodities demand, in which green metals - copper in particular - are critical.

Copper has the necessary physical properties to transform and transmit these sources of energy to their useful final state, such as moving a vehicle or heating a home, the report said.

"Leveraging our equity analysts' carbonomics analysis across EVs, wind, solar, and battery technology, we quantify this demand in a bottom-up model, estimating that by 2030, copper demand from the transition will grow nearly 600 per cent to 5.4Mt in our base case and 900 per cent to 8.7Mt in the case of hyper adoption of green technologies", Goldman Sachs said.

"We estimate that by-mid decade this growth in green demand alone will match, and then quickly surpass, the incremental demand China generated during the 2000s. Ripple effects into non-green channels mean the 2020s are expected to be the strongest phase of volume growth in global copper demand in history", it added.

The copper market as it currently stands is not prepared for this demand environment.

"Moreover, a decade of poor returns and ESG concerns have curtailed investment in future supply growth, bringing the market the closest it's ever been to peak supply. Indeed, we see the copper market sleepwalking to a classic case of the "Revenge of the old economy", just as oil did during the 2000s commodity boom", the report said.

It added that the mining sector remains wary of a pivot towards growth after the price collapse in the mid-2010s severely punished any front-footed producers. Even as copper prices have rallied 80 per cent over the last 12 months, there have been no material greenfield project approvals.

Coronavirus has only compounded this dynamic, creating enough uncertainty to freeze companies' investment decisions. This combination of surging demand and sticky supply has reinforced current deficit conditions and foreshadows large open-ended deficits from mid-decade. We now estimate a long-term supply gap of 8.2Mt by 2030, twice the size of the gap that triggered the bull market in copper in the early 2000s, it added.

The report projects that copper is on a necessary path to $15,000 per ton. "We believe that the most probable path for copper price from here - that both avoids depletion risk and as well as a sharp surplus swing - is to trend into the mid-teens by mid-decade", Goldman Sachs said.

"We now project copper to average $9,675/t in 2021, $11,875/t in 2022, $12,000/t in 2023 before a material step-up to $14,000/t in 2024 and $15,000/t in 2025. In this context, we upgrade our 12-month target to $11,000/t", it said.

Copper