



## Copper: Preliminary Data for September 2018

The International Copper Study Group (ICSG) released preliminary data for September 2018 world copper supply and demand in its December 2018 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).

**World mine production is estimated to have increased by about 2.8% in the first nine months of 2018**, with concentrate production rising by 2.7% and solvent extraction-electrowinning (SX-EW) by 3%:

- The increase in world mine production of about 410,000 t copper was mainly due to constrained output in 2017 (mainly in Chile, Indonesia and the DRC).
  - Production in Chile, the world's biggest copper mine producing country, increased by 7% primarily because production in February/March 2017 was restricted by a strike at Escondida (the world's biggest copper mine) and also because there has been an improvement in Codelco's production levels in 2018.
  - Indonesian output increased by 23% because comparative output in 2017 was negatively affected by a temporary ban on concentrate exports that started in January and ended in April.
  - SX-EW production in the Democratic Republic of Congo (DRC) increased by 11% and Zambian mine output increased by 9% due to the restart of temporarily closed capacity in both countries.
- Although no major supply disruptions occurred in the first nine months of this year, overall growth was partially offset by lower output in Canada (-11%) and in the United States (-4.5%).
- After a strong increase over the last few years due to new and expanded capacity, output in Peru (the world's second largest copper mine producing country) has stabilized.
- On a regional basis, mine production is estimated to have increased by around 7.5% in Africa, 4% in Latin America, 3% in Asia and 8% in Oceania but declined by 5% in North America and remained essentially unchanged in Europe.

**World refined production is estimated to have increased by 1% in the first nine months of 2018** with primary production (electrolytic and electrowinning) declining by 1.3% and secondary production (from scrap) increasing by 12%:

- The main contributor to growth in world refined production was China due to its continued expansion of capacity.
- Production in Chile was up by 3.5% mainly supported by a 9% increase in primary electrolytic production as output was constrained in the comparative period of 2017 due to a series of smelter maintenance shutdowns.
- Production in Indonesia and Japan was also substantially higher, recovering from reduced output last year.
- Increases in electrowinning (SX-EW) output in the DRC and Zambia also contributed to world refined production growth.
- However, overall growth was partially offset by a 32% decline in India's output due to the shutdown of Vedanta's Tuticorin smelter in April and declines in production in Australia, the Philippines, Poland, and the United States as a consequence of maintenance shutdowns and operational issues.
- On a regional basis, refined output is estimated to have increased in Africa (10%), Asia (1%) and Latin America (2.5%) whilst remaining essentially unchanged in Europe and declining in North America (-5%) and Oceania (-8%).

**World apparent refined usage is estimated to have increased by about 3% in the first nine months of 2018:**

- ICSG world refined copper usage for the first nine months of the year has been revised upwards based on new data available for China and the United States.
- Chinese apparent usage was revised upwards as actual Chinese refined copper trade data again became available and indicated higher imports than previously estimated (since March, China Customs had suspended the publication of detailed copper trade data and ICSG had used an estimate based on reverse trade). Chinese apparent usage grew by 7% driven by a 22% increase in net refined copper imports. It is possible this development was influenced by a tightness in the availability of scrap in China.
- United States usage was also revised upwards based on new data published by the USGS, showing now a growth of around 1%.
- Among other major copper users, demand increased in India, Japan and the EU but declined in Taiwan (China) and South Korea.
- Preliminary data indicates that world ex-China usage declined by 0.5%.

**World refined copper balance for the first nine months of 2018 (including above referred usage upward revisions) indicates a deficit of about 595,000 t:**

- 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.
- The 2018 market deficit was higher than indicated in last month's copper bulletin due to the upward revisions in refined usage for China and the United States explained above.
- In the first nine months of 2018, the world refined copper balance adjusted for changes in Chinese bonded stocks indicated a market deficit of around 680,000 t.

**Copper Prices and Stocks:**

- Based on the average of stock estimates provided by independent consultants, China's bonded stocks are thought to have declined by 85,000 t in the first nine months of 2018 compared to the year-end 2017 level. Bonded stocks increased by around 30,000 t on the same period of 2017.
- As of the end of November, copper stocks held at the major metal exchanges (LME, COMEX, SHFE) totalled 388,198 t, a decline of 154,331 t (-28%) from stocks held at the end of December 2017. Stocks were down at the LME (-33%), SHFE (-13%) and COMEX (-36%).
- The average LME cash price for November was US\$ 6,193.00 /t, down 0.4% from the October average of US\$ 6,215.89 /t.

- The 2018 high and low copper prices through the end of November were US\$7,262.50 per tonne (on 8<sup>th</sup> Jun) and US\$5,823 per tonne (on 5<sup>th</sup> Sep), respectively, and the year average was US\$6,557.83/t per tonne (6% above the 2017 annual average).

Please visit the ICSG website [www.icsg.org](http://www.icsg.org) for further copper market related information.

### World Refined Copper Usage and Supply Trends, 2014-2018

Thousand metric tonnes, copper

	2014	2015	2016	2017	2018	2018				
					Jan-Sep	Jun	Jul	Aug	Sep	
World Mine Production	18,426	19,149	20,357	20,038	14,686	15,096	1,702	1,695	1,694	1,697
World Mine Capacity	21,524	22,321	23,368	23,849	18,073	18,313	2,050	2,033	2,041	1,983
Mine Capacity Utilization (%)	85.6	85.8	87.1	84.0	81.3	82.4	83.0	83.4	83.0	85.6
Primary Refined Production	18,575	18,897	19,471	19,470	14,391	14,198	1,584	1,573	1,602	1,561
Secondary Refined Production	3,915	3,945	3,866	4,053	3,020	3,403	385	379	359	377
World Refined Production (Secondary+Primary)	22,490	22,843	23,338	23,523	17,411	17,601	1,970	1,952	1,961	1,938
World Refinery Capacity	26,468	26,551	26,862	27,389	20,440	20,647	2,269	2,348	2,353	2,281
Refineries Capacity Utilization (%)	85.0	86.0	86.9	85.9	85.2	85.2	86.8	83.1	83.4	85.0
World Refined Usage 1/	22,927	23,081	23,605	23,789	17,636	18,196	2,040	2,088	2,004	2,106
World Refined Stocks End of Period	1,334	1,505	1,375	1,383	1,428	1,317	1,582	1,463	1,399	1,317
Period Stock Change	10	171	-130	7	53	-66	-64	-119	-63	-82
Refined Balance 2/	-436	-239	-267	-266	-226	-595	-71	-136	-43	-168
Seasonally Adjusted Refined Balance 3/					-203	-579	-30	-131	-161	-128
Refined Balance Adjusted for Chinese bonded stock change 4/	-460	-342	-255	-264	-193	-680	-73	-148	-76	-208

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".