Copper: Preliminary Data for May 2017

The International Copper Study Group (ICSG) released preliminary data for May 2017 world copper supply and demand in its August 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 3% in the first five months of 2017, with concentrate production declining by around 2.5% and solvent extraction-electrowinning (SX-EW) declining by around 4.5%:

- The decline in world mine production was mainly due to:
  - A 10% (220,000 t Cu) decline in production in Chile, the world’s biggest copper mine producing country, negatively affected by the strike at Escondida mine and lower output from Codelco mines.
  - A decline in Canada and Mongolia concentrates production of 20% and 21%, respectively, mainly due to lower grades in planned mining sequencing.
  - A 14% 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 the United States production 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 a 11% and 6% rise in Mexican (concentrate and SX-EW) 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.

- On a regional basis, production rose by 1% in Asia, 4% in Europe (including Russia) and 5% in Oceania while declining by 6% in the Americas and 4% in Africa.

World refined production is estimated to have remained essentially unchanged in the first five months of 2017 with primary production (electrolytic and electrowinning) declining by 2% and secondary production (from scrap) increasing by 12%:

- 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 6.5%), followed by Mexico (11%) where expanded SX-EW capacity contributed to refined production growth.
- However, overall growth was partially offset by a 13.5% 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 (in electrolytic production from concentrates) and in the United States (mainly in electrowinning output).
- On a regional basis, output is estimated to have increased in Asia (4.5%) and in Europe (including Russia) (2.5%) while declining in the Americas (10.5%) and in Oceania (8%) and remaining essentially unchanged in Africa.

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

- Preliminary data indicates that although world ex-China usage might have grown slightly by around 0.5% this growth was more than offset by a 5.5% decline in Chinese apparent demand.
- Chinese apparent demand (excluding changes in unreported stocks) declined by 5.5% because although refined copper production increased by 6.5%, net imports of refined copper declined by 30%.
- Among other major copper using countries, usage increased in India and Japan but declined in the United States and Germany.
- On a regional basis, usage is estimated to have declined in all regions: in Africa by 3%, in Asia by 3% (when excluding China), Asia usage increased by 4.5%), in the Americas by 0.5% and in Europe by 5%.

World refined copper balance for the first five months of 2017 indicates a surplus of around 15,000 t (including revisions to data previously presented):

- This is mainly due to the decline in Chinese apparent demand (China currently represents around 48% 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 five months of 2017, the world refined copper balance adjusted for changes in Chinese bonded stocks indicates a surplus of around 115,000 t.

Copper Prices and Stocks:

- Based on the average of stock estimates provided by independent consultants, China’s bonded stocks increased by around 100,000 t in the first five months of 2017 from the year-end 2016 level. Bonded stocks increased by around 140,000 t in the same period of last year.
- As of the end of July, copper stocks held at the major metal exchanges (LME, COMEX, SHFE) totalled 630,262 t, an increase of 91,189 t (17%) from stocks held at the end of December 2016. Compared with the December 2016 levels, stocks were down at the LME (-5%) and up at SHFE (22%) and COMEX (93%).
- The average LME cash price for July 2017 was US$5,978.60 per tonne, up from the June average of US$5,699.48 per tonne.
- The 2017 high and low copper prices through the end of July were US$6,347.00 (on 31st July) and US$5,466 per tonne (on 8th May), respectively, and the year average was US$5,781.72 per tonne (19% above 2016 annual average).
## World Refined Copper Usage and Supply Trends, 2013-2017

**Thousand metric tonnes, copper**

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
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<tr>
<td></td>
<td>Jan-May</td>
<td>Feb</td>
<td>Mar</td>
<td>Apr</td>
<td>May</td>
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<tr>
<td>World Mine Production</td>
<td>18,185</td>
<td>18,431</td>
<td>19,132</td>
<td>20,219</td>
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<td></td>
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<td>1,562</td>
<td>1,608</td>
<td>1,704</td>
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<td>World Mine Capacity</td>
<td>20,767</td>
<td>21,561</td>
<td>22,468</td>
<td>23,477</td>
<td>9,632</td>
<td>10,049</td>
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<td>1,856</td>
<td>2,063</td>
<td>2,004</td>
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<td>Mine Capacity Utilization (%)</td>
<td>87.6</td>
<td>85.5</td>
<td>85.2</td>
<td>86.1</td>
<td>84.8</td>
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<td>79.0</td>
<td>77.4</td>
<td>75.7</td>
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<td>Primary Refined Production</td>
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<td>18,924</td>
<td>19,440</td>
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<td>1,455</td>
<td>1,632</td>
<td>1,578</td>
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<td>Secondary Refined Production</td>
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<td>3,915</td>
<td>3,945</td>
<td>3,864</td>
<td>1,532</td>
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<td>1,318</td>
<td>1,363</td>
<td>1,340</td>
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<td>World Refined Production (Secondary+Primary)</td>
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<td>22,480</td>
<td>22,870</td>
<td>23,304</td>
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<td>1,773</td>
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<td>World Refinery Capacity</td>
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<td>11,409</td>
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<td>Refineries Capacity Utilization (%)</td>
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<td>84.3</td>
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<td>84.0</td>
<td>85.2</td>
<td>84.4</td>
<td>83.2</td>
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<td>World Refined Usage 1/</td>
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<td>World Refined Stocks End of Period</td>
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<td>1,451</td>
<td>1,560</td>
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<td>Period Stock Change</td>
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<td>25</td>
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<td>-118</td>
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<td>Refined Balance 2/</td>
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<td>-400</td>
<td>-171</td>
<td>-125</td>
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<td>Seasonally Adjusted Refined Balance 3/</td>
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<td>125</td>
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<td>Refined Balance Adjusted for Chinese bonded stock change 4/</td>
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<td>-424</td>
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<td>181</td>
<td>26</td>
<td>-89</td>
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</table>

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".