



Copper: Preliminary Data for December 2017

The International Copper Study Group (ICSG) released preliminary data for December 2017 world copper supply and demand in its March 2018 Copper Bulletin. 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 declined by around 2% in 2017, with concentrate production declining by 1.6% and solvent extraction-electrowinning (SX-EW) by 3%:

- Mine production fell 4% YoY in the 1st half of 2017 due to a series of supply constraints but the situation improved in the 2nd half with output remaining essentially flat YoY but increasing by 10% compared to the 1st half 2017.
- The reduction in world mine production was mainly due to:
 - A 1% decline in Chile, the world's biggest copper mine producing country which was negatively affected by the strike at the Escondida mine in the first part of the year and lower output from Codelco mines.
 - Reductions in concentrate production in Argentina, Canada and Mongolia of 59%, 14% and 14% respectively that were mainly due to lower grades in planned mining sequencing and Argentina's Alumbrera mine approaching end of life.
 - A 12.5% decrease in Indonesian concentrate production as output was constrained by a temporary ban on concentrate exports that started in January and ended in April.
 - A 12% fall in production in the United States mainly due to lower ore grades, reduced mining rates and unfavourable weather conditions at the beginning of the year.
- However, these reductions in output were partially offset by 30% and 4% increases in Kazakhstan and Peruvian mine production respectively, with both countries benefitting from new and expanded capacity that was not yet fully available in 2016. Brazil, Mexico, Myanmar, Spain and Sweden also contributed to world growth.
- On a regional basis, mine production is estimated to have declined in the Americas by 2%, in Asia by 4% and in Oceania by 5% while increasing in Africa and Europe (including Russia) by 2.5% and 2% respectively.

World refined production is estimated to have increased by 0.6% in 2017 with primary production (electrolytic and electrowinning) declining by 0.15% and secondary production (from scrap) increasing by 4.5%:

- Increased availability of scrap allowed world secondary refined production to increase, notably in China.
- The main contributor to growth in world refined production was China (increase of 5%), followed by India (6%) and some EU countries where output recovered after maintenance shutdowns in 2016.
- However, overall growth was offset by a 7% decline in Chile, the second largest refined copper producer, where both primary electrolytic refined production and electrowinning production fell.
- Production also decreased in the third and fourth ranked refined copper producers, namely, Japan (-4%) and the United States (-12%) mainly due to maintenance shutdowns at several plants.
- On a regional basis, refined output is estimated to have increased in Africa (1.5%), in Asia (3.5%) and in Europe (3.7%) whilst declining in the Americas (7.5%) and in Oceania (15%).

World apparent refined usage is estimated to have increased modestly by 0.7% in 2017:

- Improved scrap supply constrained world refined copper usage growth globally in 2017.
- Preliminary data indicates that world ex-China usage increased by 0.5% while Chinese apparent usage (currently representing almost 50% of world refined usage) increased by 0.9%.
- Chinese apparent usage (excluding changes in unreported stocks) increased by 0.9% as although refined copper production increased by 5%, net imports of refined copper declined by 9.5%.
- Among other major copper using countries, usage increased in India and Japan but declined in the United States, Germany and South Korea.

World refined copper balance for 2017 indicates a deficit of about 163,000 t (including revisions to data previously presented):

- This is mainly due to an almost stagnant situation in world refined copper supply.
- 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 table below 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 2017, the world refined copper balance adjusted for changes in Chinese bonded stocks indicates a deficit of around 135,000 t.

Copper Prices and Stocks:

- Based on the average of stock estimates provided by independent consultants, China's bonded stocks increased by around 30,000 t in 2017 from the year-end 2016 level. Bonded stocks increased by about 15,000 t in 2016.
- As of the end of February, copper stocks held at the major metal exchanges (LME, COMEX, SHFE) totalled 755,847 t, an increase of 213,318 t (39%) from stocks held at the end of December 2017. Compared with the December 2017 levels, stocks were up at the LME (63%), at SHFE (45%) and COMEX (9%).
- The average LME cash price for February was US\$7001.80/t, up from the January average of US\$7080.30/t.
- The 2018 high and low copper prices through the end of February were US\$7,202.50 per tonne (on 4th Jan) and US\$6,755 per tonne (on 9th Feb), respectively, and the year average was US\$7042.92/t per tonne (14% above 2017 annual average).

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

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

World Refined Copper Usage and Supply Trends, 2013-2017

Thousand metric tonnes, copper

	2013	2014	2015	2016	2016	2017	2017			
					Jan-Dec	Sep	Oct	Nov	Dec	
World Mine Production	18,185	18,428	19,154	20,365	20,365	19,983	1,685	1,766	1,744	1,821
World Mine Capacity	20,778	21,548	22,337	23,415	23,415	23,906	1,987	2,061	2,002	2,076
Mine Capacity Utilization (%)	87.5	85.5	85.7	87.0	87.0	83.6	84.8	85.7	87.1	87.7
Primary Refined Production	17,255	18,576	18,925	19,497	19,497	19,471	1,614	1,647	1,646	1,796
Secondary Refined Production	3,803	3,915	3,945	3,866	3,866	4,037	336	352	347	332
World Refined Production (Secondary+Primary)	21,058	22,491	22,871	23,363	23,363	23,508	1,949	1,999	1,993	2,129
World Refinery Capacity	25,568	26,468	26,551	26,863	26,863	27,402	2,260	2,337	2,264	2,343
Refineries Capacity Utilization (%)	82.4	85.0	86.1	87.0	87.0	85.8	86.3	85.5	88.0	90.9
World Refined Usage 1/	21,396	22,885	23,040	23,513	23,513	23,670	2,065	1,969	2,034	2,112
World Refined Stocks End of Period	1,325	1,350	1,521	1,391	1,391	1,406	1,447	1,425	1,390	1,406
Period Stock Change	-52	25	171	-130	-130	15	11	-22	-35	16
Refined Balance 2/	-337	-394	-169	-150	-150	-163	-116	31	-41	17
Seasonally Adjusted Refined Balance 3/					-148	-155	-80	4	-20	-2
Refined Balance Adjusted for Chinese bonded stock change 4/	-585	-418	-272	-137	-137	-135	-131	21	-26	7

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".