

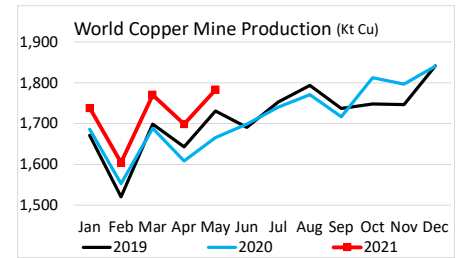


Copper: Preliminary Data for May 2021

The International Copper Study Group (ICSG) released preliminary data for May world copper supply and demand in its August 2021 Copper Bulletin. The Bulletin and ICSG online statistical database provide data, on a country basis, for copper mine, smelter, refined and semis production, copper refined usage, trade, stocks and prices. The bulletin is available for sale (annual subscription €550/€850 for orders originating from/outside institutions based in ICSG member countries).

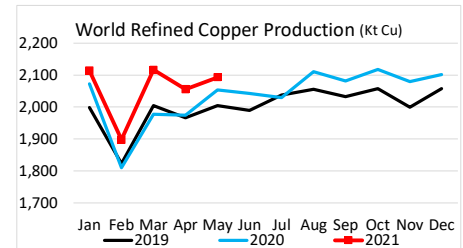
Preliminary data indicates that world copper mine production increased by 4.8% over the first five months of 2021, with concentrate production increasing by around 6.5% and solvent extraction-electrowinning (SX-EW) declining by about 2%:

- World mine production started to recover in June 2020 as lockdown measures eased and the industry adapted to stricter health protocols. However, government-imposed restrictions related to COVID-19 and preventative measures implemented by the industry to mitigate the impact of COVID-19 continue to constrain output in a few countries this year.
- Production in Chile, the world's biggest copper mine producing country, was down by 2% in the first 5 months of this year with a 2% growth in concentrate production being more than offset by a 13% decline in SX-EW output.
- Output in Peru, the world's second biggest copper mine producing country, increased by 17% mainly because March-May production was up by 35% from a constrained March-May 2020 basis when the industry was severely impacted by the COVID-19 related country lockdown. However, Jan-May 2021 production is still 7% below that of Jan-May 2019.
- Indonesian output increased by about 72% mainly due to the continued ramp-up of underground production at the Grasberg mine.
- Strong increases were also seen in the D.R.Congo and Panama due to additional output from new or expanded operations. Production in the United States remained essentially unchanged.



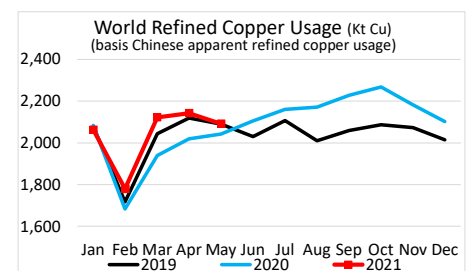
Preliminary data indicates that world refined copper production increased by about 4% during the first five months of 2021 with primary production (electrolytic and electrowinning) up by 4.3% and secondary production (from scrap) up by 2%.

- Preliminary official Chinese refined production data indicates growth of 7.5%.
- Chilean total refined copper production (electrolytic and electrowinning) declined by 7% as an increase of about 4% in electrolytic refined was more than offset by a 13% reduction in electrowinning refined production
- In Africa, refined production was up by 14% in the D.R. Congo due to the continued ramp-up of new or expanded SX-EW plants, and by 25% in Zambia, where output has recovered from smelters' operational issues and temporary shutdowns during 2019 and early 2020.
- Refined production increased by 13% in the United States mainly due to a recovery from 2020 operational issues at smelters.
- Preliminary data indicates declines in Brazil, Japan, Russia, Spain (SX-EW) and Sweden for various reasons including maintenance work, operational issues and the shutdown of SX-EW plants.
- Globally, secondary refined production (from scrap) increased by 2% with China being the biggest contributor to growth.



Preliminary data indicates that world apparent refined copper usage increased by 4.5% over the first five months of 2021:

- The COVID-19 related global lockdown has had a notable negative impact on the world economy and subsequently on key copper end-use sectors in all regions ex-China. Although usage started to recover in the 2nd half of 2020, global demand remains below pre-pandemic levels in most countries.
- World ex-China refined copper usage is estimated to have declined by about 9% in 2020. Usage over the first five months of this year is estimated to have increased by about 3.8% compared to the same period of 2020 but is still 5% below that in the first five months of 2019.
- Chinese apparent usage (excluding changes in bonded/unreported stocks) increased by around 5%.



Preliminary world refined copper balance in the first five months of 2021 indicates an apparent surplus of about 80,000 t:

- In developing its global market balance, ICSG uses an apparent demand calculation for China that does not consider changes in unreported stocks [State Reserve Bureau (SRB), producer, consumer, merchant/trader, bonded]. To facilitate global market analysis, however, an additional line item - Refined World Balance Adjusted for Chinese Bonded Stock Changes - is included in the attached table that adjusts the world refined copper balance based on an average estimate of changes in bonded inventories provided by two consultants with expertise in China's copper market.
- Over the first five months of 2021, the world refined copper balance, based on Chinese apparent usage (excluding changes in unreported stocks), indicated a surplus of about 80,000 t. The world refined copper balance adjusted for changes in Chinese bonded stocks indicated a market surplus of about 130,000 t.

Copper Prices and Stocks:

- Based on the average of estimates provided by two independent consultants, China's bonded stocks are thought to have increased by about 50,000 t in the first five months of 2021 compared to the year-end 2020 level.
- As of the end of July 2021, copper stocks held at the major metal exchanges (LME, COMEX, SHFE) totalled 374,366 t, an increase 123,191 t (+49%) from stocks held at the end of December 2020. Stocks were up at the LME (+126%) and SHFE (+25%) and down at COMEX (-41%).
- The average LME cash price for July was US\$ 9,433.59 /t, down 1.9% from the June average of US\$ 9,612.43 /t. The 2021 high and low copper prices through the end of July were US\$ 10,724.50 /t (on 10th May) and US\$ 7,755.50 /t (on 2nd Feb), respectively, and the year average was US\$ 9,143.48 /t (48% above the 2020 annual average).

(World Refined Copper Usage and Supply Trends table on next page)

Please visit the ICSG website www.icsg.org for further copper market related information.

World Refined Copper Usage and Supply Trends

Thousand metric tonnes, copper

	2018	2019	2020	2020	2021	2021			
				Jan-May	Feb	Mar	Apr	May	
World Mine Production	20,579	20,571	20,575	8,200	8,594	1,604	1,770	1,698	1,783
World Mine Capacity	24,063	24,164	24,764	10,183	10,645	1,965	2,185	2,124	2,203
Mine Capacity Utilization (%)	85.5	85.1	83.1	80.5	80.7	81.6	81.0	80.0	80.9
Primary Refined Production	20,040	19,999	20,579	8,297	8,651	1,595	1,789	1,727	1,767
Secondary Refined Production	4,035	4,028	3,875	1,593	1,627	303	328	328	327
World Refined Production (Secondary+Primary)	24,075	24,028	24,454	9,890	10,278	1,898	2,116	2,056	2,093
World Refinery Capacity	28,234	29,044	29,945	12,295	12,521	2,319	2,570	2,490	2,576
Refineries Capacity Utilization (%)	85.3	82.7	81.7	80.4	82.1	81.9	82.3	82.6	81.2
World Refined Usage 1/	24,484	24,429	24,987	9,769	10,198	1,780	2,123	2,142	2,092
World Refined Stocks End of Period	1,227	1,215	1,234	1,421	1,388	1,279	1,362	1,337	1,388
Period Stock Change	-148	-12	19	206	154	96	83	-25	51
Refined Balance 2/	-409	-401	-532	121	80	119	-6	-86	2
Seasonally Adjusted Refined Balance 3/				66	12	17	-42	-4	5
Refined Balance Adjusted for Chinese bonded stock change 4/	-468	-579	-422	91	128	125	4	-75	19

Due to the nature of statistical reporting, the published data should be considered as preliminary as some figures are currently based on estimates and could change.

1/ Based on Chinese and EU apparent usage.

2/ Surplus/deficit is calculated using refined production minus refined usage.

3/ Surplus/deficit is calculated using seasonally adjusted refined production minus seasonally adjusted refined usage.

4/ For details of this adjustment see the paragraph of the press release on "World refined copper balance".