



## Copper: Preliminary Data for September 2016

The International Copper Study Group (ICSG) released preliminary data for September 2016 world copper supply and demand in its December 2016 Copper Bulletin. The Bulletin is available for sale upon request.

In developing its global market balance, ICSG uses an apparent demand calculation for China—the leading global consumer of copper accounting for about 45% of world demand—that does not take into account changes in unreported stocks [State Reserve Bureau (SRB), producer, consumer and merchant/trader]. To facilitate global market analysis, however, an additional line item—Refined World Balance Adjusted for Chinese Bonded Stock

Changes—is included 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. The resulting adjustments to world refined copper balance are discussed separately in italics below.

According to preliminary ICSG data, the refined copper market for September 2016 (excluding the adjustment for changes in China's bonded stocks) showed an apparent production deficit of around 15,000 metric tonnes (t). When making seasonal adjustments for world refined production and usage, September showed a production surplus of about 25,000 t. The refined copper balance for the first nine months of 2016, including revisions to data previously presented, indicates a production deficit of around 84,000 t (and a seasonally adjusted deficit of about 29,000 t). This compares with a production deficit of around 28,000 t (a seasonally adjusted surplus of about 34,000 t) for the same period of 2015.

In the first nine months of 2016, world apparent refined usage is estimated to have increased by around 3% (565,000 t) compared with that in the same period of 2015 mainly due to Chinese apparent demand as world usage excluding China remained essentially unchanged. Chinese apparent demand increased by around 7% in the first nine months of 2016 based on a 2% increase in net imports of refined copper and 7% growth in refined production. However, net refined copper imports have been on a declining trend in 2016 with the monthly average in the third quarter 40% below that of the 1<sup>st</sup> half. Monthly average Chinese apparent demand in the 3<sup>rd</sup> quarter 2016 is 5% below that in the first half. In the first nine months of 2016 aggregated usage in the EU, Japan and the United States is down by 0.6%. On a regional basis, usage is estimated to have increased by 1% in Europe and 5% in Asia (when excluding China, Asia usage increased by 2%), while declining by 11.5% and 4% in Africa and in the Americas respectively and remaining essentially unchanged in Oceania.

World mine production is estimated to have increased by around 6% (820,000 t) in the first nine months of 2016 compared with production in the same period of 2015. Concentrate production increased by 7.5% while solvent extraction-electrowinning (SX-EW) declined by 0.5%. The increase in world mine production was mainly due to a 44% (+530,000 t) rise in Peruvian output that is benefitting from new and expanded capacity brought on stream in the last two years. A recovery in production levels in Canada, Indonesia and the United States, and expanded capacity in Mexico, also contributed to world growth. However overall growth was partially offset by a 4% decline in production in Chile, the world's biggest copper mine producer, and a 7% decline in DRC where output is being constrained by temporary production cuts. On a regional basis, production rose by 7% in the Americas, 9% in Asia and 7% in Oceania but declined by 4% in Africa while remaining essentially unchanged in Europe. The average world mine capacity utilization rate for the first nine months of 2016 increased to 86% from 85% in the same period of 2015.

World refined production is estimated to have increased by about 3% (510,000 t) in the first nine months of 2016 compared with refined production in the same period of 2015: primary production was up by 2.5% and secondary production (from scrap) was up by 5.5%. The main contributor to growth was China (+7%), followed by the United States where production increased by 13% and Mexico (+19%) where expanded SX-EW capacity is contributing to refined production growth. Output in Chile and Japan, the second and third leading refined copper producers, increased by around 1% and 3% respectively. Refined production in the DRC and Zambia declined due to the impact of temporary production cuts. On a regional basis, refined output is estimated to have increased in the Americas (5%), Asia (6%) and Oceania (8%) while declining in Africa (-13%) and in Europe (-3.5%). The average world refinery capacity utilization rate for the first nine months of 2016 remains practically unchanged from that in the same period of 2015 at around 83.5%.

*Based on the average of stock estimates provided by independent consultants, China's bonded stocks increased by around 70,000 t in the first nine months of 2016 from the year-end 2015 level. Stocks decreased by around 130,000 t in the same period of 2015. In the first nine months of 2016, the world refined copper balance adjusted for the change in Chinese bonded stocks indicates a production deficit of around 16,000 t compared to a deficit of about 155,000 t in the same period of 2015.*

The average LME cash price for November was US\$5,443.25 per tonne, up from the October average of US\$4,732.14 per tonne. The 2016 high and low copper prices through the end of November were US\$5,935.50 (on 28<sup>th</sup> Nov) and US\$4,310.50 per tonne (on 15<sup>th</sup> Jan), respectively, and the year-to-date average was US\$4,793.60 per tonne (13% below 2015 annual average). As of the end of November, copper stocks held at the major metal exchanges (LME, COMEX, SHFE) totalled 451,780 t, a decline of 30,088 t (-6%) from stocks held at the end of December 2015. Compared with the December 2015 levels, stocks were down at SHFE and up at the LME and COMEX.

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, 2012-2016

Thousand metric tonnes, copper

	2012	2013	2014	2015	2015	2016	2016			
					Jan-Sep	Jun	Jul	Aug	Sep	
World Mine Production	16,687	18,171	18,433	19,147	14,189	15,008	1,713	1,691	1,720	1,675
World Mine Capacity	19,928	20,658	21,416	22,388	16,734	17,413	1,929	1,976	1,983	1,927
Mine Capacity Utilization (%)	83.7	88.0	86.1	85.5	84.8	86.2	88.8	85.6	86.7	86.9
Primary Refined Production	16,606	17,256	18,568	18,927	14,046	14,390	1,585	1,631	1,628	1,593
Secondary Refined Production	3,596	3,803	3,915	3,945	2,890	3,055	330	356	371	363
World Refined Production (Secondary+Primary)	20,203	21,060	22,483	22,872	16,936	17,446	1,915	1,987	1,999	1,955
World Refinery Capacity	24,654	25,989	26,906	27,195	20,337	20,791	2,287	2,371	2,378	2,308
Refineries Capacity Utilization (%)	81.9	81.0	83.6	84.1	83.3	83.9	83.7	83.8	84.1	84.7
World Refined Usage 1/	20,473	21,396	22,880	23,035	16,964	17,530	2,020	1,821	1,844	1,970
World Refined Stocks End of Period	1,376	1,325	1,350	1,521	1,504	1,423	1,245	1,347	1,417	1,423
Period Stock Change	171	-52	25	171	154	-98	-50	102	70	6
Refined Balance 2/	-270	-336	-397	-164	-28	-84	-106	166	156	-15
Seasonally Adjusted Refined Balance 3/					34	-29	-55	154	52	25
Refined Balance Adjusted for Chinese bonded stock change 4/	298	-583	-421	-267	-155	-16	-108	156	138	-55

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 paragraph 2 of the press release.