Copper: Preliminary Data for December 2019

The International Copper Study Group (ICSG) released preliminary data for December 2019 world copper supply and demand in its March 2020 Copper Bulletin. The Bulletin and ICSG online statistical database provide detailed data, on a country basis, for copper mine, smelter, refined and semis production and copper refined usage, trade, stocks and prices. The bulletin is available for sale (annual subscription €550/€850 for orders originating from/inside institutions based in ICSG member countries).

Preliminary data indicates that world mine production declined by about 0.7% in 2019, with concentrate production down by around 0.6% and solvent extraction-electrowinning (SX-EW) declining by around 1%:

- Reduced output in major copper mine producing countries more than offset growth in other countries.
  - Production in Chile, the world’s biggest copper mine producing country, declined by around 1% mainly due to lower copper head grades and few production disruptions.
  - Indonesian output declined by around 45% as a consequence of the transition of the country’s major two copper mines to different ore zones leading to temporarily reduced output levels.
  - After growth of 13% in 2018, aggregated production in the Democratic Republic of Congo (DRC) and Zambia declined by about 3% as a consequence of temporary suspensions at SX-EW mines, reductions in planned production and operational constraints.

- Production in a number of copper mine producing countries, including Australia, Canada, China, Mexico, Peru and the United States increased in 2019 mainly due to a recovery from constrained output in 2018.

- Panama started producing copper in March 2019, with the commissioning of the Cobre de Panama mine, and was by far the most significant contributor to world mine production growth in 2019.

- On a regional basis, mine production is estimated to have increased by around 3% in North America, 1% in Latin America and 3% in Oceania but declined by around 6% in Asia, 2.5% in Africa and 0.5% in Europe.

Preliminary data indicates that world refined production declined by about 0.6% in 2019 with primary production (electrolytic and electrowinning) falling by 1% and secondary production (from scrap) increasing by 1.5%.

- World refined production growth was constrained as a consequence of:
  - A 22% decrease in Chilean electrolytic refined output due to temporary smelter shutdowns whilst undergoing upgrades to comply with new environmental regulations. Total Chilean refined production (including Electrowinning) declined by 8%.
  - A 40% decrease in Zambian refined output due to power supply interruptions, smelter outages and temporary shutdowns and the introduction on 1st January 2019 of a 5% custom duty on copper concentrate imports that constrained smelter feed.
  - A decline of 24% in India’s production mainly as a consequence of the shutdown of Vedanta’s Tuticorin smelter in April 2018.
  - Reduced output in Japan, Peru, the United States and in several EU countries, due to smelter maintenance shutdowns and operational constraints.

- However, these reductions were partially offset by growth in Chinese output and by increases in countries recovering from production constraints in 2018 such as Australia, Brazil, Iran and Poland.

- On a regional basis, refined output is estimated to have increased in Asia (2%) and in Oceania (9%) but declined, in North America (-2%), in Latin America (-6%), in Africa (-10%) and in Europe (-2.5%).

Preliminary data indicates that world apparent refined usage declined by about 0.8% in 2019:

- Although Chinese net refined copper imports declined by 7%, Chinese apparent usage grew by around 2% as a consequence of higher Chinese refinery output.

- Among other major copper users, demand increased in the United States and India but declined in the EU and Japan.

- World ex-China usage declined by around 3%.

Preliminary world refined copper balance for 2019 indicates a deficit of about 340,000 t:

- 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 attached table 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 2019, the world refined copper balance, based on apparent Chinese usage (excluding unreported/bonded stocks), indicated a deficit in the market of 340,000 t.

- The world refined copper balance adjusted for changes in Chinese bonded stocks indicated a market deficit of about 520,000 t.

Copper Prices and Stocks:

- Based on the average of estimates provided by independent consultants, China’s bonded stocks are thought to have declined by about 180,000 t in 2019 compared to the year-end 2018 level. Bonded stocks declined by around 60,000 t in 2018.

- As of the end of February, copper stocks held at the major metal exchanges (LME, COMEX, SHFE) totalled 553,671 t, an increase of 251,284 t (83%) from stocks held at the end of December 2019. Stocks were up at the LME (+50%) and SHFE (+150%) and down at COMEX (-24%).

- The average LME cash price for February 2020 was US$ 5,686.45 /t, down 6% from the January average of US$ 6,049.20 /t.

- The 2020 high and low copper prices through the end of February were US$ 6,300.50 /t (on 16th Jan) and US$ 5,570 /t (on 31st Jan), respectively, and the year average was US$ 5,876.46 /t (2% below the 2019 annual average).

Please visit the ICSG website 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

**Thousand metric tonnes, copper**

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".

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th></th>
<th>Jan-Dec</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
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<tbody>
<tr>
<td><strong>World Mine Production</strong></td>
<td>20,402</td>
<td>20,082</td>
<td>20,577</td>
<td>20,577</td>
<td>20,431</td>
<td>1,716</td>
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<td><strong>World Mine Capacity</strong></td>
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<td>24,018</td>
<td>24,127</td>
<td>24,127</td>
<td>24,238</td>
<td>2,014</td>
<td>2,089</td>
<td>2,029</td>
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<tr>
<td><strong>Mine Capacity Utilization (%)</strong></td>
<td>86.9</td>
<td>83.6</td>
<td>85.3</td>
<td>85.3</td>
<td>84.3</td>
<td>85.2</td>
<td>82.8</td>
<td>85.3</td>
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<td><strong>Primary Refined Production</strong></td>
<td>19,490</td>
<td>19,485</td>
<td>20,055</td>
<td>20,055</td>
<td>19,846</td>
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<td><strong>Secondary Refined Production</strong></td>
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<td>4,043</td>
<td>4,043</td>
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<td><strong>World Refined Production (Secondary+Primary)</strong></td>
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<td>24,098</td>
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<td>86.4</td>
<td>86.4</td>
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<td><strong>World Refined Usage 1/</strong></td>
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<td><strong>World Refined Stocks End of Period</strong></td>
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<td><strong>Seasonally Adjusted Refined Balance 3/</strong></td>
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<td>-24</td>
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