



Consulting –

Bluglance Consulting Private Ltd

Unlocking Success through Strategic Insights

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Global Copper: Supply and Demand Dynamics

Upstream  Downstream

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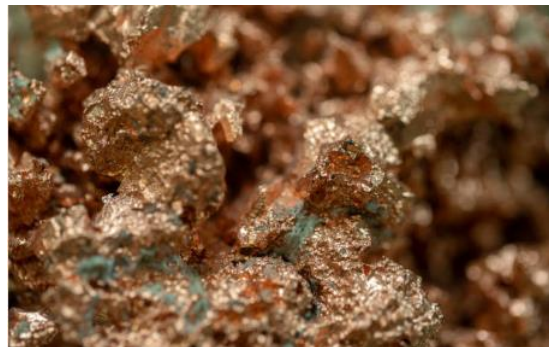
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Global Copper Supply and Demand Dynamics

Our Position:

- ❑ According to estimates, the refined CU market might be short of 75,000 to 100,000 MT in 2024.
- ❑ Due to tight supply dynamics, the price of copper surged over \$11K/MT in the first five months of 2024. **However, we anticipate that the price of copper will stabilize in the third and early fourth quarters of 2024 before making a significant upward move in 2025.**
- ❑ After the Panama mine was closed, the supply number estimates might have been revised.
(First Quantum Minerals at Cobre Panama weighs 1.50% of the world copper supply)
- ❑ The estimated 26 million MT of refined copper consumption in 2024 may have been impacted by **China's weak demand** (The problem statement >50% consumption)
- ❑ Tight supply conditions (**concentrates**) and rising global copper demand will propel the year 2025.
- ❑ For the remainder of 2024, we project that the copper price (LME Cash) will fluctuate between \$8700 and \$9800 per MT. However, in 2025, it might increase to \$12,000+



Copper: Supply Scenario

- ❑ Refined production of copper is estimated **below** 25.92 million MT
- ❑ Due to ongoing mine disruptions, there is likely to be a further deficit in the copper concentrate market this year.
- ❑ Because of the limited supply and the smelters' aggressive first-hand purchases, the TC/RC moved into **-Ve USD/MT** (temporarily), further tightening the market.
- ❑ Although it might have been feasible to supply the remaining 2024 supply (miners' contractual supplies with smelters) at a higher pre-fixed TC/RC rate, **that shouldn't be feasible in 2025**
- ❑ However, some parts of tightness will get balanced due to the **strong Scrap supply**
- ❑ We estimate the tight market to persist for at least the upcoming three quarters and more



Copper: Demand Scenario

- ❑ The overall consumption demand to stabilize for the rest of 2024. We estimate the refined copper consumption to stand near ~ 26 Million MT.
- ❑ However, we believe 2025, demand to grow higher between 26.60 to 26.80 Million MT
- ❑ The Chinese market is currently the obstacle, but by 2025, we think the real estate and manufacturing sectors may have peaked and will begin to progressively recover. (**Cyclic demand**)
- ❑ The key to the demand for copper in the upcoming years is the **energy shift**. In the upcoming years, the development of solar and wind power plants, electric car technology, and associated infrastructure will propel the need for copper.
- ❑ Power distribution within **data centers** around the world will make heavy use of copper.



Copper: Global Supply-Demand Balance

- ❑ The estimates suggest a wider deficit in 2025
- ❑ Copper may be referred to as **"Green Metal"** in 2025 due to the demand for EVs and renewable energy
- ❑ **Supply Cut:** As mines run empty, current mines will produce less copper in the upcoming years, and businesses won't be investing enough in new locations to make up for it.

Outlook:

We believe the demand prognosis for copper has been strengthened by the worldwide industrial shift towards renewable energy, electric vehicles, and the rapidly expanding AI sector.

The copper market may remain tight in the years ahead. **"We expect Copper demand to rise at a CAGR of 7% for the next decade"**

MMT	2023	2024E	2025E
Mine Production	22.25	22.35	23.00
Refined Production	25.50	25.92	26.50
Refined Consumption	25.49	26.00	26.70
Trade Surplus/Deficit	0.01	-0.08	-0.20

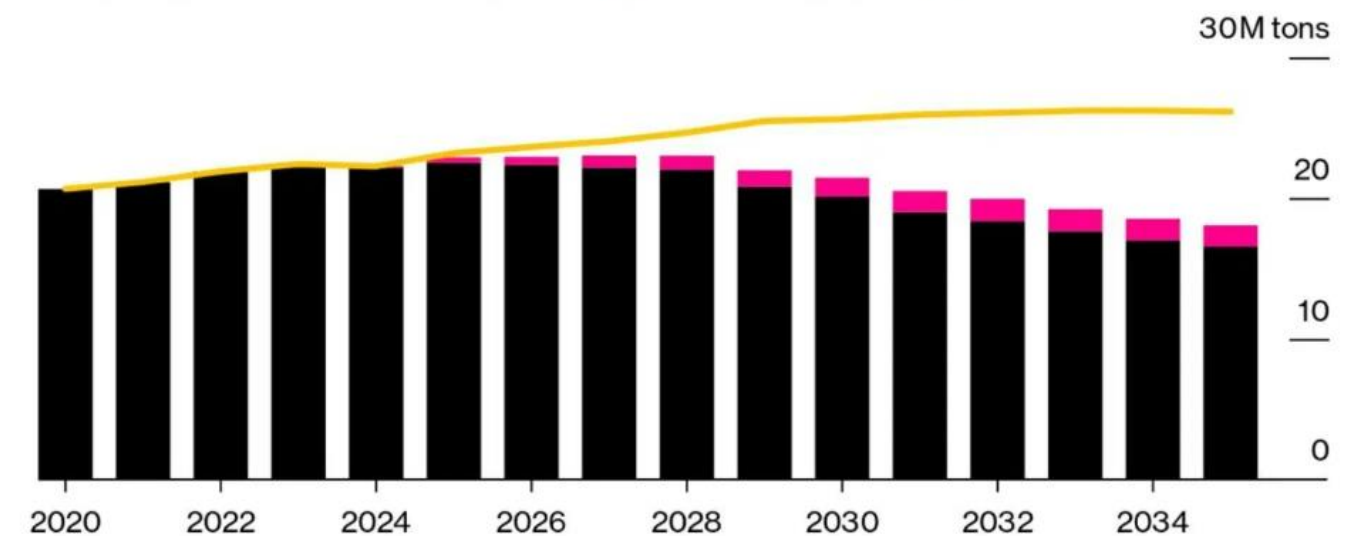
Sources: ICSG, Secondary research, Citi Research, our convictions. Average estimates

An intriguing chart shows how, over time, supply could drastically decline if miners fail to make spending

Copper Supply Will Plunge If Miners Don't Get Spending

CRU says massive investments are needed to address copper's supply gap

■ Copper production from existing mines ■ Committed projects / Primary demand

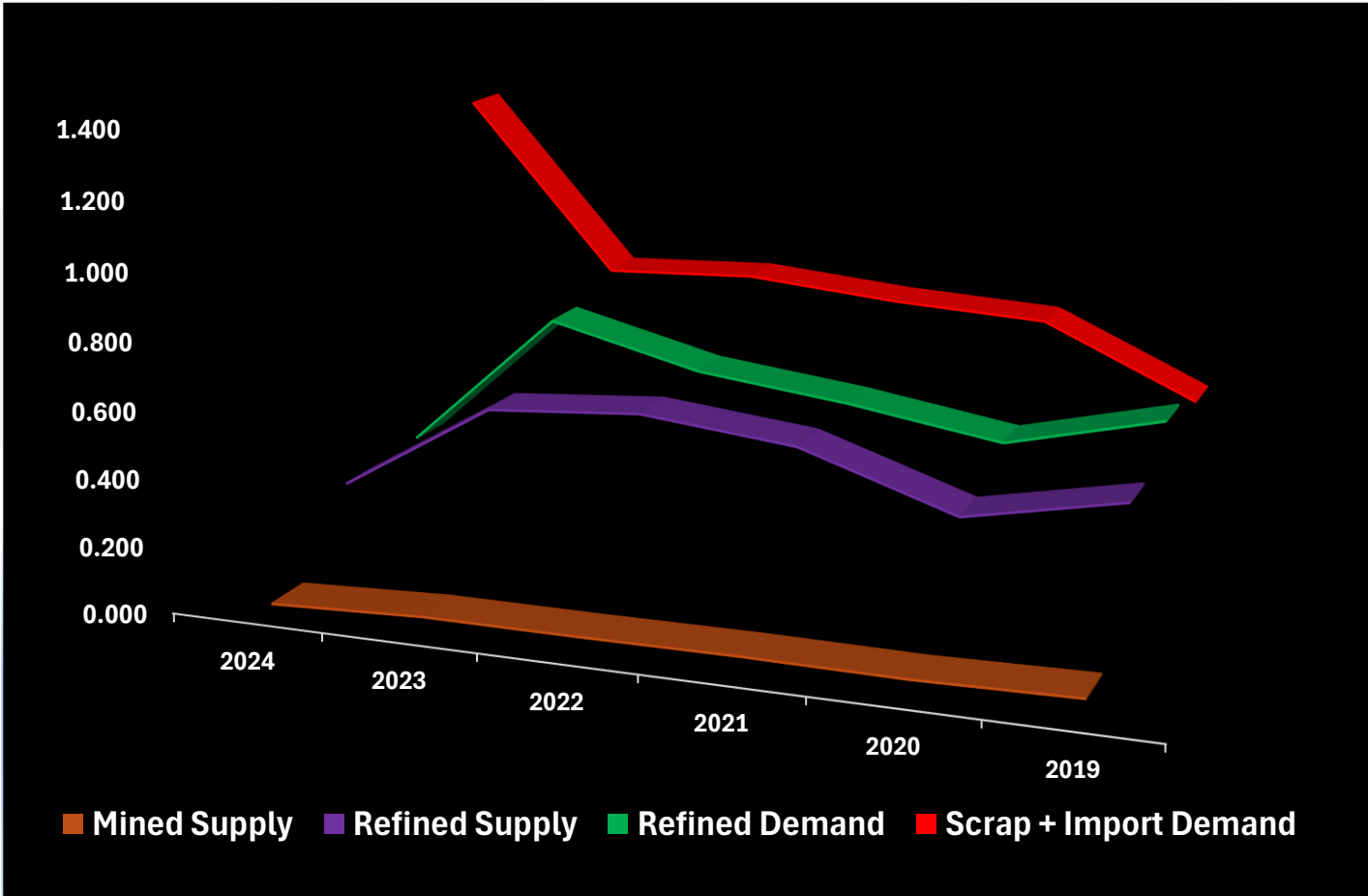


Source: CRU Group

Bloomberg

Copper: Supply-Demand Scenario (India Perspective)

- India's demand for copper increased from 1.1 MMT in FY22 to 1.52 MMT in FY23. This increase is consistent with the nation's economic growth.
- Emphasized infrastructure development and a gradual shift to renewable energy, domestic refined copper demand growth is predicted to continue robust at **~11% in FY2024 and FY2025**, exceeding the rate of global increase in copper demand.
- India produces an estimated 0.55MMT of refined copper compared to a local demand of over 0.75 MMT. India imports about 0.50 MMT of copper annually to make up the difference.
- Besides, **Birla Copper and Hindalco**, a new Copper Smelter: **Kutch Copper Ltd** will add up to another 0.50 MMT of Copper supply into the country.
- Adani's Kutch Copper could fill the Sterlite Copper gap and a move towards **आत्मनिर्भर भारत**
- In the upcoming years, it is anticipated that India's per capita consumption of copper will rise from its current level of **0.6 kg to 1 kg**. The average per capita copper consumption in the world is 3.2 kg
- It is anticipated that by 2027, the demand for copper from electric vehicles (EV) will rise by 1.7 million tonnes.



Balance	2024	2023	2022	2021	2020	2019
Mined Supply	0.010	0.029	0.028	0.031	0.027	0.037
Refined Supply	0.23	0.51	0.54	0.4918	0.34	0.43
Refined Demand	0.25	0.67	0.55	0.50	0.42	0.53
Scrap + Import Demand	1.25	0.73	0.75	0.70	0.68	0.47

Note: 2024 data as of April, Source: Bloomberg

Copper: Base, Bull, and Bear case scenario

Copper	Probability	Supporting Factor		Q3 & Q4 2024	2025
Bull Case	25%	China: Easing & Stimulus	Very Strong renewable demand	\$9,500 to 10,500	\$13,000 to \$15,000
		Weak mine supply	Soft landing in US & Europe		
Base Case	60%	Manufacturing growth optimism	Tight physical market	\$8500 to \$10,000	\$11,000 to \$12,000
		Fed Rate cut	Funds buying		
Bear Case	15%	Feeble Chinese Policy	Headwinds from Excessive Debt	\$7,500- \$8,500	\$8,000-\$8,500
		Demand slowdown from China continues	New Mine addition		

Probability weights are assigned in-house based on their internal factors

Chart Analysis



6-Month Copper Future: COMEX



3-Month Copper Future: COMEX



1-Month Copper Future: COMEX



Weekly Copper Future: COMEX



Daily Copper Future: COMEX

Visible volatility in copper across periods, while the trend is bullish in the medium to long term.

Risk management is the key to managing commodity price risk



Copper: Risk Management Strategies

Price Risk

Priced-in: Month Average, MAMA, QP period, provisional pricing, LME CSP
Priced-Out: Month Average, Other Period Average, CSP
Natural Hedge: Purchase to the Sale time parity
Financial Hedge: OTC and ETCD products: MAF, Options, Asian Swaps

Basis Risk

Cash to derivative spread risk
Contango/Backwardation market structure (highly important)

Requisites

For an Indian entity to participate in global markets – LME, Authorized Dealers' Bank Approval, Overseas Banks and Brokers Engagement, Credit Lines, SBLC, and Margin management using the VaR technique, Collateral

Commodity Risk Management



Company Overview —

About Bluglance Consulting

We are facilitating the growth of worldwide businesses through strategic consulting and advisory services.



Founded by Aurobinda Gayan

Launched the firm following a comprehensive 19-year career in Financial markets, Commodities, Foreign Exchange, and Interest Rates sectors.



Location

Headquartered in Hyderabad with a physical office presence in Mumbai.



Focus

Specializes in delivering holistic consulting services to global enterprises in managing risk, facilitating market intelligence, advising investment avenues and catering intermediary services.

Our Services

①

Market Intelligence

Serve the global commodity, foreign exchange, and rates markets.

③

Investments

Managing working capital, treasury management and long term investment.

②

Risk Management

Handle the risk associated with commodities and foreign exchange.

④

Intermediary

Facilitate access to global markets and locate suppliers, manufacturers, distributors, and end consumers for a variety of commodities.



Thank You