

TABLE 1. WORLD REFINED COPPER PRODUCTION AND USAGE TRENDS

Thousand metric tonnes, copper

	2015	2016	2017	2018	2018	2019	2019			
					p/	Jan-Nov	Aug	Sep	Oct	Nov
World Mine Production	19,160	20,402	20,082	20,577	18,745	18,642	1,775	1,724	1,739	1,743
World Mine Capacity	22,367	23,481	24,018	24,127	22,562	22,663	2,074	2,014	2,089	2,029
Mine Capacity Utilization (%)	85.7	86.9	83.6	85.3	83.1	82.3	85.6	85.6	83.2	85.9
Primary Refined Production	18,892	19,490	19,485	20,055	18,293	18,133	1,675	1,661	1,724	1,670
Secondary Refined Production	3,945	3,866	4,053	4,043	3,706	3,765	345	331	349	351
World Refined Production (Secondary+Primary)	22,838	23,357	23,538	24,098	21,998	21,898	2,020	1,992	2,073	2,021
Seasonally Adjusted Refined Production - monthly <sup>1/</sup>					2,008	1,999	1,997	2,001	2,036	2,009
World Refinery Capacity	26,607	26,913	27,445	27,879	25,566	26,376	2,461	2,387	2,473	2,399
Refineries Capacity Utilization (%)	85.8	86.8	85.8	86.4	86.0	83.0	82.1	83.4	83.8	84.2
Secondary Refined as % in Total Refined Prod.	17.3	16.6	17.2	16.8	16.8	17.2	17.1	16.6	16.8	17.4
World Refined Usage <sup>2/</sup>	23,062	23,492	23,710	24,488	22,406	22,282	1,992	2,071	2,088	1,988
Seasonally Adjusted World Refined Usage - monthly <sup>1/</sup>					2,044	2,032	2,053	2,035	2,074	1,964
World Refined Stocks End of Period	1,505	1,365	1,375	1,227	1,194	1,305	1,400	1,309	1,314	1,305
Period Stock Change	171	-140	10	-148	-180	78	79	-92	5	-8
Refined Balance <sup>3/</sup>	-224	-136	-171	-391	-408	-384	27	-79	-15	33
Seasonally Adjusted Refined Balance <sup>4/</sup>					-390	-362	-56	-34	-38	45
Refined Balance Adjusted for Chinese bonded stock change <sup>5/</sup>	-327	-123	-169	-451	-478	-570	-20	-134	-57	23
LME Copper Price <sup>6/</sup>	5,494	4,863	6,166	6,523	6,565	6,000	5,708	5,745	5,743	5,860
Comex Copper Price <sup>7/</sup>	250.54	219.85	280.53	292.38	294.41	271.83	257.24	259.74	261.17	265.46

p/ Preliminary

1/ See note below on seasonal adjustments. Figures in the year-to-date columns represent seasonally adjusted monthly averages.

2/ Apparent refined usage is used for the European Union (EU-15) instead of the accumulation of the individual countries' refined usage.

3/ Surplus or deficit is calculated using total refined production minus refined usage.

4/ Refined balance is calculated using seasonally adjusted total refined production minus seasonally adjusted refined usage.

5/ See note below on refined balance adjusted for Chinese bonded stock change.

6/ Averages for the period in US dollars per ton of copper.

7/ Averages for the period in US cents per pound of copper.

**Note on refined balance adjusted for Chinese bonded stock change.**

Beginning in January 2014 Bulletin, the International Copper Study Group (ICSG) introduced an additional line item for apparent world balance that includes an adjustment for assumed changes in Chinese bonded stocks. Historically, ICSG has only accounted for reported stock data in its statistics and therefore did not account for unreported stocks change in the calculation of apparent usage. In recent years anecdotal evidence has suggested that there have been substantial fluctuations in Chinese bonded stock levels and apparent consumption based on trade, production, and changes in exchange inventories may not adequately reflect industrial use in a given time period. ICSG acknowledges the distortion these unreported stock movements can cause in the calculation of the world copper refined balance and, effective with the January 2014 Bulletin, will include an additional line item - Refined World Balance Adjusted for Chinese Bonded Stock Changes. As there is no officially reported data for Chinese bonded stocks, ICSG will use an average of stock estimates provided by three consultants based on their ongoing research and analysis of the Chinese copper market to estimate the unreported inventory changes.

**Note on seasonal adjustments:**

The International Copper Study Group introduced seasonal adjustments in its supply usage table to help better assess the state of the copper market. The introduction of seasonally adjusted refined usage and refined balance figures was originally intended to account for the effects of variations in days per month and holiday periods in certain key copper using regions of the world. Starting with the April 2007 edition of the Copper Bulletin (January 2007 data), the International Copper Study Group will be using the U.S. Census Bureau's X-12 seasonal adjustment program to calculate seasonally adjusted refined usage, production, and balance figures in order to provide more analytically rigorous seasonally adjusted results. Seasonal adjustments have also been made for data from past years.

Each month the ICSG issues the above table in a Press Release which is also included in ICSG's web site:

<http://www.icsg.org>