Copper: Preliminary Data for July 2019

The International Copper Study Group (ICSG) released preliminary data for July 2019 world copper supply and demand in its October 2019 Copper Bulletin. The Bulletin and ICSG online statistical database provide detailed data, on a country basis, for copper mine, smelter, refined and semis production and copper refined usage, trade, stocks and prices. The bulletin is available for sale (single issues €100/€150, annual subscription €500/€750 for orders originating from/outside institutions based in ICSG member countries).

Preliminary data indicates that world mine production declined by about 1.3% in the first seven months of 2019, with concentrate production declining by 1% and solvent extraction-electrowinning (SX-EW) by 2.7%:

- Reduced output in major producing countries more than offset growth in other countries.
  - Production in Chile, the world's biggest copper mine producing country, declined by 2% mainly due to lower copper head grades and a few production disruptions that occurred early in the year.
  - Concentrate production in Indonesia declined by 55% as a consequence of the transition of the country's major two mines to different ore zones leading to temporarily reduced output levels.
  - After growth of 13% in 2018, aggregated production in the Democratic Republic of Congo (DRC) and Zambia declined by 1.5% as consequence of temporary suspensions at SX-EW mines, reductions in planned production and few operational constraints.
- Production in Peru (the world's second largest copper mine producing country), Australia, China and Mexico increased due to improved grades and recovery from constrained output in 2018.
- On a regional basis, mine production is estimated to have increased by around 7% in Oceania but declined by 7% in Asia, 1.2% in Africa and 2.8% in Europe while remaining essentially unchanged in North America and Latin America.

Preliminary data indicates that world refined production remained essentially unchanged in the first seven months of 2019 with primary production (electrolytic and electrowinning) declining by 0.5% and secondary production (from scrap) increasing by 1.5%.

- World refined production growth was constrained as a consequence of:
  - A 35% decrease in Chilean electrolytic refined output due to temporary smelter shutdowns whilst undergoing upgrades to comply with new environmental regulations. Total Chilean refined production (including Electrowinning) declined by 14%.
  - A decline of 26% in India's production which was negatively impacted by the shutdown of Vedanta's Tuticorin smelter in April 2018.
  - A 27% decrease in Zambian refined output due to power supply interruptions, smelter outages and temporary shutdown and the introduction on 1st January 2019 of a 5% custom duty on copper concentrate imports constraining smelter feed.
  - Reduced output in Japan, Peru, the United States and a few European countries due to smelter maintenance shutdowns.
- However these reductions were offset by growth in Chinese output and by increases in countries recovering from production constraints in 2018 such as Australia, Brazil, Iran and Poland.
- On a regional basis, refined output is estimated to have increased in Asia (3%) and in Oceania (15%) but declined in Africa (-7%), the Americas (-8%) and in Europe (-1%).

Preliminary data indicates that world <u>apparent</u> refined usage grew by a modest 0.5% in the first seven months of 2019:

- Although Chinese net refined copper imports declined by 15%, Chinese apparent usage grew by around 2.4% as a consequence of higher Chinese refinery output.
- Among other major copper users, demand increased in the United States, India and Taiwan (China) but declined in the EU and Japan.
- World ex-China usage declined by around 1.5%.

Preliminary world refined copper balance in the first seven months of 2019 indicates a deficit of about 325,000t:

- In developing its global market balance, ICSG uses an apparent demand calculation for China that does not take into account 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 unreported inventories provided by three consultants with expertise in China's copper market.
- In the first seven months of 2019, the world refined copper balance, based on apparent Chinese usage (excluding unreported/bonded stocks), indicated a deficit of about 325,000 t.
- The world refined copper balance adjusted for changes in Chinese bonded stocks indicated a market deficit of around 297,000 t.

Copper Prices and Stocks:

- Based on the average of estimates provided by independent consultants, China's bonded stocks are thought to have increased by about 30,000 t in the first seven months of 2019 compared to the year-end 2018 level. Bonded stocks declined by around 15,000 t in the same period of 2018.
- As of the end of September, copper stocks held at the major metal exchanges (LME, COMEX, SHFE) totalled 412,847 t, an increase of 62,351 t (+18%) from stocks held at the end of December 2018. Stocks were up at the LME (+96%) and down at COMEX (-64%) and SHFE (-0.5%)
- The average LME cash price for September 2019 was US$ 5,745.48 /t, up 0.7% from the August average of US$ 5,707.98 /t.
- The 2019 high and low copper prices through the end of September were US$ 6,572 /t (on 1st Mar) and US$ 5,537 /t (on the 3rd September), respectively, and the year average was US$ 6,017.68 /t (7.7% below the 2018 annual average).

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

	2016	2017	2018	2018	2019	2019			
				Jan-Jul		Apr	May	Jun	Jul
World Mine Production	20,402	20,082	20,575	11,778	11,620	1,626	1,729	1,676	1,727
World Mine Capacity	23,481	23,993	24,077	14,376	14,425	2,053	2,129	2,068	2,060
Mine Capacity Utilization (%)	86.9	83.7	85.5	81.9	80.6	79.2	81.2	81.0	83.8
Primary Refined Production	19,490	19,485	20,055	11,535	11,481	1,624	1,655	1,672	1,740
Secondary Refined Production	3,866	4,053	4,043	2,355	2,393	340	345	341	341
World Refined Production (Secondary+Primary)	23,357	23,538	24,098	13,890	13,874	1,965	2,001	2,014	2,082
World Refinery Capacity	26,913	27,435	27,770	16,102	16,603	2,349	2,435	2,363	2,448
Refineries Capacity Utilization (%)	86.8	85.8	86.8	86.3	83.6	83.6	82.2	85.2	85.0
World Refined Usage 1/	23,505	23,723	24,502	14,127	14,197	2,099	2,087	2,050	2,130
World Refined Stocks End of Period	1,365	1,375	1,227	1,461	1,317	1,346	1,293	1,274	1,317
Period Stock Change	-140	10	-148	86	90	12	-53	-19	43
Refined Balance 2/	-149	-184	-404	-237	-324	-134	-86	-36	-48
Seasonally Adjusted Refined Balance 3/				-148	-233	-32	-39	-4	-34
Refined Balance Adjusted for Chinese bonded stock change 4/	-136	-182	-464	-234	-297	-84	-81	-84	-116

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 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”.