



Release of ICSG 2015 Statistical Yearbook

The International Copper Study Group released its 2015 Statistical Yearbook covering world copper supply and demand data for the 10-year period 2005-2014. It is an excellent tool that allows an assessment of how the market evolved in the last 10 years, and shows which countries increased or lost share in the global copper production, usage and trade. The Statistical Yearbook is included as part of the ICSG Monthly Bulletin annual subscription and is also available for sale as a separate issue (€200 for orders originating from ICSG member countries and €300 for other orders).

According to ICSG data, world copper mine production rose by 24% during the 10-year period from 14.9 million metric tonnes (Mt) in 2005 to 18.5 Mt in 2014: copper in concentrates rose by 20% while solvent extraction-electrowinning (SX-EW) production rose by 45%. The SX-EW share of total mine production increased from 18% in 2005 to 21% in 2014. Although the mine capacity utilization rate averaged around 86% over this period, over the 2008-2011 period, as a result of numerous factors including lower head grades, labour unrest, accidents, technical problems, and world financial crisis related temporary shutdowns/production cuts, capacity utilization averaged 83% and mine production grew by a compound annual growth rate (CAGR) of only 1%. Mine production growth averaged 2.5%/y over the 10-year period with a significant recovery in mine output in 2012-2013 (+6.5%) but with constrained growth (1.5%) again in 2014. Notable changes in mine production over 2005-2014 included increases of 1Mt in China, 820,000 t in the Democratic Republic of Congo (DRC), 430,000t in Chile and 370,000t in Peru. Chile remains by far the biggest world copper mine producer but its share in world production declined from around 36% to 31%. The revival of the African copper belt led to an increase in African copper mine output of 1.3 Mt. Conversely, operational issues led to a decline of 690,000 t (65%) in Indonesia compared with the 2005 production level. Output from countries that were minor producers in 2005, or where copper mining production was non-existent, increased by around 630,000 t.

Over the 10-year period, annual world refined production rose by 35.5% from 16.6 Mt in 2005 to 22.5 Mt in 2014, with a CAGR of 3.5%. Primary (electrolytic and SX-EW) and secondary (from scrap) refined production increased by 29% and 81%, respectively. The share of secondary production in total refined production increased gradually from 13% in 2005 to around 18% in 2011 remaining at the same level in the following two years but with a small decline seen in 2014. Over the full 10-year period, China's annual refined production almost tripled, increasing to around 7.6 Mt, while production in Chile (the second leading refined copper producer) declined by 3% to 2.7 Mt. The expansion of refinery capacity in India, Japan and Bulgaria led to significant increases in annual output in these countries. With the start-up of several SX-EW plants production in the DRC grew from around 20,000 t in 2005 to 780,000 t in 2014. In North America, production fell by 17% to 1.8 Mt due to refinery closures in the United States, Canada and Mexico. Refined production in the EU rose by 13% to 2.7 Mt over the same period.

World annual apparent refined copper usage increased by 38% (CAGR of 3.5%) over the 10-year period from 16.6 Mt to 22.9 Mt. Growth was driven by China¹ where apparent usage over the 10-year period tripled, increasing by around 7.3 Mt and its share of world usage grew to around 45% from about 20% in 2004. Conversely, world usage excluding China decreased by 8% (1 Mt) during the period, mainly due to the decline in refined usage in three of the major copper using regions, namely the EU (-17%), Japan (-13%), and the United States (-23%). However, usage increased significantly in the MENA region (133%), in Europe ex-EU (10%) and in Asia ex-China/Japan region (16%).

¹ 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. Apparent copper demand for China is based only on reported data (production + net trade +/- SHFE stock changes) and does not take into account changes in unreported stocks [State Reserve Bureau (SRB), producer, consumer and merchant/trader], which have reportedly been significant during recent periods of stocking or de-stocking and which could significantly alter supply-demand balances. To facilitate global market analysis, however, an additional line item—Refined World Balance Adjusted for Chinese Bonded Stock Changes—is included in the world summary 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.

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

World Refined Copper Usage and Supply Trends, 2005-2014

Thousand metric tonnes, copper

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
World Mine Production	14,925	14,986	15,516	15,571	15,959	16,051	16,056	16,776	18,254	18,514
World Mine Capacity	16,567	16,814	17,805	18,453	19,101	19,269	19,468	19,964	20,787	21,718
Mine Capacity Utilization (%)	90	89	87	84	84	83	82	84	88	85
Primary Refined Production	14,411	14,678	15,163	15,374	15,394	15,751	16,132	16,604	17,255	18,560
Secondary Refined Production	2,161	2,613	2,739	2,825	2,847	3,236	3,468	3,596	3,803	3,916
World Refined Production (Secondary+Primary)	16,572	17,291	17,903	18,199	18,241	18,987	19,599	20,201	21,059	22,475
World Refinery Capacity	20,035	20,379	21,613	22,404	23,201	23,458	23,950	25,027	26,375	27,288
Refineries Capacity Utilization (%)	83	85	83	81	79	81	82	81	80	82
Secondary Refined as % in Total Refined Prod.	13	15	15	16	16	17	18	18	18	17
World Refined Usage 1/	16,564	16,934	18,049	17,896	17,903	19,140	19,704	20,461	21,387	22,881
World Refined Stocks End of Period	810	1,075	970	1,102	1,376	1,198	1,205	1,376	1,325	1,342
Period Stock Change	-56	265	-105	132	275	-178	7	171	-52	18
Refined Balance 2/	8	357	-147	303	338	-152	-105	-260	-328	-406
Refined Balance Adjusted for Chinese bonded stock change 3/	NA	NA	NA	NA	NA	24	-166	307	-584	-419
LME Copper Price 4/	3,684	6,727	7,126	6,952	5,164	7,539	8,811	7,950	7,322	6,862

1/ Based on EU apparent usage. 2/ Surplus/deficit is calculated using refined production minus refined usage. 3/ For details of this adjustment see footnote one in the last paragraph of this press release. 4/ Annual average in US dollars per ton of copper.