

Copper: Preliminary Data for February 2017

The International Copper Study Group (ICSG) released preliminary data for February 2017 world copper supply and demand in its May 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% in the first two months of 2017, with concentrate production declining by around 1% and solvent extraction-electrowinning (SX-EW) declining by 5%:

- The decline in world mine production was mainly due to:
 - ➤ A 10% decline in Chilean mine production negatively affected by the strike at Escondida mine and lower output from Codelco mines.
 - > A decline in Canada and Mongolia concentrates production of 19% and 23%, respectively, mainly due to lower grades in planned mining sequencing.
 - > A 10% decline in Indonesian concentrate production as output was constrained by a temporary ban on concentrate exports that started in January and ended in April.
- However overall decline was partially offset by an 18% and 15% rise in Mexican (concentrate and SX-EW) and Peruvian (concentrate) output, respectively, both countries benefitting from new and expanded capacity that was not yet fully available in the same period of last year.
- On a regional basis, production rose by 5% in Europe (including Russia) and 10% in Oceania while declining by 4% in the Americas and 6% in Africa, and remaining essentially unchanged in Asia.

World refined production is estimated to have remained essentially unchanged in the first two months of 2017 with primary production (electrolytic and electrowinning) declining by 3% and secondary production (from scrap) increasing by 11%:

- 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 4%) followed by Mexico (14%) where expanded SX-EW capacity contributed to refined production growth.
- However, overall growth was partially offset by a 16% decline in Chile, the second world leading 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 (in electrolytic production from concentrates) and in the United States (mainly in electrowinning output).
- On a regional basis, refined output is estimated to have increased in Asia (3%), in Africa (2%) and in Europe (including Russia) (1.5%) while declining in the Americas (11%) and in Oceania (5%).

World apparent refined usage is estimated to have declined by around 3% in the first two months of 2017:

- Preliminary data indicates that although world ex-China usage might have grown by around 2.5%, growth was more than offset by a 9.5% decline in Chinese apparent demand.
- Chinese apparent demand (excluding changes in unreported stocks) declined by 9.5% because although refined copper production increase by 4%, net imports of refined copper declined by 29%.
- · Some countries in Asia and in Europe saw growth.
- On a regional basis, usage is estimated to have increased by 1.5% in Europe while declining by 1% in the Americas and 5% in Asia (when excluding China, Asia usage increased by 6%).

World refined copper balance for the first two months of 2017 indicates a surplus of around 150,000 t (including revisions to data previously presented):

- This is mainly due of the decline in Chinese <u>apparent</u> demand (China currently represents 47% of the world copper refined usage).
- 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 two months of 2017, the world refined copper balance adjusted for changes in Chinese bonded stocks indicates a surplus of around 255,000 t.

Copper Prices and Stocks:

- Based on the average of stock estimates provided by independent consultants, China's bonded stocks increased by around 105,000 t in the first two months of 2017 from the year-end 2016 level. Bonded stocks increased by around 80,000 t in the same period of last year.
- The average LME cash price for April 2017 was US\$5,697.67 per tonne, down from the March average of US\$5,821.52 per tonne.
- The 2017 high and low copper prices through the end of April were US\$6,145.00 (on 14th Feb) and US\$5,500.50 per tonne (on 4th Jan), respectively, and the year average was US\$5,802.07 per tonne (19% above 2016 annual average).
- As of the end of April, copper stocks held at the major metal exchanges (LME, COMEX, SHFE) totalled 623.917 t, an increase of 84,844 t (16%) from stocks held at the end of December 2016. Compared with the December 2016 levels, stocks were down at the LME (-3%) and up at SHFE (33%) and COMEX (51%).

Please visit the ICSG website <u>www.icsg.org</u> 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		2016		2017	
					Jan-Feb		Nov	Dec	Jan	Feb
World Mine Production	18,185	18,431	19,132	20,216	3,119	3,060	1,728	1,787	1,628	1,433
World Mine Capacity	20,747	21,541	22,431	23,420	3,735	3,895	1,962	2,035	2,043	1,852
Mine Capacity Utilization (%)	87.7	85.6	85.3	86.3	83.5	78.6	88.1	87.8	79.7	77.4
Primary Refined Production	17,257	18,565	18,924	19,443	3,189	3,095	1,598	1,671	1,626	1,469
Secondary Refined Production	3,803	3,915	3,945	3,866	593	662	340	345	345	317
World Refined Production (Secondary+Primary)	21,060	22,480	22,870	23,309	3,782	3,757	1,938	2,016	1,972	1,785
World Refinery Capacity	25,779	26,680	26,750	27,129	4,362	4,470	2,259	2,340	2,346	2,124
Refineries Capacity Utilization (%)	81.7	84.3	85.5	85.9	86.7	84.0	85.8	86.1	84.0	84.0
World Refined Usage 1/	21,396	22,880	23,041	23,429	3,738	3,608	1,954	2,014	1,916	1,692
World Refined Stocks End of Period	1,325	1,350	1,521	1,403	1,587	1,450	1,304	1,403	1,402	1,450
Period Stock Change	-52	25	171	-118	66	47	-55	99	-1	48
Refined Balance 2/	-335	-400	-171	-120	44	149	-17	1	55	93
Seasonally Adjusted Refined Balance 3/					-49	62	21	-51	22	40
Refined Balance Adjusted for Chinese bonded stock change 4/	-583	-424	-274	-107	122	254	-32	-11	80	173

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".