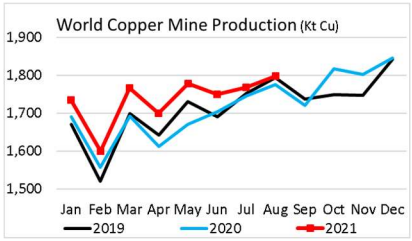
Copper: Preliminary Data for August 2021

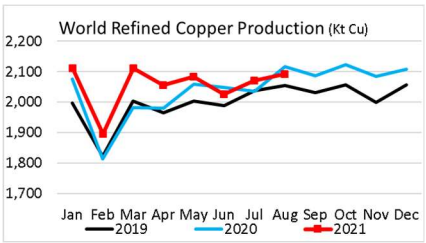
The International Copper Study Group (ICSG) released preliminary data for August world copper supply and demand in its November 2021 Copper Bulletin. The Bulletin and ICSG online statistical database provide data, on a country basis, for copper mine, smelter, refined and semis production, copper refined 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 3.3% over the first eight months of 2021, with concentrate production increasing by around 5% and solvent extraction-electrowinning (SX-EW) declining by about 4%:



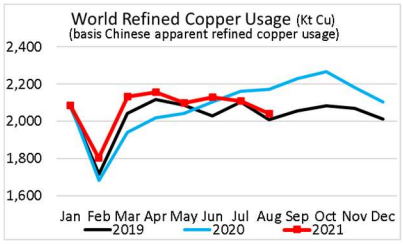
- World mine production started to recover in June 2020 as lockdown measures eased and the industry adapted to stricter health protocols. However, government imposed restrictions related to COVID-19 and preventative measures implemented by the industry to mitigate the impact of COVID-19 have continued to constrain output in a few countries this year.
- Production in Chile, the world's biggest copper mine producing country, was down by 1.5% over the first eight months of this year with a 1% growth in concentrate production being more than offset by an 8% decline in SX-EW output mainly at the Escondida mine.
- Output in Peru, the world's second biggest copper mine producing country, increased by 10% primally due to the fact that March-May 2021 production was up by 35% from a constrained March-May 2020 during which time the industry was severely impacted by a COVID-19 related country lockdown. Despite the recovery this year, production over the first eight months of 2021 was still 8% below that of the same period in 2019.
- Indonesian output increased by about 57% principally as a consequence of the continued ramp-up of underground production at the Grasberg mine.
- Strong increases were also seen in the D.R.Congo (+11%) and Panama (+85%) due to additional output from new or expanded operations. Production in the United Sates declined by 0.8%.

Preliminary data indicates that world refined copper production increased by about 2.1% over the first eight months of 2021 with primary production (electrolytic and electrowinning) up by 1.2% and secondary production (from scrap) up by 6.5%.



- Preliminary official Chinese refined production data indicates growth of 5.8%.
- Chilean total refined copper production (electrolytic and electrowinning) declined by 5% negatively impacted by an 8% reduction in electrowinning refined production.
- Refined production was up by 11% in the D.R. Congo due to the continued ramp-up of new or expanded SX-EW plants.
- Refined output increased by 11.5% in the United States mainly due to a recovery from 2020 operational issues.
- Preliminary data indicates falls in Brazil, Germany, Japan, Myanmar (SX-EW), 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 6.5% with China being the biggest contributor to this growth.

Preliminary data indicates that world <u>apparent</u> refined copper usage increased by 2.1% over the first eight 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 global demand started to recover in the 2nd half of 2020, refined usage still remains below pre-pandemic levels in most countries.
- World ex-China refined copper usage over the first eight months of this year is estimated to have increased by about 8.5% compared to the same period of 2020 but is still 4% below that of the same period of 2019.
- Due to a 27% decline (780,000 t) in net refined copper imports, Chinese apparent usage (excluding changes in bonded/unreported stocks) declined by 2.8%, partially offsetting usage growth in other regions of the world.

Preliminary world refined copper balance in the first eight months of 2021 indicates an <u>apparent</u> deficit of about 107,000 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 eight months of 2021, the world refined copper balance, based on Chinese apparent usage (excluding changes in bonded/unreported stocks), indicated a deficit of about 107,000 t. The world refined copper balance adjusted for changes in Chinese bonded stocks indicated a market deficit of about 120,000 t.

Copper Prices and Stocks:

- Based on the average of estimates provided by two independent consultants, China's bonded stocks are thought to have declined by about 13,000 t in the first eight months of 2021 compared to the year-end 2020 level.
- As of the end of October 2021, copper stocks held at the major metal exchanges (LME, COMEX, SHFE) totalled 232.682 t, a decline of 18.493 t (-7%) from stocks held at the end of December 2020. Stocks were up at the LME (+24%) and down at COMEX (-26%) and SHFE (-34%).
- The average LME cash price for October was US$ 9,778.50 /t, up 4.9% from the September average of US$ 9,324.07 /t. The 2021 high and low copper prices through the end of September 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$ 9,247.27/t (49.6% above the 2020 annual average).

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

Please visit the ICSG website <u>www.icsg.org</u> for further copper market related information.

World Refined Copper Usage and Supply Trends

Thousand metric tonnes, copper

	2018	2019	2020	2020	2021	2021			
				Jan-Aug		May	Jun	Jul	Aug
World Mine Production	20,579	20,571	20,634	13,448	13,893	1,777	1,749	1,768	1,798
World Mine Capacity	24,131	24,239	24,824	16,460	17,305	2,214	2,152	2,230	2,237
Mine Capacity Utilization (%)	85.3	84.9	83.1	81.7	80.3	80.3	81.3	79.3	80.4
Primary Refined Production	20,028	19,987	20,635	13,533	13,701	1,733	1,678	1,725	1,757
Secondary Refined Production	4,035	4,028	3,875	2,576	2,745	350	349	345	335
World Refined Production (Secondary+Primary)	24,063	24,016	24,510	16,110	16,446	2,084	2,027	2,070	2,092
World Refinery Capacity	28,314	29,124	30,021	19,869	20,208	2,581	2,500	2,584	2,585
Refineries Capacity Utilization (%)	85.0	82.5	81.6	81.1	81.4	80.7	81.1	80.1	80.9
World Refined Usage 1/	24,480	24,405	24,989	16,206	16,553	2,099	2,129	2,108	2,039
World Refined Stocks End of Period	1,227	1,215	1,234	1,260	1,415	1,395	1,452	1,407	1,415
Period Stock Change	-148	-12	19	45	181	53	56	-45	8
Refined Balance 2/	-417	-389	-479	-97	-107	-15	-102	-39	52
Seasonally Adjusted Refined Balance 3/				-134	-155	-11	-69	-2	17
Refined Balance Adjusted for Chinese bonded stock change 4/	-477	-567	-369	-100	-120	2	-90	-56	-3

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”.