



## Copper: Preliminary Data for September 2017

The International Copper Study Group (ICSG) released preliminary data for September 2017 world copper supply and demand in its December 2017 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 2.5% in the first nine months of 2017**, with concentrate production declining by 1.7% and solvent extraction-electrowinning (SX-EW) declining by around 5%:

- The decline in world mine production was mainly due to:
  - A 4% decline in production in Chile, the world's biggest copper mine producing country, negatively affected by the strike at the Escondida mine and lower output from Codelco mines.
  - A decline in Argentina, Canada and Mongolia concentrates production of 52%, 18% and 18%, respectively, mainly due to lower grades in planned mining sequencing and Argentina's Alumbra mine approaching end of life.
  - A 18% decline in Indonesian concentrate production as output was constrained by a temporary ban on concentrate exports that started in January and ended in April.
  - A 11% decline 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 34% and 4% increases in Kazakhstan and Peruvian concentrate output, respectively, with both countries benefitting from new and expanded capacity that was not yet fully available in the same period of last year. Brazil, Mexico, Myanmar, Spain and Sweden also contributed to world growth.
- On a regional basis, mine production is estimated to have declined in Africa by 1.5%, in the Americas by 3.5%, in Asia by 2% and in Oceania by 2% while increasing in Europe (including Russia) by 2.5%.

**World refined production is estimated to have grown modestly by 0.5% in the first nine months of 2017** with primary production (electrolytic and electrowinning) declining by 1.3% and secondary production (from scrap) increasing by 9.5%:

- 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 6%), followed by India (7.5%) and some EU countries recovering from maintenances shutdowns in 2016.
- However, overall growth was offset by a 10% decline in Chile, the second largest refined copper producer, where both primary electrolytic refined production and electrowinning production declined.
- Production also declined in the third and fourth world leading refined copper producers, namely, Japan (-3.7%) and the United States (-8.5%).
- On a regional basis, refined output is estimated to have increased in Asia (4%) and in Europe (4%) while declining in Africa (2%), in the Americas (9%) and in Oceania (8.5%).

**World apparent refined usage is estimated to have increased modestly by around 0.5% in the first nine months of 2017:**

- Improved scrap supply is constraining world refined copper usage growth globally in 2017.
- Preliminary data indicates that world ex-China usage might have increased by about 1%, however China apparent usage (currently representing almost 50% of world refined usage) remained essentially unchanged.
- Chinese apparent usage (excluding changes in unreported stocks) remained essentially unchanged as although refined copper production increased by 6%, net imports of refined copper declined by 13%.
- 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 the first nine months of 2017 indicates a deficit of about 180,000 t** (including revisions to data previously presented):

- This is mainly due to stagnant growth in world refined copper supply.
- September showed a strong deficit mainly due to high Chinese apparent use (highest in the year) led by a combination of strong refined copper production and imports.
- 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 the first nine months of 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 50,000 t in the first nine months of 2017 from the year-end 2016 level. Bonded stocks increased by around 85,000 t in the same period of last year.
- As of the end of November, copper stocks held at the major metal exchanges (LME, COMEX, SHFE) totalled 537,722 t, a decline of 1,351 t (0.3%) from stocks held at the end of December 2016. Compared with the December 2016 levels, stocks were down at the LME (-41%) and up at SHFE (12%) and COMEX (135%).
- The average LME cash price for November 2017 was US\$6,825.57/t, up from the October average of US\$6,797.39/t.
- The 2017 high and low copper prices through the end of November were US\$7,073.50. (on 24<sup>th</sup> Oct) and US\$5,466 per tonne (on 8<sup>th</sup> May), respectively, and the year average was US\$6,114.17 per tonne (26% above 2016 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 table on next page)

### World Refined Copper Usage and Supply Trends, 2014-2017

Thousand metric tonnes, copper

	2013	2014	2015	2016	2016	2017	2017			
					Jan-Sep	Jun	Jul	Aug	Sep	
World Mine Production	18,185	18,432	19,148	20,357	15,064	14,709	1,645	1,696	1,739	1,704
World Mine Capacity	20,767	21,562	22,473	23,483	17,534	18,156	2,019	2,043	2,051	1,992
Mine Capacity Utilization (%)	87.6	85.5	85.2	86.7	85.9	81.0	81.5	83.0	84.8	85.5
Primary Refined Production	17,255	18,576	18,925	19,473	14,561	14,378	1,574	1,618	1,652	1,626
Secondary Refined Production	3,803	3,915	3,945	3,866	2,844	3,117	351	350	350	351
World Refined Production (Secondary+Primary)	21,058	22,491	22,871	23,339	17,405	17,495	1,925	1,967	2,002	1,977
World Refinery Capacity	25,779	26,681	26,765	27,119	20,273	20,702	2,280	2,359	2,362	2,288
Refineries Capacity Utilization (%)	81.7	84.3	85.5	86.1	85.9	84.5	84.4	83.4	84.8	86.4
World Refined Usage 1/	21,396	22,880	23,041	23,493	17,572	17,676	1,996	1,980	1,908	2,109
World Refined Stocks End of Period	1,325	1,350	1,521	1,391	1,426	1,447	1,455	1,507	1,436	1,447
Period Stock Change	-52	25	171	-130	-95	56	-25	52	-71	11
Refined Balance 2/	-337	-389	-170	-154	-167	-181	-70	-13	94	-132
Seasonally Adjusted Refined Balance 3/					-137	-151	-23	-42	-37	-103
Refined Balance Adjusted for Chinese bonded stock change 4/	-585	-413	-273	-141	-84	-133	-110	-13	79	-132

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".